

THE IRISH TIMES

Mobile phone radiation and cancer

Sir, – The Irish Times article, published on Thursday Feb 27th, [“Is there a connection between a mobile phone and cancer?”](#) concluded that “mobile phones do not cause cancer”,

This statement was scientifically and factually untrue. The article in question was informed by the scientifically disputed and discredited findings of a 2024 review by researchers funded by the World Health Organisation (WHO).

Significantly, the latest WHO review by a different team of researchers published in May 2025 confirms the association between everyday radio frequency radiation (RFR) exposure and a risk of cancer found in extant animal studies. It reports that the “results of this systematic review provide high or moderate [certainty of evidence] for several cancer sites [in animals] relevant to cancer hazard identification for humans.” In response to the findings of the latest WHO study, Dr Ron Melnick, a former senior toxicologist and director of special programs at the US National Toxicology Program and the US National Institute of Environmental Health Sciences (NIEHS), states: “The evidence is now clear – cell phone radiation can cause cancer in animals in concordance with the tumor types identified in human studies of mobile phone users.” Thus, any claim, such as that made by the WHO 2024 review, that RFR “likely does not increase the risk of brain cancer” in humans is also untrue.

In support of its thesis, the article also cites Prof Deirdre Murray of the National Cancer Registry Ireland who reports that “NCRI data shows that brain cancer incidence rates have remained stable” since 1994. My analysis of the full data set obtained from the NCRI covering 1994-2019 finds the incidence of all types of glioblastoma multiforme (GBM) in Ireland more than doubled since 1994, with certain subtypes showing increases of between over four to six times, after adjusting for population growth. These are forms of aggressive brain cancers scientists associate with RFR exposure in research studies. This notable increase in the most serious types of brain cancer is obscured by the decrease in certain other types since 1994.

It is also of concern that other cancers linked with RFR exposure from smartphones are also on the increase. The following statistics were drawn from publicly available NCRI data 1994-2021 for the age range 10-49 years: As with GBM in 2019, thyroid cancer presented a 2.3-fold higher risk for males and 3.6-fold higher risk for females by 2021.

However, researchers are concerned with the rise in other cancers, as adolescents and young adults carry their smartphones in their pockets. Thus, my analysis of the Irish NCRI data 1994-2021 for age range 10-49 revealed that colorectal cancer presented a 1.5-fold (males) and 1.6-fold (females) increase in risk; testicular cancer presented a 2.1-fold increase in risk; while the incidence of prostate cancer rose

dramatically from 1 in 5,000 in 1994 to 1 in 313 in 2021, reflecting a 16-fold increase in risk.

While environmental and lifestyle factors may play a role in the observed increases in cancers, the elephant in the room is the ubiquitous RFR from smartphones and other sources. Incidentally, while oxidative stress is a major pathway linking environmental toxins such as RFR to diseases like cancer, other mechanisms (eg, genotoxicity, inflammation) may also play roles.

The WHO-sponsored reviews, one of which was cited in the article and formed the basis of its conclusions, are the subject of critical commentary from several independent scientists and the International Commission on the Biological Effects of Electromagnetic Fields Prof James Lin, former commissioner of the International Commission on Non-Ionizing Radiation Protection (ICNIRP), summarises criticisms thus in the IEEE Microwave Magazine Health Matters, January 2025: “The criticisms and challenges encountered by the published WHOEMF systematic reviews are brutal, including calls for retraction. Rigorous examinations of the reviews reveal major concerns. In addition to the scientific quality, they appear to have a strong conviction of nothing but heat to worry about with RF radiation. The unsubtle message that cellular mobile phones do not pose a cancer risk is clear. The reviews exhibit a lack of serious concerns for conflicts of interest and display unequivocal support for the recently promulgated ICNIRP RF exposure guidelines for human safety.”

The matters addressed in The Irish Times article in February are of serious import for public health, particularly that of children and adolescents. International colleagues, including Dr Hugh Taylor, professor of obstetrics, gynaecology, and reproductive sciences, and also professor of molecular, cellular, and developmental biology at Yale University, and Dr Linda Birnbaum, a world-renowned scientist and former director of the NIEHS and the US National Toxicology Program (NTP), and I addressed our concerns in a monograph entitled “Wireless technologies, non-ionising electromagnetic fields and children: Identifying and Reducing Health Risks”, published in the journal Current problems in Pediatric and Adolescent Health Care in 2023.

Parents and the public are unaware of the very real risks EMF exposures pose to children. The Fourth Estate has a responsibility here which it needs to live up to if it is to properly inform the public and hold policymakers and industry to account. – Yours, etc,

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