Cell phones and Cancer: 8 Precautions Worth Taking

By Bill Snyder, CIO
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The good thing about being an adult is you get to make your own decisions. The bad thing? You get to make your own decisions - and live with the consequences.

As you probably know, the World Health Organization issued a controversial report at the end of May saying that radiofrequency electromagnetic fields, which is to say cell phones, "are possibly carcinogenic to humans based on an increased risk for glioma, a malignant type of brain cancer."

That's scary, but "possibly" is a heck of a qualifier, and the report was not based on new research. Instead, it reflected an intensive review of existing studies, some of which appear to give cell phones a clean bill of health. One of those, a 13-country study released last year called Interphone, was the largest and longest study of the issue to date, and it concluded that "no increase in risk of glioma or meningioma was observed with use of mobile phones." It noted, however, that there were "suggestions of an increased risk of glioma at the highest exposure levels" but that evidence was inconclusive, and some scientists felt that the amount of exposure that might be carcinogenic was improbably high.

The new report, prepared by a panel of 31 scientists from 14 countries, added cell phone use to a list of 240 substances and a few occupations that are possibly related to cancer. The "2B" classification includes a lot of chemicals that one might expect to be dangerous, but it also lists coffee and pickled vegetables, a fact that the CTIA, which represents the wireless industry, quickly seized upon.

"This IARC classification does not mean cell phones cause cancer. Under IARC rules, limited evidence from statistical studies can be found even though bias and other data flaws may be the basis for the results," the group said in a statement posted on its Web site.

It's pretty clear that there's lots of room for disagreement about the safety of cell phones. On the one hand, the WHO is a large and respected international organization that is raising a caution flag. On the other hand, there are equally respected groups offering a much more benign interpretation of the evidence, which is why the question of choice is so difficult. If the evidence were as clear, say, as the evidence that smoking causes cancer, the decision about using cell phones would be simple. But because it isn't, you have to decide for yourself.

I'm obviously not a medical professional (I don't even play one on TV) but it seems reasonable to take some precautions on the chance that we could be damaging our health.

In 2008, someone who really is a doctor, and an eminent one at that, testified before Congress about the dangers of cell phone use and listed a number of precautions you might take. The doctor was Ronald Herberman, the founding director of the University of Pittsburg Cancer Institute. (You can read his entire testimony here.) Some of these may seem too drastic. But again, that's a choice for you to make.

Minimize children's use of cell phones. The developing organs of a fetus or child are the most likely to be sensitive to any possible effects of exposure to electromagnetic fields.

Try to keep the cell phone away from your body by using the speaker-phone mode or a Bluetooth headset. The amplitude of the electromagnetic field is one fourth the strength at a distance of two inches and fifty times lower at three feet. Avoid carrying your cell phone next to your body for extended periods. Do not keep it near your body at night such as under the pillow or on a bedside table, particularly if pregnant. Putting it in "airplane mode" stops electromagnetic
If you must carry your cell phone on you, it is preferable that the keypad is positioned toward your body and the back is positioned toward the outside of your body.

Keep calls short since the biological effects are directly related to the duration of exposure.

Avoid using your cell phone when the signal is weak or when moving at high speed, such as in a car or train, as this automatically increases power to a maximum as the phone repeatedly attempts to connect to a new relay antenna.

Switch sides regularly while communicating on your cell phone to spread out your exposure.

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Choose a device with the lowest SAR possible (SAR = Specific Absorption Rate, which is a measure of the strength of the magnetic field absorbed by the body). The FCC has a database with information on the SAR rating of many phones.

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