Your Family Health in the 5G Wireless Era





Dr Pri Bandara, Independent Medical Researcher/Educator, formerly of USyd Medicine at RPA & Westmead Hospitals

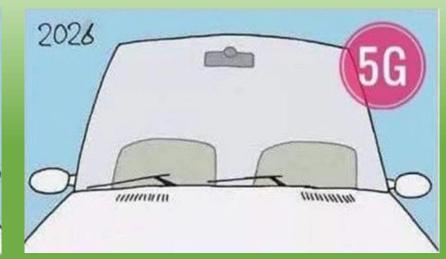
Why This? Why Now?











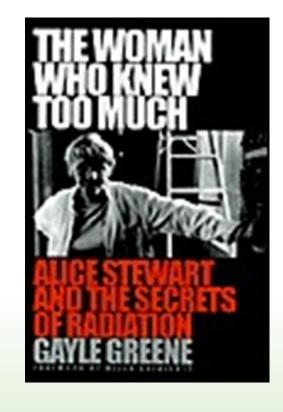
What's Wrong? Why Should You Care?



Dr. Alice Stewart (1906 -2002)

Pioneering research linking X-ray and cancer

- 1956 rejected by medical establishment
- 1980s world-wide acceptance
- How many lives were lost?





- 14 people in an industry-friendly closed-club NGO control the Wireless radiation exposure regulation
- They are ignoring the evidence of harm
- How many lives are being lost?

Serious Warning from Expert Scientists: International EMF Scientist Appeal





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,

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

As of July 14, 2023, 259 EMF scientists from 44 nations and 15 Supporting Scientists from 11 nations have signed the Appeal.

https://emfscientist.org/



Calls of Thousands of Scientists and Physicians to Protect People from RF-EMR





















2020 Consensus Statement of UK and International Medical and Scientific Experts and Practitioners on Health Effects of Non-Ionising Radiation (NIR)

https://phiremedical.org/2020-nir-consensus-statement-sign/

German Doctors Protesting Against 5G



23 Oct 2019, in front of the State Department in Stuttgart

Our Exposure to RF Electromagnetic Radiation



Children's Exposure to Wireless Radiation (RF-EMR) in the 21st Century



5G Era: A Massive Increase in RF-EMR Exposure is Happening Now



Australian Radiation Protection & Nuclear Safety Agency (ARPANSA) - No Established Evidence of Any Adverse Health Effects

Home > 5G: the new generation of the mobile phone network and health

5G: the new generation of the mobile phone network and health

At exposure levels below the limits set within the ARPANSA safety standard, it is the assessment of ARPANSA and international organisations such as the <u>World Health Organisation</u> (WHO) and the <u>International Commission on Non-lonising Radiation (ICNIRP)</u> that there is no established scientific evidence to support any adverse health effects from very low RF EME exposures to populations or individuals.

https://www.arpansa.gov.au/news/5g-new-generation-mobile-phone-network-and-health

Public Exposure Regulation – Only Prevents Short-Term Heating



- Guidelines International Commission on Nonlonizing Radiation Protection (ICNIRP) and Institute of Electrical and Electronic Engineers (IEEE)
- Only account for thermal (heating) effects in acute exposures - 6 minutes
- Non-thermal & long-term effects ignored
- Followed by most countries in the West (FCC, ARPANSA)

SAM Head phantom

A Snapshot of RF-EMR Experimental Studies

Experimental outcome	Number of studies	% of total
Found biological/health		
effect/s	1329	68
No Effect/s	469	24
Uncertain outcomes	157	8
Total number of studies	1955	100

With 68% of 1955 studies showing biological/health effects, "wireless is safe" claim is rejected (2018).

https://www.orsaa.org



The WHO Knew of RF-EMR Serious Adverse Health Effects

suggests that the human body may be more sensitive to the <u>nonthermal</u> effects of RF/MW radiation [3].

In response to earlier Soviet reports, the World Health Organization (WHO) decided to conduct a comprehensive study on the biological effects of exposure to RF/MW radiation. In 1976, M. Zaret published the results of the study (reference found in [8]). The WHO investigation focused on the population of North Karelia, a remote area of Finland that borders the Soviet Union. This region was selected because of its close proximity to a then Soviet early warning radar station. North Karelia is geographically located in the path of intercontinental ballistic missiles that would originate from the midwest United States. To detect these missiles, the Soviets constructed a number of high power tropospheric scattering radar units adjacent to nearby Lake Ladoga. The operation of these units exposes the residents of North Karelia to large doses of ground and scatter radiation. The WHO investigation found evidence linking exposure of RF/MW radiation to cardiovascular disease and cancer. The North Karelian population suffered from an unusually high number of heart attacks and cases of cancer. In addition, it was found that the affliction rate of these diseases was much higher among residents living closest to the radar site [8].

