



INTERNATIONAL COMMISSION ON
THE BIOLOGICAL EFFECTS OF
ELECTROMAGNETIC FIELDS

NEWS RELEASE

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FOR IMMEDIATE RELEASE

Simple engineering fixes could dramatically reduce cellphone radiation, scientists say

Industry will now have to start competing on safety

Six simple engineering fixes could dramatically reduce radiation emitted by cellphones according to a group of scientists. The fixes are easy to implement, and in one case the fix relies on technology already patented by the industry.

The group recently reported its findings in [a peer-reviewed article](#) entitled “Cell Phone Radiation Exposure Limits and Engineering Solutions” published in the *International Journal of Environmental Research and Public Health* on April 4, 2023.

“Given the growing evidence of the health effects of radiation from cellphones and cell towers, I believe the wireless industry is going to have to start competing on safety,” said Joel Moskowitz, one of the authors who is also director of the Center for Family and Community Health at the University of California, Berkeley.

“With the proliferation of online advice and consultants helping people reduce their exposures, the concern about the safety of cellphones and other wireless devices has moved into the mainstream,” Moskowitz added.

“We will undoubtedly hear from many in the industry that a move toward safer cellphones and other wireless devices will be too costly and unnecessary,” Moskowitz said. “But carmakers said the same thing when the public demanded safer cars and the government required them. Today, those same carmakers compete on safety.”

“This competition for safety can move forward without a change in the current government standards,” Moskowitz explained. “Ultimately, I believe governments around the world will be playing catch-up with industry and consumers.”

“The six engineering solutions outlined in this paper provide a significant move forward in cellphone safety,” said Elizabeth Kelley, one of the authors of the paper and managing director of the International Commission on the Biological Effects of Electromagnetic Fields. “The scientists and engineers proposing them stand ready to assist the cellphone industry with implementing them as soon as is practical.”

Kelley added, “Some of the proposed solutions are just common sense. Using Wi-Fi to make cellphone calls whenever feasible dramatically reduces radiation emissions from the phone.” And, when a cellphone is sitting on the nightstand while the user is sleeping, it doesn’t need to communicate constantly with a cell tower to relay its location. “Why not shut down these transmissions—which cause frequent radiation emissions—when our phones are stationary such as when they sitting on a bedside table as we sleep or on our desk next to us as we work?”

Kelley said, “These common-sense changes can quickly and dramatically reduce radiation exposure from cellphones. Implementing them will create a healthier environment for all of us while still allowing us to stay connected to others and to the information we need daily.”

The paper also examines the history behind the current cellphone emissions standards and finds a trail of dated assumptions and poorly designed experiments and tests that don’t reflect how people use cellphones today.

Paul Héroux, one of the authors and a professor in the School of Population and Global Health at McGill University in Montreal, said the team of scientists and engineers who worked on the paper “identified seven blind spots in the methods and experiments upon which our current cellphone radiation emission standards and guidelines are based. These blind spots call into serious question the validity of those standards.”

For example, tests to gauge the hazards of wireless radiation upon which our current standards rest only used exposures lasting between 40 and 60 minutes. Such exposures “can hardly be said to be representative of the 24/7 chronic exposures which all of us are and will be subject to for the rest of our lives.”

Héroux added, “Combined, these seven blind spots tell us that our current cellphone emissions standards cannot be trusted. We cannot and should not tell the public that we know cellphones are safe.”

In his written statement Héroux recommends that two things be done right away:

1. Test cellphones “using test designs that represent actual use and that rely on the growing body of research demonstrating biological effects from radiation emitted by cellphones.”
2. “Demand a quantitative health risk assessment of cellphone use and wireless infrastructure. This type of scientific assessment is routinely used by government agencies worldwide. In the United States the Environmental Protection Agency,

the Food and Drug Administration, the Centers for Disease Control and Prevention, and the Occupational Safety and Health Administration all use quantitative human health risk assessments to determine potential health risks associated with exposure to hazardous agents or activities.”

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About

*International Commission on the Biological Effects of
Electromagnetic Fields*

The ICBE-EMF is made up of a multidisciplinary consortium of scientists, doctors and related professionals who are involved with research related to the biological and health effects of electromagnetic frequencies up to and including 300 GHz. The organization makes recommendations that include and go beyond establishing numerical exposure guidelines based on the best peer-reviewed scientific research publications.

Website: www.icbe-emf.org