Cell Phones and Health: Recap of U.S. Senate Hearing

September 15 (updated on October 9) … Yesterday’s Senate hearing on Health Effects of Cell Phone Use, chaired by Sen. Tom Harkin (D-IA), was a standing-room-only affair. C-Span has posted a complete video and transcript of the 105-minute hearing. (The Senate Appropriations Committee has also posted a video of the hearing.) The prepared testimonies of the witnesses may be downloaded from the Appropriations Committee Web site. There was a last-minute addition to the witness list: Harkin invited Olga Naidenko of the Environmental Working Group (EWG) to testify. See September 10 (p.2) for a list of the other witnesses. The hearing was requested by Sen. Arlen Specter. A third senator, Mark Pryor (D-AR), made a brief appearance.

A few sound bites from the hearing:

• “What worried me was that, in my study, I saw consistent positive results and they always appeared where there is biological plausibility. They did not appear in this group or in that group. They appeared in the more than ten years [group], they appeared on the same side where the phone was held, they appeared for the heavy users and they appeared in rural areas compared to urban areas and this also has had biological plausibility … So the fact that all of these indications appeared where they should have appeared told me that it was really a red light. But as a scientist, this is not enough, definitely not for causality, but an indication that, according to my judgment, it is enough in order to advise the precautionary principle”—Siegal Sadetzki on her Israeli Interphone study;
• “While the weight of the current scientific evidence has not conclusively linked cell phones with any health problems, we and other scientific organizations … have concluded that better data are needed to establish any potential risks to humans” —John Bucher;
• “In the present situation of the scientific uncertainty, the statements that the use of mobile phones is safe are premature” —Dariusz Leszczynski;
• “The current scientific evidence does not demonstrate that wireless cause cancer or other adverse health effects” —Linda Erdreich, on behalf of the CTIA;
• “I am not alarmed, I am concerned” —Devra Davis;

(continued on p.2)
“EWG strongly believes that the government should support additional research into this important health question” — Olga Naidenko;
“Let me tell you where I come out … We just don’t know what the answer is … Precautions are not a bad idea. They may not be a good idea, but they are not a bad idea. And the issue of children is something we should look at a little more closely … We have a duty to do more by protecting children. The question, I think, boils down to what additional studies are necessary” — Sen. Arlen Specter;
“I found this really very interesting and very challenging and I can assure you we are going to do some follow-up on this” — Sen. Tom Harkin.

Some links to the press coverage on the hearing:
• “Researchers Push for New Cell Phone Safety Standards” (CNET);
• “Cell Phones: Feds Probing Health Impacts”; “Cell Phones: Precautions Recommended” and “For Kids: Are Cell Phones Safe?” (Science News);
• “U.S. Senator Promises Look into Cellphone-Cancer Link” (Reuters);
• “Is Your Cell Phone Melting Your Brain? Not Yet” (PC Magazine);
• “Experts Urge More Study of Cellphone Radiation, Especially on Kids” (USA Today);
• “Scientists Call on U.S Senate To Issue Advice on Mobile Phones” (U.K. Telegraph);
• “Cancer Risk of Cell Phones Debated” (Detroit News);
• “Mixed Verdict on Mobile Phones as Cancer Cause” (Voice of America);
• “Cell Phone Radiation Risks: Why the Jury’s Still Out” (Time);
• “Is Cell-Phone Safety Assured? Or Merely Ignored?” (BusinessWeek);
• “More Research on Cell Phone Safety Needed, Experts Say” (American Cancer Society);
• “Safety Advocates Gain Ground in Cell Phone Debate” (Contra Costa Times, California);
• “How Safe Is Your Mobile Phone?” (The Age, Australia);
• “Cell Phones and Cancer - How To Stay Safe” (Dr. Andrew Weil).

Other resources:
• Sen. Harkin’s press release;
• CTIA’s press release;
• Environmental Working Group’s (EWG) report, Cell Phone Radiation Report;
• International EMF Collaborative’s report, Cellphones and Brain Tumors: 15 Reasons for Concern, Science, Spin and the Truth Behind Interphone.

Senator Witness List; Conference Participants

September 10… Sen. Arlen Specter (D-PA) has posted the witness list for next Monday afternoon’s hearing on The Health Effects of Cell Phone Use:
• John Bucher, associate director of the National Toxicology Program (NTP);
• Devra Davis, University of Pittsburgh;
• Linda Erdreich, Exponent, a consulting firm;
• Dariusz Leszczynski, Finland’s radiation protection authority (STUK);
• Israeli epidemiologist Siegal Sadetzki, a member of the Interphone study group.