Radiofrequency Microwave Radiation Biological Effects and Safety Standards: A Review. US Air Force Materiel Command, New York, 1994).

Experts Who Pioneered WHO & Military RF Research Warned

Dr. Milton Zaret MD (US military Microwave research pioneer) was the first medical doctor to testify in Congress on the hazards of microwave radiation (March 9, 1973):

"There is a clear, present and ever-increasing danger to the entire population of our country from exposure to the entire non-ionizing portion of the electromagnetic spectrum. The dangers cannot be overstated because most non-ionizing radiation injuries occur covertly, usually do not become manifest until after latent periods of years, and when they do become manifest, the effects are seldom recognized."

https://microwavenews.com/news-center/milton-zaret-early-prophet-microwave-hazards-dies-91

RNSH Cardiologists: Increasing Heart Attacks in those Without Standard Risk Factors

> Eur J Prev Cardiol. 2017 Nov;24(17):1824-1830. doi: 10.1177/2047487317720287. Epub 2017 Jul 13.

Increasing proportion of ST elevation myocardial infarction patients with coronary atherosclerosis poorly explained by standard modifiable risk factors

```
Stephen T Vernon <sup>1 2</sup>, Sean Coffey <sup>1 3</sup>, Ravinay Bhindi <sup>1 2</sup>, Soon Yeng Soo Hoo <sup>1</sup>, Gregory I Nelson <sup>1</sup>, Michael R Ward <sup>1</sup>, Peter S Hansen <sup>1</sup>, Kaleab N Asrress <sup>1 2</sup>, Clara K Chow <sup>2 4 5</sup>, David S Celermajer <sup>2 6</sup>, John F O'Sullivan <sup>2 7</sup>, Gemma A Figtree <sup>1 2</sup>
```

- Australian study at RNSH, Sydney. Standard Modifiable Cardiovascular Risk Factors (SMuRFs; hypercholesterolaemia, hypertension, diabetes and smoking)
- 132/695 (25%) STEMI patients had no SMuRF this proportion didn't change with age, gender or family history.
- Patients without SMuRF in 2006 was 11%, which increased to 27% by 2014
- proportion of patients with hypercholesterolaemia and smoking decreased, no change in diabetes and high BP

RF-EMR Exposure – a Modifiable Cardiovascular Risk Factor

European Journal of Preventive Cardiology



Cardiovascular disease: Time to identify emerging environmental risk factors

Priyanka Bandara, Steven Weller

First Published October 3, 2017 | Editorial | Find in PubMed | @ Check for updates https://doi.org/10.1177/2047487317734898

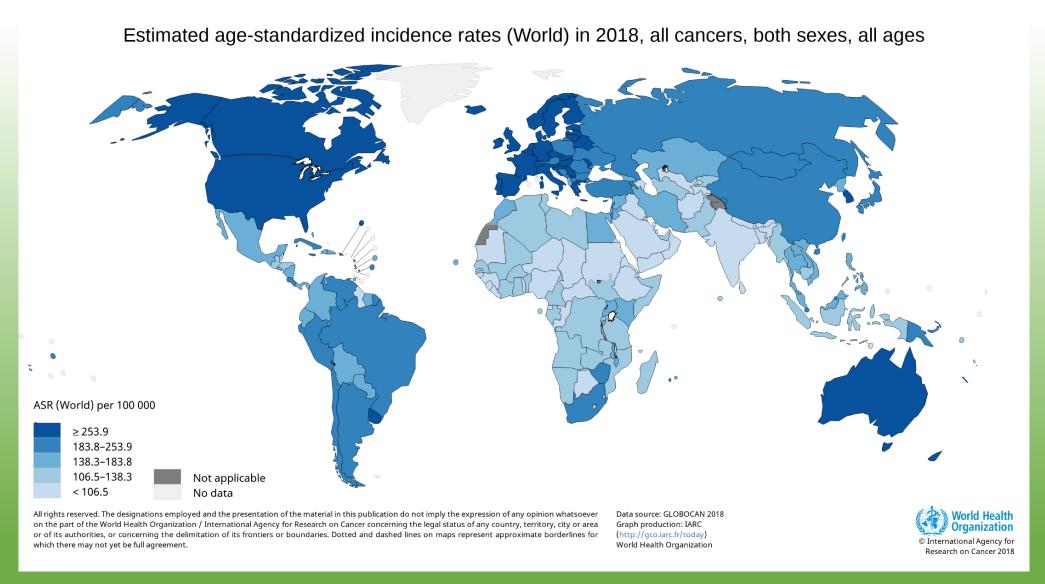
- Presented evidence for RF-EMR to be considered a standard modifiable cardiovascular risk factor
- We offered the cardiology team our help to assess RF-EMR exposure (free of charge) of their patients and investigate if it could explain the increase in heart attacks
- Lead investigator did not even reply to my emails

