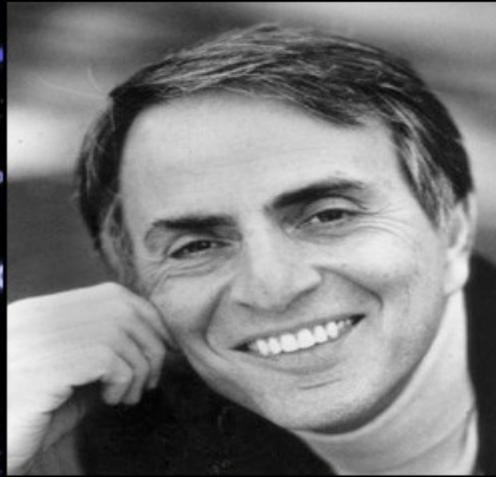


ARE THERE HEALTH RISKS FROM ELECTROMAGNETIC FIELDS (EMFS) CREATED BY MOBILE PHONES, WIFI AND BASE STATION MASTS ?

WHAT DOES ***THE SCIENCE*** TELL US.
PART 1

Cllor Patrick Scott Hogg @ Cumbernauld Community Forum, 2019
PRESENTATION ON THE NECESSITY TO REMOVE WIFI IN NORTH
LANARKSHIRE'S SCHOOLS
(updated June 2022)



“We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces.”

- Carl Sagan

WHAT ARE ELECTROMAGNETIC FIELDS (EMF'S)?

**ELECTROMAGNETIC FIELDS (EMFs) are
Radiofrequency (RF) Pulsed Waves that allow
information to be transmitted back and forth between
computers and a router or base station antenna through
the air.**

**The specific frequency that WiFi uses is
2.4 GHz, or 2.4 billion cycles per second.**

This is the same frequency as microwave oven radiation.

IF IT CAN TRAVEL THROUGH WALLS IT TRAVELS THROUGH OUR BODIES! SIMPLE!

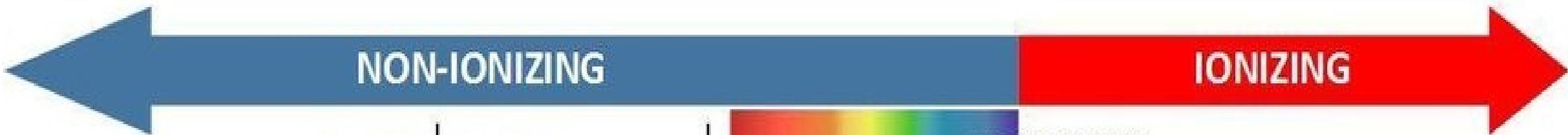
JOIN COMMUNITY AWARE SCOTLAND ON FACEBOOK AND OUR WEBSITE OF THE SAME NAME

Ref: unitefortruth.online/wifi%2F-5g-issues
Unite For Truth - Community Aware Scotland
(FB)

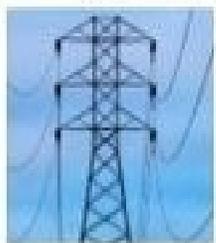
WIFI or Mobile Phone Signals are forms of low level non -ionising RADIATION

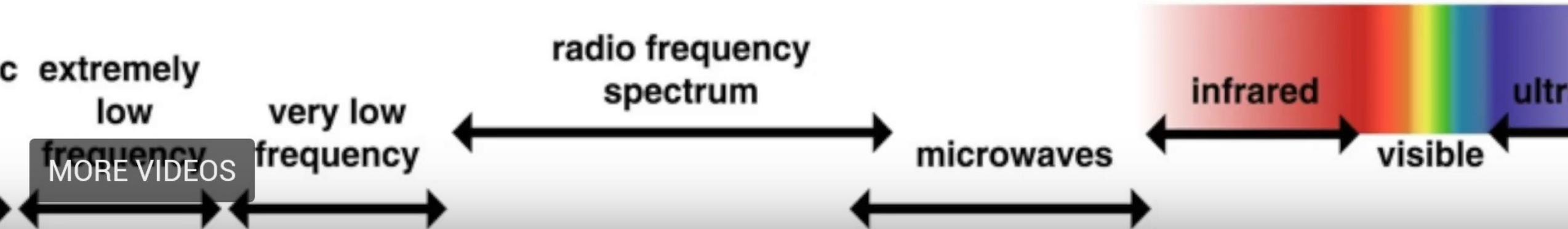
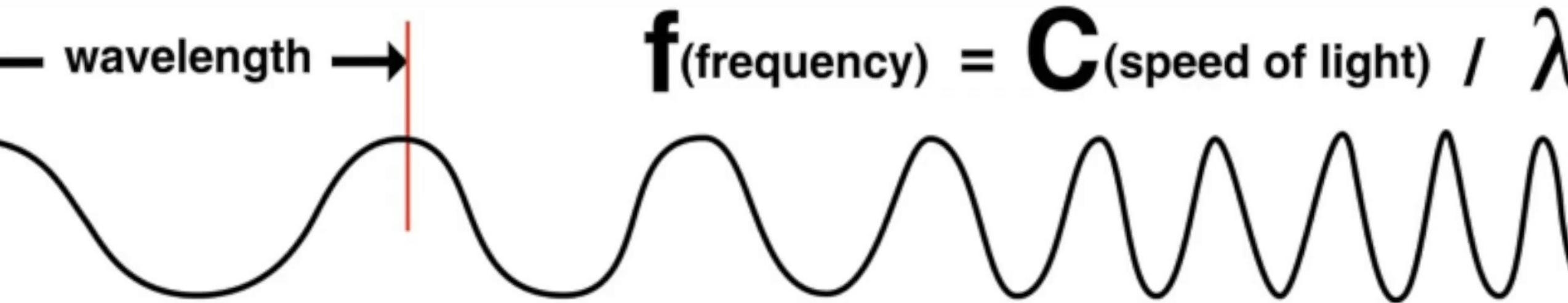
- ▶ **SO WHAT IS NON-IONISING RADIATION AND WHERE**
- ▶ **DOES IT SIT ON THE**
- ▶ **ELECTRO MAGNETIC SPECTRUM?**





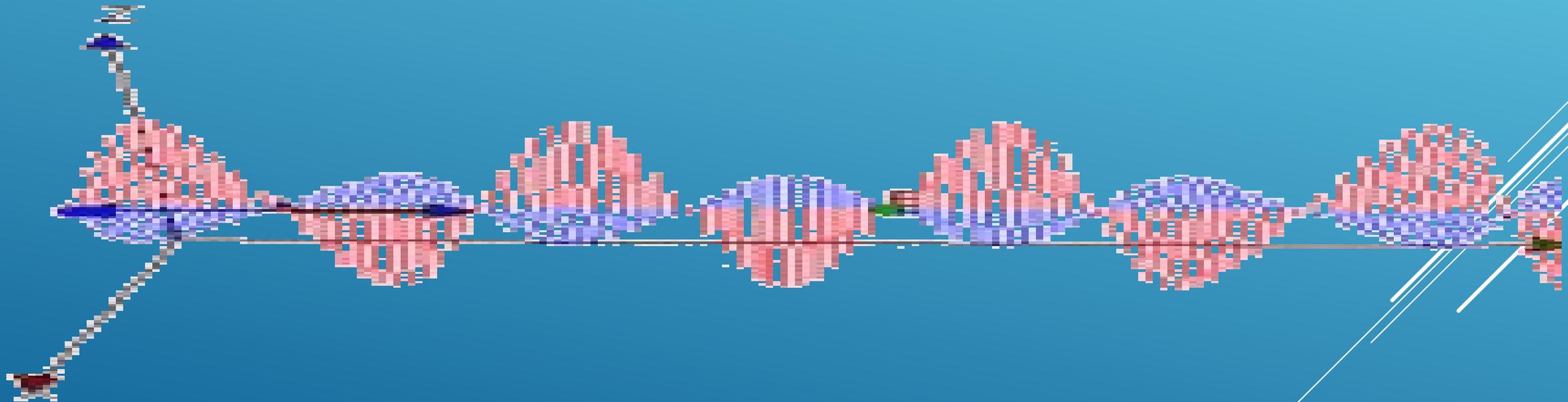
NON-IONIZING		IONIZING	
RADIO WAVES (RF)		INFRARED	ULTRAVIOLET
EXTREMELY LOW FREQUENCY (ELF)	MICROWAVE	VISIBLE	X-RAY
		GAMMA RAYS	
NON-THERMAL	THERMAL	OPTICAL	BROKEN BONDS
INDUCES LOW CURRENT	HIGH CURRENTS	EXCITES ELECTRONS	DAMAGES DNA
	HEATING	PHOTOCHEMICAL	

Power line	Radio-TV	Microwave Oven/satellite/cell phone	Heat Lamp Laser	Tanning booth	Medical X-ray	Radioactive sources
						

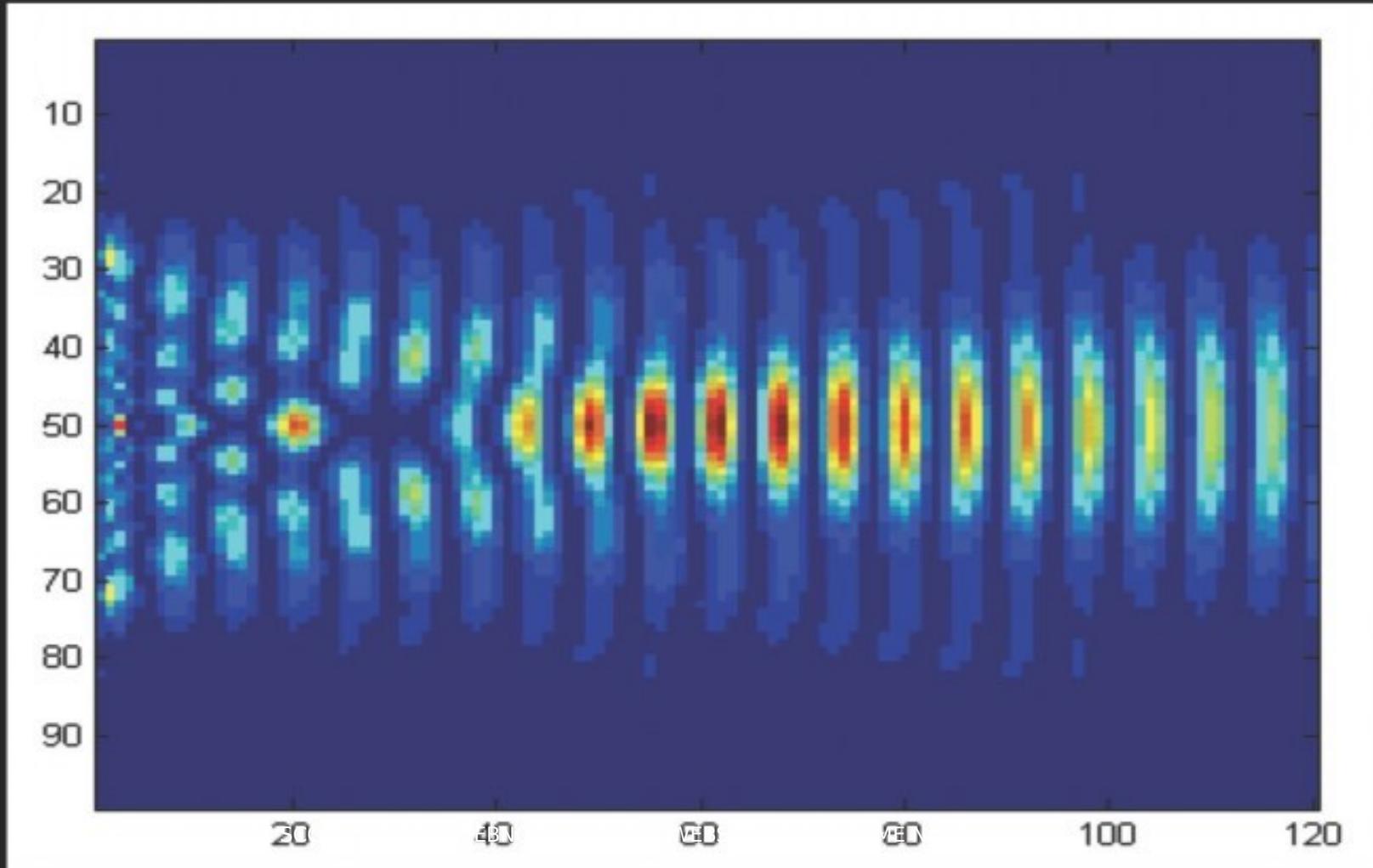


MORE VIDEOS

EMF PULSED RADIO WAVE DATA SIGNAL



The impact of any form of radiation depends on the nature of the waves



- Frequency
- Amplitude
- Pulse
- Wavelength/Form
- Information

RADIO FREQUENCY SPECTRUM - MHZ

4G: 700 MHz = radio frequency waves 17 inches long

3G/4G: 800 MHz = radio frequency waves 15 inches long

3G/4G: 900 MHz = radio frequency waves 13 inches long

3G/4G: 1800 MHz = radio frequency waves 7 inches long

3G/4G: 2100 MHz = radio frequency waves 6 inches long

Wi-Fi: 2450 MHz = radio frequency waves 5 inches long



Texting



Texting



Internet access



Texting



Internet access



Video



Texting



Internet access



Ultra HD & 3-D video



Smart home

2G Frequencies

GSM 2G
Upto 1.9 Ghz

3G Frequencies

HSDPA 3G
Upto 2.1 Ghz

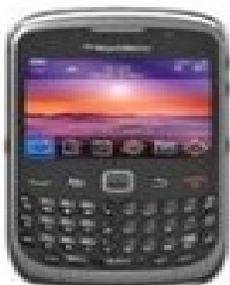
4G Frequencies

LTE 4G
Upto 2.5 Ghz

5G Frequencies

IoT 5G
Upto 95 Ghz



1G	2G	3G	4G	5G
1981	1992	2001	2010	2020(?)
2 Kbps	64 Kbps	2 Mbps	100 Mbps	10 Gbps
Basic voice service using analog protocols	Designed primarily for voice using the digital standards (GSM/CDMA)	First mobile broadband utilizing IP protocols (WCDMA / CDMA2000)	True mobile broadband on a unified standard (LTE)	'Tactile Internet' with service-aware devices and fiber-like speeds
				





WIFI AND EMF SIGNALS FROM BASE ANTENNAE ARE UBIQUITIOUS - HOMES, SCHOOLS, SHOPPING CENTRES, SUPERMARKETS, WORKPLACES, BUSES - WIFI IS ALMOST A 'FASHION ACCESORY' TO MODERN BUSINESS - A WAY OF ATTRACTING CUSTOMERS !

MOST OF US STILL ASSUME IT IS SAFE...

**SO, WHO SETS THE
REGULATORY 'SAFETY'
GUIDELINES? AND
WHAT ARE THEY?**

**THE UK AND SCOTTISH
GOVERNMENTS & COUNCILS
ACCEPT REGULATORY
STANDARDS SET BY
I.C.N.I.R.P.**



**A private
organisation
in
Germany**

An N.G.O.

**Supported by the
World Health
Organisation
(W.H.O.) sub Group
I.A.R.C.**

**INTERNATIONAL
COMMISSION ON NON-
IONISING RADIATION
PROTECTION**



World Health
Organization

PRESS RELEASE
N° 208

31 May 2011

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as **possibly carcinogenic to humans (Group 2B)**, based on an increased risk for **glioma**, a malignant type of brain cancer¹, associated with wireless phone use.

SINCE 2011 Many of those on the W.H.O. I.A.R.C. panel and other scientists have publicly voiced the view that the category for EMF RADIATION should have been Group 2A 'Probably carcinogenic to humans' and MANY SCIENTISTS NOW ARGUE FOR Group 1 'Carcinogenic to humans' based on recent major studies.



**Example of
IARC
member
demanding
re-
classification
of EMF
radiation as
class 2A!**



Annie J. Sasco - international Expert in epidemiology, and cancer prevention. she is also a medical doctor and a scientist. she graduated from the University of Bordeaux, France, with M.D degree. she also got several specialized qualifications :hygiene and social

medicine, occupational medicine, spatial and aeronautical medicine, sociology. and much more education.

She have 3 degrees in epidemiology from Harvard :

- 1. MPH- Master of Public Health.**
- 2. MS- Master of Science , in Biostatistics and Epidemiology.**
- 3. DrPH - Doctor of Public Health, in Epidemiology.**

she was a Harvard Teaching Fellow for several years. Then she joined the INSERM (French NIH - national institute of health and medical research) and worked in IARC for 22 years, including 9 years as Chief of Unit of Epidemiology for Cancer Prevention, and 2 years as Chief of the WHO Program for Cancer Control. She spent most of the past 35 years working in the epidemiology of cancer.

she is the author of more than 400 publications including more than 135 indexed in Medline, and has numerous editorial activities for peer-reviewed journals.

She claims that artificial EMF is a cause of cancer in the world, and needs to be classified as 2A, not 2B. and that 5G is dangerous to the health of the people around the world. and that there is no justification at all, to risk the health of Billions of people worldwide wish such a threat.

NB: IF RF ELECTROMAGNETIC RADIATION WERE CLASSIFIED AS CLASS 1 CARCINOGEN, BY THE W.H.O.,

THIS WOULD MEAN ALL WIFI IN SCHOOLS WOULD BE ILLEGAL AS IT IS ILLEGAL TO HAVE CLASS 1 CARCINOGENS IN ANY PUBLIC SPACES



Protecting Children From Non-Ionising Radiation in Schools. Speaker Dr. Erica ...



Watch later Share

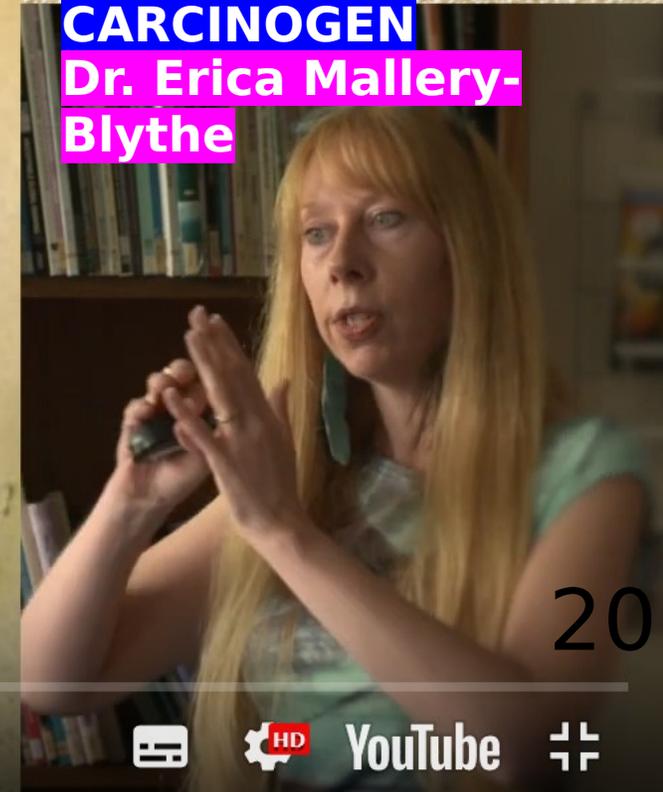
Do Cell Phones Cause Brain Tumours?

(Hardell L and Carlberg M. 2013, Hill criteria, Reviews of Environmental Health 28: 97–106)

1. **Strength:** Ipsilateral tumours in highest cumulative exposure category
2. **Consistency:** Same results, different studies (Hardell, Interphone)
3. **Specificity:** Regarding tumour type and site (glioma/AN / temporal L)
4. **Temporality:** Exposure precedes effect. Risk increases with time.
5. **Biologic gradient:** Dose-Response effect clear
6. **Plausibility:** DNA breakage /ROS demonstrated, no specific mutations
7. **Coherence:** 165/208 countries common risk TC subscriptions alone
8. **Experiment:** Decreasing exposure: external antennas decreased risk
9. **Analogy:** Limited evidence for CNS tumour, but initiation and promotion noted with other cancers (malignant lymphoma, mammary, skin, lymphoma)

**IN 2013 HARDELL ET
ALL PROVED DIRECT
CAUSATION OF
MOBILE RADIATION
FOR GLIOMA BRAIN
TUMOURS IN A
MAJOR STUDY
JUSTIFYING CLASS 1
CARCINOGEN**

**Dr. Erica Mallery-
Blythe**



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MORE VIDEOS



Protecting Children From Non-Ionising Radiation in Schools. Speaker Dr. Erica ...
Carcinogenesis Studies of Cell Phone Radiofrequency Radiation in Hsd:
Sprague Dawley® SD rats (Whole Body Exposures)



Watch later Share

**MAJOR ANIMAL
STUDY IN USA
PROVES
CAUSATION OF
CANCERS**

• Key Points:

- \$25 Million Funding, twice normal number of animals
- 3 reviewing panels instead of one
- Largest study on cellphone radiation and cancer
- Classical design for assessing risk in humans
- exposure of 1.5 W/Kg is lower than currently allowed under FCC public safety limits
- same cell types as in human epidemiological studies (IARC's Monograph)
- 1 in 12 male rats developed either malignant cancer (brain and rare heart tumors) or pre-cancerous lesions.
- No cancers occurred in the control group
- Dose response relationship noted

MORE VIDEOS



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Protecting Children From Non-Ionising Radiation in Schools. Speaker Dr. Erica ...

Peer-Review of NTP

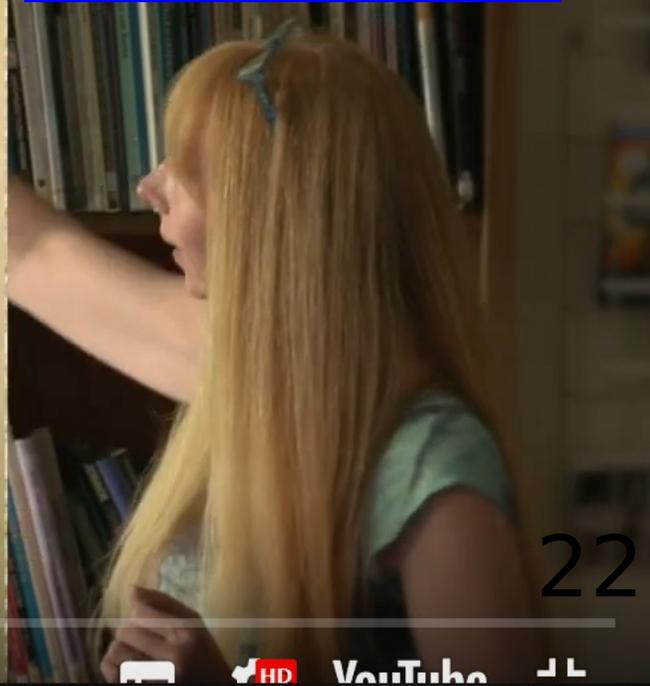


Table thanks to: Joel M. Moskowitz, PhD, School of Public Health, UC Berkeley, March 30, 2018
Electromagnetic Radiation Safety: Evidence of Carcinogenicity

A	Sex	Modulation	<u>Tumor</u>	NTP Draft Report	Expert Panel (vote)
Rat	Male	GSM	Heart: Schwannoma	some evidence	clear evidence (8-3)
Rat	Male	CDMA	Heart: Schwannoma	some evidence	clear evidence (8-3)
Rat	Male	GSM	Brain: Glioma	equivocal	some evidence (7-4)
Rat	Male	CDMA	Brain: Glioma	equivocal	some evidence (6-4-1)
Rat	Male	GSM	Brain: Granular Cell	equivocal	equivocal (11-0)
Rat	Male	GSM	Prostate gland	equivocal	equivocal (11-0)
Rat	Male	GSM	Pituitary gland	equivocal	equivocal (10-1)
Rat	Male	CDMA	Pituitary gland	equivocal	equivocal (11-0)
Rat	Male	GSM	Adrenal gland	equivocal	some evidence (6-4-1)
Rat	Male	GSM	Pancreas	equivocal	equivocal (11-0)
Rat	Male	CDMA	Liver	equivocal	equivocal (11-0)
Rat	Female	GSM	Heart: Schwannoma	no evidence	equivocal (9-2)
Rat	Female	CDMA	Heart: Schwannoma	no evidence	equivocal (9-2)
Rat	Female	CDMA	Brain: Glioma	equivocal	equivocal (8-3*)
Rat	Female	CDMA	Adrenal gland	equivocal	equivocal (10-0-1)
M	Male	GSM	Skin	equivocal	equivocal (8-3)
M	Male	GSM	Lung	equivocal	equivocal (11-0)
M	Male	CDMA	Liver	equivocal	equivocal (10-1)
M	Female	CDMA	Lymphoma	equivocal	equivocal (9-2)
M	Female	CDMA	Lymphoma	equivocal	equivocal (11-0)

**PEER-REVIEW
PANEL ACCEPTS
2 TYPES OF
CANCER
CAUSATION
FROM THE
ANIMAL STUDY**

MORE VIDEOS



22

SO WHAT ARE 'SAFE' LEVELS?

**58 VOLTS PER METRE IS SET AS THE SAFE LEVEL - SET
IN 1998!**

**IF IT DOESN'T HEAT TISSUE IN 6 MINUTES AVERAGE
ITS DEEMED 'SAFE'!**

**THIS EQUALS 9 MILLION MICROWATTS PER SQUARE
METER ($\mu\text{W}/\text{m}^2$)**

**I.C.N.I.R.P. and W.H.O. subgroup I.A.R.C. are
key REGULATORS to governments**

I.C.N.I.R.P. REJECT ALL PEER-REVIEWED SCIENCE WHICH SHOWS ANY HARM TO HUMANS FROM EMF RADIATION

Professor Magda Havas - Trent University, Canada

'Science is one of the tools society uses to decide health policy. In the case of telecommunications... the science is being ignored. Why do we teach science in schools and train talented scientists in Universities, only to ignore the research that they publish when it is economically or politically inconvenient?'

ICNIRP are a small NGO, a private company, accountable to no one, whose members have been repeatedly exposed for financial conflicts of interest and ties with the industry.

In 2008 the EU Parliament voted the ICNIRP limits obsolete by 522 votes to 16 - yet nothing was done to lower safety levels.

Many Scientists worldwide point to the parallels with lead, asbestos, glyphosate and tobacco in terms of industry interests versus protecting public health.

SCIENTISTS FROM AROUND THE WORLD SEE I.C.N.I.R.P AS A DISCREDITED PRO INDUSTRY

GROUP IGNORING SCIENCE

The EMF Call

For Truly Protective Limits for Exposure to Electromagnetic Fields (100 kHz to 300 GHz)

ICNIRP's opinion and guidelines are unscientific and protect industry, not public health

In order to protect the public and the environment from the known harmful effects from electromagnetic fields (EMF) we ask the United Nations, the World Health Organization and all governments not to accept the ICNIRP guidelines. They are not protective, rather they pose a serious risk to human health and the environment since they allow harmful exposure to the world population, including the most vulnerable, under the unscientific pretext that they are "protective".

Background

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) issued draft Guidelines on 11th July 2018 for limiting exposure to electric, magnetic and electromagnetic fields (100 kHz to 300 GHz).¹ These guidelines are unscientific, obsolete and do not represent an objective evaluation of the available science on effects from this form of radiation. They ignore the vast amount of scientific findings that clearly and convincingly show harmful effects at intensities well below ICNIRP guidelines.² The guidelines are inadequate to protect humans and the environment.



**'YOU COULD WALLPAPER
THE WORLD WITH THE
STUDIES PROVING THE
HARM CAUSED BY WIRELESS
RADIATION'**

OLGA SHEEAN former employee of W.H.O.

**EVIDENCE SHOWS HARM AT LEVELS OF EXPOSURE 100'S &
1000'S OF TIMES LOWER THAN SO-CALLED SAFETY LEVELS**

I.C.N.I.R.P. GUIDELINES FOR EUROPE COMPARED TO OTHER COUNTRIES WITH A PRECAUTIONARY APPROACH

- Phone masts
- Powerlines
- EMFields store
- W3C XHTML 1.0
- W3C CSS
- Liability disclaimer -
- Privacy policy -
- Cookies policy -
- © Copyright Powerwatch 2019

precautionary.

1800 MHz Public Exposure Guidelines	Microwatts / m ²		c.f. speed m.p.h.
	μW/m ²	Equivalent V/m	
FCC (USA) OET-65	10,000,000	61	3000
ICNIRP (1998), WHO	9,000,000	58	2847
Belgium (excluding Wallonia)	1,115,000	21	1002
Italy (sum of frequencies)	100,000	6	300
Russia, PRChina	100,000	6	300
Switzerland, Lichtenstein, Luxembourg	95,000	6	292
Belgium Wallonia	24,000	3	147
Typical 100m from a base station (0.2 to 6 V/m)	10,000	1.9	95
Vienna (sum GSM)	10,000	1.9	95
Italy (single frequency)	1,000	0.6	30
Salzburg 1998 (sum GSM)	1,000	0.6	30
EU-Parl, GD Wissenschaft, STOA GSM (2001)	100	0.2	9
Median level, 15 US cities 1977 (mainly VHF & TV)	48	0.14	7
Salzburg GSM/3G outside houses (2002)	10	0.06	3
Salzburg GSM/3G inside houses (2002)	1	0.02	1
Burgerforum BRD proposal, waking areas (1999)	1	0.02	1
Burgerforum BRD proposal, sleeping areas (1999)	0.01	0.002	0.1
Mobile phone handsets can work down to about	0.000002	0.00003	0.0015
Natural background level (all RF frequencies)	0.000001	0.00002	0.001
Cosmic background at 1800 MHz average approx	0.00000000001	0.00000006	0.000003

9 million microwatts per m2 is safe?

