

Radiating corruption? The frightening science and politics of cell phone safety

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A growing body of scientific evidence show that cell phone users suffer a range of negative health impacts from infertility and brain tumors to hyperactivity and memory loss, writes Gary Null. Yet the Center for Disease Control has taken a weak and ambiguous stance on the issue, reflecting industry interests at the expense of citizens. We deserve - and must demand - better.

A growing body of independent science shows that cell phones may have massive consequences on the health of our nation, especially our children. It is time that Americans stand up to the corporate profiteers and rein in this invisible danger in our midst.

In <u>an article</u> published in the *New York Times* last month entitled 'At CDC, a Debate Behind Recommendations on Cellphone Risk', author Danny Hakim discusses the controversy surrounding the potential health risks of using cell phones.

Hakim writes that the Centers for Disease Control and Prevention (CDC) issued guidelines recommending "caution in cellphone use", due to the potentially harmful effects of radiation emitted by the wireless devices on human health. Included in the guidelines was information about reducing exposure among children.

Just a few weeks after the CDC's publication, and amid rising concerns about cell phone safety, the CDC rescinded the advisory completely.

Today, the CDC website takes an ambiguous stance on the issue, <u>stating</u> that "There is no scientific evidence that provides a definite answer to that question. Some organizations recommend caution in cell phone use. More research is needed before we know if using cell phones causes health effects."

Can using a cell phone cause cancer?

Hakim notes several agencies and individuals that have drawn stronger conclusions on the potential risks of such radiation. Among them is the International Agency for Research of Cancer (IARC), a branch of the World Health Organization, which listed the radio frequencies emitted by cell phones as a 'possible carcinogen' in 2011.

Hakim identifies several countries' health authorities, including, Finland, the United Kingdom and Israel issuing public warnings about the potential hazards of non-ionizing radiation from cell phones.

As one of the foremost organizations tasked with ensuring the health and safety of Americans, it is troubling that the CDC has failed to warn us of the potential dangers of these devices.

We find that even a cursory review of the scientific literature reveals a significant body of research that points to the harmful effects of cell phone radiation. Here is some of the most compelling evidence:

Health issues in children

- 1. According to research, radiation from cell phones is <u>more easily absorbed by children</u> than adults, although this is dependent on <u>the age of the child</u>, and the <u>type of phone</u> used.
- 2. A <u>Danish study</u> surveying more than 13,000 children found an 80% increase the likelihood of behavioral problems among children who use cell phones and whose mothers used cell phones during pregnancy.
- 3. Research suggests that <u>long-term and heavy cell phone users have an increased risk of developing glioma</u>, a brain tumor that is often cancerous. The research discovers the <u>tumors usually appearing</u> on the side of the head favored during cell phone conversations.
- 4. Long-term exposure to cell phone radiation is linked with a <u>60% higher risk</u> of <u>developing a condition</u> known as acoustic neuroma, a benign brain tumor.
- 5. Heavy cell phone use <u>increases the risk</u> of benign salivary gland tumors by 60%.
- 6. Radiation from cell phones produces reactive oxygen species, which may <u>contribute to DNA</u> damage resulting in inflammatory conditions such as <u>cancer</u> and <u>heart disease</u>.
- 7. Brain cancer risk tripled among individuals who used cell phones for more than 15 hours monthly.

Infertility

The close proximity of cell phones carried in pant pockets to reproductive organs have led many to suspect a link between cellular radiation and infertility. Several studies point to the damaging effects of cell phone radiation on sperm:

- 1. <u>Lower sperm quality</u> among men who carried their cell phone in their pant pocket when compared to men who carried cell phones:
- 2. Higher cell phone use linked with lower sperm quality.
- 3. Cell phone use associated with decreased sperm motility.
- 4. Men who <u>used cell phones for more than four hours daily</u> found to have lower sperm quality and 42% lower sperm count compared to those who didn't use cell phones.
- 5. <u>Analysis of semen samples</u> exposed to radiation from cell phones show sizeable decreases in sperm count, quality and higher levels of inflammatory markers.
- 6. Cell phone wave exposure appears to <u>decrease the potential for fertilization</u> in semen samples.
- 7. Cell phone use <u>linked with erectile dysfunction</u>.

Brain / Neurological Health

- 1. Electromagnetic frequencies from cell phones <u>alter brain tissue activity</u> by increasing glucose metabolism.
- 2. Yale University researchers show that mice exposed to cell phone radio frequencies in utero exhibited impaired memory and hyperactivity.
- 3. Thirty minutes of cellphone use <u>causes spontaneous low-frequency fluctuations in the brain</u>.
- 4. Cellphone use may interfere with brain sleep patterns.
- 5. Exposure to electromagnetic cell phone frequencies damages fetal brains in study on rats.

- 6. Accordingly, some parties recommend taking measures to further reduce exposure to [radiofrequency] energy. The FCC does not endorse the need for these practices.
- 7. Some parties recommend that you consider the reported SAR value of wireless devices. However, comparing the SAR of different devices may be misleading.

Why has the CDC - an institution with more than enough resources to thoroughly investigate such issues - failed to take into account the preponderance of evidence suggesting a link between cell phone use and health problems?