RF-EMR Can Cause Cancer

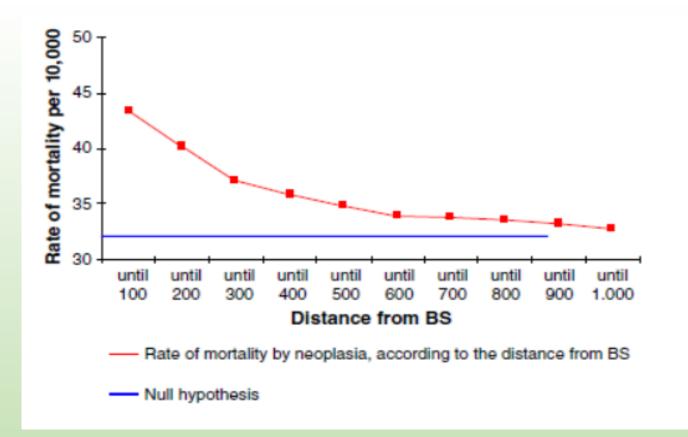
WHO IARC (2011): RF-EMR is a "possible" carcinogen

Expert Scientists: RF-EMR is a carcinogen

Cancer Map of the World – Australia Has the Highest Cancer Rate



Cancer Deaths Near Mobile Phone Base Stations (MPBS)



Distance from	Number of
MBS	Cancer deaths
0-100 m	3569
100-200 m	1408
200-300 m	973
300-400 m	482
400 -500 m	292
Total 0 – 500 m	6724
Beyond 1000 m	147

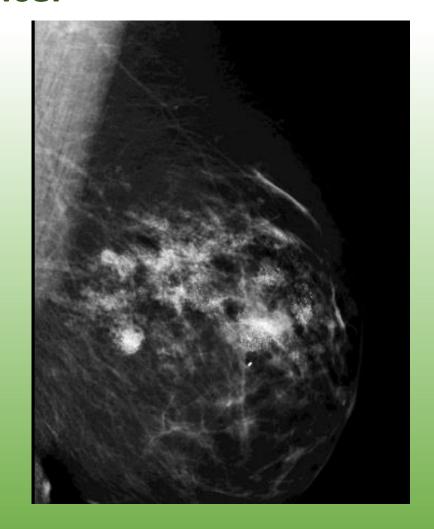
Cancer deaths within 500m from MPBS 6724/7191 = 93.5%

Dode et al., Science of The Total Environment 2011;409:3649–65

Mobile Phones Can Cause Breast Cancer







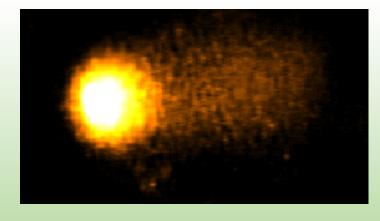
West JG et al.

Multifocal breast cancer in young women with prolongedcontact between their breasts and their cellular phones. Case Rep Med. 2013;2013:354682.

DNA Damage Shown by Comet Assay

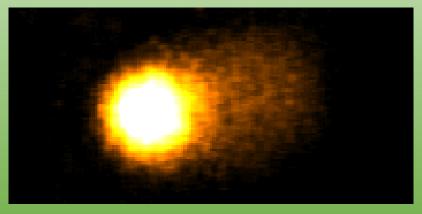


sham exposure



gamma-radiation 0.5 Gy

5000 chest X-rays



RF-EMF: 1800 MHz; SAR 1.3 W/kg; 24h

Mobile phone 24 hr ICNIRP 2 W/kg

Diem E et al., Non-thermal DNA breakage by mobile-phone radiation (1800 MHz) in human fibroblasts and in transformed GFSH-R17 rat granulosa cells in vitro. Mutat Res. 2005;583(2):178-83.