Davis, Leszczynski and Sadetzki will also be speaking at a conference on cell phones and health that begins on Sunday afternoon and continues through Tuesday, with a break for the Senate hearing. The program has evolved since it was first announced last month. For instance, Michael Wyde of the NIEHS, who is overseeing the NTP’s $22 million RF-animal study at NIOSH, will now be speaking on Monday morning. David Servan-Schreiber, the author of Anti-Cancer, cannot attend the meeting in Washington, but will participate from his home base in France via Skype, as will Lennart Hardell, of Örebro University, from Sweden, according to Davis.

Libby Kelley, who is helping organize the conference, told Microwave News that the press will no longer be asked to pay the $100 registration fee (see August 18). The meeting will be taped, Davis said, and video excerpts will be posted on the Internet.

* * * *

One of our alert readers has reminded us that there was a Senate hearing on RF/microwave health effects more recently than 30 years ago. Sen. Joe Lieberman (Ind-CT) held a hearing on The Effects of Traffic Radar Guns on Law Enforcement Officers on August 10, 1992. At the time, Sens. Lieberman and Christopher Dodd (D-CT) called on NIOSH to do an epidemiological study on the possible link between police radar use and cancer. “Senator Dodd and I are going to stick with this until we get some answers,” Lieberman said at the time (see MWN, S/O92, p.7). NIOSH never did the study and neither Lieberman nor Dodd ever followed-up.
New Analysis Reaffirms Long-Term Tumor Risk

October 14... A new analysis of already-published epidemiological studies points to a tumor risk following long-term use of cell phones. This meta-analysis by a joint Korean-U.S. team of 13 past studies was published yesterday in the Journal of Clinical Oncology. Its conclusions support two previous similar efforts: All three indicate a 20-25% increase in tumors after ten or more years of cell phone use.

“I went into this really dubious that anything was going on,” Joel Moskowitz of the University of California, Berkeley, School of Public Health, told the Los Angeles Times. “Overall, you find no difference. But when you start teasing the studies apart and doing these subgroup analyses, you do find there is reason to be concerned.” Moskowitz is one of the coauthors of the new study; the lead author is Seung-Kwon Myung of South Korea’s National Cancer Center.

The Korean and U.S. researchers argue that the epidemiological studies by Lennart Hardell, of Sweden’s Örebro University, are of a higher quality than those from the Interphone project.

A team from the University of Utah published the first meta-analysis with long-term exposure data two years ago. Hardell’s group published the second last year.

Still no word on when the Interphone group will release its paper on brain tumor risks.

Interphone: U.K. “Telegraph” Jumps the Gun

October 28... Saturday’s lead story in the Telegraph made believe that the U.K. daily had gotten hold of the much-delayed and much sought-after final results of the Interphone study—and that they showed that using a cell phone does indeed increase the risk of developing a brain tumor. Under the headline “Mobiles: New Cancer Alert,” the newspaper proclaimed that, “Long-term use of mobile phones may be linked to some cancers, a landmark international study will conclude later this year.” In its inside pages were a number of related stories, notably “People Must Be Told About Mobile Phone Dangers, Say Experts” and a sidebar about Larry Mills, who had developed a tumor “exactly where he held the phone.” The story was pitched as an “EXCLUSIVE” and was soon picked up by many other newspapers and Web sites.

In fact, the Telegraph had no scoop. Its reporters did not have an advance copy of the Interphone brain tumor paper. The story was mostly a rehash of what has already been disclosed—a lot of it a long time ago. For instance, quotes from Elisabeth Cardis, the head of Interphone, which ran three paragraphs on the front page, were exactly the same as had been reported in Microwave News back in June 2008 (see: “Interphone Project: The Cracks Begin To Show; Cardis Endorses Precaution”).

Cardis was also quoted in the Telegraph as saying the Interphone paper would include a public health message. “I said of course there would be one,” she told Microwave News. “We need to make a statement about the public health relevance of our findings.” But, she added, she had also told the Telegraph that she was “not at liberty to discuss it now in Copenhagen at the Danish Cancer Society.