And how can we explain the CDC's quick retraction of their guidelines urging the public to be cautious with cell phones 18 months ago? Surely they wouldn't have created such guidelines unless there was a scientific basis. Right?

The CDC and FCC: kowtowing to the wireless industry?

An investigative report published by the watchdog group Environmental Health Trust (EHT) digs deeper into the circumstances surrounding the CDC's retraction of their guidelines on cell phone radiation exposure.

The report, based on 500 pages of internal CDC documents released through a Freedom of Information Act (FOIA), illuminates key information left of out the *New York Times* article and points to a cover-up by the CDC.

Among the most startling revelations detailed is that immediately after publishing the new guidelines in June 2014 the CDC hired Kenneth Foster as a consultant to assist in the creation of future materials related to 'non ionizing radiation matters'.

Foster has an established record of conducting research funded by the private wireless industry and has authored a number of studies with results that contradict the notion that <u>children are more susceptible</u> to cell phone radiation than adults.

One such study published by Foster was recently scrutinized by EHT Senior Medical Advisor Robert Morris, MD PhD, and his peers in the journal *IEEE*.

In the paper, the authors highlight the dubious and unscientific methodology used by Foster and his colleague in drawing their conclusions about children absorbing cell phone waves, <u>pointing out</u> "what appears to be a deliberate distortion of the science and a boldfaced effort to downplay potential risks to children using mobile devices."

In addition, the CDC's internal communications reveal that the agency considered including in their guidelines information about the potential hazards of cell phone towers located near schools, but <u>chose to</u> omit that information.

By all indications, CDC officials aren't immune to the influence of the cell phone industry, even when the health of Americans is at stake. The role of special interests in shaping government policy on wireless devices seems to extend beyond the CDC.

Federal agencies buckling under pressure

An exposé by the Environmental Working Group (EWG) released in 2013 documented a disturbingly similar case of federal regulatory agencies buckling under pressure from private industry.

The controversy began after the FCC, presumably in response to research demonstrating the dangers of cell phone radio waves, updated their website in November of 2009 to <u>recommend</u> that people "buy a wireless device with lower SAR", referring to cell phones which emit less radiation.

Upon Reviewing FCC documents secured through FOIA, the EWG team discovered that over the next nine months, three meetings were held between FCC staff and wireless companies such as Nokia, AT&T and Motorola as well as Cellular Telecommunications Industry Association (CTIA), which lobbies on behalf of cell phone giants including Verizon, Sprint, TMobile and Cricket.

The <u>topic of discussion</u> at the meetings revolved around the issue of Specific Absorption Rate (SAR), a measurement of how much radiation the body absorbs from wireless devices.

In September 2010, less than a year after the cautionary advice was first posted on the FCC website, the agency revised its language and adopted a dramatically different position on the issue. The revised text stated that:

Once again it appears that our bureaucratic institutions prefer to submit to the whims of corporate lobbyists rather than protect citizens from scientifically-established health hazards. A closer examination of the FCC turns up further evidence of a revolving door between the organization and the telecommunications industry.

A prime example of the conflicts of interest within the organization can be found in the current president and CEO of the aforementioned cell phone industry trade group CTIA, Meredith Attwell Baker. Baker served as a commissioner for the FCC from 2009-2011 and before that worked as the CTIA's director of congressional affairs from 1998-2000.

Remarkably, while acting as FCC commissioner in January 2011, Baker voted in favor of Comcast acquiring NBCUniversal, and left the agency just five months later to become Comcast-NBC Universal's senior vice president of government affairs. Baker's long history of hopping the fence between industry insider and government regulator raises serious questions about her loyalties.

Baker isn't an isolated case. The current chairman heading the FCC, Tom Wheeler, previously worked as the president of the influential lobby group known as National Cable & Telecommunications Association (NCTA) and served as the CEO of CTIA for more than a decade. And in a stunning role reversal, former FCC chairman Michael Powell is now President and CEO of NCTA.

A global push for cell phone safety

As this alarming lack of US government oversight of wireless devices progresses, we witness governments around the world taking action to reduce wireless radiation exposure in their populations.

Currently, the governments of France and Belgium mandate cell phone packages clearly display SAR values. National guidelines in Israel, Austria, and Australia advise reducing exposure to WiFi devices among children.

The UK National Health Service recommends keeping phone calls short and keeping the phone away from the body, noting "children are thought to be at higher risk of health implications."

Despite this global rise in awareness about the dangers inherent in our wireless technology, as of January 2016, the FCC website continues to reflect a seemingly dangerous ignorance on the subject, <u>stating that</u>

"Some health and safety interest groups have interpreted certain reports to suggest that wireless device use may be linked to cancer and other illnesses, posing potentially greater risks for children than adults.

"While these assertions have gained increased public attention, currently no scientific evidence establishes a causal link between wireless device use and cancer or other illnesses. Those evaluating the potential risks of using wireless devices agree that more and longer-term studies should explore whether there is a better basis for RF safety standards than is currently used."

A growing body of independent science shows that the issue of cell phone safety may have massive consequences on the health of our nation, especially our children. If we are to enact measures to protect against this dangerous radiation we must demand full accountability from the CDC and FCC.

It is time that Americans stand up to the anti-science corporate profiteers running the show and rein in this invisible danger in our midst.

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