RUSSIA CHINA SWITZERLAND ETC HAVE SAFETY LEVELS OF 6 VOLTS PER METRE

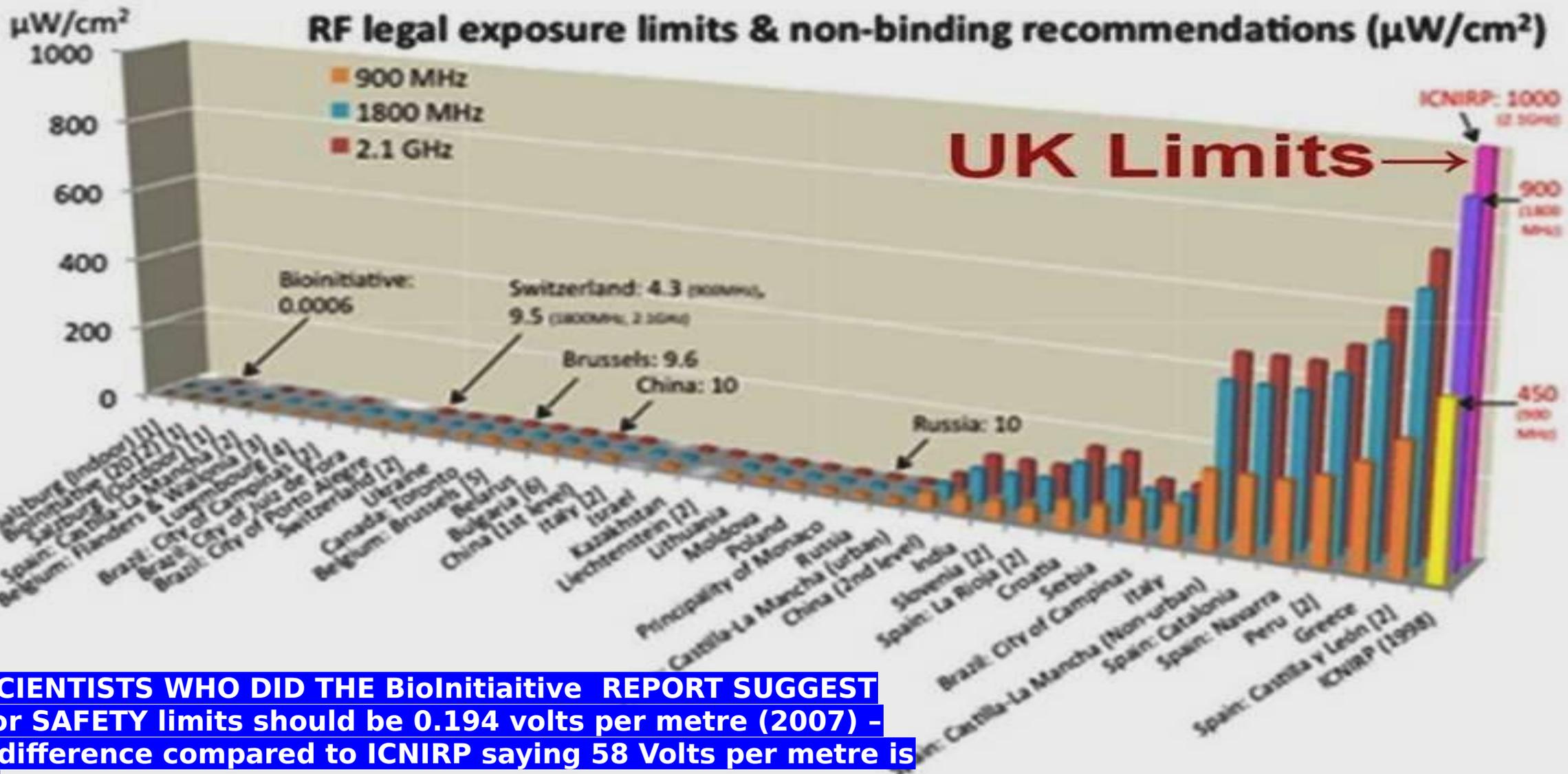


58 VOLTS PER METRE IS SET AS THE SAFE LEVEL - IF IT DOESN'T HEAT TISSUE IN 6 MINUTES AVERAGED IS DEEMED SAFE!

Note that it is very rare indeed for broadcast radio signals to exceed 1 V/m inside residences, with VHF/UHF ones rarely exceeding 0.05 V/m, being typically less than 0.01 V/m.

Mobile phones can work down to less than 0.00003 V/m.

Note also that The Power Flux Density (PFD) value **only** converts into the volts/metre value for continuous signals (like VHF FM radio signals). PFD, by its definition, relates to the average power (ICNIRP specifies that it should be averaged over 6 minutes) and is often much lower in mobile phone mast (etc) signals than is found in the short peak signal strength in the pulsing radiation. Most precautionary authorities believe that it is the peak power than matters



NB SCIENTISTS WHO DID THE BioInitiative REPORT SUGGEST indoor SAFETY limits should be 0.194 volts per metre (2007) - vast difference compared to ICNIRP saying 58 Volts per metre is safe!

PHYSICIANS HEALTH INITIATIVE FOR RADIATION & THE ENVIRONMENT

**THE BODY OF SCIENCE PAPERS -
SHOWING BIOLOGICAL NON-THERMAL
HARM - HAS BEEN IGNORED BY
I.C.N.I.R.P.**

**THIS INCLUDES thousands of Peer-Reviewed
SCIENTIFIC PAPERS SHOWING HARM BELOW
REGULATED LEVELS OF EMF RADIATION**

**What's the chances of 1000's of science papers all
being wrong at once?**

**THE SCIENTISTS AND
GROUPS DEMANDING LOWER
SAFETY LEVELS HAVE
STARTED A **WORLDWIDE
CAMPAIGN!****

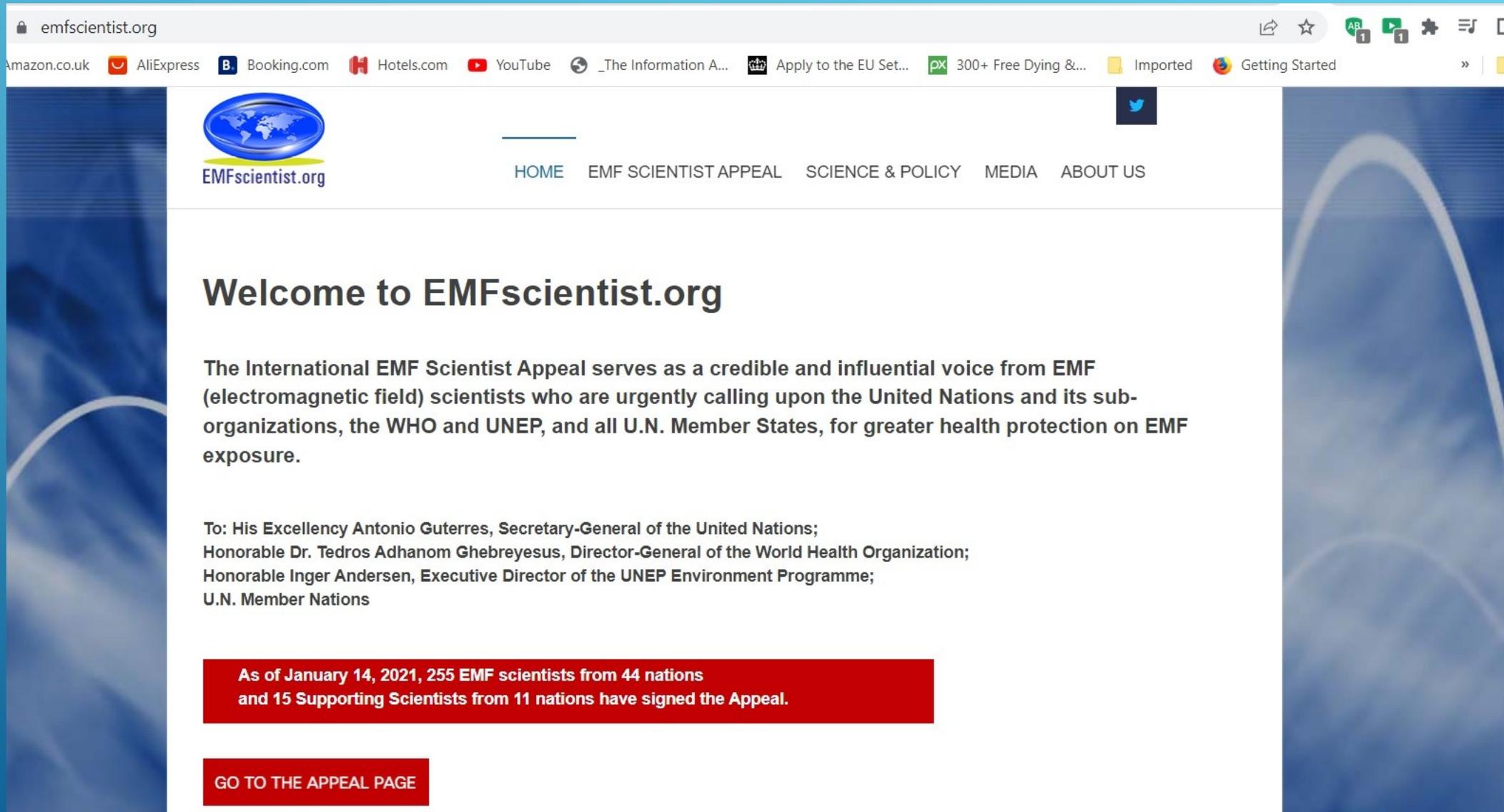
WHO ARE THEY?

SO, THE SCIENTISTS WHO HAVE DONE PEER-REVIEWED WORK INTO HUMAN EFFECTS OF EMF RADIATION TELL US THE SAFETY LEVELS ARE DANGEROUSLY WRONG AND ARE MAKING PEOPLE ILL - ESP. CHILDREN AND PREGNANT MUMS.

POLICY MAKERS IN GOVERNMENT REALLY NEED TO TAKE NOTE OF EVIDENCE-BASED SCIENCE AND DECIDE IF THEY WANT TO PROTECT THE PUBLIC HEALTH OR PROMOTE THE TELECOMS INDUSTRY AND IGNORE ALL WARNINGS FROM THE INDEPENDENT SCIENTISTS WHO STUDY THIS COMPLEX

SUBJECT

IN 2017 252 SCIENTISTS FROM 43 NATIONS DEMAND THE UN AND WHO CHANGE EMF SAFETY STANDARDS IN AN INTERNATIONAL APPEAL



The screenshot shows the homepage of EMFscientist.org. At the top, there is a navigation menu with links for HOME, EMF SCIENTIST APPEAL, SCIENCE & POLICY, MEDIA, and ABOUT US. The main heading is "Welcome to EMFscientist.org". Below this, a paragraph explains the organization's mission: "The International EMF Scientist Appeal serves as a credible and influential voice from EMF (electromagnetic field) scientists who are urgently calling upon the United Nations and its sub-organizations, the WHO and UNEP, and all U.N. Member States, for greater health protection on EMF exposure." A list of recipients for the appeal is provided: "To: His Excellency Antonio Guterres, Secretary-General of the United Nations; Honorable Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization; Honorable Inger Andersen, Executive Director of the UNEP Environment Programme; U.N. Member Nations". A red call-to-action box states: "As of January 14, 2021, 255 EMF scientists from 44 nations and 15 Supporting Scientists from 11 nations have signed the Appeal." Below this is another red button labeled "GO TO THE APPEAL PAGE".

emfscientist.org

HOME EMF SCIENTIST APPEAL SCIENCE & POLICY MEDIA ABOUT US

Welcome to EMFscientist.org

The International EMF Scientist Appeal serves as a credible and influential voice from EMF (electromagnetic field) scientists who are urgently calling upon the United Nations and its sub-organizations, the WHO and UNEP, and all U.N. Member States, for greater health protection on EMF exposure.

To: His Excellency Antonio Guterres, Secretary-General of the United Nations;
Honorable Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization;
Honorable Inger Andersen, Executive Director of the UNEP Environment Programme;
U.N. Member Nations

As of January 14, 2021, 255 EMF scientists from 44 nations and 15 Supporting Scientists from 11 nations have signed the Appeal.

GO TO THE APPEAL PAGE



THE INTERNATIONAL APPEAL IS AVAILABLE FOR ANYONE TO READ ON THE INTERNET

SCIENCE & POLICY MEDIA ABOUT US

Summary of the Appeal

The **Appeal** is being signed by scientists who have published **peer-reviewed papers on the biological or health effects of non-ionizing electromagnetic fields**, part of the electromagnetic field (EMF) spectrum that includes extremely low frequency fields (ELF) emitted by electrical devices; and, radiofrequency radiation (RFR), used for wireless communications. Scientists who have published peer-reviewed papers in related fields and have been significantly engaged in EMF education, are recognized as Supporting Scientists.

The Appeal urgently calls upon the United Nations, the WHO, UNEP and the UN Member States to:

- **Address the global public health concerns** related to exposure to cell phones, power lines, electrical appliances, wireless devices, wireless utility meters and wireless infrastructure in residential homes, schools, communities and businesses.

The scientific findings identified by the signators and others justify this appeal. The World Health Organization (WHO) is encouraged to exert strong leadership in fostering the development of more protective EMF guidelines, to call for precautionary measures, and to educate the public about health risks, particularly risks posed to children and to normal fetal development. **By not taking action, the WHO is failing to fulfil its role as the preeminent international public health agency.**

- The United Nations Environmental Programme (UNEP) is the U.N.'s "**voice for the environment**" and is uniquely positioned to take a planetary view of the potential for harm that EMF pollution presents to, biology -- evolution, health, well being, and very survival of all living organisms world-wide.
- We encourage the U.N. to ask UNEP to evaluate the scientific evidence and initiate an assessment of alternative exposure standards and practices that could substantially lower human exposures to non-ionizing electromagnetic fields.

Emfcall.org
5Gexposed.com
emfacademy.com
electricsense.com
scientists4wiredtech.com

International Appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure

Ehtrust.org Bioinitiative.org
5ginformation.net
safemr.com Whatis5g.info
scientists4wiredtechn.org
mdsafetech.org

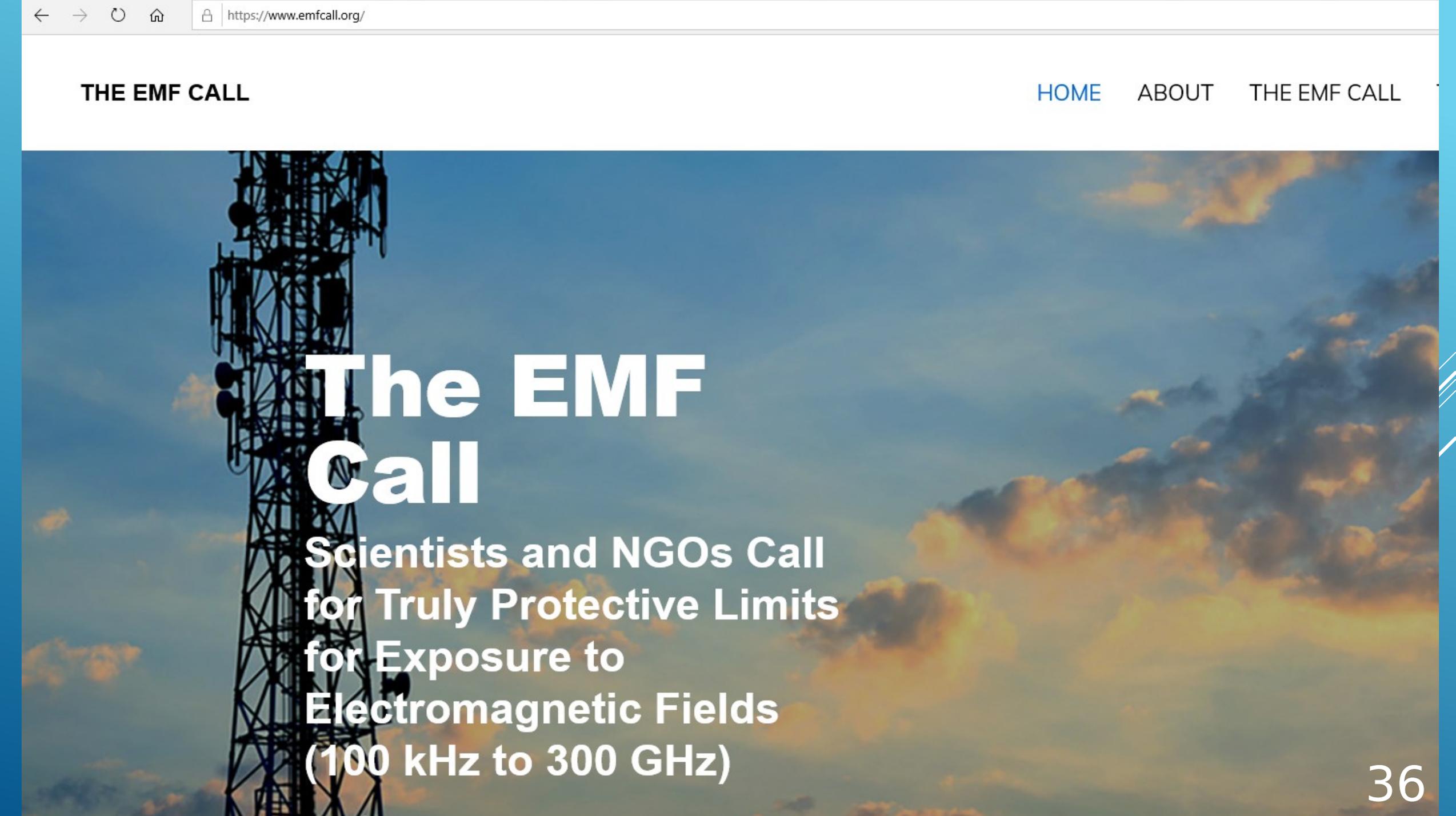
We are scientists engaged in the study of biological and health effects of non-ionizing electromagnetic fields (EMF). Based upon peer-reviewed, published research, we have serious concerns regarding the ubiquitous and increasing exposure to EMF generated by electric and wireless devices. These include—but are not limited to—radiofrequency radiation (RFR) emitting devices, such as cellular and cordless phones and their base stations, Wi-Fi, broadcast antennas, smart meters, and baby monitors as well as electric devices and infra-structures used in the delivery of electricity that generate extremely-low frequency electromagnetic field (ELF EMF).

255 SCIENTISTS FROM 44 COUNTRIES (AT THE END OF 2021)

Have "serious concerns" about wireless radiation.

SO DO WE.





The EMF Call

Scientists and NGOs Call for Truly Protective Limits for Exposure to Electromagnetic Fields (100 kHz to 300 GHz)

Urgent Need for Truly Protective Limits for Exposure to Electromagnetic Fields (100 kHz to 300 GHz)

SUBSCRIBE

On November 1st, 2018, in order to protect the public and the environment from the known harmful effects from electromagnetic fields (EMF), **The EMF Call** was launched. It is by November 26, 2018, signed by 164 scientists and medical doctors together with 95 non-governmental organizations. New medical guidelines need to be developed that represent the state of medical science and are truly protective. They also need to be developed without any industry influence.

The EMF Call also urges all governments, the UN and the WHO not to

The **EMF Call** also urges all governments, the UN and the WHO not to accept the **ICNIRP** guidelines, issued as draft on 11th July 2018. ICNIRP's guidelines pose a serious risk to human health and the environment. They allow harmful exposure to the world population, including the most vulnerable. They are not protective. They do not represent an objective evaluation of the available science on effects from this form of radiation.

Read [The EMF Call](#)

Download The EMF Call as pdf [EN](#) | [FR](#) | [DE](#) | [ES](#) | [IT](#) | [RU](#) | [FI](#) | [SK](#) | [GR](#) | [SV](#)

See the list of supporting scientists and medical doctors ([pdf](#))

SCIENTISTS AND DOCTORS FROM AROUND THE WORLD CALL FOR BETTER SAFETY STANDARDS TO PROTECT THE PUBLIC

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[TEAM](#)

[RADIATION HEALTH](#)

[RESOURCES](#)

[EVENTS](#)

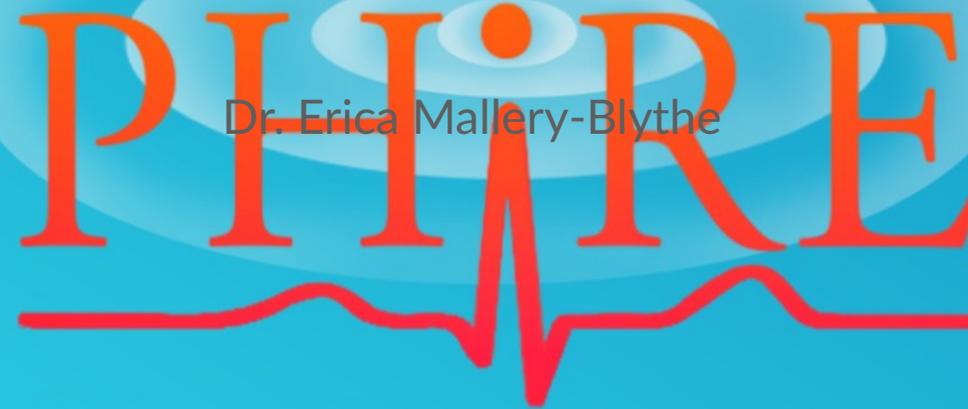
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[JOIN PHIRE](#)

[DONATE](#)

[CONTACT](#)

**GROUP SET
UP BY Dr.
Erica Mallery-
Blythe**



Physicians' Health Initiative for Radiation and Environment



P.H.I.R.E. Assessment

of

ICNIRP regulations

“OUTDATED, INCORRECT SCIENTIFIC BELIEFS HAVE SEVERELY SLOWED PROGRESS TOWARD APPROPRIATE PROTECTION OF THE PUBLIC. THE... (ICNIRP) GUIDELINES (DEvised IN 1998) THAT WE CURRENTLY USE IN ENGLAND, ARE OBSOLETE. THEY ARE BASED ON THERMALLY INDUCED (TISSUE HEATING) EFFECTS WHICH HAVE BEEN UNDERMINED BY THOUSANDS OF PAPERS DEMONSTRATING SERIOUS BIOLOGICAL EFFECTS AT NON-THERMAL LEVELS, ORDERS OF MAGNITUDE BELOW CURRENT ICNIRP GUIDELINES.”

▶ The American Academy of Paediatrics

- ▶ 60,000 Paediatricians wrote to the American government asking for **WIFI** to be taken out of schools



AAEM: WiFi in Schools Not Recommended

The American Academy of Environmental Medicine Statement on WiFi in Schools

<http://aaemonline.org/wifischool.html>

Adverse health effects, such as learning disabilities, altered immune responses, headaches, ect. from wireless radio frequency fields do exist and are well documented in the scientific literature. Safer technology, such as using hard-wiring, must be seriously considered in schools for the safety of those susceptible individuals who may be affected by this phenomenon.

Approved by the American Academy of Environmental Medicine Board of Directors on June 9, 2012.

CEP Note: WIFI is not found just in schools, but increasingly, in public libraries and stores such as Barnes and Noble, and Vons grocery stores. Involuntary exposures to WIFI can lead to headaches, cardiac problems, immune responses and more. CEP takes the position that WIFI should not be allowed in public places, as it is a hazard. Under the Americans with Disabilities Act and Section 504, as well as other discrimination laws that pertain to access, disabilities, and medical conditions, WIFI in public places should be challenged in the courts.

CEP calls upon all schools, libraries, and stores such as Barnes and Noble and Vons, as well as other places of public accommodation, and all workplaces, to turn off the WIFI and remove it permanently, as a hazardous RF radiation exposure to the general public.

Consider removing the WIFI in your homes as well, replace with wired Internet. That is what we

Search

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Your donation helps with our vital educational outreach and advocacy.

Want to learn how to measure electrosmog? 
ELECTROSMOG METER
0.580
-30.0 dBm
CORNET

- LATEST POPULAR TAGS
- 1-2-3 Action Plan to Stop 5G
OCTOBER 4, 2019
 - Stop 5G with Protective Wireless Ordinances
OCTOBER 3, 2019
 - San Diego County Supervisors vote to deploy hazardous 4G and 5G small cells
AUGUST 10, 2019
 - Letter from Dr. Beatrice Golomb UCSD researcher on

Wi-Fi In Schools, Wireless Radiation Health Impacts And Practical Solutions



A 21st century classroom must bridge the digital divide so that all students are engaged with technology. Low EMF Best Practices for schools allows for full technological access in the classroom while minimizing health risk so that schools and safe technology can work together.

The Low EMF Best Practice safe solution is a fully wired technology network in the school, along with corded phones (not cordless). Wireless technology introduces

an environmental pollutant into the school setting and this is not safe for children. All school technology should be fully wired -meaning schools should remove the Wi-Fi/wireless systems and replace them with wires and cable connections.

Background

Millions of children and adults in schools around the world spend significant amounts of time around wireless devices and Wi-Fi. Many schools are introducing Bring Your Own Device (BYOD) policies and installing industrial wireless routers for tablets. However, wireless devices expose students and staff to microwave radiofrequency radiation that can impact learning and overall health. Studies have found that wireless radiation can damage reproductive systems, impact the immune system, alter brain functioning, and increase cancer risk. Tablets have up to 5 antennae that are constantly



CELL PHONE FINE PRINT WARNINGS



CELL PHONE RADIATION FAQ'S



WIFI IN SCHOOLS



CELL PHONES AND BREAST CANCER

PROF DEVRA DAVIS' ENVIRONMENTAL HEALTH TRUST (EHT) SET UP TO EDUCATE PEOPLE ON THE HEALTH RISKS OF WIFI MOBILES AND EMF RADIATION

WiFi in Schools

Home

Basics

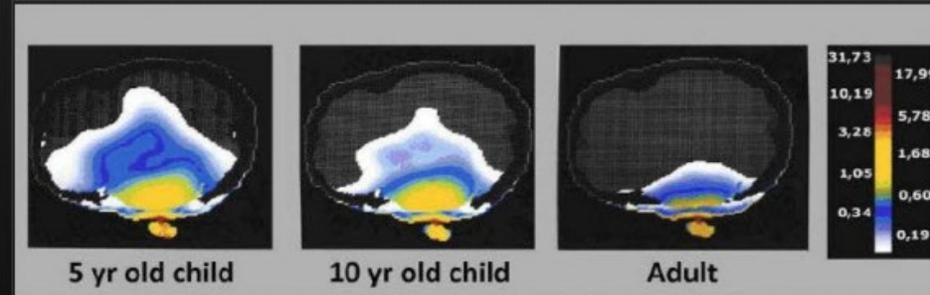
Science

Educational Videos

Experts

FAQ

News/Links



This website is dedicated to helping the public realize that wireless internet, or WiFi, emits radiation that causes a myriad of serious health effects, including damage to DNA, cancer, and infertility. Research shows that autism, ADHD, and other behavioral problems are also associated with wireless radiation exposure. Many scientific and medical experts have issued warnings because of the evidence before them.

[Escuela Sin WiFi](#) [WiFi in Schools UK](#) [WiFi in Schools Australia](#) [C4ST Canada](#) [Parents for Safe Technology](#)

Solutions are readily available. Computers in schools can be connected to the internet via wired technology, which does not emit RF microwave radiation, and is both faster and more reliable.

WiFi emits RF radiofrequency microwave radiation. Both wireless routers and wireless computers contain transmitters that send information back and forth through the air. Microwave radiation is able to penetrate walls made of wood, metal, and concrete. It can also penetrate our bodies.

There are literally thousands of peer reviewed studies, conducted in laboratories and field studies from around the world, that show wireless radiation to be harmful.

Parents For Safe Technology

- Home
- Health
- Family
- School
- Community

- f
- Twitter
- Print
- Envelope
- +

Meet the Medical Doctors and Scientists Calling For Reduced Wireless Exposure to Children

Why not hear the science from the scientists themselves? These well credentialed experts state unequivocally that governments must take action to reduce wireless exposure on children. Listen to them explain the science below.

We are thankful for their courage. They are all respected experts in the field trying to share this credible evidence with the world.

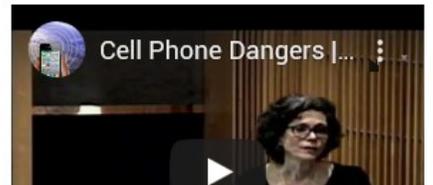
Please start by watching this excellent presentation by Dr. Erica Mallery-Blythe to the right.



Dr. Erica Mallery-Blythe
Children and EMFs

- School
- Doctor's Letters
- Resources to Print Out
- Why Children Are More Vulnerable
- Five Reasons to Turn Off The Wireless
- Science and Scientists
- Worldwide Countries

"Real courage is when you know you're licked before you begin, but you begin anyway and see it through no matter what."
— Harper Lee, *To Kill a Mockingbird*



Devra Davis PhD MPH

Devra Davis heads the [Environmental Health Trust](#) focused on raising awareness about cell phone radiation. Davis was a founding director of the Board on Environmental Studies and Toxicology of the U.S. National Research Council, National Academy of Sciences and Scholar in



Parliamentary Assembly
Assemblée parlementaire



COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

<http://assembly.coe.int>

Doc. 12608
6 May 2011

Resolution 1815 (2011)

The potential dangers of electromagnetic fields and their effect on the environment



8.3.2. for children in general, and particularly in schools and classrooms, give preference to **wired Internet connections**, and strictly regulate the use of mobile phones by schoolchildren on school premises;

Doc. 12608
6 May 2011

Resolution 1815 (2011)

The potential dangers of electromagnetic fields and their effect on the environment

The
European Parliament Committee on the Environment, Public Health and Food Safety

have said

(see A Precautionary Approach)

'the limits of exposure to electromagnetic fields which have been set for the general public are obsolete'.

It is calling for stricter exposure limits.

The European Environment Agency has said that evidence is now strong enough to reconsider the scientific basis for the present EMF exposure standards which have serious limitations **(September 2009).**

**SO, THE EUROPEAN
PARLIAMENT AND 1000's of
SCIENTISTS FROM AROUND
THE WORLD ALL AGREE
WE NEED MUCH LOWER
SAFETY LEVELS TO PROTECT
PUBLIC HEALTH.**

Chart shows the Safety level recommendations from scientists who specialise in this area - data from the Bioinitiative Report

Look at Column 3 (microwatts per sq meter) 4 levels of risk

Level 1 Green 0.00-0.027

Level 2 Yellow 0.1-26.5

Level 3 Amber 26.5-1,120

Level 4 Red >1,120

EM Watch	Electromagnetic Radiation Exposure Guidelines		Copyright: www.emwatch.com
Radio-Frequency Radiation Guidelines - for continuous and prolonged exposure			
Risk Level	Millivolts per Metre	Microwatts per square meter	Description
1	0.00 – 10.0	0.00 – 0.27	Low risk of health effects, except for electro-hypersensitive people.
2	10.0 – 100	0.1 – 26.5	Slight risk of serious health effects, especially for children / pregnant women
3	100 – 650	26.5 – 1120	Moderate risk of serious health effects
4	Over 650	Over 1120	High risk of serious health effects

Low Frequency Electromagnetic Radiation Guidelines - for continuous and prolonged exposure			
Risk Level	Milligauss	Micro Tesla	Description
1	0.0 – 1.0	0.00 – 0.1	Low risk of health effects, except for electro-hypersensitive people.
2	1.0 – 2.0	0.1 – 0.2	Slight risk of serious health effects, especially for children / pregnant women
3	2.0 – 5.0	0.2 – 0.5	Moderate risk of serious health effects
4	Over 5.0	Over 0.5	High risk of serious health effects

Continuous and prolonged exposure means exposure for several hours a day, for several months - or years.

Notes

1. Electro-Hypersensitive people may experience discomfort at very low EMF levels (even at Risk Level 1).
2. Pregnant women should spend most of their time in level 1, but brief visits to levels 2 and 3 will probably do no harm. Avoid level 4.
3. Children should spend most of their time in level 1. Short periods of time may be spent in levels 2, 3 and 4.
4. Everyone should avoid continuous prolonged exposure at level 4.
5. Bedrooms, schools, hospitals, libraries and workplaces should be at level 1.

Use with discretion, and at your own risk. Bear in mind that no level of EMF has been proved absolutely safe (except zero).

No level of RF RADIATION above the natural level has been proven safe !

