



Visit us online at www.MedPageToday.com

[A](#) | [A](#) | [A](#) | [A](#)

WHO Says Cell Phones May Cause Cancer

By Kristina Fiore, Staff Writer, MedPage Today
Reviewed by
May 31, 2011

Review

A work group of the World Health Organization has declared the radiofrequency electromagnetic fields emitted by cell phones to be "possibly carcinogenic to humans."

The declaration was made after a week-long meeting of the International Agency for Research on Cancer (IARC) in Lyon, France, which involved 31 scientists from 14 countries, who decided there was enough evidence linking use of cellphones to an increased risk of glioblastoma.

The declaration puts these energy fields into the IARC's group 2B for carcinogenic agents -- one notch above compounds "not classifiable" as cancer-causing because of inadequate evidence.

Other agents in group 2B include progestins and anti-epileptics such as phenytoin and phenobarbital.

Jonathan Samet, MD, of the University of Southern California and chair of the work group, said the "evidence, while still accumulating, is strong enough to support a conclusion and the 2B classification."

"The conclusion means that there could be some risk, and therefore we need to keep a close watch for a link between cellphones and cancer risk," Samet said in a statement.

The IARC's group 2A classification -- *probably* carcinogenic to humans -- includes shift work involving circadian changes and high-temperature frying.

Benzene, hexavalent chromium, mustard gas, solar radiation, and other radioactive elements are among the agency's highest class of carcinogens, group 1, those with "sufficient evidence of carcinogenicity."

The WHO work group did not find that there was sufficient evidence linking cancer and environmental or occupational exposures with microwave energy.

The latest large-registry study on cancer and cellphone use -- the [Interphone study](#), sponsored by both government and industry sources and reported last year -- found no conclusive link between talk time and glioblastoma. There was a significant increase associated with the highest levels of use, but researchers said spending that amount of time on the phone was "implausible."

In addition, odds ratios for other categories of cellphone use appeared to be protective.

Still, a recent [study](#) by researchers at the National Institute on Drug Abuse -- known for their fMRI studies of the brains of addicts -- found that active cellphones changed glucose metabolism in the parts of the brain closest to the antenna.

Although the clinical significance of the findings is still unclear, it provides some of the first evidence that the brain is sensitive to radiofrequency electromagnetic fields.

Antonio Chiocca, MD, chair of neurosurgery at Ohio State University, who was not involved in the work group, said in an email to *MedPage Today* and ABC News that the evidence tying cell phones to brain cancer is "still pretty circumstantial."

"The follow-up hasn't been long enough," he said. "If it takes 20-plus years for the effects to be seen, we may still not have enough time to really know whether the use is linked to brain cancer."

Still, he said that it wouldn't do any harm if the public were to hold their phones further from their heads, or use ear pieces.

An estimated five billion people around the world use cellphones.

The wireless industry group Cellular Telecommunications Industry Association (CTIA) emphasized that the IARC classification "does not mean cellphones cause cancer."

The group pointed out that in the past, IARC has given the same classification to "pickled vegetables and coffee," and highlighted that the Federal Communications Commission and the FDA have concluded that there's no firm evidence linking cellphones and cancer.

This article was developed in collaboration with ABC News.



Disclaimer

The information presented in this activity is that of the authors and does not necessarily represent the views of the University of Pennsylvania School of Medicine, MedPage Today, and the commercial supporter. Specific medicines discussed in this activity may not yet be approved by the FDA for the use as indicated by the writer or reviewer. Before prescribing any medication, we advise you to review the complete prescribing information, including indications, contraindications, warnings, precautions, and adverse effects. Specific patient care decisions are the responsibility of the healthcare professional caring for the patient. Please review our Terms of Use.