Two other members of the Interphone project have also stated that that there was no basis for the story. “There is, as far as I know, absolutely no information circulating at the moment that is accurate and correct with respects to the results of that study,” Bruce Armstrong, the head of the Australian Interphone team at the University of Sydney, told the Australian Broadcasting Corp. Earlier this year, Armstrong gave a public lecture in which he said that the Interphone study is inconclusive but that the suggestion of a long-term risk prompted him to advise taking precautionary measures such as discouraging children from using mobile phones (see: “Cell Phone Link to Tumors?—“We Don’t Know” - March 9, 2009).

The harshest criticism of the Telegraph came from the Karolinska Institute’s Maria Feychting, who leads the Swedish Interphone group. “It’s unethical and astounding for this to be in the press before the study is completely and fully analyzed,” she told the Expressen, a Swedish tabloid. Feychting also voiced her disagreement with the substance of the Telegraph’s story. “There is no indication that cell phones pose any health risk over the short term,” she said. “In the long run, that is, for more than ten years, the data are less reliable.”

When then can we expect to see the Interphone re-
sults? Ten months after the new director of IARC, Christopher Wild, made their release a high priority, that is still a matter of speculation (see “IARC Director Forces Publication of Interphone Brain Tumor Results”). When asked this question at a conference in Paris last week, Dan Krewski, of the University of Ottawa and a member of the Canadian Interphone team, replied that the paper is currently under review at a journal and that “hopefully” it would be available “this calendar year.” But in the halls outside the lecture room, some expressed a less sanguine outlook. They predicted that the results would not be available until sometime in 2010.

**Spin, Spin, Spin**

December 18, 2009... Pity those who are trying to follow the cell phone–brain tumor story. Their sense of the cancer risk is most likely a reflection of the last thing they read or saw on TV—It all depends on whose sound bite they happen to catch...

Read the full story at:  
http://www.microwavenews.com/spin.html

**Very Weak Magnetic Fields**  
**Lower Sperm Quality**

November 6... De-Kun Li’s new epidemiological study showing that extended exposure to weak magnetic fields as low as 1.6 mG (0.16 µT) can have negative effects on sperm quality was published today by Reproductive Toxicology.

“This is the first demonstration of a link between EMF exposure and the decline of semen quality,” Li told Microwave News. The study, which was carried out in Shanghai, has important implications for overall fertility because approximately 40% of the Shanghai population is exposed to more than 1.6 mG for 2.4 hours on a daily basis.

The study, a collaboration with Chinese researchers, documented detrimental effects on a number of different indices of male fertility including semen morphology, motility, density and vitality. The effect on sperm quality follows a dose-response relationship: the longer the daily exposure above 1.6 mG, the greater the risk. Men who were exposed for more than six hours a day were three-to-four times more likely to have decreased fertility. The research team notes that the real risk is probably higher. “[S]ince everyone is exposed to some levels of magnetic fields, we did not have a totally ‘unexposed’ reference group in our study population. Therefore, the magnitude of the effect observed in this study is likely underestimated,” they note.

They also comment that what they have seen is biologically “plausible” because experimental studies in China and Korea have shown that magnetic fields can affect the reproductive system of mice.

Li first announced this finding at a scientific conference a year ago last summer: see our post of July 3, 2008. Now the full details are available in the new paper. Li is with Kaiser Permanente in Oakland, CA.

Deleterious effects have now been shown for both power-frequency EMFs and RF/microwave radiation (see “Keep That Phone Out of Your Trouser Pocket!” - August 16, 2009). The same mechanism could be at work at both high and low frequencies,” Li said.

December 7... Bioelectromagnetics has posted “Comments” by Louis Slesin, the editor of Microwave News on the call to stop research on power-frequency electric fields by Leeka Kheifets and John Swanson (see “The Real Junk Science of EMFs,” below). The two electric utility insiders declined the journal’s offer to respond. The comments are now on the journal’s Web site and will be published in its February 2010 issue.

---

**Please Help Keep Microwave News On the Web**

*We now accept contributions through credit cards and PayPal on our web site.*

**Enclosed is my contribution of**

- [ ] $25.00  
- [ ] $50.00  
- [ ] $100.00  
- [ ] $250.00  
- [ ] $500.00  
- [ ] $1,000.00  
- [ ] Other $ ___

**Suggested Contributions: Individuals $50–$100; Corporations and Institutions $250–$500.**

Microwave News, 155 East 77th Street, Suite 3D, New York, NY 10075, USA  
☎: +1 (212) 517-2800, Fax: +1 (212) 734-0316; E-mail: <info@microwavenews.com>