This is for continuous prolonged exposure

I.C.N.I.R.P. tell us 9 MILLION microwatts per square meter is safe!

Peer reviewed science tells us up to 1,120 microwatts per square meter is a MODERATE RISK of SERIOUS HEALTH EFFECTS and anything above 1120 microwatts per square metre is a HIGH RISK OF SERIOUS HEALTH EFFECTS

Biologically-Based RF Microwave Radiation Exposure Guidelines

To compare, [explore this link](#) to "FCC Guidelines for Human Exposure to Radio-frequency Microwave Radiation"

[BioInitiative, 2017](#): "A scientific benchmark of 30 $\mu\text{W}/\text{m}^2$ for lowest observed effect level for RF microwave radiation 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) or for children as a sensitive subpopulation yields a **3 to 6 $\mu\text{W}/\text{m}^2$** RF Microwave Radiation exposure guideline"

Similar scientifically-based RF Microwave Radiation Exposure Guidelines are published by the [International Institute for Building-Biology & Ecology](#).

No Hazard	Slight Hazard	Severe Hazard	Extreme Hazard
< 0.1 $\mu\text{W}/\text{m}^2$	0.1 $\mu\text{W}/\text{m}^2$ to 10 $\mu\text{W}/\text{m}^2$	10 $\mu\text{W}/\text{m}^2$ to 1,000 $\mu\text{W}/\text{m}^2$	> 1,000 $\mu\text{W}/\text{m}^2$

- $\mu\text{W}/\text{m}^2$ = millionths of a Watt per square meter (a measurement of power flux density)
- **Power flux density (PFD)** = the amount of electrical power that flows through a unit area: expressed as microWatts (μW) per square meter (m^2).
- PFD measures only the **rate of electrical power**, **NOT** the total electrical power delivered over time, which requires the rate to be multiplied by the time of exposure and then requires reporting the results in a **more relevant unit**: $\mu\text{W}\text{-seconds}/\text{m}^2$ or $\mu\text{Joules}/\text{m}^2$
- Average $\mu\text{W}/\text{m}^2$ readings, as specified by the FCC, **significantly under-report** the levels of pulsed, data-modulated, RF microwave radiation exposures for two reasons —
 1. **Peak RF microwave radiation** exposures meter **100x–1000x higher** than average RF microwave radiation for data-carrying, modulated, high-crest signals like Wi-Fi, 4G/LTE and 5G because of the **duty cycle**, inherent in these RF signals. Inexplicably, the FCC RF microwave radiation exposure guidelines *only consider average* RF microwave radiation exposures, which is a significant error because living organisms' biology reacts to the sharp changes of RF microwave radiation from zero to peak levels and back again. This is more fully explained here: [Palo Alto Whitewashes RF Microwave Radiation Exposure Hazards](#)
 2. The FCC RF microwave radiation exposure guidelines **consider neither the time of exposure nor the total electrical power delivered over time**, which is *utter nonsense* and scientifically unsound. This is more fully explained here: [RF Microwave Radiation Counter](#).

The numbers are given in the Supplement: Building Biology Evaluation Guidelines for Sleeping Areas

		NO CONCERN	SLIGHT CONCERN	SEVERE CONCERN	EXTREME CONCERN
Electric field with ground potential	V/m	<1	1-5	5-50	>50
Electric field potential-free	V/m	<0.3	0.3-1.5	1.5-10	>10
Magnetic field	μT	<0.02	0.02-0.1	0.1-0.5	>0.5

2017 BioInitiative report
Update goes Lower Still
in Recommended safe
levels!

At 30 $\mu\text{W}/\text{m}^2$ is the
lowest found effect on
humans, So they suggest
safe levels for children
below this at between 3
and 6 $\mu\text{W}/\text{m}^2$

Slight hazard 0.1 - 10

Severe hazard 10-1000

Extreme hazard >1000

All $\mu\text{W}/\text{m}^2$
(microwatts per square
meter)

ALL OF THESE
RECOMMENDED
LEVELS COME
FROM EXPERT
SCIENTIST
STUDYING HUMAN
EFFECTS

ALL
RECOMMENDATION
S ARE LOWER
THAN
1 V/m (VOLT PER
METER)

WHEREAS ICNIRP
TELL US 58 VOLTS
IS SAFE (HAVING
TESTED A DUMMY
IN 1998)

EXAMPLES OF HARM FROM THE BIOINITIATIVE REPORT AT LEVELS WAY BELOW

Power Density (Microwatts/centimeter ² - $\mu\text{W}/\text{cm}^2$)	X 10,000 for $\mu\text{W}/\text{m}^2$	Reference
As low as (10^{-13}) or 100 femtowatts/cm ²	Super-low intensity RFR effects at MW resonant frequencies resulted in changes in genes; problems with chromatin conformation (DNA)	Belyaev, 1997
5 picowatts/cm ² (10^{-12})	Changed growth rates in yeast cells	Grundler, 1992
0.1 nanowatt/cm ² (10^{-10}) or 100 picowatts/cm ²	Super-low intensity RFR effects at MW resonant frequencies resulted in changes in genes; problems with chromatin condensation (DNA) intensities comparable to base stations	Belyaev, 1997
0.00034 $\mu\text{W}/\text{cm}^2$	Chronic exposure to mobile phone pulsed RF significantly reduced sperm count,	Behari, 2006
0.0005 $\mu\text{W}/\text{cm}^2$	RFR decreased cell proliferation at 960 MHz GSM 217 Hz for 30-min exposure	Velizarov, 1999
0.0006 - 0.0128 $\mu\text{W}/\text{cm}^2$	Fatigue, depressive tendency, sleeping disorders, concentration difficulties, cardio-vascular problems reported with exposure to GSM 900/1800 MHz cell phone signal at base station level exposures.	Oberfeld, 2004
0.003 - 0.02 $\mu\text{W}/\text{cm}^2$	In children and adolescents (8-17 yrs) short-term exposure caused headache, irritation, concentration difficulties in school.	Heinrich, 2010
0.003 to 0.05 $\mu\text{W}/\text{cm}^2$	In children and adolescents (8-17 yrs) short-term exposure caused conduct problems in school (behavioral problems)	Thomas, 2010
0.005 $\mu\text{W}/\text{cm}^2$	In adults (30-60 yrs) chronic exposure caused sleep disturbances, (but not significantly increased across the entire population)	Mohler, 2010
0.005 - 0.04 $\mu\text{W}/\text{cm}^2$	Adults exposed to short-term cell phone radiation reported headaches, concentration difficulties (differences not significant, but elevated)	Thomas, 2008
0.006 - 0.01 $\mu\text{W}/\text{cm}^2$	Chronic exposure to base station RF (whole-body) in humans showed increased stress hormones; dopamine levels substantially decreased; higher levels of adrenaline and nor-adrenaline; dose-response seen; produced chronic physiological stress in cells even after 1.5 years.	Buchner, 2012
0.01 - 0.11 $\mu\text{W}/\text{cm}^2$	RFR from cell towers caused fatigue, headaches, sleeping problems	Navarro, 2003

Power Density (Microwatts/centimeter ² - $\mu\text{W}/\text{cm}^2$)	X 10,000 for $\mu\text{W}/\text{m}^2$		Reference
0.01 - 0.05 $\mu\text{W}/\text{cm}^2$		Adults (18-91 yrs) with short-term exposure to GSM cell phone radiation reported headache, neurological problems, sleep and concentration problems.	Hutter, 2006
0.005 - 0.04 $\mu\text{W}/\text{cm}^2$		Adults exposed to short-term cell phone radiation reported headaches, concentration difficulties (differences not significant, but elevated)	Thomas, 2008
0.015 - 0.21 $\mu\text{W}/\text{cm}^2$		Adults exposed to short-term GSM 900 radiation reported changes in mental state (e.g., calmness) but limitations of study on language descriptors prevented refined word choices (stupified, zoned-out)	Augner, 2009
0.05 - 0.1 $\mu\text{W}/\text{cm}^2$		RFR linked to adverse neurological, cardio symptoms and cancer risk	Khurana, 2010
0.05 - 0.1 $\mu\text{W}/\text{cm}^2$		RFR related to headache, concentration and sleeping problems, fatigue	Kundi, 2009
0.07 - 0.1 $\mu\text{W}/\text{cm}^2$		Sperm head abnormalities in mice exposed for 6-months to base station level RF/MW. Sperm head abnormalities occurred in 39% to 46% exposed mice (only 2% in controls) abnormalities was also found to be dose dependent. The implications of the pin-head and banana-shaped sperm head. The occurrence of sperm head observed increase occurrence of sperm head abnormalities on the reproductive health of humans living in close proximity to GSM base stations were discussed."	Otitolaju, 2010
0.38 $\mu\text{W}/\text{cm}^2$		RFR affected calcium metabolism in heart cells	Schwartz, 1990
0.8 - 10 $\mu\text{W}/\text{cm}^2$		RFR caused emotional behavior changes, free-radical damage by super-weak MWs	Akoiev, 2002
0.13 $\mu\text{W}/\text{cm}^2$		RFR from 3G cell towers decreased cognition, well-being	Zwamborn, 2003
0.16 $\mu\text{W}/\text{cm}^2$		Motor function, memory and attention of school children affected (Latvia)	Kolodynski, 1996
0.168 - 1.053 $\mu\text{W}/\text{cm}^2$		Irreversible infertility in mice after 5 generations of exposure to RFR from an 'antenna park'	Magras & Zenos, 1997
0.2 - 8 $\mu\text{W}/\text{cm}^2$		RFR caused a two-fold increase in leukemia in children	Hocking, 1996
0.2 - 8 $\mu\text{W}/\text{cm}^2$		RFR decreased survival in children with leukemia	Hocking, 2000
0.21 - 1.28 $\mu\text{W}/\text{cm}^2$		Adolescents and adults exposed only 45 min to UMTS cell phone radiation reported increases In headaches.	Riddervold, 2008

Power Density (Microwatts/centimeter ² - $\mu\text{W}/\text{cm}^2$)	X 10,000 for $\mu\text{W}/\text{m}^2$	Reference
0.5 $\mu\text{W}/\text{cm}^2$	Significant degeneration of seminiferous epithelium in mice at 2.45 GHz, 30-40 min.	Saunders, 1981
0.5 - 1.0 $\mu\text{W}/\text{cm}^2$	Wi-Fi level laptop exposure for 4-hr resulted in decrease in sperm viability, DNA fragmentation with sperm samples placed in petri dishes under a laptop connected via WI-FI to the internet.	Avendano, 2012
1.0 $\mu\text{W}/\text{cm}^2$	RFR induced pathological leakage of the blood-brain barrier	Persson, 1997
1.0 $\mu\text{W}/\text{cm}^2$	RFR caused significant effect on immune function in mice	Fesenko, 1999
1.0 $\mu\text{W}/\text{cm}^2$	RFR affected function of the immune system	Novoselova, 1999
1.0 $\mu\text{W}/\text{cm}^2$	Short-term (50 min) exposure in electrosensitive patients, caused loss of well-being after GSM and especially UMTS cell phone radiation exposure	Eltiti, 2007
1.3 - 5.7 $\mu\text{W}/\text{cm}^2$	RFR associated with a doubling of leukemia in adults	Dolk, 1997
1.25 $\mu\text{W}/\text{cm}^2$	RFR exposure affected kidney development in rats (in-utero exposure)	Pyrpasopoulou, 2004
1.5 $\mu\text{W}/\text{cm}^2$	RFR reduced memory function in rats	Nittby, 2007
2 $\mu\text{W}/\text{cm}^2$	RFR induced double-strand DNA damage in rat brain cells	Kesari, 2008
2.5 $\mu\text{W}/\text{cm}^2$	RFR affected calcium concentrations in heart muscle cells	Wolke, 1996
2 - 4 $\mu\text{W}/\text{cm}^2$	Altered cell membranes; acetylcholine-induced ion channel disruption	D'Inzeo, 1988
4 $\mu\text{W}/\text{cm}^2$	RFR caused changes in hippocampus (brain memory and learning)	Tattersall, 2001
4 - 15 $\mu\text{W}/\text{cm}^2$	Memory impairment, slowed motor skills and retarded learning in children	Chiang, 1989
5 $\mu\text{W}/\text{cm}^2$	RFR caused drop in NK lymphocytes (immune function decreased)	Boscolo, 2001
5.25 $\mu\text{W}/\text{cm}^2$	20 minutes of RFR at cell tower frequencies induced cell stress response	Kwee, 2001
5 - 10 $\mu\text{W}/\text{cm}^2$	RFR caused impaired nervous system activity	Dumansky, 1974
6 $\mu\text{W}/\text{cm}^2$	RFR induced DNA damage in cells	Phillips, 1998

Power Density (Microwatts/centimeter ² - $\mu\text{W}/\text{cm}^2$)		Reference
	X 10,000 for $\mu\text{W}/\text{m}^2$	
8.75 $\mu\text{W}/\text{cm}^2$	RFR at 900 MHz for 2-12 hours caused DNA breaks in leukemia cells	Marinelli, 2004
10 $\mu\text{W}/\text{cm}^2$	Changes in behavior (avoidance) after 0.5 hour exposure to pulsed RFR	Navakatikian, 1994
10 - 100 $\mu\text{W}/\text{cm}^2$	Increased risk in radar operators of cancer; very short latency period; dose response to exposure level of RFR reported.	Richter, 2000
12.5 $\mu\text{W}/\text{cm}^2$	RFR caused calcium efflux in cells - can affect many critical cell functions	Dutta, 1989
13.5 $\mu\text{W}/\text{cm}^2$	RFR affected human lymphocytes - induced stress response in cells	Sarimov, 2004
20 $\mu\text{W}/\text{cm}^2$	Increase in serum cortisol (a stress hormone)	Mann, 1998
28.2 $\mu\text{W}/\text{cm}^2$	RFR increased free radical production in rat cells	Yurekli, 2006
37.5 $\mu\text{W}/\text{cm}^2$	Immune system effects - elevation of PFC count (antibody producing cells)	Veyret, 1991
45 $\mu\text{W}/\text{cm}^2$	Pulsed RFR affected serum testosterone levels in mice	Forgacs, 2006
50 $\mu\text{W}/\text{cm}^2$	Cell phone RFR caused a pathological leakage of the blood-brain barrier in 1 hour	Salford, 2003
50 $\mu\text{W}/\text{cm}^2$	An 18% reduction in REM sleep (important to memory and learning functions)	Mann, 1996
60 $\mu\text{W}/\text{cm}^2$	RFR caused structural changes in cells of mouse embryos	Somozy, 1991
60 $\mu\text{W}/\text{cm}^2$	Pulsed RFR affected immune function in white blood cells	Stankiewicz, 2006
60 $\mu\text{W}/\text{cm}^2$	Cortex of the brain was activated by 15 minutes of 902 MHz cell phone	Lebedeva, 2000
65 $\mu\text{W}/\text{cm}^2$	RFR affected genes related to cancer	Ivaschuk, 1999
92.5 $\mu\text{W}/\text{cm}^2$	RFR caused genetic changes in human white blood cells	Belyaev, 2005
100 $\mu\text{W}/\text{cm}^2$	Changes in immune function	Elekes, 1996
100 $\mu\text{W}/\text{cm}^2$	A 24.3% drop in testosterone after 6 hours of CW RFR exposure	Navakatikian, 1994
120 $\mu\text{W}/\text{cm}^2$	A pathological leakage in the blood-brain barrier with 915 MHz cell RF	Salford, 1994

Recommended Wireless Energy Exposure Levels

Measured in RF Units of	Volts per meter	Microwatts per centimeter squared
Abbreviation	V/m	$\mu\text{W}/\text{cm}^2$
FCC Safety Level (Thermal)	61.4	1,000
August Advises Please Don't Exceed This Level <i>LESS IS BEST</i>	0.98	0.5
BioInitiative Report from 2007	0.61	0.1
Building Biology-Sleeping Area Recco for Severe Concern	0.061	0.001
BioInitiative Report from 2012	0.034	0.0003
Austrian Med Assoc. Recco's for EHS patients 4 hrs/day reg exposure	0.020 or less	0.0001 or less

BIOINITIATIVE REPORT RECOMMENDS A SAFETY LEVEL of 0.194 V/m in public spaces after examining 2000 peer reviewed papers!

X 10,000 for $\mu\text{W}/\text{m}^2$



Physicians for Safe Technology

Note: Building Biologists Extreme Concern for Long Term Exposure

- $0.614 \text{ V/m} = 614 \text{ mV/m} = 1000 \mu\text{W/m}^2 = 0.1 \mu\text{W/cm}^2$

Note: [Bioinitiative Limit](#) for No Observable Effects

- $0.019,4 \text{ V/m} = 19.4 \text{ mV/m} = 3-6 \mu\text{W/m}^2 = 0.0003-0.0006 \mu\text{W/cm}^2$

Building Biology Precautionary [Guidelines](#) (2015) for Sleeping Areas

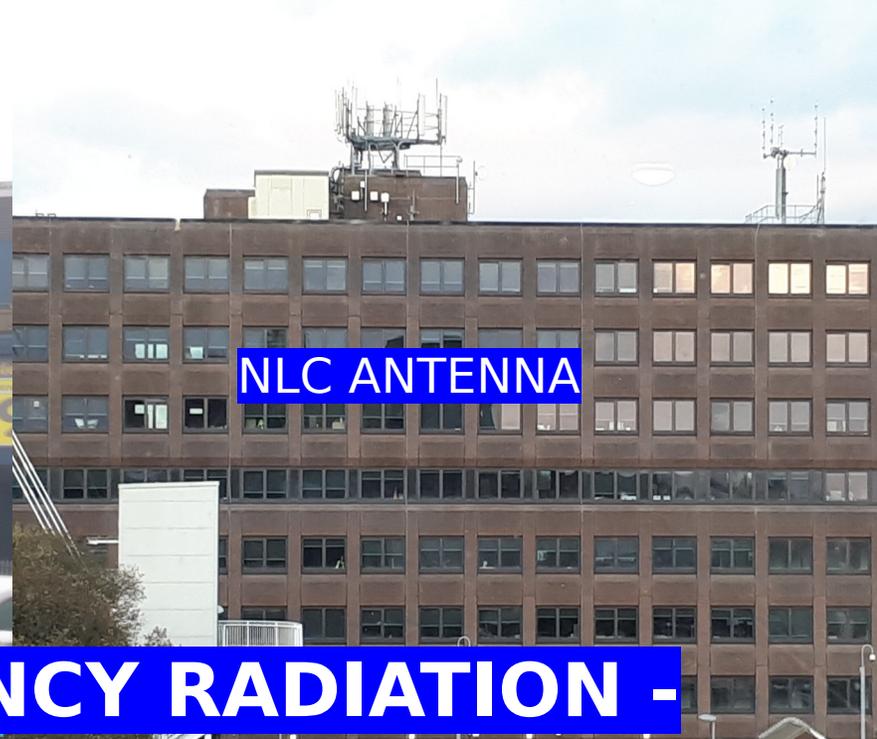
Power density	No Concern	Slight Concern	Severe Concern	Extreme Concern
microWatts per square meter $\mu\text{W/m}^2$	< 0.1	0.1 - 10	10 - 1000	> 1000
microWatts per square cm $\mu\text{W/cm}^2$	< 0.000,01	0.000,01 - 0.001	0.001 - 0.1	> 0.1
milliWatts per square meter mW/m^2	<0.000,1	0.000,1 - 0.01	0.01 - 1	> 1
Signal strength				
Volts per meter V/m	< 0.006,14	0.006,14 – 0.061,4	0.061,4 – 0.614	> 0.614



CARRICKSTONE

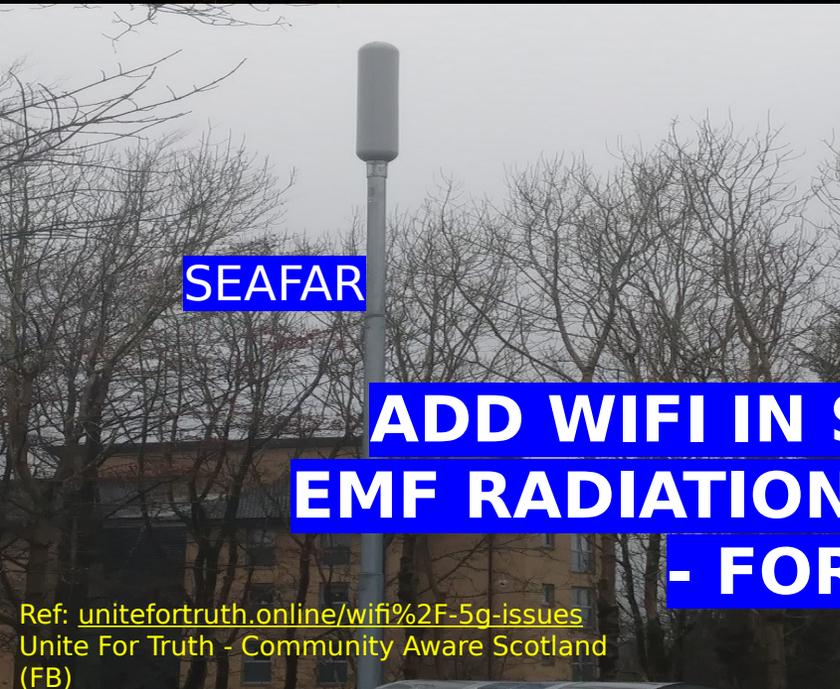


TOWN CENTRE



NLC ANTENNA

UBIQUITOUS EMF RADIO FREQUENCY RADIATION - CUMBERNAULD



SEAFAR

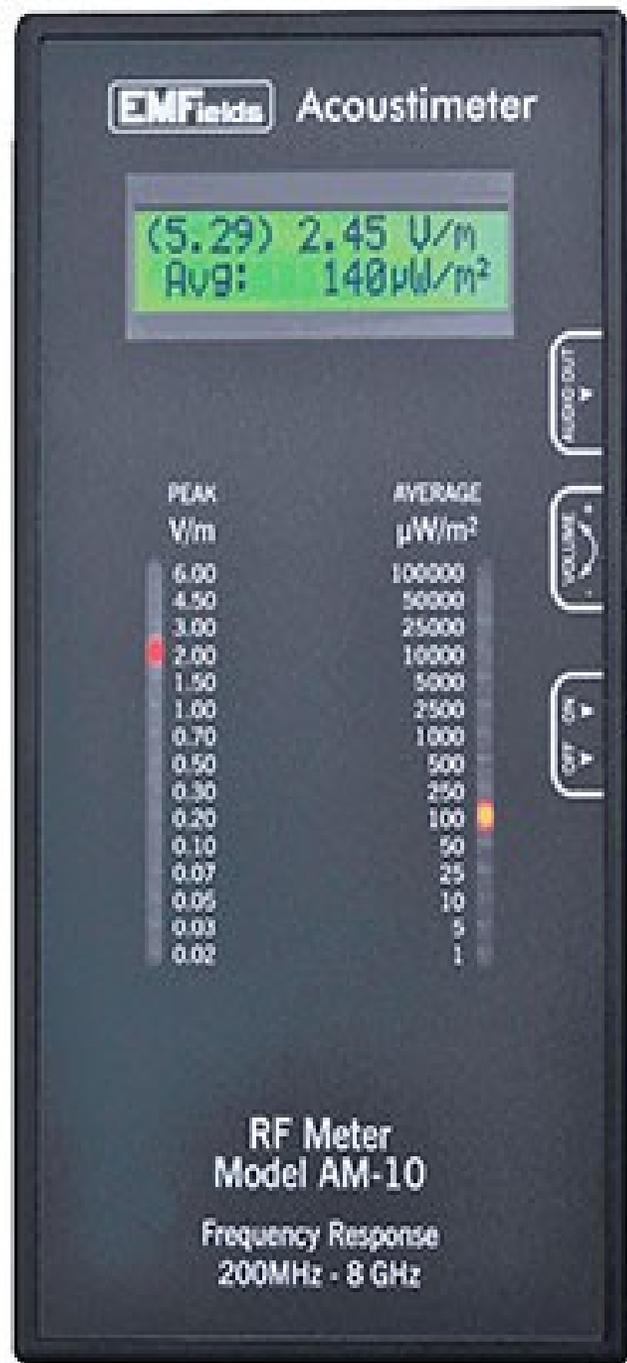


TOP OF KILDRUM



ABRONHILL

ADD WIFI IN SCHOOLS, WIFI IN HOMES, MOBILE PHONE EMF RADIATION & IT IS PART OF OUR LIVING ENVIRONMENT - FOR SOME PEOPLE EXPOSURE IS 24/7

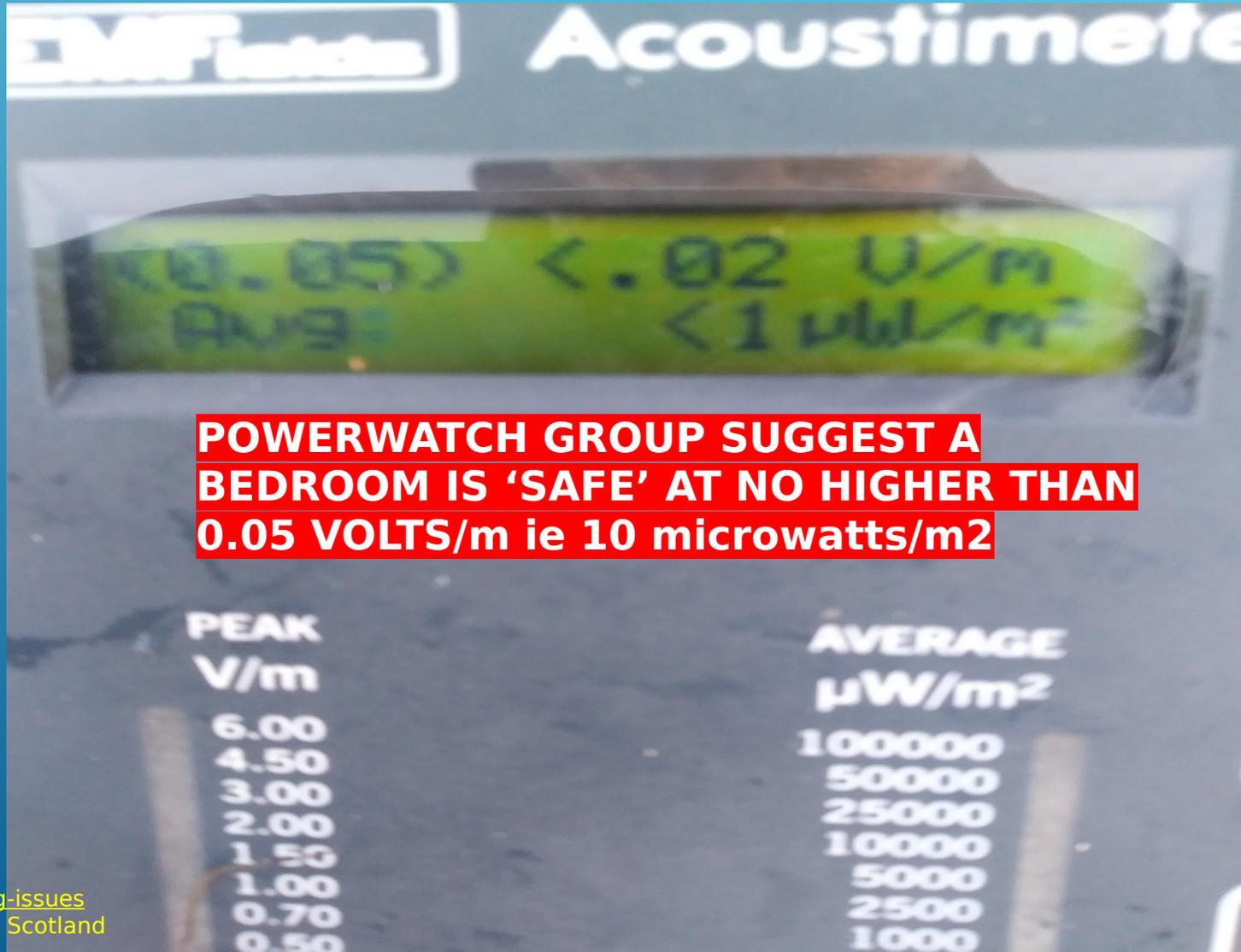


**TO MEASURE THE
EMF RADIATION
AROUND US WE
CAN USE AN
ACOUSTIMETER &
TAKE OUR OWN
READINGS**

**(ONLY FOR RF
RADIATION)**

AN ACOUSTIMETER - Natural Background Safe reading at Home: 0.05 peak V/m

**LEFT: PEAK
HOLD 0.05
V/m**



**POWERWATCH GROUP SUGGEST A
BEDROOM IS 'SAFE' AT NO HIGHER THAN
0.05 VOLTS/m ie 10 microwatts/m²**

**RIGHT UP:
PEAK
SIGNAL
STRENGTH (0.02
V/m)**

**RIGHT DOWN:
AVERAGE POWER
(FLUX DENSITY)
OF RADIATION
(1 uW/m²)**

Fleming Building
Town Centre Cumbernauld (2020)

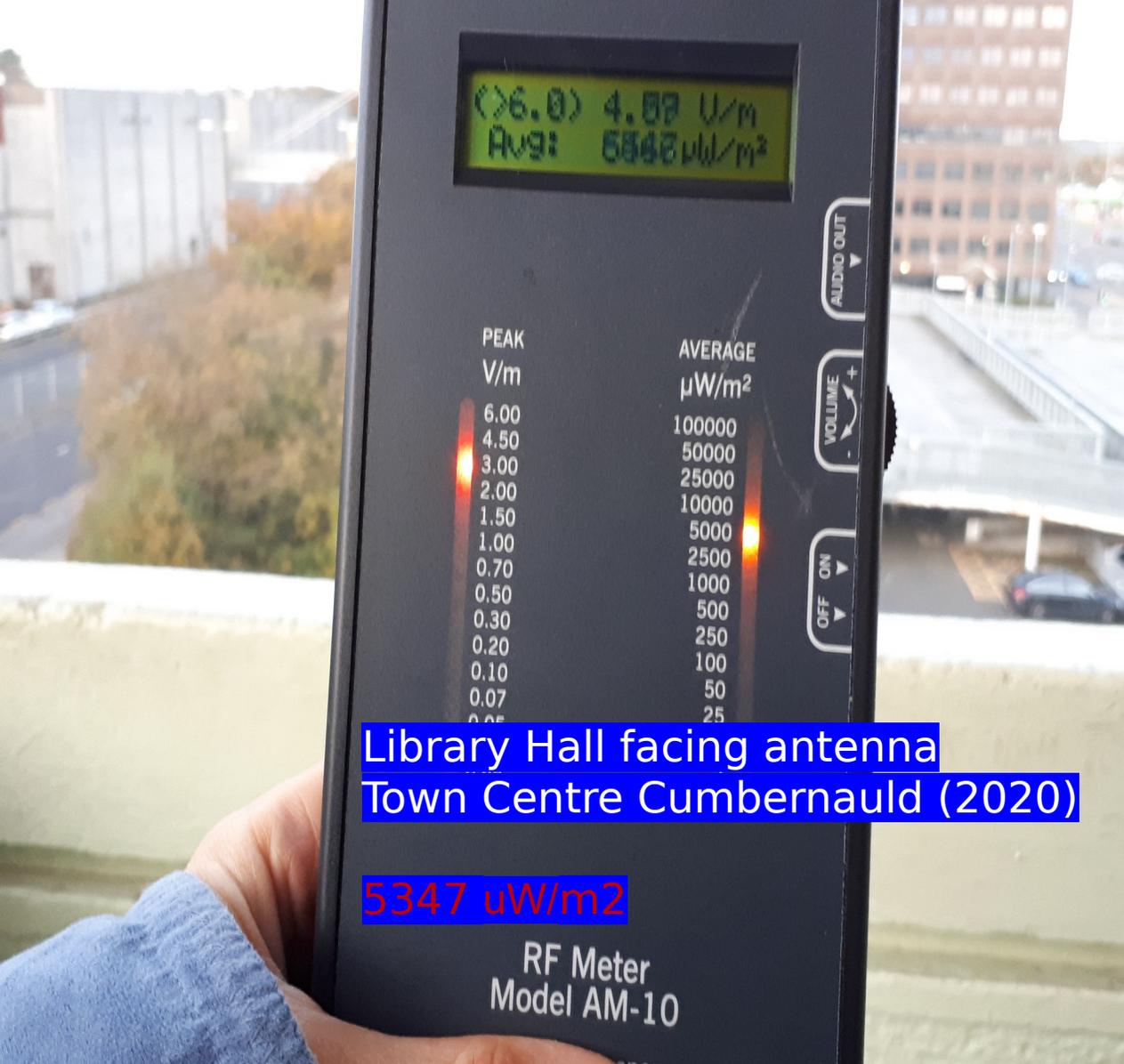
1786 $\mu\text{W}/\text{m}^2$



CARRICKSTONE -
Cumbernauld (2020)

