New Paper: US Scientist Sets the Record Straight on the US National Toxicology Program Cell Phone Radiation Study

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Microwaves Linked to Brain Damage in US Diplomats Also Cause Brain Damage and Cancer in Large Laboratory Study

Teton Village, WY -- (SBWire) -- 09/06/2018 -- In a new article to be published today in Environmental Research, Ronald L Melnick, PhD, the senior US toxicologist who led the design of the National Toxicology Program (NTP) study on cell phone radiation, explains that the NTP found "clear evidence" of increased cancers (gliomas in the brain and Schwannomas in the heart) in animals and why this is directly relevant to evaluating human risks from cell phone radiation. In addition, Melnick explains how widely circulated criticisms of the NTP study are mistaken and "unfounded."

Melnick notes the striking parallels between human studies of regular cell phone users and the NTP experiment with rodents. Both the human and rodent studies found elevated rates of the same tumor types. The new paper is titled, "Commentary on the Utility of the National Toxicology Program Study on Cell Phone Radiofrequency Radiation Data for Assessing Human Health Risks Despite Unfounded Criticisms Aimed at Minimizing the Findings of Adverse Health Effects."

"Even a small increase in cancer risk could have a serious health impact due to the widespread use of cell phones. Clear information on how to reduce cell phone exposure should be promoted by health and regulatory agencies, especially for children and pregnant women, as well as for those that already have cancer," concludes Melnick. He adds that the NTP study not only found cell phone radiation increased tumors in the heart and brain but also induced heart damage (cardiomyopathy of the right ventricle in male and female rats) and DNA damage in brain cells of rats and mice.

"The front page reports from the Pulitzer Prize winning New York Times reporter William J. Broad about sickened American diplomats in China and Cuba implicate microwave radiation as a cause of brain damage," stated Dr. Devra Davis, referring to the work of University of California San Diego medical researcher Dr. Beatrice Golomb. "The NTP found a type of brain damage in rats exposed to a form of microwave radiation that invisibly pummels billions of humans every day. If targeted microwave radiation can damage diplomats then what does more diffuse radiation do to our children and us? Before we blanket our nation with 5G, yet another layer of microwave radiation, we must critically examine its impact on our health and environment."

"We can no longer state that adverse effects are not replicated. Increases in tumors from cell phone radiation have indeed been replicated in several studies at this time," states Melnick. He notes that the Ramazzini Institute large-scale rodent study found increased Schwannomas in the heart at much lower radiation levels than the NTP study. Further, Melnick indicates that other studies, such as Lerchl et al., 2015, found radiofrequency radiation..."
at significantly lower doses than the NTP study promoted cancer development, with evidence for a heightened synergistic impact when combined with a known carcinogen.

Melnick presented scientific data debunking eight widely circulated criticisms of the NTP study. Those rejected criticisms included the notion that rat studies are not relevant to humans, that tumors occurred only in male rats, that the exposures in the study were extraordinarily high, and that the study had a higher chance of producing a falsely positive result. Regarding the allegation that NTP radiation exposure levels "were much higher than human exposure limits (19 to 75 times)," Melnick explained that the NTP exposures were actually "similar to or only slightly higher" than limits in US regulations on radiofrequency radiation exposures to human brain tissue when a cell phone is held next to the head, and they were below regulatory limits for occupational exposures.

Melnick also detailed that since 1996 the US Federal Communications Commission cell phone regulations have been based on the "now proven wrong" assumption that low level "non thermal" radiofrequency radiation (RFR) could not cause harmful effects.

"This assumption of safety from non-thermal RFR levels is frankly wrong. The non-thermal effects of cell phone RFR include tumor development, heart damage, DNA damage to brain, tumor promotion and oxidative stress." Oxidative DNA damage is shown to be an effect of RFR in numerous research studies and can lead to genomic changes in animals and humans that can result in cancer development. Many human carcinogens, including asbestos and arsenic, are now understood to induce oxidative stress even though they do not directly cause DNA damage. "Thus, without causing direct DNA damage, RFR may induce oxidative stress and thereby initiate or promote tumor development," Melnick explained.

Ronald L Melnick, PhD, was a senior scientist for 28 years with National Institutes of Health leading studies on numerous industrial chemicals and led the design of the National Toxicology Program/National Institute of Environmental Health Sciences' Cell Phone Radiofrequency Radiation Studies. Melnick was Director of Special Programs in the Environmental Toxicology Program at the National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health, USA and is now retired.

The paper entitled, "Commentary on the Utility of the National Toxicology Program Study on Cell Phone Radiofrequency Radiation Data for Assessing Human Health Risks Despite Unfounded Criticisms Aimed at Minimizing the Findings of Adverse Health Effects" is to be published September 6, 2018 online at Environmental Research.

About Environmental Research
Environmental Research publishes original reports describing studies of the adverse effects of environmental agents on humans and animals. The principal aim of the journal is to assess the impact of chemicals and microbiological pollutants on human health. Both in vivo and in vitro studies, focused on defining the etiology of environmentally induced illness and to increase understanding of the mechanisms by which environmental agents cause disease, are especially welcome. Investigations on the effects of global warming/climate change on the environment and public health, as well as those focused on the effects of anthropogenic activities on climate change are also of particular interest.

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