ARPANSA False Position Regarding Oxidative Stress Pointed Out



Radiation Protection in Australasia (2017) Vol. 34, No. 2

ARPS42 Conference Paper

BIOLOGICAL EFFECTS OF LOW-INTENSITY RADIOFREQUENCY ELECTROMAGNETIC RADIATION – TIME FOR A PARADIGM SHIFT IN REGULATION OF PUBLIC EXPOSURE

Priyanka Bandara (1,2) PhD (Biochemistry & Molecular Genetics, UNSW) and Steve Weller (1) BSc (Biochemistry and Microbiology, Monash).

Submitted 28/8/2017; Accepted 31/10/2017

ARPANSA TRS164 (2014): "The putative link between RF energy and altered ROS production is tenuous"

Bandara & Weller (2017): 89% of 242 peer-reviewed studies (from 29 countries) on oxidative stress found significant effects. RF-EMR causes altered ROS production.

Oxidative Stress is a major contributor to all diseases

Swiss Expert Group Confirmed RF-EMR Causes Oxidative Stress in 2021



BERENIS – The Swiss expert group on electromagnetic fields and non-ionising radiation Newsletter – Special Issue January 2021

This **special issue** of the BERENIS newsletter contains an up-to-date assessment of a possible correlation between oxidative stress and exposure to magnetic and electromagnetic fields and their putative effects on health. For this purpose, relevant animal and cell studies published between 2010 and 2020 were identified and summarized. An extended report presenting these recent studies in more detail will be published soon by the FOEN¹. This special issue contains a short version of the report.

recovery phase. Pre-existing conditions, such as immune deficiencies or diseases (diabetes, neurodegenerative diseases), compromise the body's defence mechanisms, including antioxidative protection, and it is therefore possible that individuals with these conditions experience more severe health effects. In addition, the studies show that very young and elderly individuals can react less efficiently to oxidative stress induced by EMF, which of course also applies to other stressors that cause oxidative stress. More extensive studies under standardised conditions are necessary, to better understand and confirm these phenomena and observations.

"EMF exposure, even in the low dose range, can lead to changes in oxidative balance"
This is a summary. The full report will be published by the

Swiss Federal Office

of the Environment.

2020 - Swiss Moratorium on 5G for 3 Years



2021 - Swiss Moratorium on 5G Overturned by Industry Legal Action

Geneva 5G ban killed by Federal Court

The three main phone operators united and took the case to court.

The judges ruled the ban was illegal as there wasn't sufficient evidence of the alleged danger of the masts to health. Link

There Are Always Experts Who Promote Toxic Products

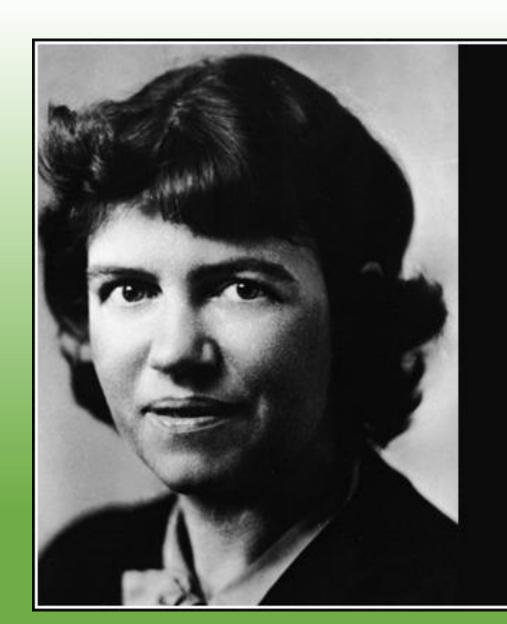


Protective Action – Replace WiFi with Wired Internet



Ceremonious removal of WiFi by the mayor at an Italian school after local authority investigated the scientific evidence of harm from microwave RF-EMR. Source: presentation by Environmental Health Trust, USA at the National Institutes of Health, USA 20 July 2018 for the healthy building conference.

Can You Beat the 5G Beast Against the Odds?



Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

— Margaret Mead —

AZ QUOTES