2755 $\mu\text{W}/\text{m}^2$





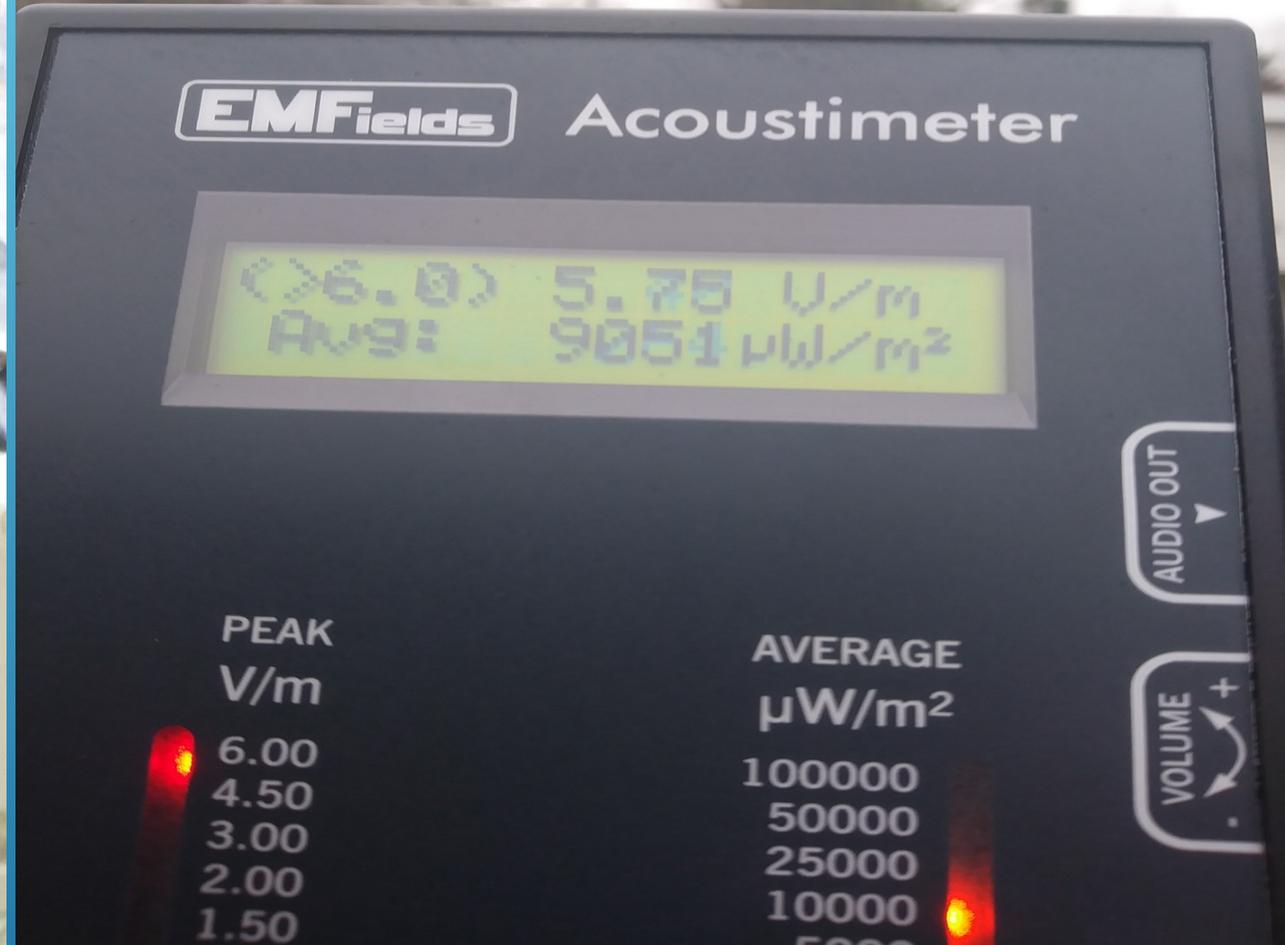
Library Hall facing antenna
Town Centre Cumbernauld (2020)

5347 $\mu\text{W}/\text{m}^2$

Morar Drive Cumbernauld

Peak 6 V/m

9051 $\mu\text{W}/\text{m}^2$





Town Centre Cumbernauld (2022)





**Glasgow
East area
2021**



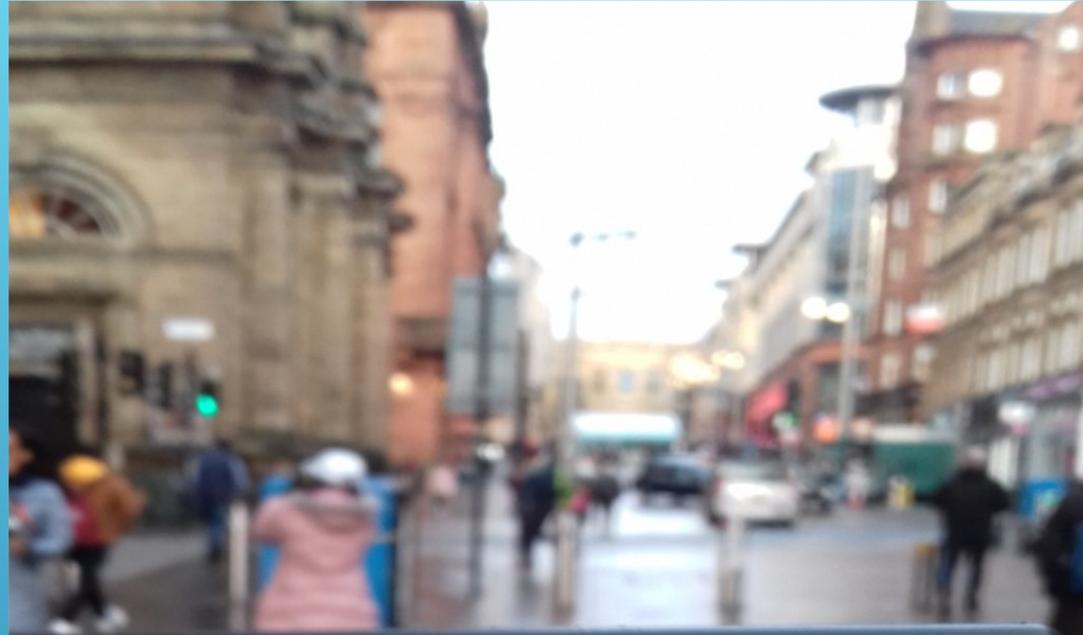
Ref: unitefortruth.online/wifi%2F-5g-issues
 Unite For Truth - Community Aware Scotland
 (FB)

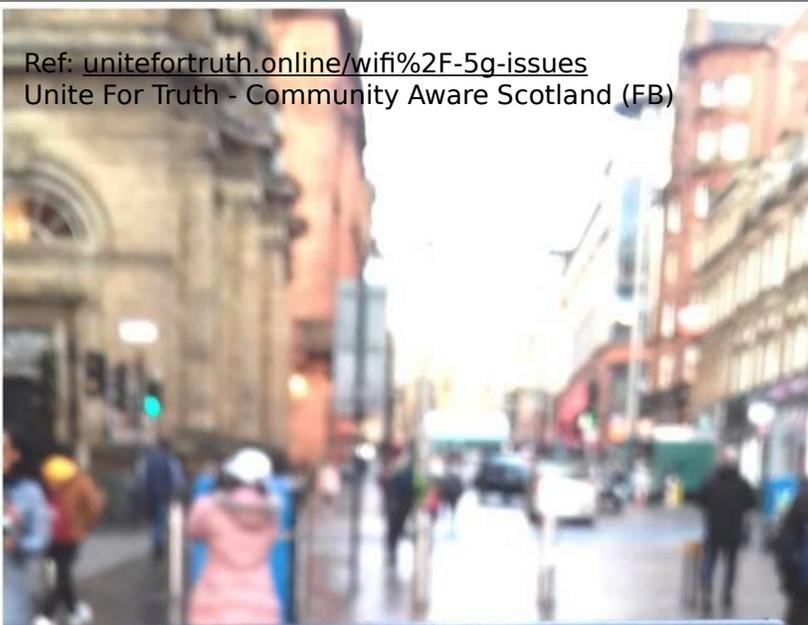


Glasgow

Argyle Street

2021





BIOLOGICAL EFFECT OF MILLIMETER RADIOWAVES

Kiev VRACHEBNOYE DELO in Russian No 3, 1977 pp 116-119

[Article by N. P. Zalyubovskaya, Khar'kov Scientific Research Institute of Microbiology, Vaccines and Sera imeni Mechnikov]

[Text] Morphological, functional and biochemical studies conducted in humans and animals revealed that millimeter waves caused changes in the body manifested in structural alterations in the skin and internal organs, qualitative and quantitative changes of the blood and bone marrow composition and changes of the conditioned reflex activity, tissue respiration, activity of enzymes participating in the processes of tissue respiration and nucleic metabolism. The degree of unfavorable effect of millimeter waves depended on the duration of the radiation and individual characteristics of the organism.

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Help | Ex

Magnetobiology:
Underlying Physical
Problems (Kindle Edition)
by Vladimir N. Binhi

Kindle Edition £136.32

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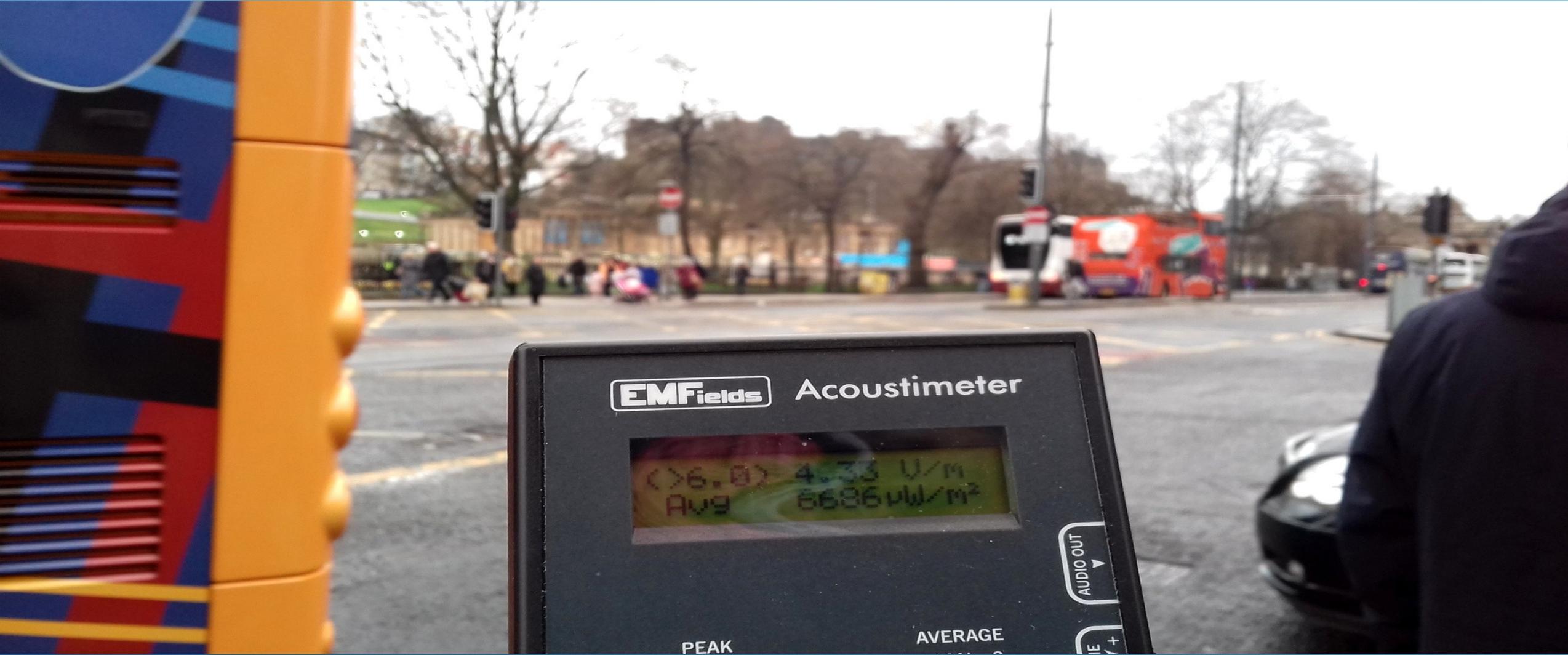
Beginning

The correlation of EMFs with cardio-vascular incidences is a subject of many studies. In that respect, also of significance are EMFs of natural origins, specifically the geomagnetic field (GMF).

The most extensively studied issue is cancer risks (Wilson *et al.*, 1990; Pool, 1990b; Goodman and Henderson, 1990; Stevens *et al.*, 1997), a topic of hundreds of publications (Nakagawa, 1997). The American Journal of Epidemiology has recently devoted a collection of materials just to one concern — EMFs and brain tumors in children (Preston-Martin *et al.*, 1996). Some works maintain that findings do not support the hypothesis of carcinogenic effects of the magnetic fields of high-voltage lines, electric heaters, and other household appliances (Verreault *et al.*, 1990). Others stress the primitive nature of the techniques used to gauge the results of exposure to magnetic fields, the possible systematic control errors and the preliminary nature of those works, and the need for further discussions (Gurney *et al.*, 1995; Lacy-Hulbert *et al.*, 1995).

Long-term exposures to even weak fields are believed to be able to suppress the activity of some clones of the cells of the immune system, thereby impairing the defences of the organism against the multiplication of "foreign" cells (Adey, 1988; Lyle *et al.*, 1988). Another possible mechanism is related to genetic changes induced by an MF (Goodman *et al.*, 1989). There is also evidence that low-frequency MFs are able to affect the synthesis of some peptides that in the organism play the role of some internal biological signals (Goodman and Henderson, 1988; Novikov, 1994). Coghill (1996) indicated that levels of power-fet al.requency EMFs (both electric and magnetic) near beds of children are 1.3–2 times higher for leukemia cases than for healthy children. Recent studies in the UK (documents³ of the National Radiological Protection Board, 12(1), 2001) provided evidence that relatively heavy average exposures of 0.4 μT or more are associated with a doubling of the risk of leukemia in children under 15 years of age. Novikov *et al.* (1996) report that under certain conditions weak MFs, in contrast, retard the cancer-producing process.

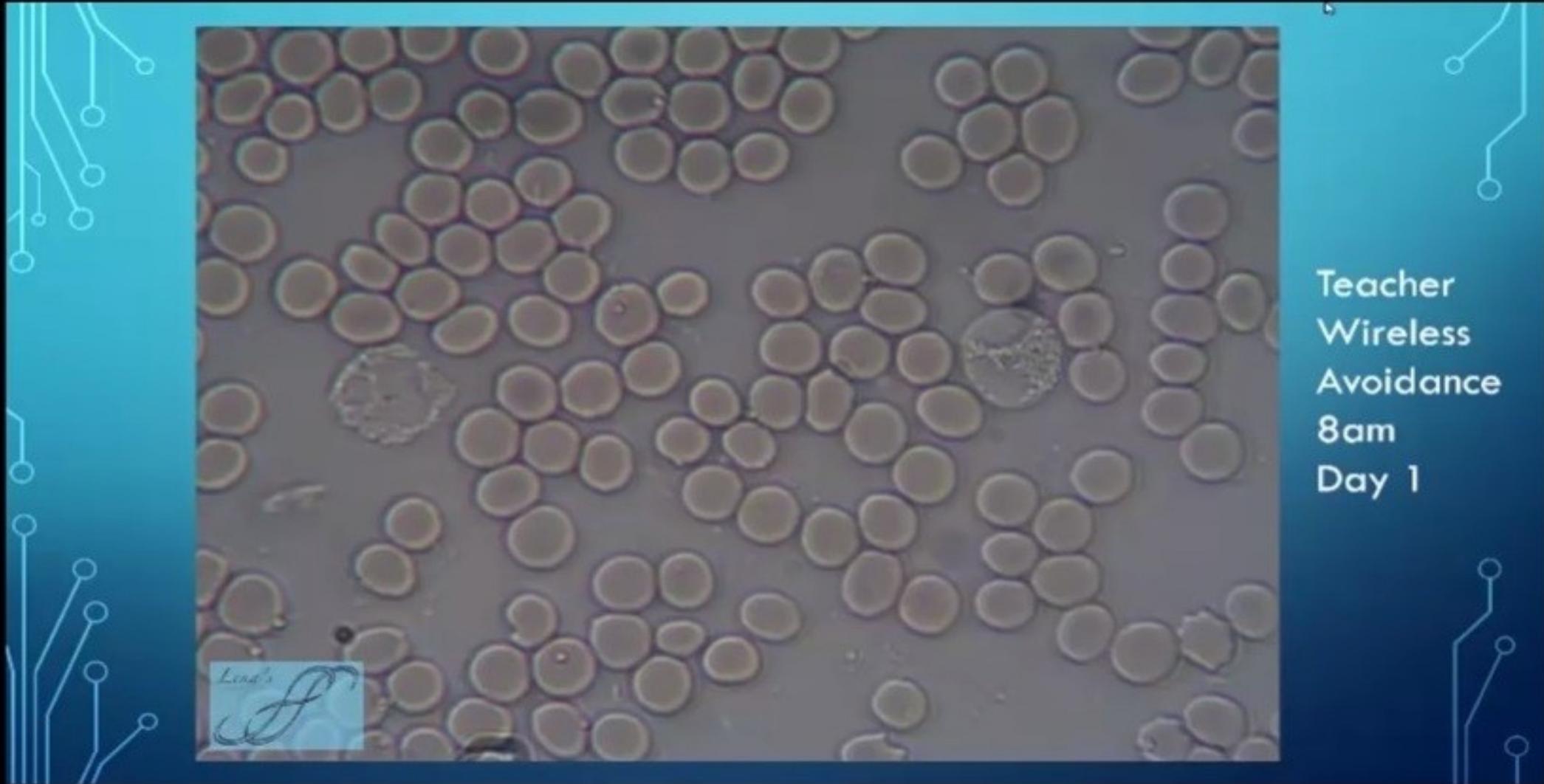
EDINBURGH – WAVERLY TRAIN STATION AREA (2022)



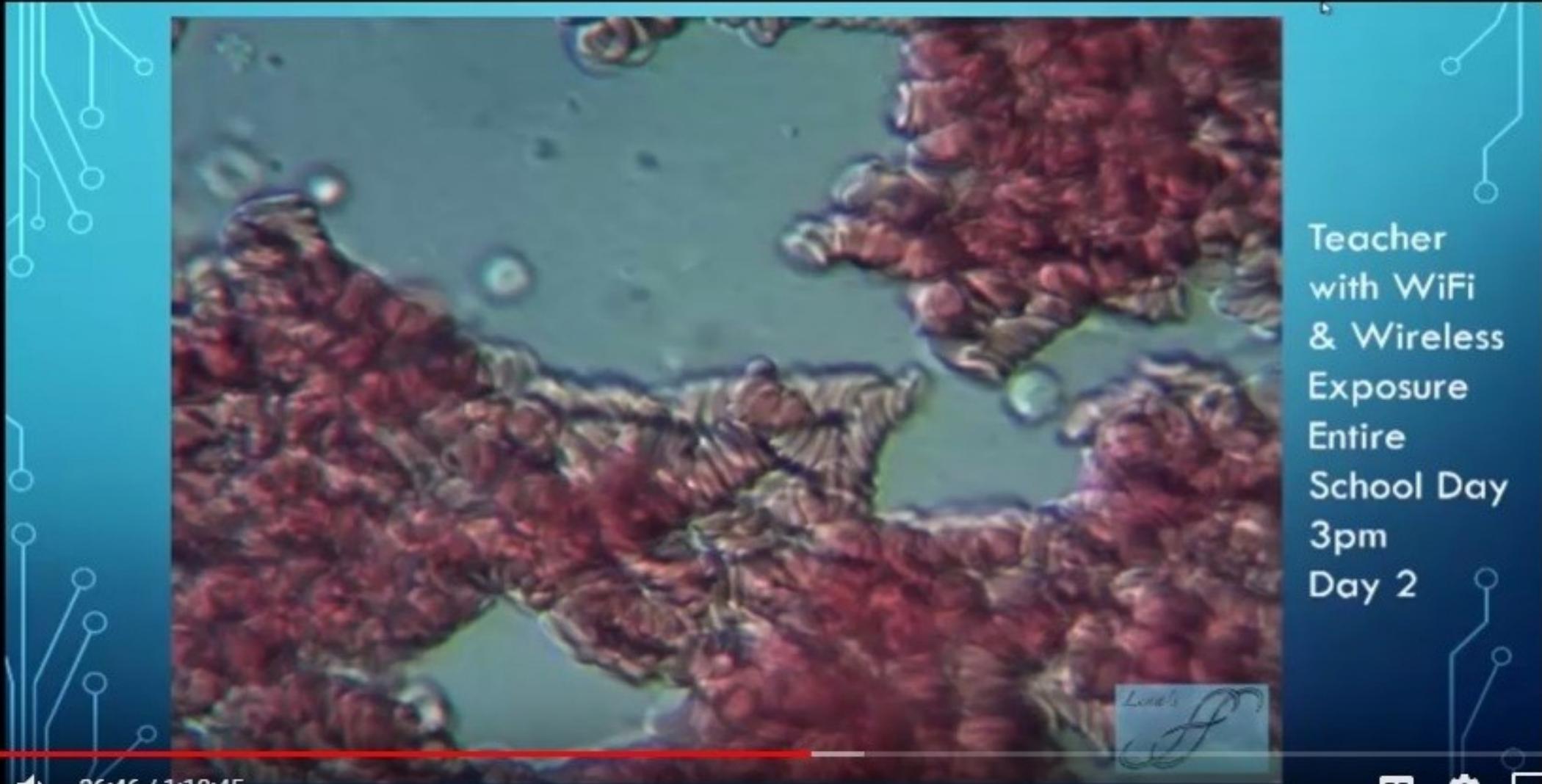
EDINBURGH - WAVERLY TRAIN STATION AREA - PRINCESS STREET (2022)



LENA PU'S WIFI EXPERIMENT (2019)



LENA PU'S WIFI EXPERIMENT (2019)

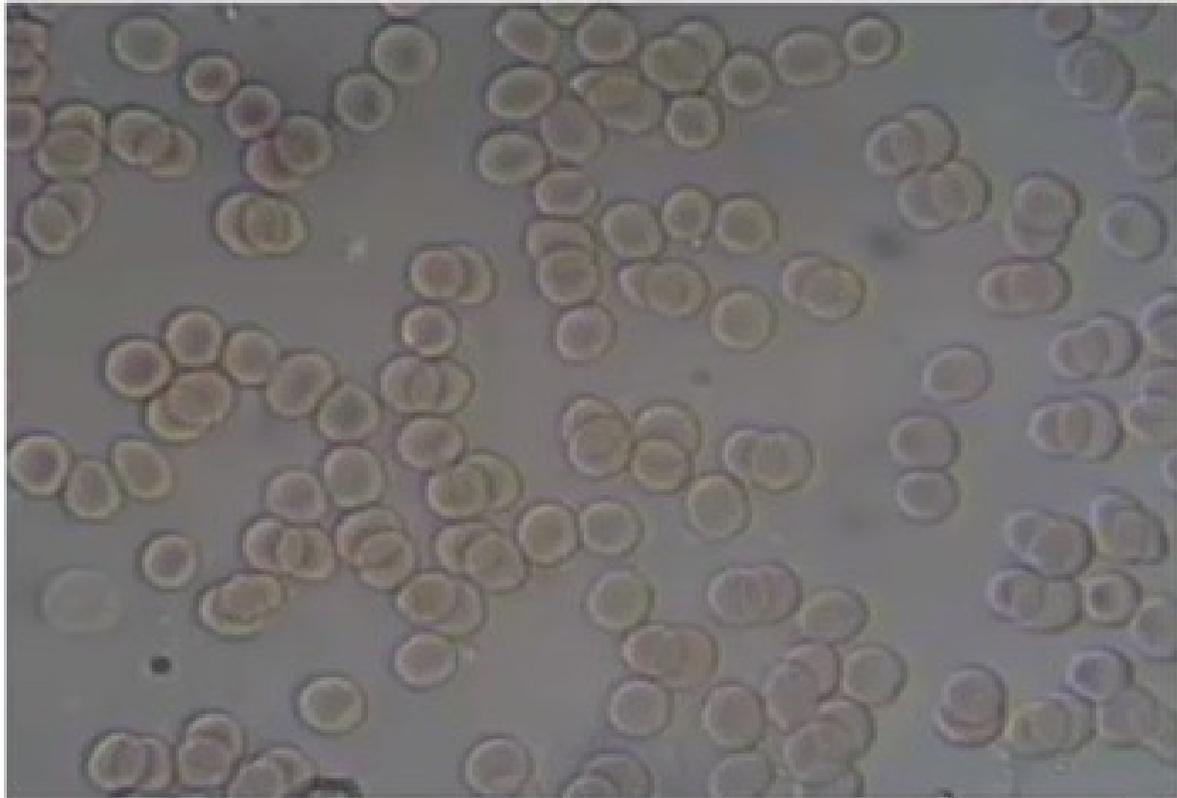


Teacher
with WiFi
& Wireless
Exposure
Entire
School Day
3pm
Day 2

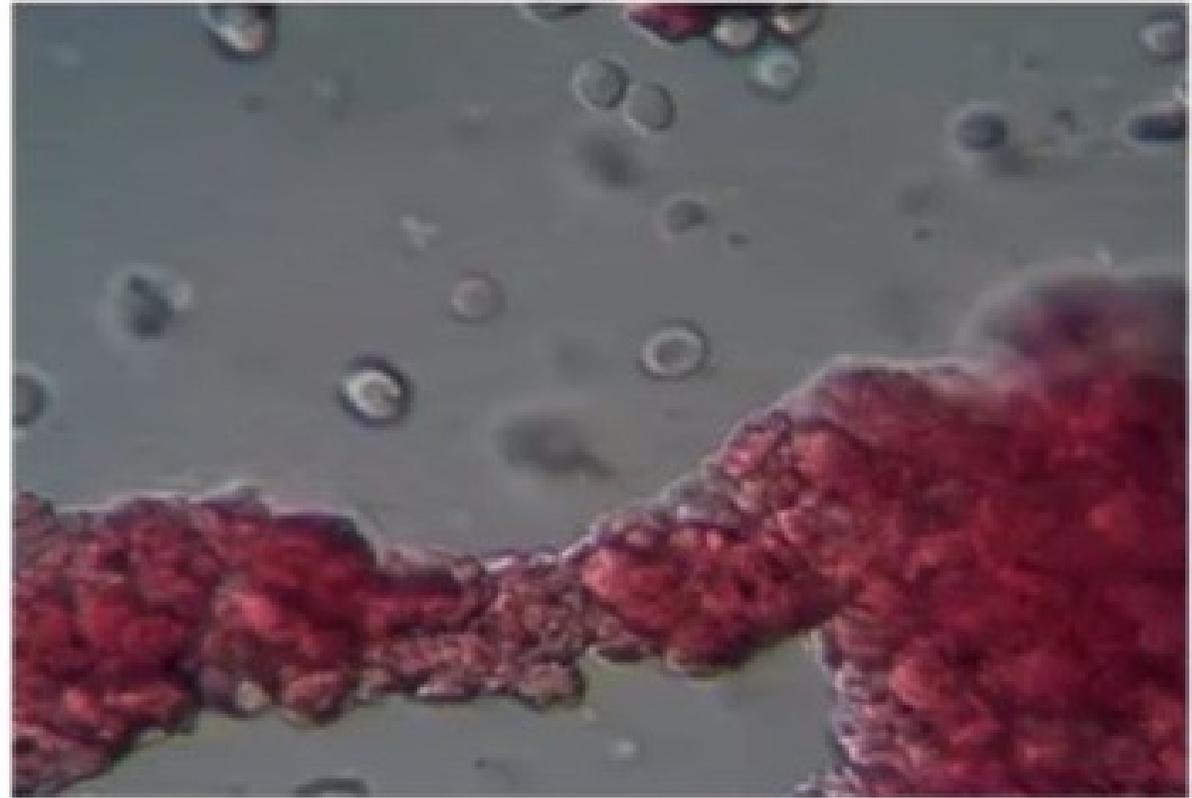
36:46 / 1:10:45



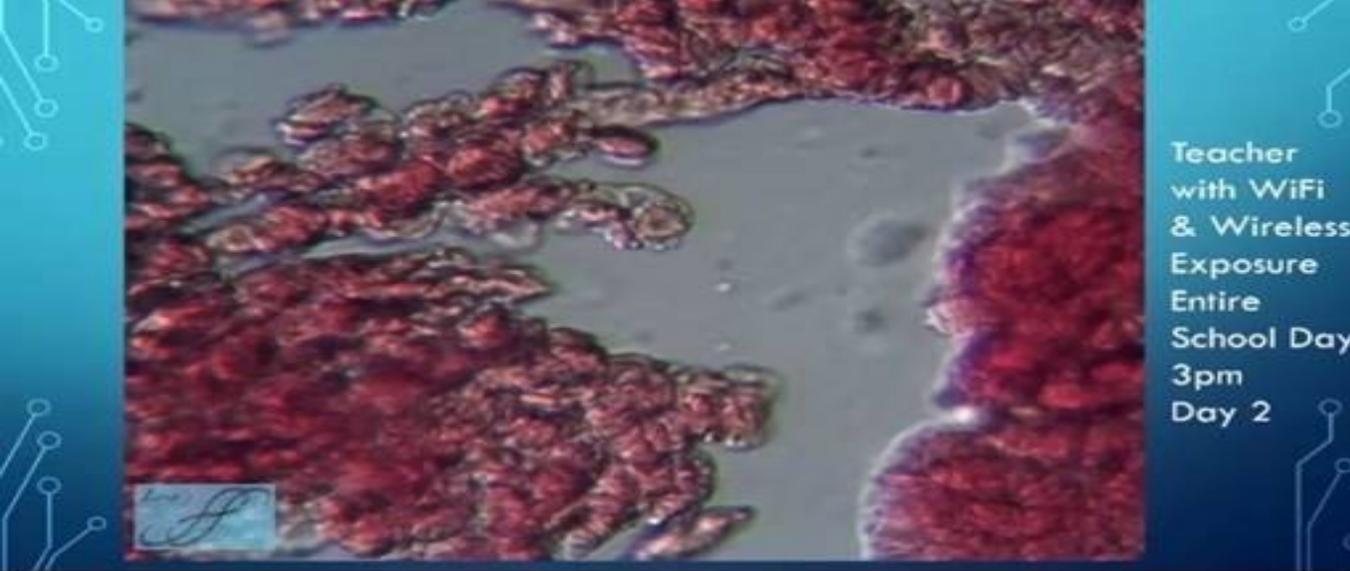
LENA PU'S WIFI EXPERIMENT (2019)



Teacher 8am Before School Wireless Exposures



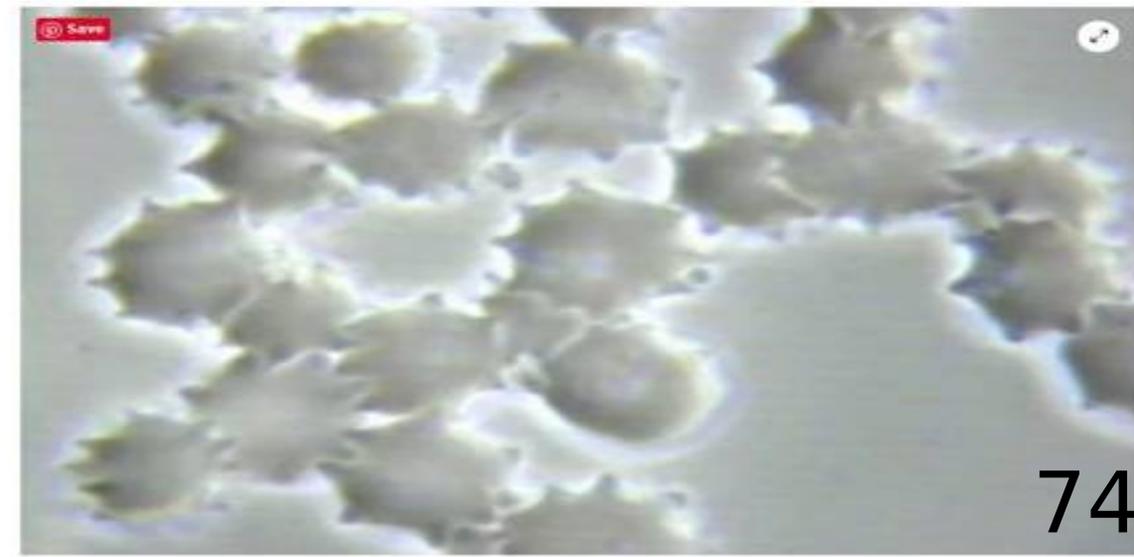
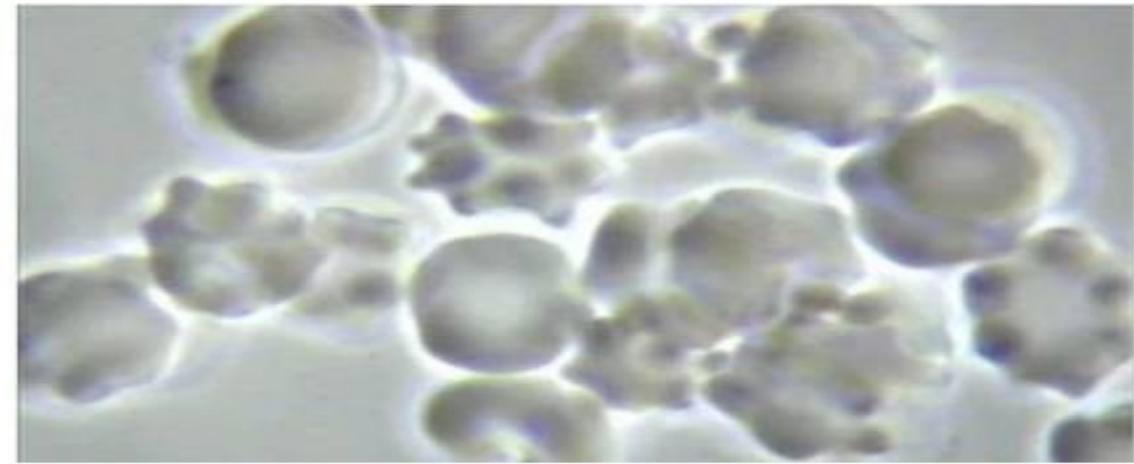
Teacher 3pm After School Wireless Exposures



Teacher
with WiFi
& Wireless
Exposure
Entire
School Day
3pm
Day 2

The Corona Effect and Spike Protein Effect

The Endogenously Created "Corona Effect" and "Spike Protein" ARE Caused by Chemical, Parasitical and Radiation Poisoning from Reduced Graphene Oxide and Microwave Radiation! [12][82][83]



5G: Health Risks, Surveillance and BioWeaponry - Lena Pu (Sept 2019)

Symptoms

Consequences

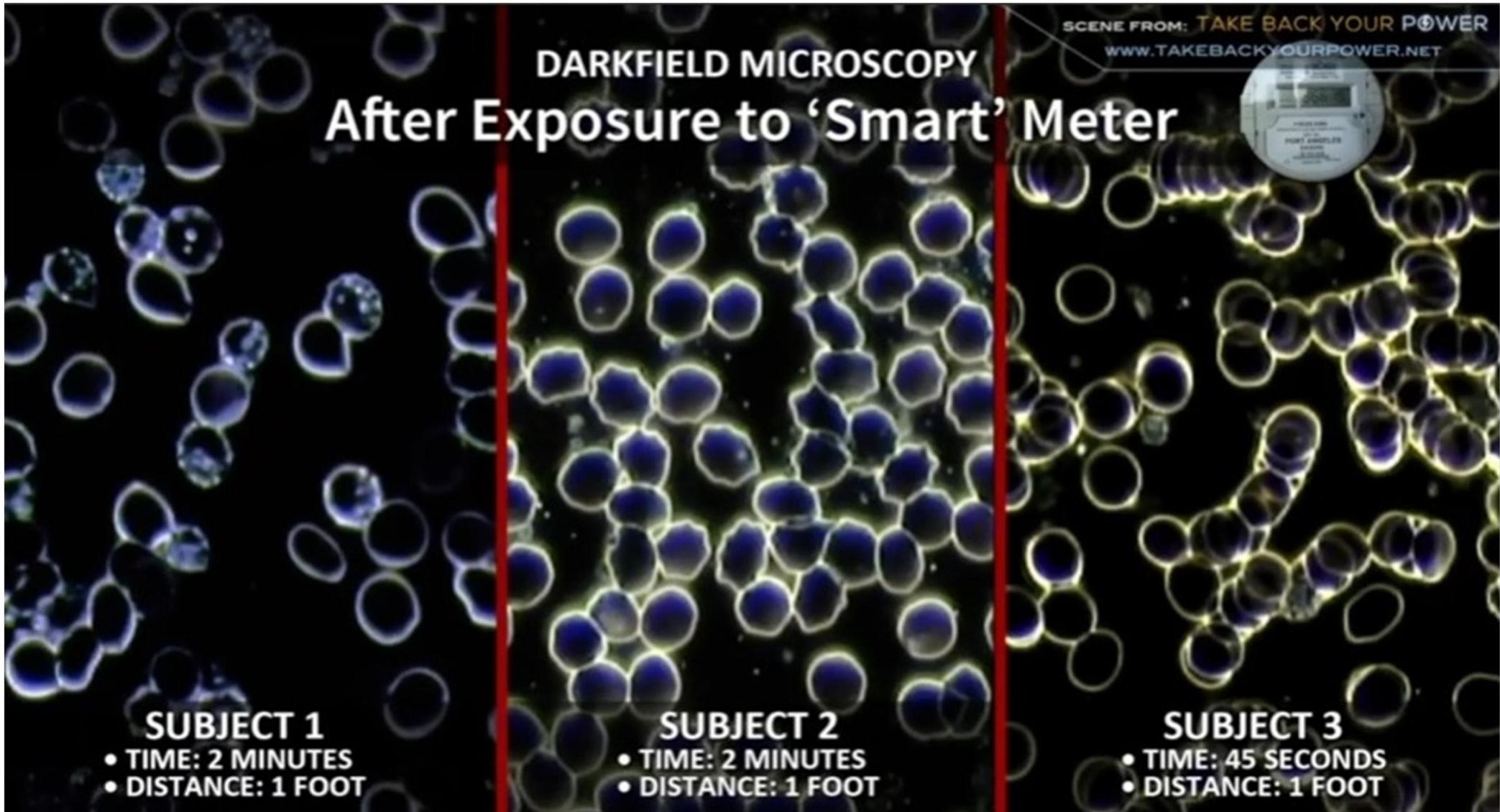


- ✓ poor circulation
- ✓ lower oxygen transport
- ✓ reduced waste removal
- ✓ diabetes mellitus
- ✓ stroke
- ✓ myocardial infarction
- ✓ Alzheimer disease . . .

- ➔ headache, fatigue
- ➔ difficulty concentrating
- ➔ numbness, tingling, cold extremities
- ➔ heart & blood pressure problems . . .

Prof. Magda Havas

[Figure 25 Shows "The Corona Effect" and the the Endogenous Birth of S1 Protein Spikes Caused by Radiation and Chemical Poisoning - or What I Call The "Protein Spiking Effect". Dr. Robert O. Young, Hikari Omni Publishing, 1987 - 2021. [83]]



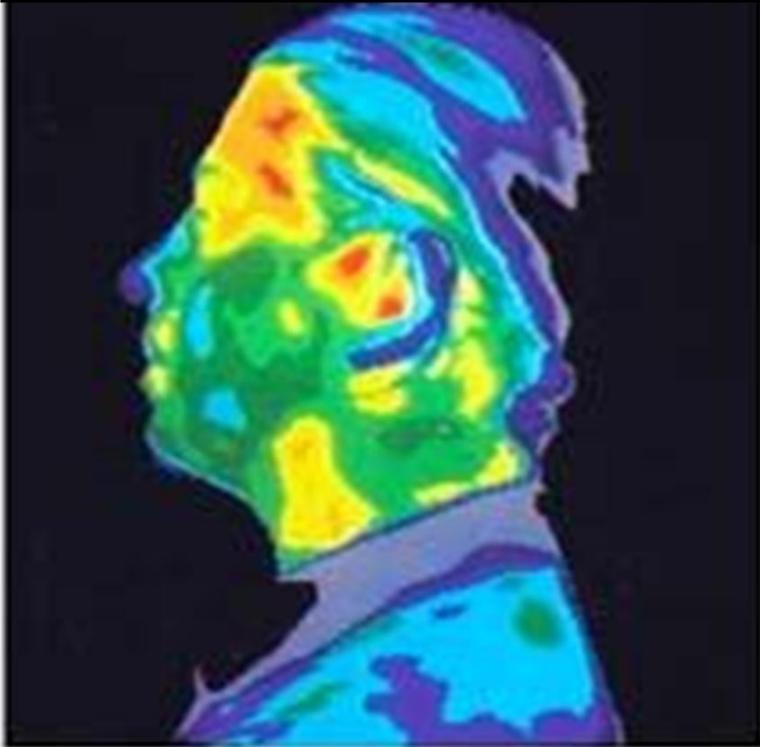
More about **Smart meters**, the high risk of fire, hacking and health damage, the increased bills of many beneficiaries and the corporate and government corruption (US) leading to an attack on human rights in the name of "smart" and "green" in this awarded documentary from Josh Del Sol. LIVE BLOOD ANALYSIS shows the damage in real time, after exposure to an **Smart Meter**. To learn about Smart Meters and their effect on health and privacy please see: **WHY STOP SMART METERS?** <https://stopsmartmeters.org/why-stop-smart-meters/>

<https://stopsmartmeters.org/why-stop-smart-meters/>

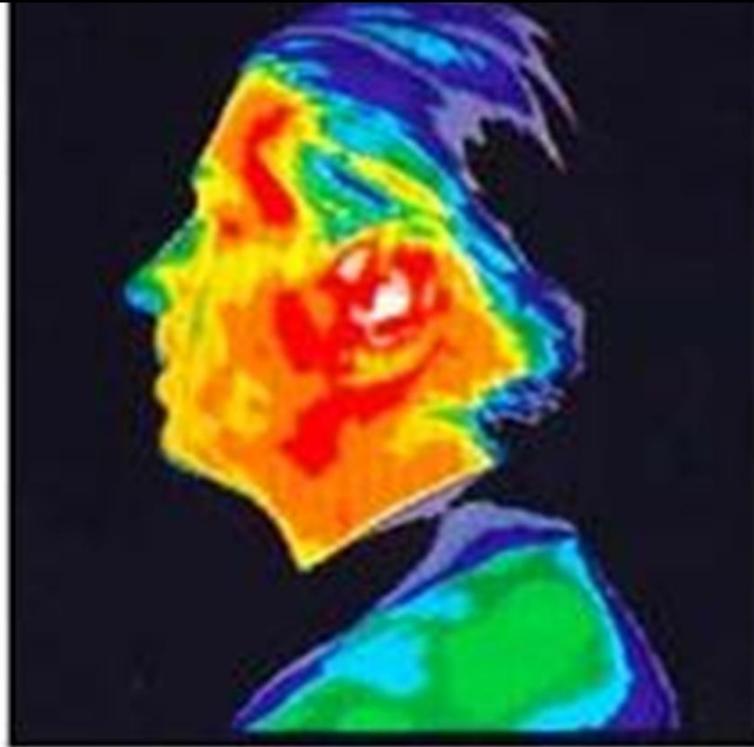
SMART GRID AWARENESS <https://smartgridawareness.org/>

SMART METERS <http://www.eiwellspring.org/smartmeter.html>

TAKE BACK YOUR POWER Documentary <https://youtu.be/2uMfx-FsJiE>



Thermographic Image of the head with no exposure to harmful cell phone radiation.



Thermographic Image of the head after a 15-minute phone call. Yellow and red areas indicate thermal (heating) effects that can cause negative health effects.

*Dr. Beverly Rubik,
Ph.D. in Biophysics
from UC-Berkeley:
performed experi-
ments on human
blood samples*

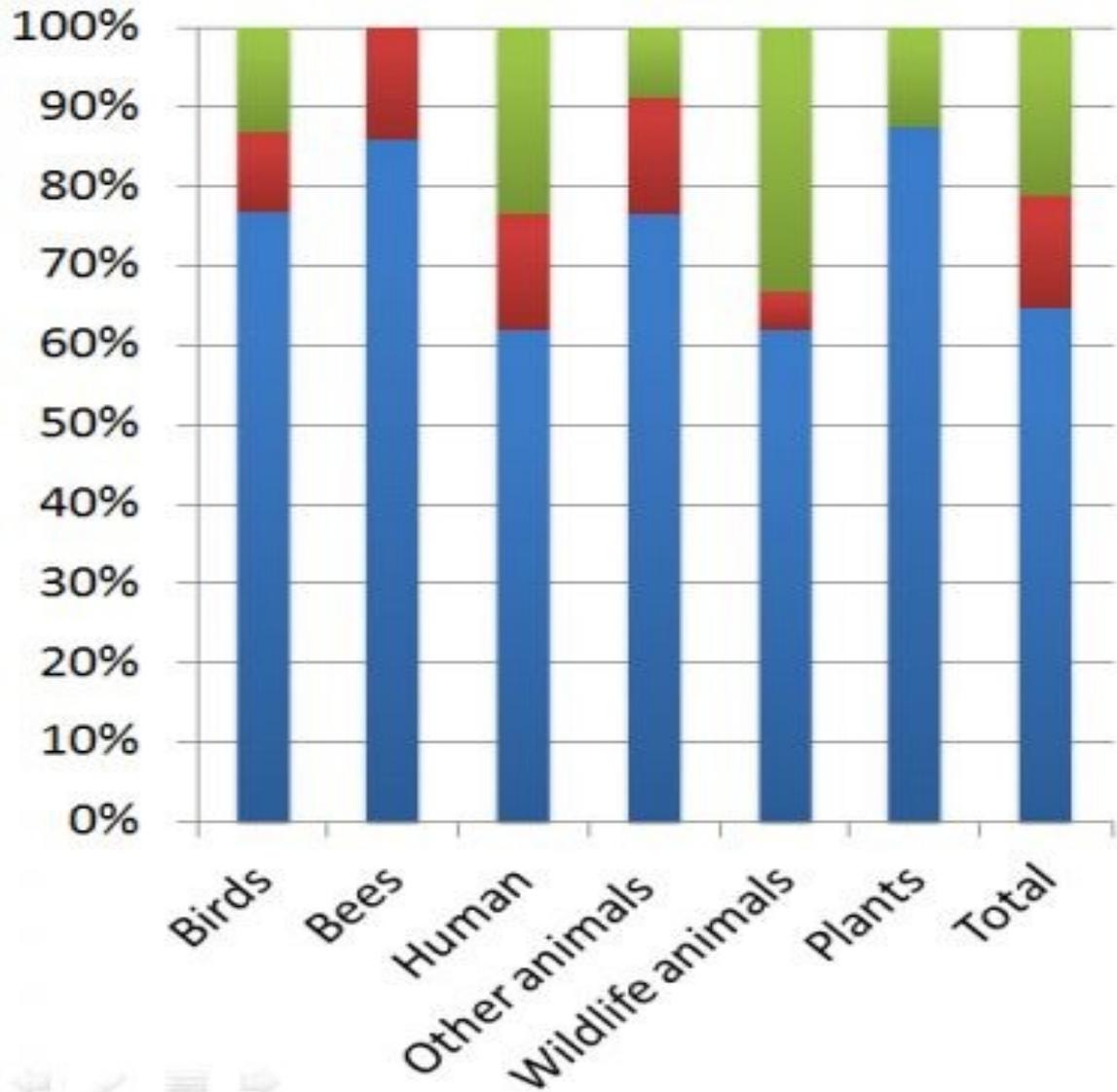
*showing that the
structure of blood
cells is damaged and
microcirculation
compromised only
after carrying a 4G
phone in the back-
pack for 45 minutes,
and this increases
dramatically after
using the phone for
calling or browsing
on the Internet.*

*Dr. Seungmo Kim,
from Georgia
Southern University
calculated that SAR
(specific absorbtion
rate –a measure of
radiation impact
upon the body)
would be 30 times
higher with 5G than
with the current 4G.*

**5 GRAPHS SHOWING THE
DIFFERENCES BETWEEN
INDUSTRY FUNDED
RESEARCH
AND INDEPENDENT
SCIENTIFIC RESEARCH**

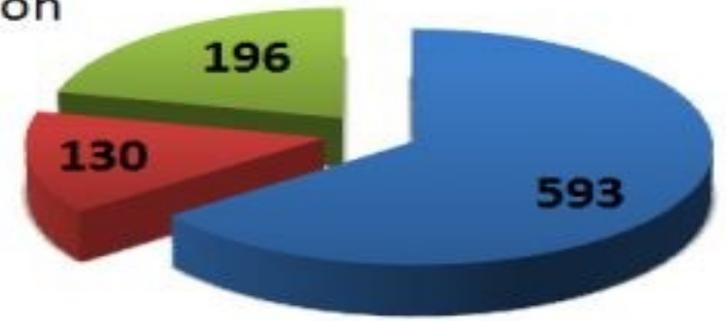
EMF Adversely Affects All Species

Studies Showing "No Effect" Occupy only 14%



Number of research studies on EMF impacts collected and collated based on study subjects and results (Rahmani et al. 2011).

- Neutral/inconclusive
- No impact
- Impact



2011 Graph from USA Physicians group

65% Impact
21% Inconclusive
14% No Impact

Total 919 studies



Industrial Support of Cell Phone Research

Funding	Effect	No Effect	Total
Industry	27 (32%)	57 (68%)	84
Non-industry	96 (70%)	41 (30%)	137
Total	123 (56%)	98 (44%)	221

$X^2 = 28.83$ ($p < .001$) (1/27/05)

(Compiled by Prof. Henry Lai, Univ. Washington)

Radiofrequency Research: Does Funding Matter?

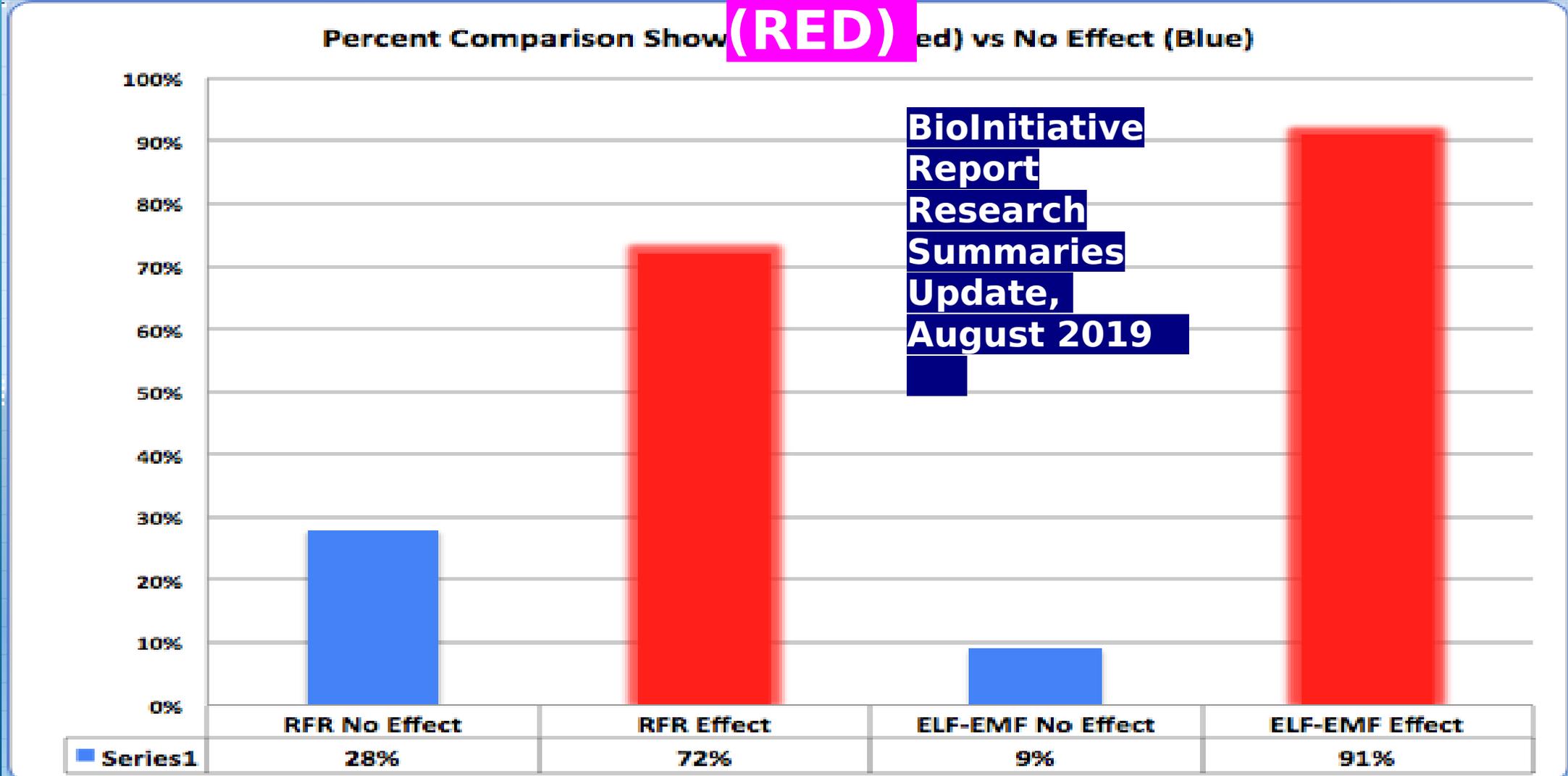
Non-industry studies



Industry studies



Of 540 scientific studies done into Neurological effects by EMF, including industry funded research, the results show that most studies prove HARMFUL NEUROLOGICAL EFFECTS





Watch later



Share

Key Points

Oxidative Stress

216 / 242

Studies significant OS

216:26

89% show biological disruption



- Oxidative Stress Found
- Oxidative Stress Not Found

MORE VIDEOS



10:33 / 54:54



YouTube



82



Oxidative Stress

SYSTEMIC PATHOPHYSIOLOGY OF OXIDATIVE STRESS LEADS TO THE FOLLOWING:

Eyes: macular degeneration, retinal degeneration, cataracts

Brain: migraine, autism, ADHD, MS, ALS, Parkinson's, Alzheimer's, stroke, cancer

Lung: Asthma, COPD, allergy,

Heart: MI, heart failure, fibrosis, hypertension

Immune: autoimmune disorders, chronic inflammation

Skin: aging, dermatitis, psoriasis, melanoma

Vascular: endothelial dysfunction, atherosclerosis

Multisystemic: cancers, lupus, diabetes, Chronic Fatigue Syndrome, Electromagnetic Hypersensitivity, aging



MORE VIDEOS

Joints: rheumatoid, osteoarthritis, psoriasis

JOIN COMMUNITY AWARE SCOTLAND ON FACEBOOK AND OUR WEBSITE OF THE SAME NAME



“The scientific evidence clearly shows that microwave radiation at levels well below [international] guidelines...with Wi-Fi routers causes CANCER in laboratory animals, causes HEART PALPITATIONS in sensitive adults, causes REDUCED SPERM MOTILITY AND VIABILITY, and is associated with symptoms of electrosensitivity that include – but are not limited to – cognitive dysfunction, pain, fatigue, mood disorders (depression, anxiety, irritability), dizziness, nausea, weakness, skin problems, and tinnitus.”

- Dr. Magda Havas, Professor of Environmental & Resource Studies



Emfcall.org (Scientists appeal to WHO and UN) 5Gexposed.com emfacademy.com
scientists4wiredtech.com Ehtrust.org Bioinitiative.org 5ginformation.net
safemr.com Whatis5g.info scientists4wiredtechn.org mdsafetech.org
mystreetmychoice.org electricsense.com wearetheevidence.com

Symptoms of Microwave Illness

<https://www.microwavedvets.com>

Headaches	Difficulty Concentrating	Tinnitus
Dizziness	Memory Loss	Hearing Loss
Nausea	Brain Damage	Irregular Sleep Pattern
Skin Rash	Mood Disorder	Insomnia
Itchy Skin	Personality Disorder	Chronic Fatigue
Burning Skin Sensation	Increased Irritability	Deteriorating Vision
Tingling Sensation	Decreasing Trust in People	Pressure in/behind eyes
Tremors	Depression	Eye Damage
Muscle Spasms	Anxiety	Cataracts
Muscle and Joint Pain	ADHD/ADD	Immune Abnormalities
Restless Leg Syndrome	Digestive Issues	Altered Sugar Metabolism
Foot Issues	Abdominal Pain	Asthma Attacks
Low/High Pressure	Enlarged Thyroid	Bronchitis
Facial Flushing	Hair Loss	Pneumonia
Dehydration	Testicular/Ovarian Pain Low	Inflamed Sinuses
Body Metals Redistribution	Sperm Motility	Chest Pain/Pressure
Leukemia	Miscarriage	Heart Arrhythmia
Lymphoma	Electromagnetic Sensitivity	Heart Palpitations

**SO HOW IS
BIOLOGICAL HARM
CAUSED BY EMF
RADIATION
ACCORDING TO
SCIENTISTS?**

Ref: unitefortruth.online/wifi%2F-5g-issues
Unite For Truth - Community Aware Scotland (FB)

**EMERITUS PROFESSOR
MARTIN PALL EXPLAINS**

**8 DIFFERENT
MECHANISMS OF
BIOLOGICAL HARM TO
HUMAN BEINGS -
FROM PEER-REVIEWED
STUDIES**



Lowered fertility (18 different reviews).

Changes in structure of testis, ovaries; lowered sperm count, quality; lowered number of follicles (eggs), increased spontaneous abortion, lowered levels of each of the 3 sex hormones, lowered libido

Neurological/Neuropsychiatric effects (25 reviews)

Insomnia, fatigue, depression, headache, lack of concentration/cognitive dysfunction, anxiety/stress agitation, memory dysfunction, etc. Major changes in brain structure seen in animals.

Cellular DNA damage, 3 types (21 reviews)

Single & double DNA breaks, oxidized bases (8-HOdG); cause both cancer and germ-line mutations

Apoptosis, programmed cell death (13 reviews)

Lead to both reproductive and neurodegenerative effects

Oxidative stress, free radical damage (19 reviews)

**PROF
MARTIN
PALL'S OWN
SLIDES**

Endocrine (hormonal effects) (12 different reviews).

Both non-steroid and steroid hormones systems affected; in some cases EMFs can produce both increased and decreased hormone activity under different conditions.

Excessive intracellular calcium $[Ca^{2+}]_i$ (15 reviews)

This is, as you will see, is the cause of almost everything else.

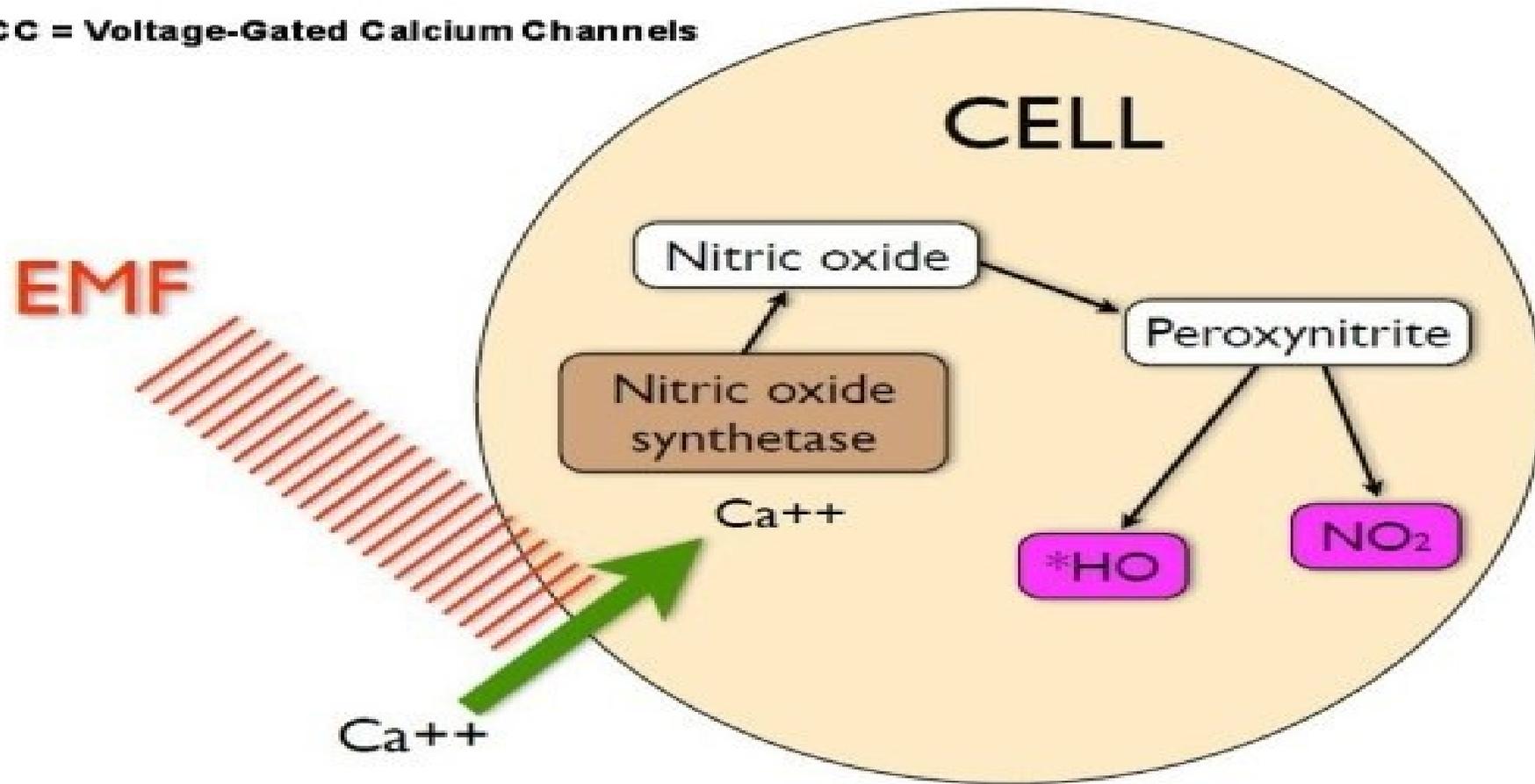
Cancer (35 reviews)

Increases initiation of carcinogenesis, tumor promotion and progression, including increased tissue invasion and metastasis

Pulsed EMFs are, in most cases much more biologically active than are non-pulsed, continuous wave EMFs (13 reviews). Because all wireless communication devices communicate via pulsations, they are potentially and I believe actually much more dangerous.

EMF Activation of VGCCs Increases Free Radical Production

VGCC = Voltage-Gated Calcium Channels



Peroxynitrite produces free radicals, including hydroxyl radical and NO₂.

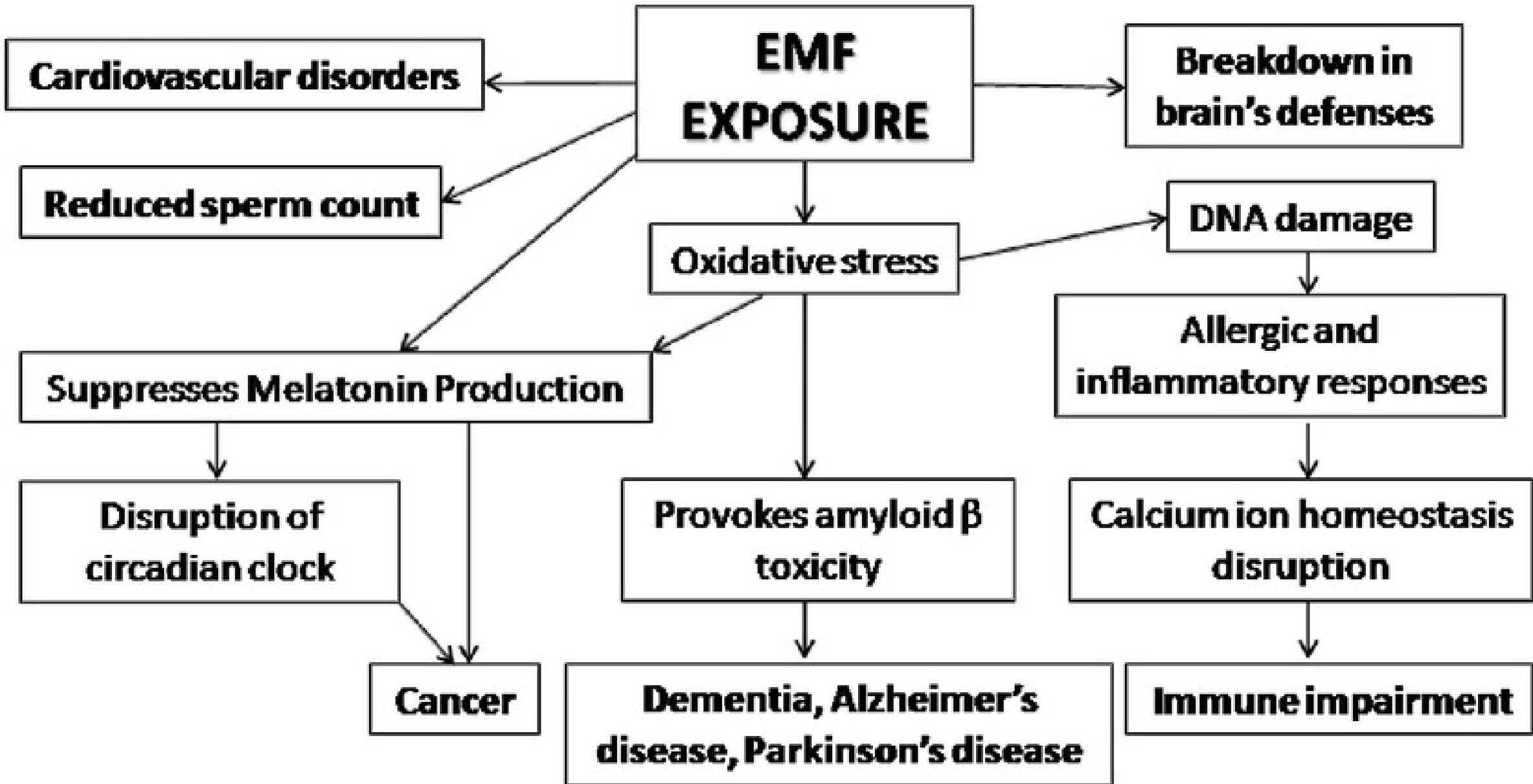
This increase in free radicals then leads to inflammation, oxidant stress, and damage to cell structures, including DNA.

The EMF doesn't directly damage the cell. It just deranges cellular metabolism.

- KEY POINT! -

The free radicals that are produced by this change in metabolism are what causes the damage.

Source: Presentation Materials of Dr. Paul Dart, July 23, 2013, before a special session of the Eugene Water and Electric Board.



Electromagnetic fields may act via calcineurin inhibition to suppress immunity, thereby increasing risk for opportunistic infection: Conceivable mechanisms of action



P.R. Doyon^{a,*}, O. Johansson^b

^a*Doyon Independent Research, 1428 7th Ave., Santa Cruz, CA 95062, United States*

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ARTICLE INFO

Article history:

Received 15 February 2017

Accepted 30 June 2017

Keywords:

Electromagnetic fields (EMF)

Reactive oxygen species (ROS)

Calcineurin

Calcineurin inhibitors

Immunosuppression

Opportunistic infections

ABSTRACT

While a good number of studies have demonstrated that modern, man-made ambient electromagnetic fields can have both stimulatory and inhibitory effect on immune system function, the precise mechanisms have yet to be completely elucidated. It is hypothesized here that, depending on the parameters, one of the means by which long-term electromagnetic field exposure has the potential to eventually lead to immunosuppression is via downstream inhibition of the enzyme calcineurin – a protein phosphatase, which activates the T-cells of the immune system and can be blocked by pharmaceutical agents.

Calcineurin is the target of a class of pharmaceuticals called calcineurin inhibitors (e.g., cyclosporine, pimecrolimus and tacrolimus). When organ transplant recipients take such pharmaceuticals to prevent or suppress organ transplant rejection, one of the major side effects is immunosuppression leading to increased risk of opportunistic infection: e.g., fungal, viral (Epstein-Barr virus, cytomegalovirus), atypical bacterial (*Nocardia*, *Listeria*, mycobacterial, mycoplasma), and parasitic (e.g., toxoplasmosis) infections.

Frequent anecdotal reports, as well as a number of scientific studies, have shown that electromagnetic field exposures may indeed produce the same effect: a weakened immune system leading to an increase in the same or similar opportunistic infections: i.e., fungal, viral, atypical bacterial, and parasitic infections.

Furthermore, numerous research studies have shown that man-made electromagnetic fields have the

THE MOST VULNERABLE GROUPS TO BIOLOGICAL HARM FROM EMFs ARE PREGNANT WOMEN AND FOETUS, THE YOUNG AND ELDERLY OR PEOPLE WITH AN EXISTING CHRONIC ILLNESS EXPOSED FOR A CONSIDERABLE PERIOD OF TIME TO EMF RADIATION.

REMEMBER THAT *I.C.N.I.R.P. SAFETY LEVELS* ARE BASED ON MINUTES OF EXPOSURE!

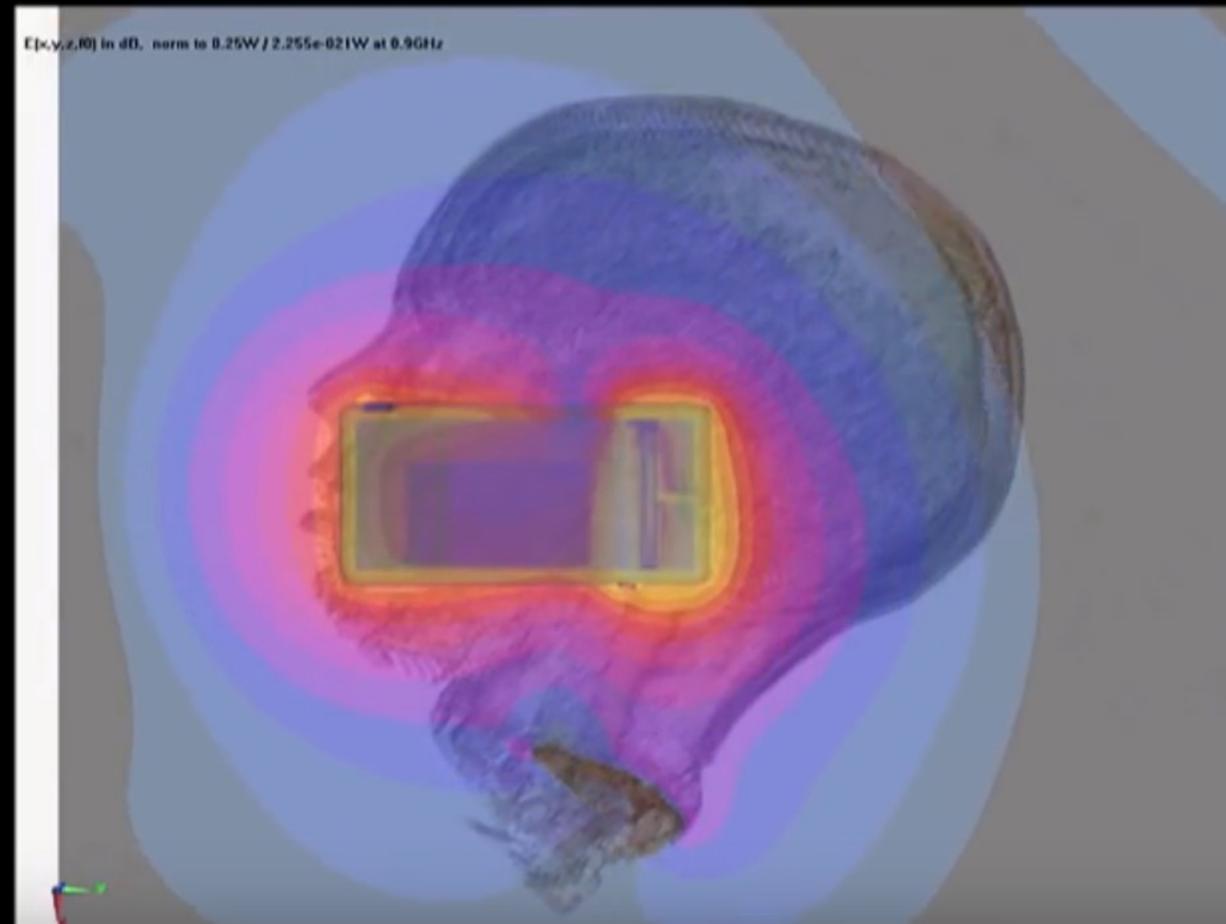
MANY PEOPLE USE LAPTOPS, MOBILES AND SO ON **FOR MANY HOURS AND MAY BE IN SCHOOL OR WORK WHERE THEY ARE EXPOSED FOR SEVERAL HOURS BEFORE ADDING TO THIS AT HOME IF THEY USE WIFI OR THEIR MOBILE.**

EXPOSURE LEVELS HAVE GROWN MASSIVELY SINCE 1998 - SOME PEOPLE ARE EXPOSED ALMOST 24/7 WITH WIFI IN THEIR HOMES

OR IF THEY LIVE CLOSE TO A BASE ANTENNA



Modeled microwave radiation dose of six-year old showing greater levels to frontal and temporal lobes, eyes and cheek, extending into brainstem





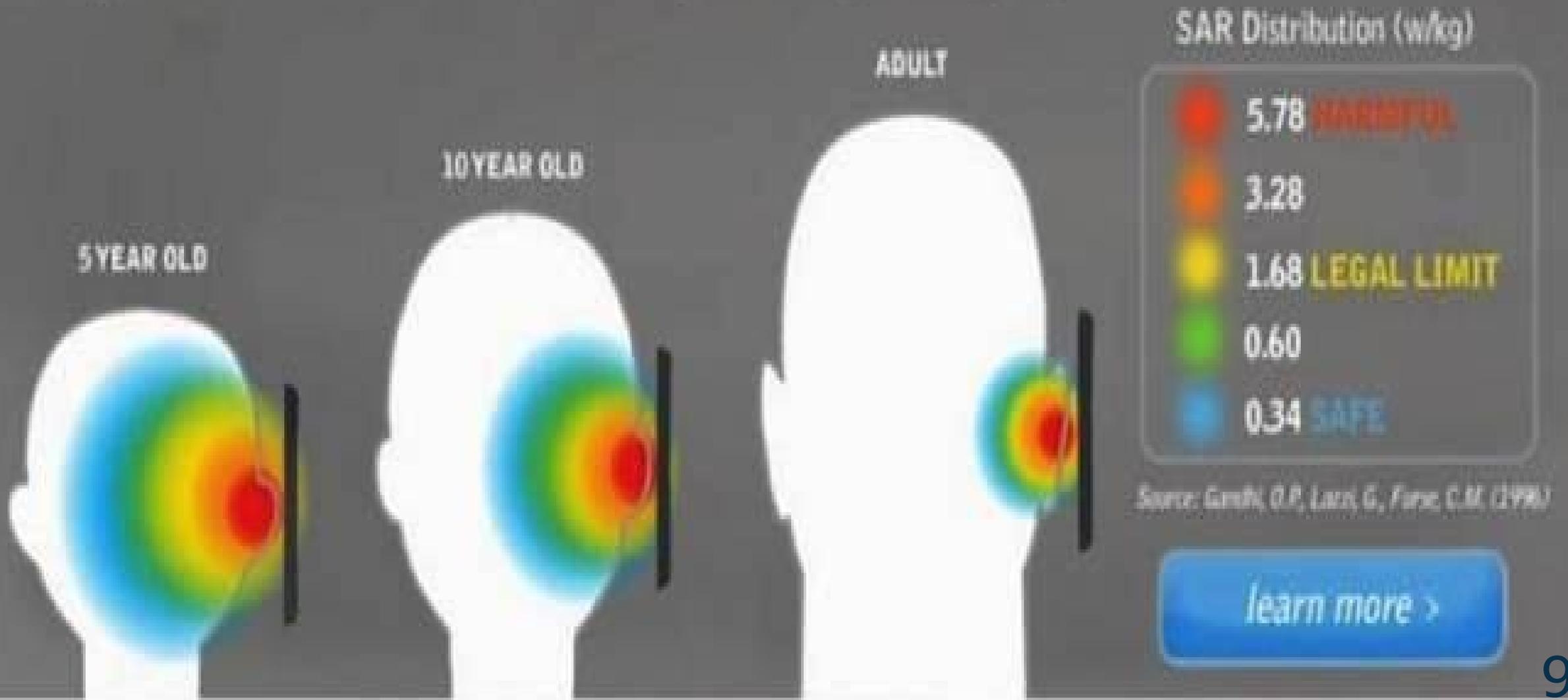
3-D modeling of dose at target tissue infant exposure



95



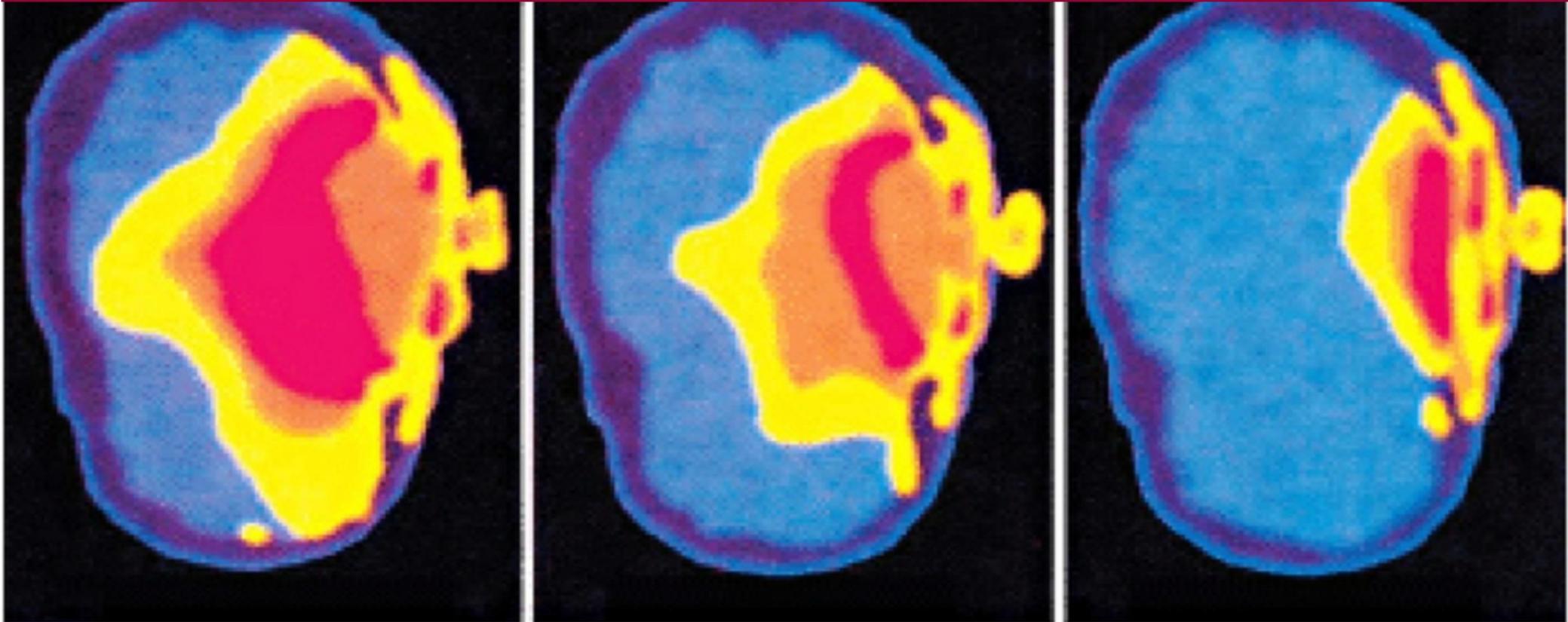
Depth of radiation absorption (SAR) by the human brain.



Microwave Cellphone Effects

Absorption in the Brain According to Age

Emfcall.org (Scientists appeal to WHO and UN) 5Gexposed.com emfacademy.com scientists4wiredtech.com Ehtrust.org Bio-initiative.org 5ginformation.net safemr.com Whatis5g.info mdsafetech.org electricssense.com wearetheevidence.com



5 Year Old

10 Year Old

Adult

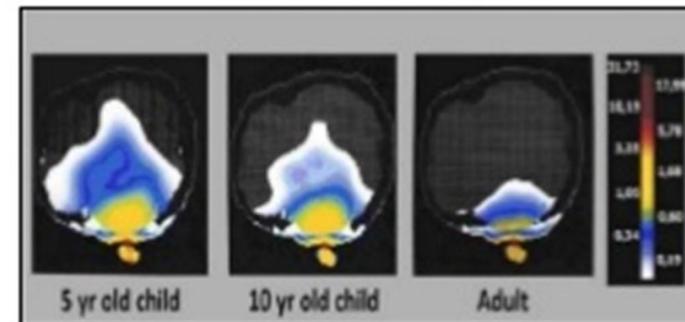
Image courtesy of Dr. Om Gandhi, University of Utah, 1996, IEE Publication

The Brain and Wireless Radiation

Children's Risk of ADHD, Autism and Neurological Problems

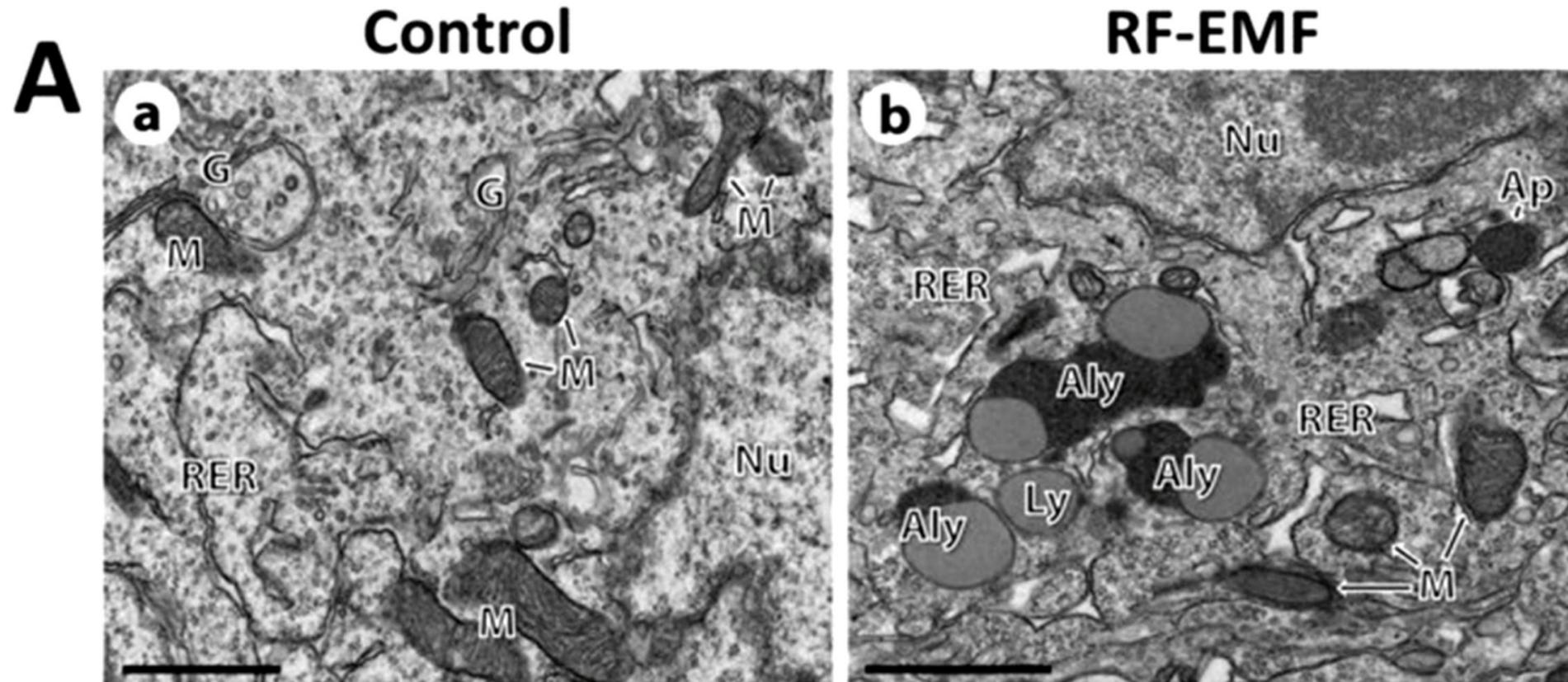
EMF/RFR from wifi and cell towers can exert a disorganizing effect on the ability to learn and remember Can also be destabilizing to immune and metabolic function

-Martha Herbert MD, pediatric neurologist, Harvard Medical School



Wi-fi is already being removed from schools worldwide. For ex. Cyprus, France, Belgium, Canada and Israel have banned or severely restricted Wi-Fi in classrooms for young children and/or reduced radiation exposure.

Figure 5: Representative TEM images showing the autophagy in the neuronal cell body of the cerebral cortex following chronic RF-EMF exposure.



Autophagy (or autophagocytosis) (from the Ancient Greek *αὐτόφαγος* *autóphagos*, meaning "self-devouring" and *κύτος* *kýtos*, meaning "hollow") is the natural, regulated mechanism of the cell that removes unnecessary or dysfunctional components. It allows the orderly degradation and recycling of cellular components.

As more countries ban it from the classroom ...

by Geoffrey Lean

Is wifi giving our children cancer?

PLENTY of children these days are so obsessed with having internet access that they will virtually refuse to go on holiday unless the hotel or villa has wifi.

They're certainly used to being fully 'connected' at school, where millions of youngsters who were once taught with chalk on a blackboard now sit in circles on the floor surfing the web on their tablets or phones.

The trouble is that though smartphones are used as educational tools in some lessons, they can also be a dangerous distraction during the day for pupils. In fact, youngsters taking phones into schools has become such a contentious issue that now a minister has called for them to be banned.

Yet there is another issue that is perhaps even more important: one of the world's top cancer experts has said the wifi beamed through Britain's classrooms - radio waves that send signals between base units and devices such as iPads and mobile phones - could be as dangerous as tobacco and asbestos.

Professor Anthony Miller, of Toronto University, couldn't be blunter, saying: 'Wifi should not be allowed in schools.'

Prof Miller - who was Director of Canada's National Cancer Institute's Epidemiology Unit, and has held posts in the World Health Organisation and the German Cancer Research Centre - is not alone in his fears.

He is the latest top scientist to warn that the invisible waves of electromagnetic radiation that now constantly wash over us all - dubbed 'electromog' even by some academics - may cause a future cancer epidemic, and that children are most at risk.

Some concerned nations have already begun banning or restricting wifi, as well as mobile phones - another source of electromog - in schools.

But one Britain. Eighteen years after an inquiry, headed by a former government chief scientist, recommended measures to reduce this kind of radiation, virtually nothing has been done.

Meanwhile, we have effectively been conducting a medical experiment on ourselves, our children - whom some campaigners now refer to as 'Generation Zapped'.

THE ubiquitous electromog from mobile phones, wifi, baby monitors, smart energy meters and a host of other internet-connected products is a billion times stronger than the natural electromagnetic fields in which living cells developed over just 3,600 million years.

Worryingly we don't know how this experiment will end. That is partly because it will take years to play out: massive exposure only began recently and cancers, for example, can take decades to develop. But partly it is because mundanely little research has been done into possible effects of electromog.

Most of the little we are learning comes from studies on mobile phones, which deliver relatively small doses of the radiation to the head.

Some studies have given them the all-clear, but these have generally only looked at short-



term exposures. By contrast, Swedish research found people exposed to them for ten years or more were twice as likely to develop a malignant brain tumour on the side of the head where they usually held their handsets. This finding was broadly confirmed by a study covering 13 countries, by the World Health Organisation's International Agency for Research on Cancer. These findings caused the Agency to conclude in 2011 that 'electromog' is a possible cause of the disease in humans.

And Miller believes new research should cause the Agency to condemn the radiation as a clear carcinogen.

Studies have also linked mobiles with cancer of the salivary gland and acoustic neuromas - benign tumours on the auditory nerve that usually cause deafness and problems with balance.

What worries Prof Miller, and other top scientists, is that evidence that mobile phones can cause cancer may be revealing just the tip of the iceberg of a far wider danger from electromog.

A room full of wifi radiation delivers a smaller dose than a mobile phone held to the head. But people are exposed to it for longer in offices, schools or at home, especially if they leave it on overnight.

And it's not only cancer that causes concern. Campaigners say evidence shows thickening of the aorta, male infertility, autism,

severe cognitive impairment and DNA damage to chromosomes and DNA, among other conditions. It is also increasingly accepted that about three in every hundred people are especially sensitive to the radiation, suffering symptoms such as headaches and sleeplessness.

It should be stressed that nothing is proven, and it's important not to be alarmed, but, whatever the danger, it is children who are most at risk from mobile phones and electromog in general.

Their developing nervous systems make them more vulnerable. Their skulls are thinner, so their brains get bigger doses. And with decades ahead of them, they will be exposed to more radiation than adults today.

So the proliferation of wifi into so many of our schools is worrisome. While using wifi, devices emit

radiation as well as receive it, which increases children's exposure. More than a million tablets are now in use in UK classrooms and campaigners are urging schools to hardwire devices.

More countries and cities are going back to the future this way. France has banned wifi from nursery schools (the younger the child, the greater the danger), and restricted its use in teaching children up to 11.

It has also banned mobile phones from schools. But the country's official Agency for Food, Environmental and Occupational Health and Safety has recommended wifi devices should be regulated as phones are.

Cyprus has also banned wifi from kindergartens, and only permits it in the staff offices of junior schools that are regulated as phones are.

Cyprus has also banned wifi from kindergartens, and only permits it in the staff offices of junior schools that are regulated as phones are.

Frankfurt, meanwhile, hardwired 80 per cent of its schools more than a decade ago, while authorities in Salzburg, Austria, wrote to headteachers advising them not to use wifi as long ago as 2005.

Ghent in Belgium has banned wifi in pre-schools and daycare centres, while local authorities in Spain and Italy have removed it from schools.

Even faraway French Polynesia has prohibited it in nursery schools and limits it in primary schools. The list goes on. In Britain,

by contrast, there is only complacency and inaction despite early warnings.

Back in 2000 an inquiry headed by Sir William Stewart, a former government chief scientist, recommended ways of reducing exposure to electromog, especially for children. Tony Blair's government accepted most of its recommendations, then failed to implement them.

FIVE years later, Sir William, as chairman of the National Radiological Protection Board, issued another report, urging similar action, with the same lack of results. In 2007 - he was by then Chairman of the Health Protection Agency (HPA) - he voiced concern about wifi in schools. But its use has only spread.

Public Health England, which succeeded the HPA, says it 'sees no reason why wifi should not continue to be used in schools'.

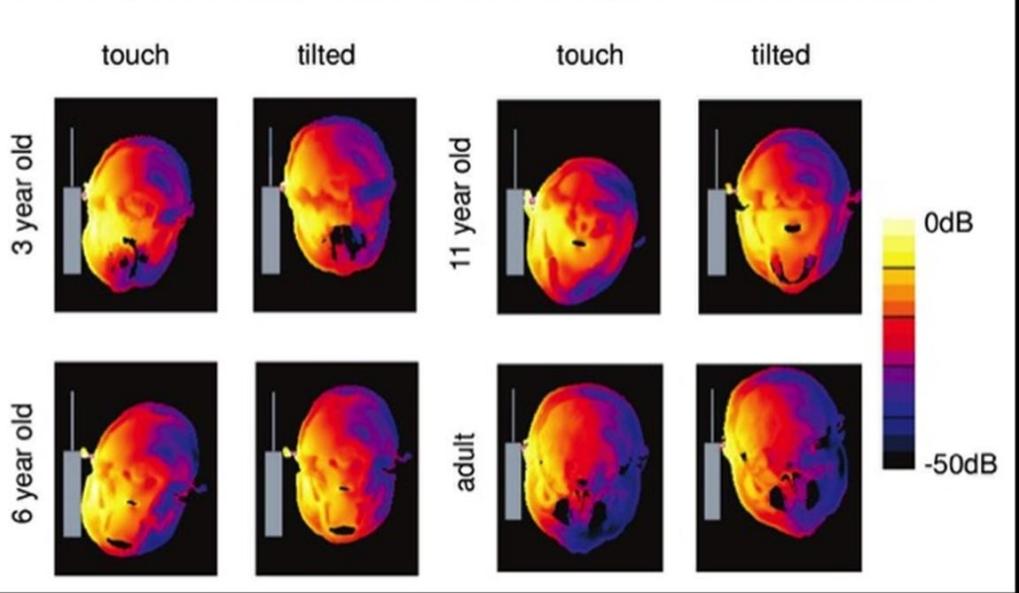
Official action on electromog in Britain is limited to advising that 'excessive use' of mobiles by children should be discouraged.

As Professor Miller recently told a conference organised by the Environmental Health Trust, it is time to start taking precautionary measures to protect our children.

The alternative is to wait and hope for the best. That's what we did with tobacco and asbestos, and we know how that turned out. In the Professor's words: 'We ignore this at our future peril.'

PHOTO POSTED BY MCOLL

SAR Distribution in the Head Models at 900MHz



Andreas Christ, 2012

Worldwide schools and governments are taking action to reduce levels of wireless and electromagnetic radiation in schools. Wireless exposures in schools come from cell phones, Wi-Fi, 5G virtual reality, and nearby cell towers/antennas. In addition, schools now have wireless security and equipment networks that create wireless exposures. FRANCE, CYPRUS, BELGIUM, ISRAEL, FRENCH POLYNESIA, CITIES WORLD-WIDE have banned or restricted WiFi and cell phone usage in schools, kindergartens, nurseries. IT CAN BE DONE!... <https://ehtrust.org/schools-worldwide-removing-wifi-reducing->

The British Brain Tumour Charity states that brain tumours are the biggest killer of children and adults under 40. Over 5000 people die each year in the UK due to brain tumours. Prof Miller of the USA believes there is an epidemic of brain tumors already started that has to be stopped by protecting young people from EMF radiation devices.

[Press release] Brain cancers : 4 times more new cases of glioblastoma in 2018 according to Public Health France

 Equipe Phonegate  18 Nov 2019  News  Press release  Scientific

 Facebook

 Twitter

 LinkedIn

In July 2019 (updated in September 2019), the French Public Health Agency “[Santé Publique France](#)”, together with the Francim cancer registries, the Hospices Civils de Lyon and the Institut National du Cancer, published national estimates of cancer incidence and mortality in metropolitan France between 1990 and 2018. These are based on the modeling of observed incidence data (new cases) until 2015 by cancer registries, supplemented by projections until 2018.

Honestly its just another reason to keep us sick. they dont care about the people. its all about money. Later control lord have mercy

26 REPLY

View 3 replies

Ms Tee 5 months ago
Georgia Guidestones " Getting humanity down to 500,000 there systematically killing everybody but that 1%

46 REPLY

View 6 replies

suparna mukherjee 5 months ago
NO
We have a tower near my school
Several of my students who are residents of that village have died of cancer.

7 REPLY

View 3 replies

Bill Saved 5 months ago
Well worth the risk so you can tell your friends what you are drinking at Starbucks faster.



Who Owns The World?

Thoughty2 2.3M views



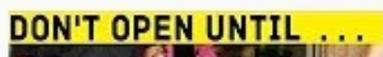
8 Eeriest Recordings Y...

Thoughty2 5.7M views



Opposition to 5G at Michiga...

Environmental ... Recommended for you



12 Most Amazing Tim...

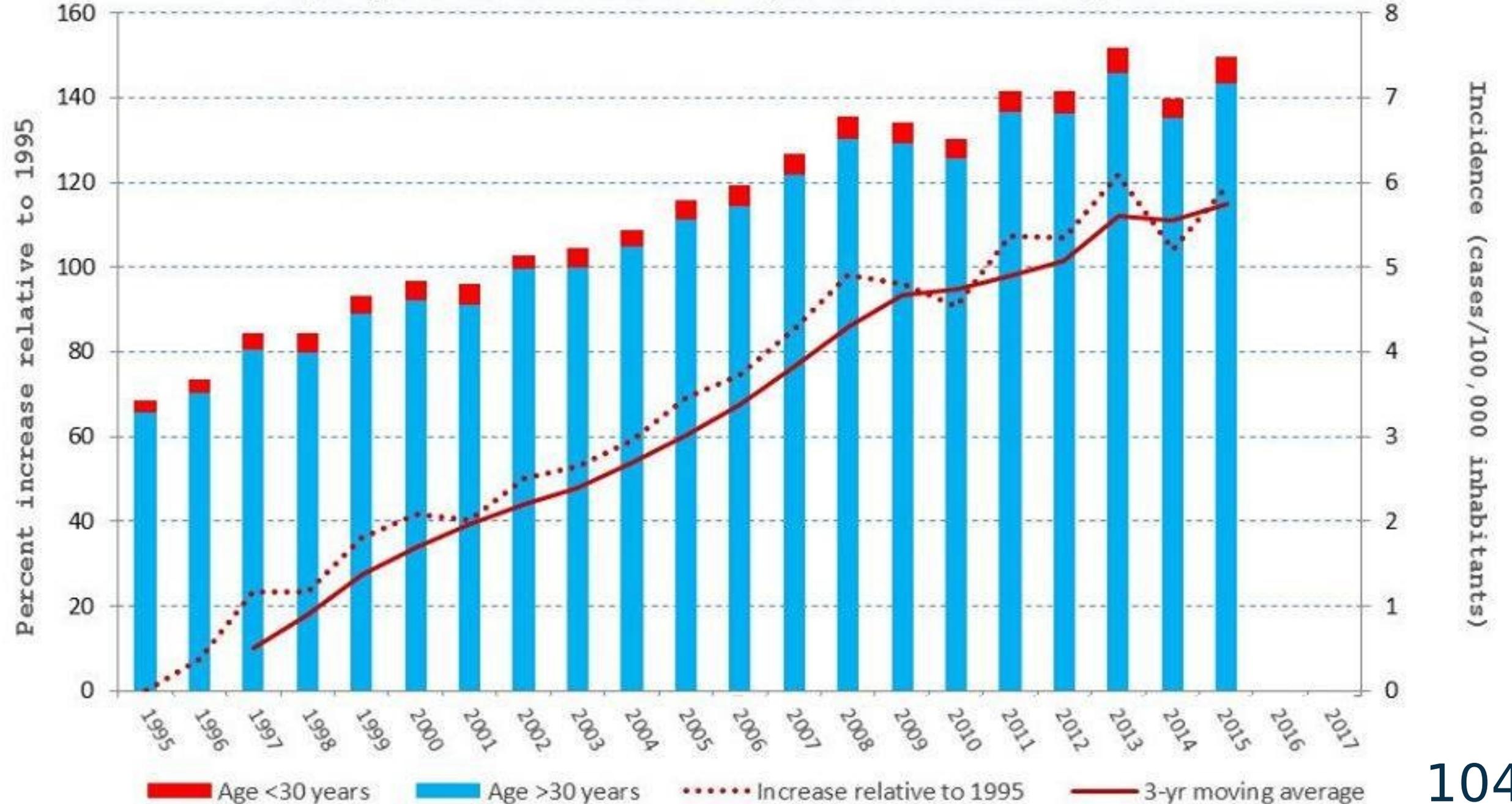
Amazing Stock 1.8M views



What If Everything Yo...

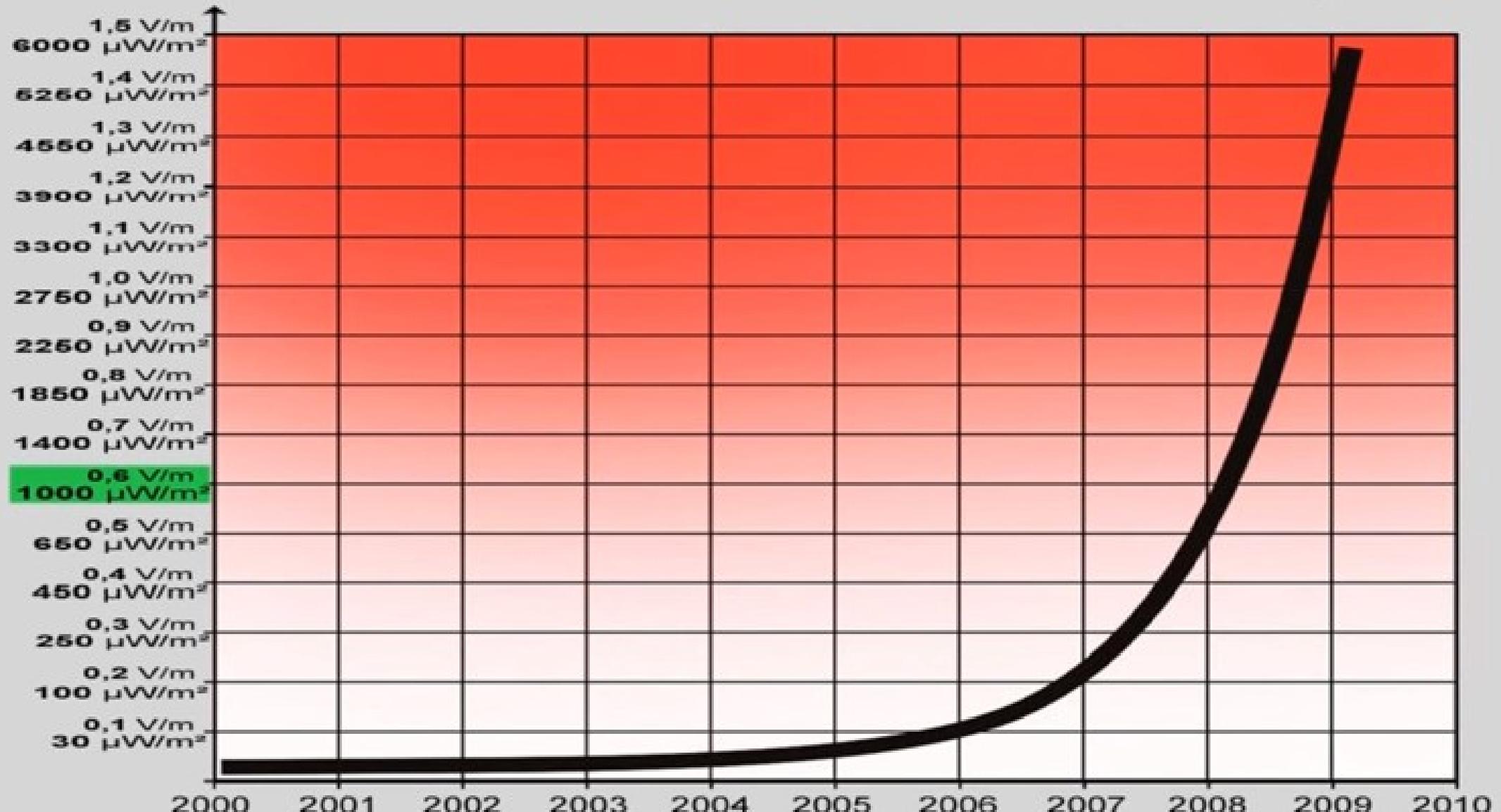
daily MOTIVATI... 1M views

Age-specific incidence of glioblastoma in England



 Average increase observed in urban area of artificial HF microwave radiation from 900 MHz - 2.5 GHz

 Valeur moyenne constatée en milieu urbain de l'irradiation artificielle HF micro-onde de 900 MHz - 2,5 GHz





Protecting Children From Non-Ionising Radiation in Schools. Speaker Dr.

UK Chief Medical Officers Advise

- “that children and young people under 16 should be encouraged to use mobile phones for **essential purposes only, and to keep calls short**”

MORE VIDEOS



29:34 / 54:54

IF MOBILES ARE
'SAFE' WHY IS THE
NHS CHIEF
MEDICAL OFFICER
SAYING KIDS
SHOULD USE
PHONES LESS AND
LESS? - ADVICE
NOT GIVEN TO
PARENTS!

'But the only
known effect of
radio waves on
the human body
is a very small
rise in
temperature of
up to 0.2C'.

NHS



YouTube 106



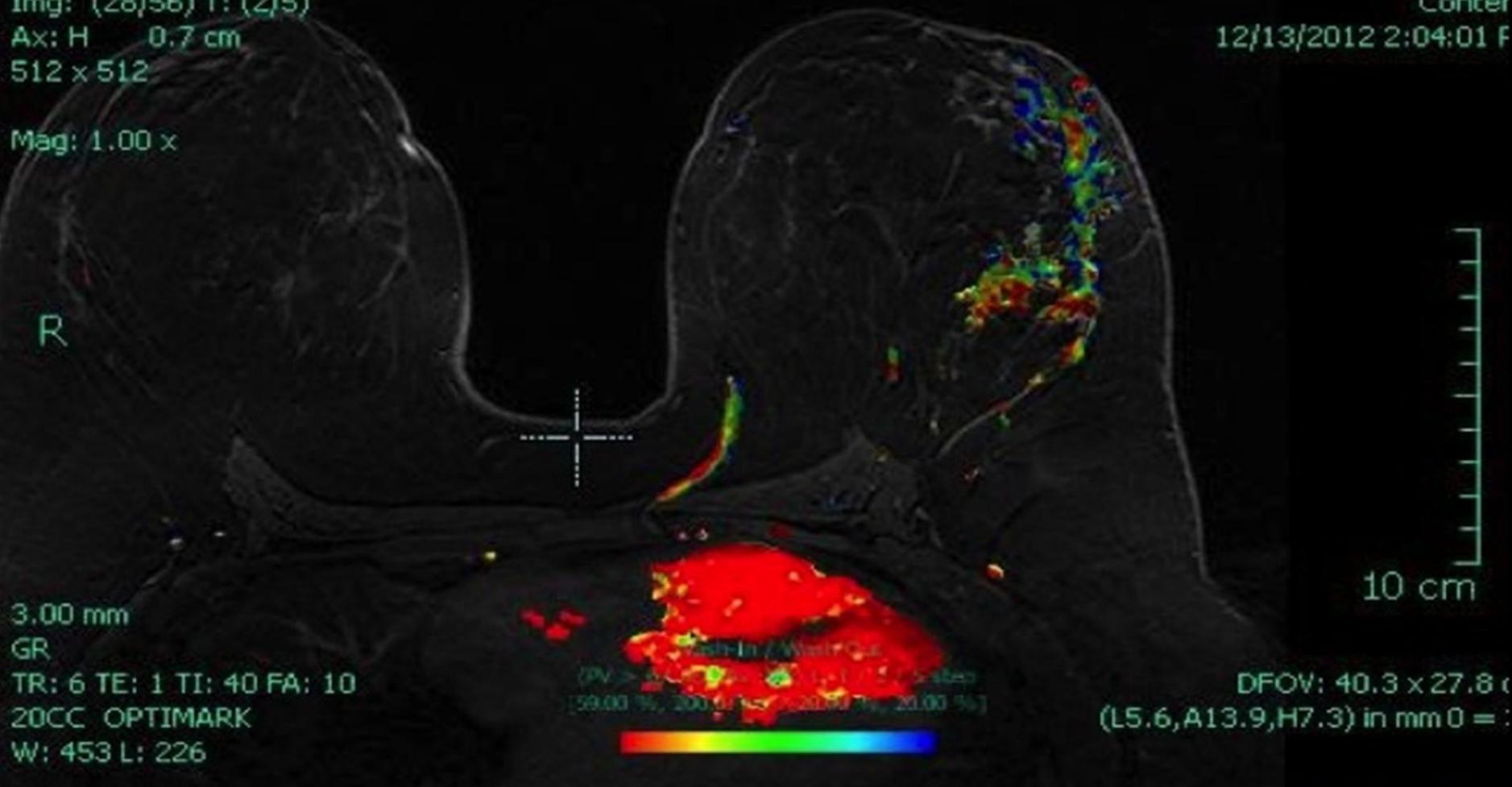
Save the Girls!

Case Reports - 21 yr old multi-focal tumors tied with cellphones kept in bra

3D DYN 20CC OPTIMARK
Img: (28/56) T: (2/5)
Ax: H 0.7 cm
512 x 512

21 years, 2/25/1991 F 40349
Center
12/13/2012 2:04:01 F

Mag: 1.00 x



LOW SPERM
COUNT,
INFERTILITY
AND POSSIBLE
TESTICULAR
CANCER FOR
MEN

Your future
is in your
hands

Medical experts are warning men not to keep their mobile phones in their pockets as this can have a direct effect on their fertility.

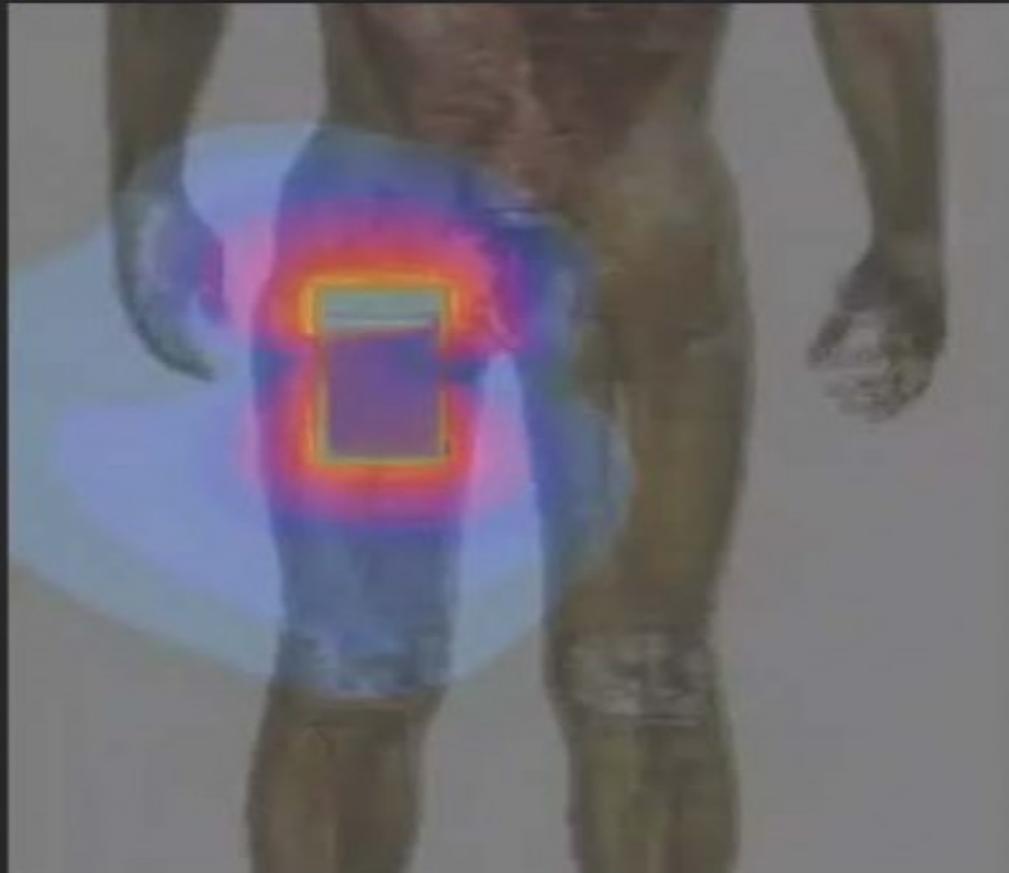


SAVE
THE
MALE™

EM-RADIATION RESEARCH

**MOBILE PHONE WHILE ON MOBILE DATA/ WIFI/
BLUETOOTH IN YOUR POCKET WILL IRRADIATE YOU**

Mobile Phone in Pocket
Exposes Reproductive Organs and Bone Marrow

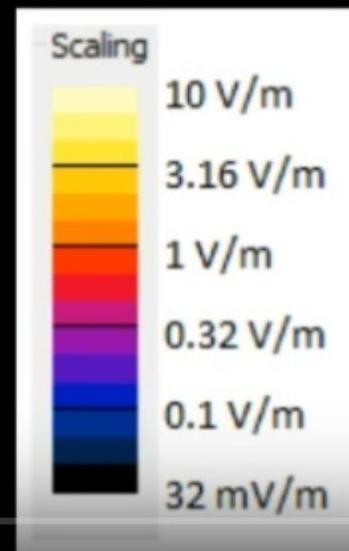
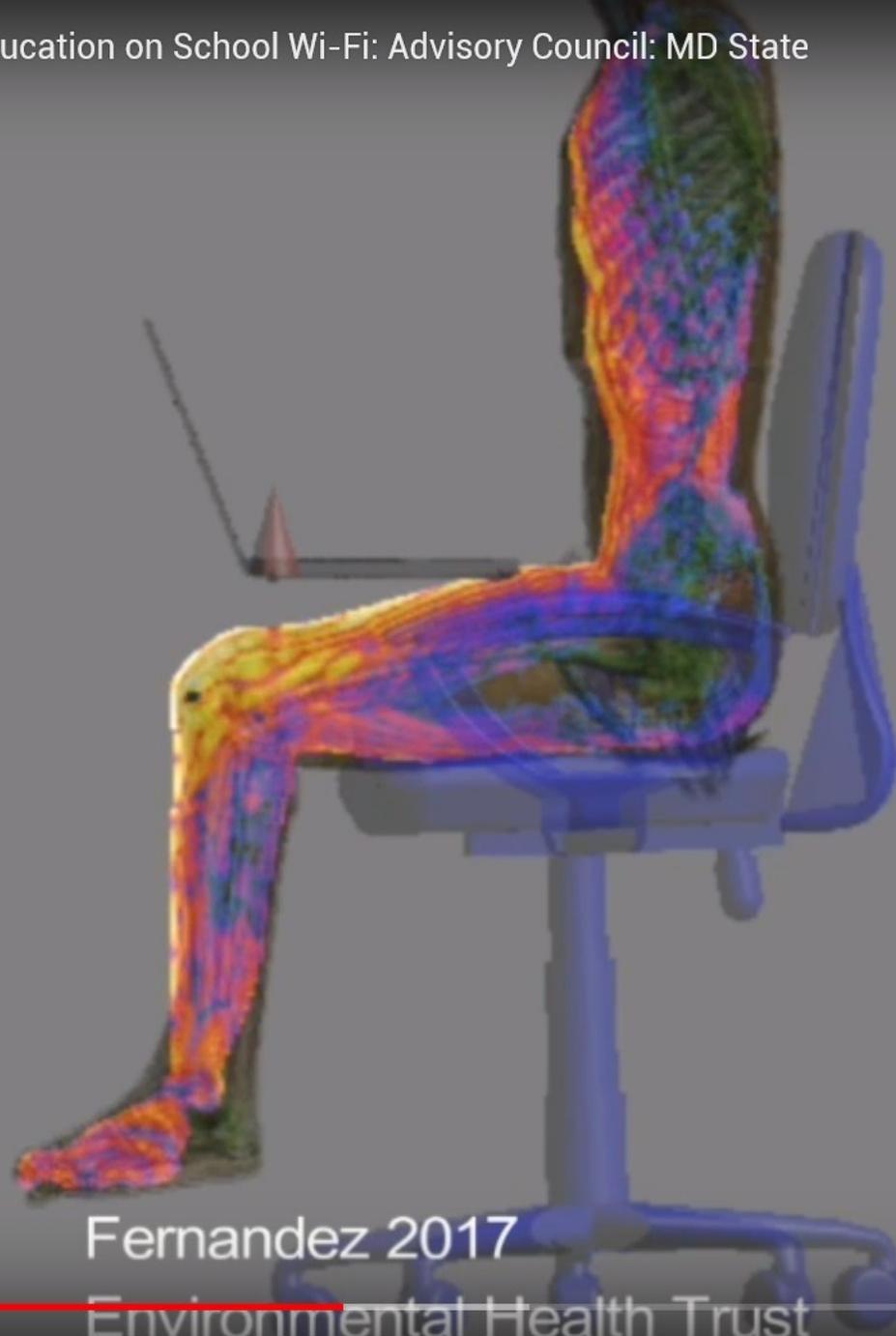


- ▶ **USE OF A MOBILE PHONE ON YOUR KNEE OR A LAPTOP COMPUTER VIA WIFI OR AN IPAD WITH DIRECT DATA ACCESS VIA SATELLITE WILL IRRADIATE YOUR LEGS AND PRIVATE AREAS AND IF DONE FOR YEARS CAN RISK DAMAGE TO YOUR HEALTH**
- ▶ **particularly**
- ▶ **CANCERS OF THE**
- ▶ **IRRADIATED ORGANS!**





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



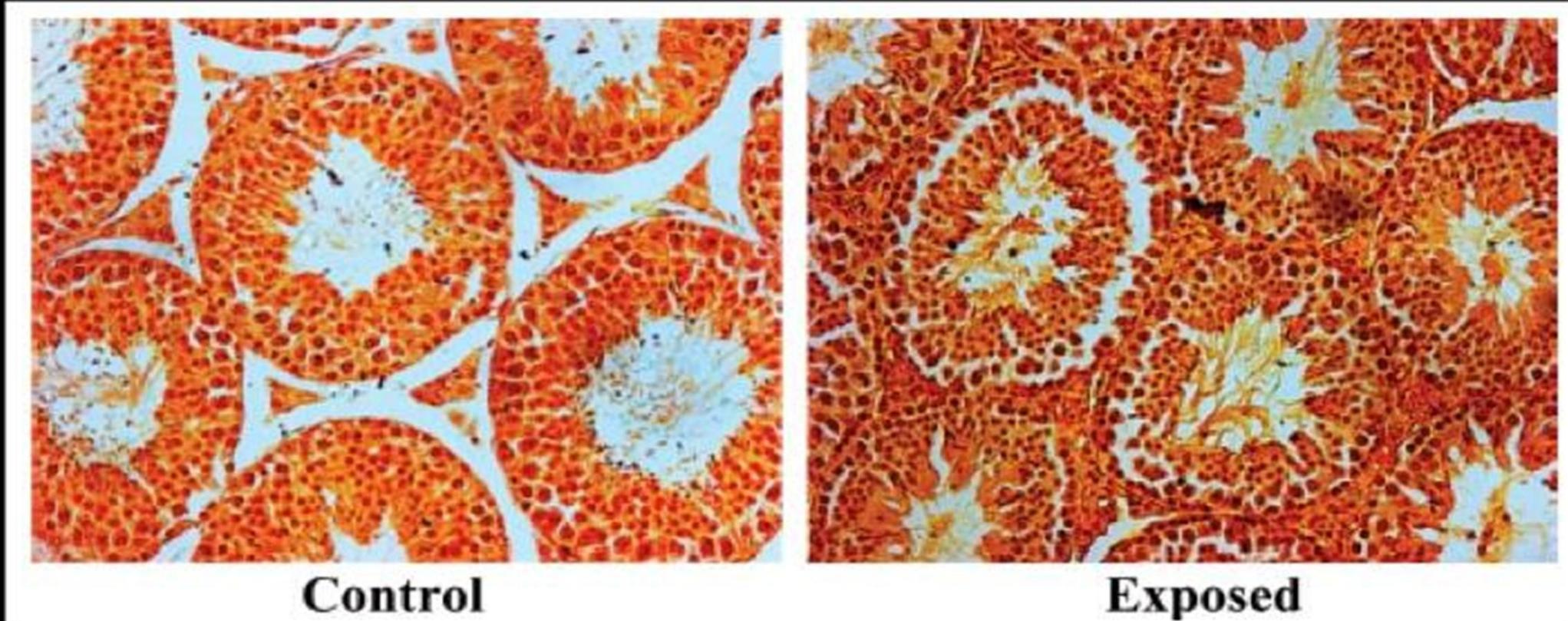
MORE VIDEOS

Fernandez 2017
Environmental Health Trust

112

Microwave radiation impairs male reproduction

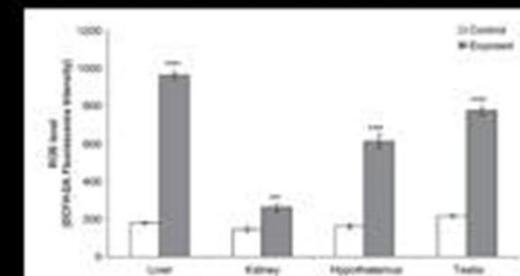
Increased i-NOS immunostaining in the spermatogonial cells of seminiferous tubules



Mice exposed to nonthermal 2.45-GHz 2h/d x 30 d

- ↑ ROS in liver, kidney, hypothalamus, and testis
- ↑ RNS, lipid peroxidation
- ↓ Antioxidant capacity, % viable sperm

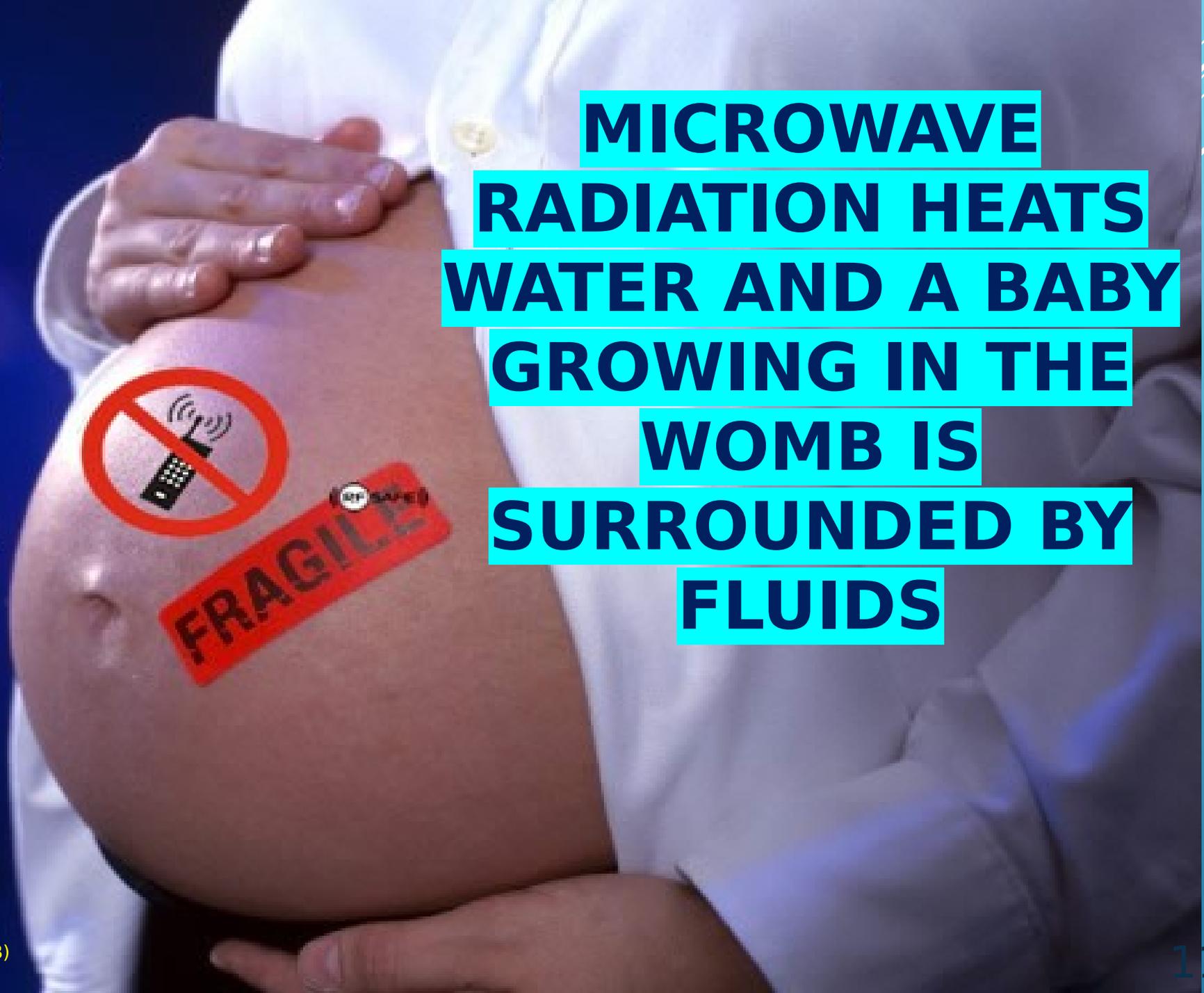
Increased DCFH-DA fluorescence (measure of ROS)





Don't Expose
Your Baby To
Microwave
Radiation From
Cell Phones

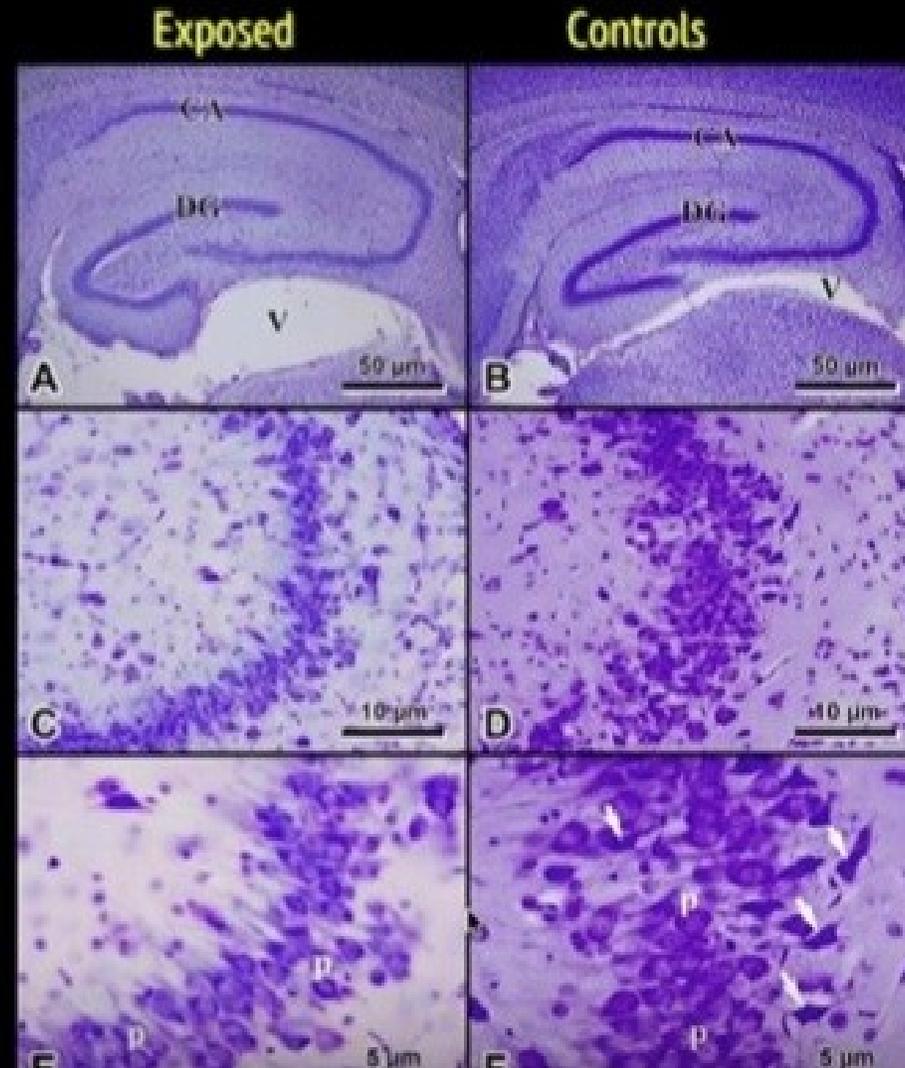
**MICROWAVE
RADIATION HEATS
WATER AND A BABY
GROWING IN THE
WOMB IS
SURROUNDED BY
FLUIDS**



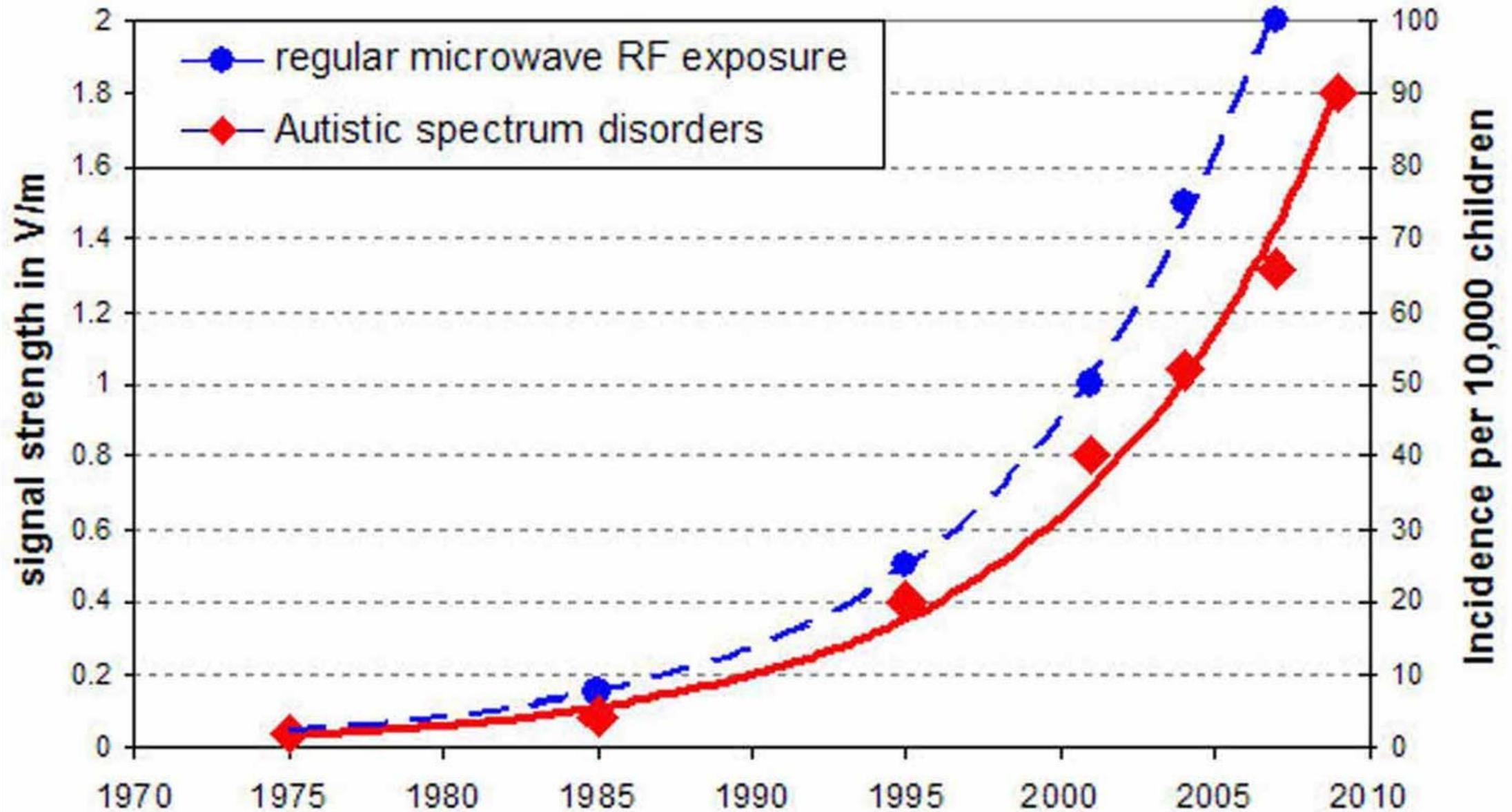
Prenatal exposure of 900 MHz EMF induces pyramidal cell loss in the hippocampus of newborn rats

RESULTS:

Prenatal exposure to wireless radiation damages cells of rat hippocampus –the thinking and memory Section of the brain (Odaci et al., 2008)



Autistic spectrum disorders and typical child RF exposures



NEUROLOGICAL & PSYCHIATRIC EFFECTS OF EMR/EMFs

- Depression
- Anxiety/restlessness
- Insomnia/sleep disturbances
- Fatigue/tiredness
- Concentration/attention problems
- Memory changes
- Headache
- Dizziness
- Nausea
- Irritability
- Skin burning/tingling
- Loss of appetite/body weight
- EEG (brain wave) changes



DrJayDavidson.com

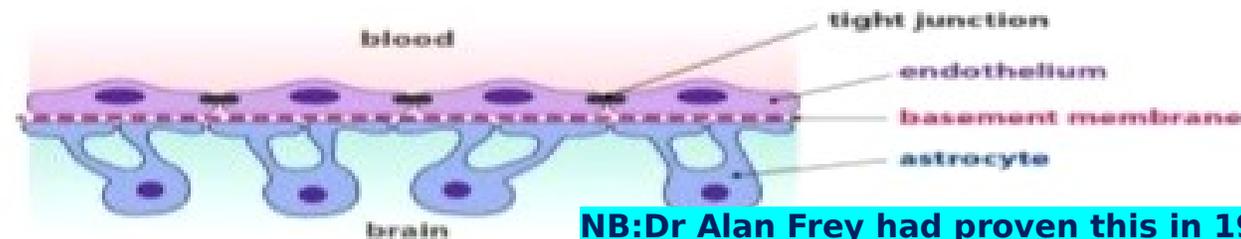
Example 1: Very Early Onset Alzheimer's & other dementias:

We have had a major decrease in age of onset of Alzheimer's, with people age 30 coming down with Alzheimer's. "Digital dementias" in young people exposed to Wi-Fi and other EMFs. Excessive intracellular calcium has essential roles in causing Alzheimer's and other neurodegenerative diseases. EMFs acting through VGCC activation produces large increases in the amyloid beta ($A\beta$) protein in the brain – has key role in Alzheimer's. Two studies in rats, showed that a series of microwave pulses given to young rats, followed by cessation of pulses, produced 100% Alzheimer's-like effects in middle aged rats – memory and behavioral changes and also high levels of $A\beta$ protein and oxidative stress in the brains.

If extremely highly pulsed 5G radiation produces similar effects in humans, 5G will inevitably produce universal or almost universal very early onset Alzheimer's dementias.

The Brain and Wireless Radiation

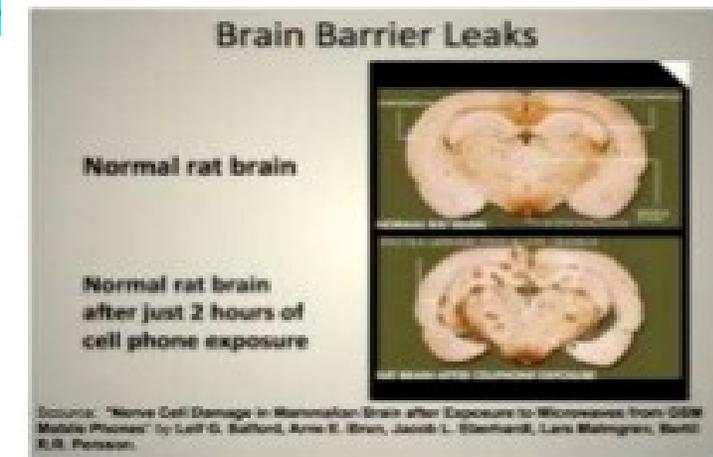
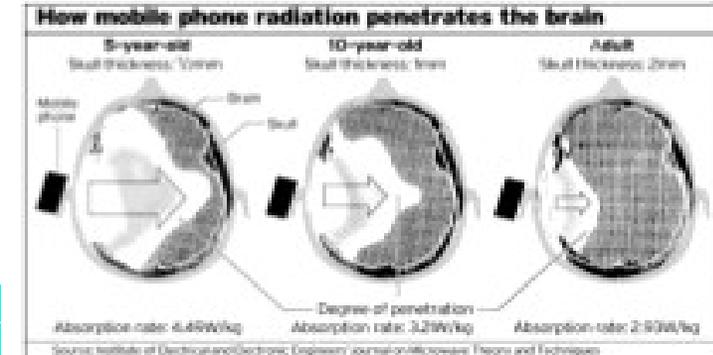
Blood Brain Barrier Permeability



NB: Dr Alan Frey had proven this in 1975 published science - see also Dr Leif Salford Neurosurgeon's work on EMF & the Brain-Blood-Barrier

Blood Brain Barrier

- Brain capillaries show no fenestrations or pinocytotic (transportation) vesicles and have **tight junctions** that almost fuse adjacent cells. This anatomy creates the **blood-brain barrier (BBB)**.
- The BBB separates plasma from the interstitial space of the CNS and affects in a critical fashion the traffic of molecules in and out of the brain.
- Lipophilic compounds cross the BBB easier than hydrophilic ones do; small lipophilic molecules diffuse freely.
- Some hydrophilic compounds enter the brain with the help of transporters; larger molecules enter via receptor-mediated endocytosis.
- The BBB protects the brain from toxic substances but impedes also the entry of drugs.
- Hypertonic stimuli and chemical substances including glutamate and certain cytokines can open the BBB.
- HIE and inflammatory mediators produced in sepsis disrupt the BBB.





Cell Phone Radiation Causes Leakage of the Blood Brain Barrier Dr Leif Salford Up next AUTOPLAY

Cell Phone Radiation Causes Leakage of the Blood Brain Barrier Dr Leif Salford Up next AUTOPLAY

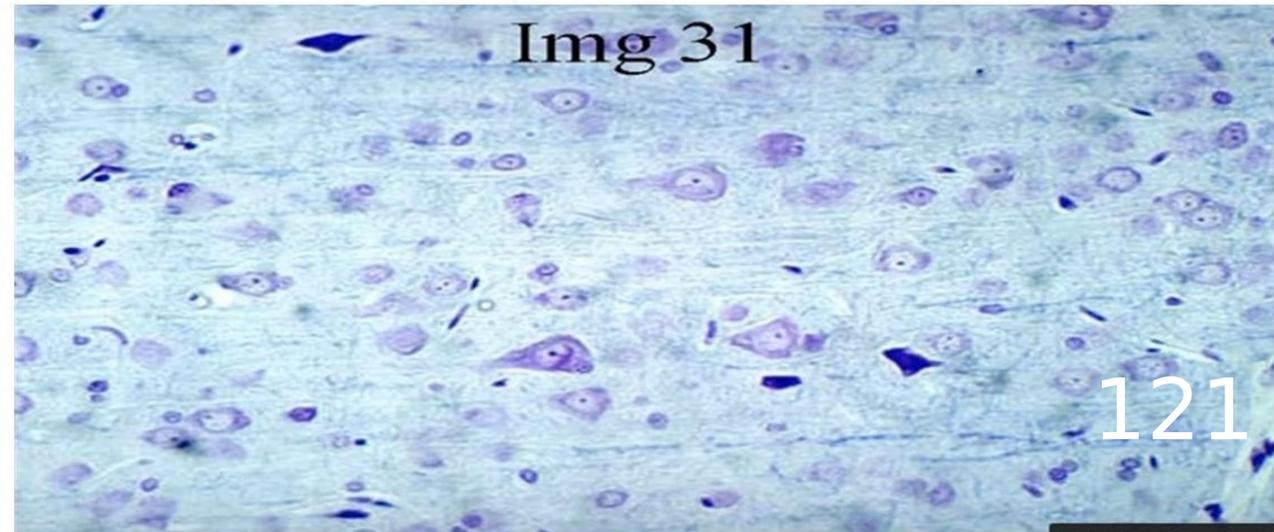
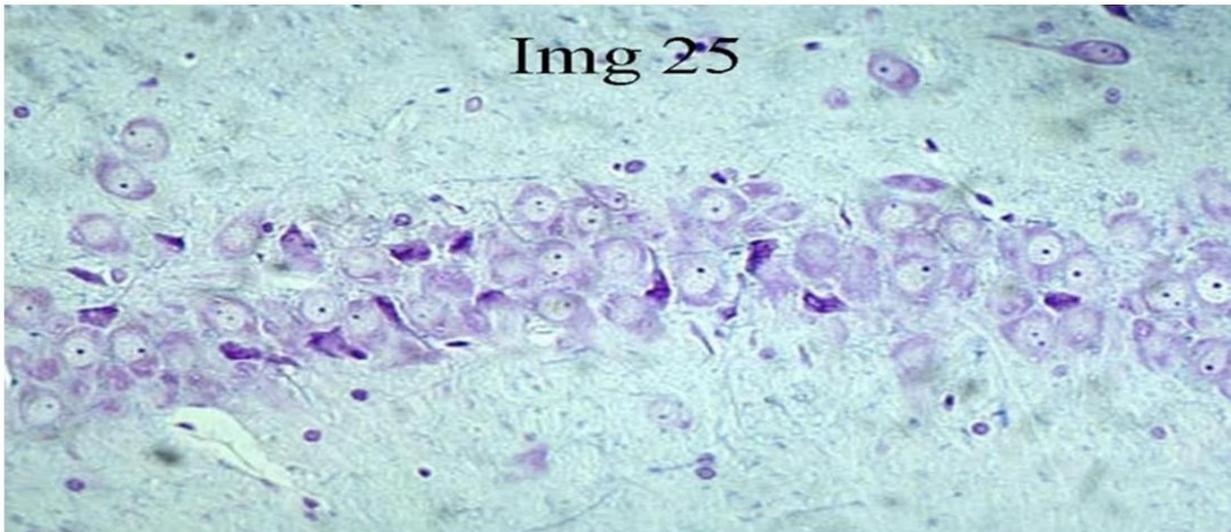
Normal Brain Blood Barrier

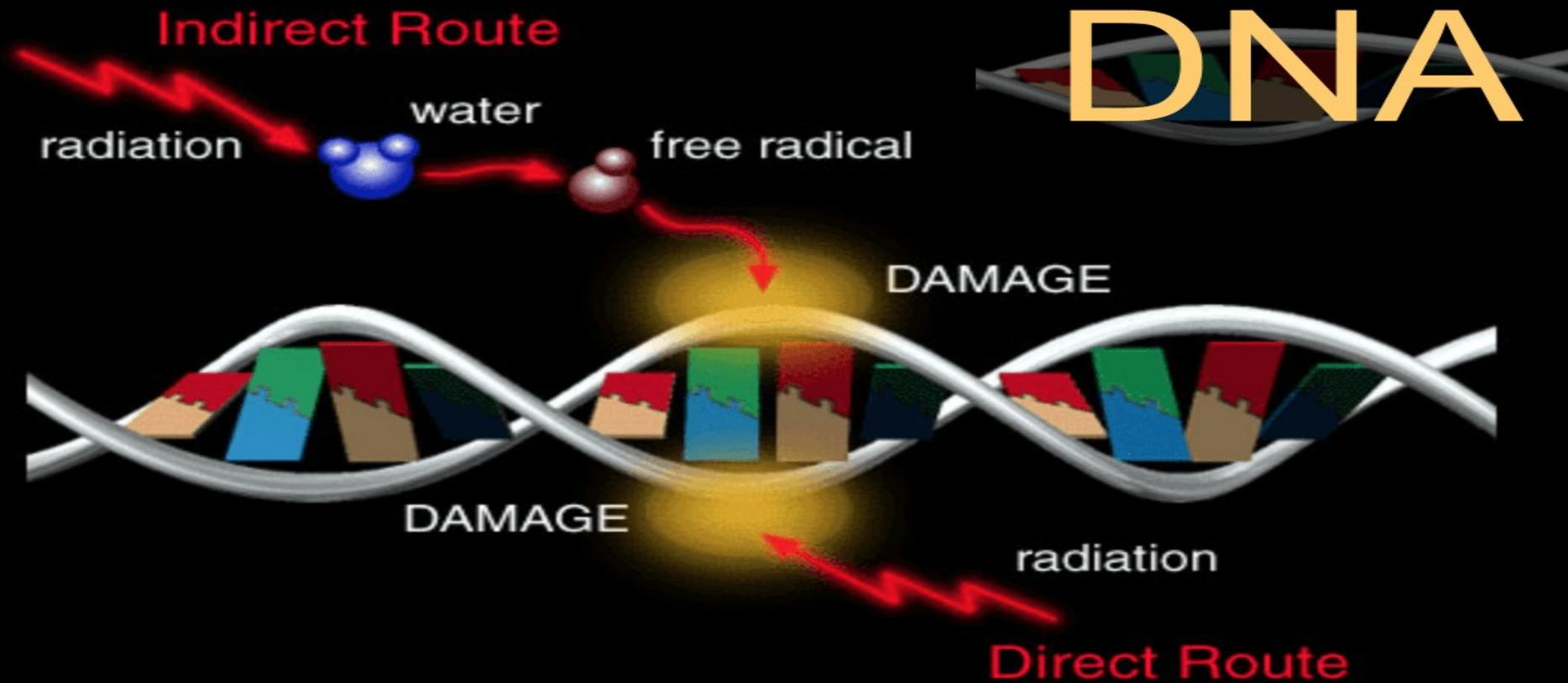
Brain Blood Barrier after exposure

Rats Brains exposed to 2hrs to mobile phone GSM radiation (997)

Shrunked Neurons (after exposure)

Dark Neurons (after exposure)





There are two main ways radiation can damage DNA inside living cells. Radiation can strike the DNA molecule directly, ionizing and damaging it. Alternately, radiation can ionize water molecules, producing free radicals that react with and damage DNA molecules. *Source unknown.*

Free radicals are unstable molecules that can damage the cells in your body. They form when atoms or molecules gain or lose electrons

Free radicals are associated with human disease, including cancer, atherosclerosis, Alzheimer's disease, Parkinson's disease and many others.

INDIRECT METABOLIC PATHWAY TO **CANCER**

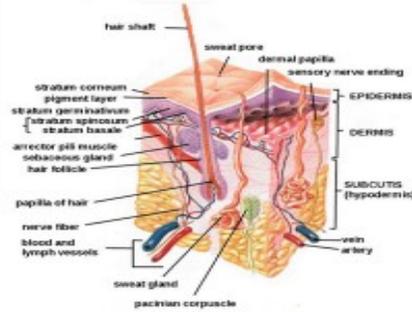
- **Oxidative Stress increase - Altered Ca² metabolism**
- **Increase in Free Radicals**
- **Alteration of Gene expression**
- **DNA damage - genetic and epigenetic**
- **DNA inhibition for single and double strands of new cells**
- **If New healthy DNA Cells cannot be made Cancer risk increases**
- **ENDOCRINE DISRUPTION - ie Lowering of Melatonin, which brings a decline in Immune Function**
- **Decline in Immune Function Increases Potential Risk of Cancers**

THIS IS A NEGATIVE HEALTH CASCADE FOR CHRONIC DISEASE OVER TIME!

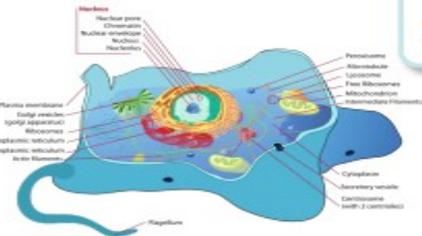
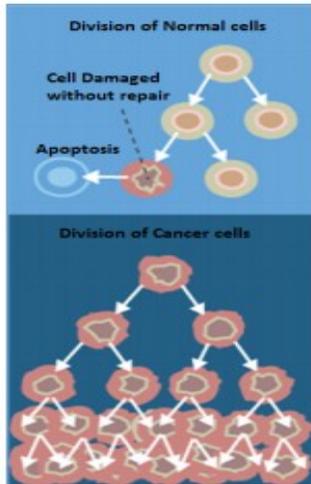
Non thermal health effects on cells

IMPORTANT TISSUE EFFECTS:

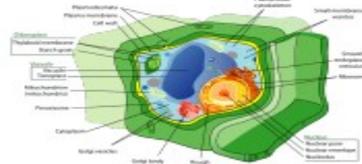
Damage to germ cells
Loss of some cell types
Cell behavior changes
Malignant proliferation
Changes in cell maturation
Functional damage to viscera
Pervasive visceral effects
Tissues vary in sensitivity



Human Skin
(Daniel de Sousa Telles)



Typical Animal Cell



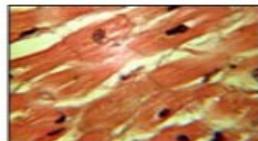
Typical Plant Cell



Skeletal muscle

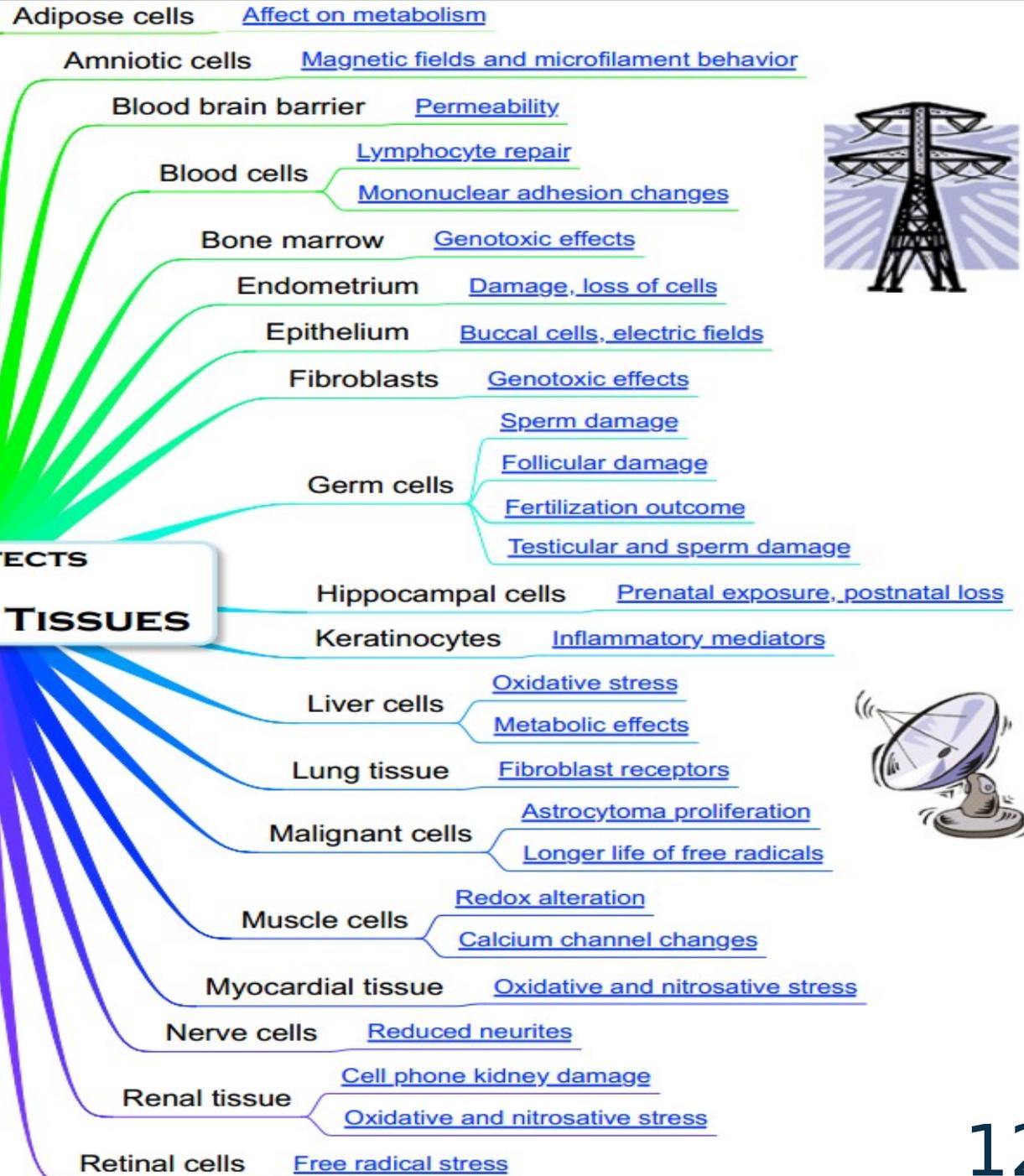


Smooth muscle



Cardiac muscle

EMF EFFECTS ON CELLS AND TISSUES



**THIS IS A REAL
HEALTH
CONDITION
WHICH EFFECTS
AROUND 3-5%
OF
POPULATIONS -
IT IS NOT
PSYCHOSOMATI
C! HEALTH
SERVICES NEED
TO LEARN TO
TREAT PEOPLE
NOT SUGGEST
THEY ARE MAD -
SWEDEN HAS
SET THE
STANDARD IN
ACCEPTING THIS
AS A HEALTH
CONDITION**

Electro-sensitivity or EHS

A biologically correct
response to an
environmental pollutant

Scroll for details