

<https://ehtrust.org/national-toxicology-program-finds-cell-phone-radiation-induces-dna-damage/>

National Toxicology Program Finds Cell Phone Radiation Induces DNA Damage

The study also found carcinogenic effects after long term exposure to cell phone radiation. In 2016 National Toxicology Program scientist released these findings:

Increased incidences of glioma (a rare, aggressive and highly malignant brain cancer) as well as schwannoma (a rare tumor of the nerve sheath) of the heart were found in both sexes of rats, but reached statistical significance only in males.

Increased incidences of rare, proliferative changes in glial cells of the brain and in Schwann cells (nerve sheath) in the heart of both sexes of rats, while not a single unexposed control animal developed these precancerous changes.

Results from this study clearly show that biological impacts occur at non-thermal exposures like those that take place from cell phones today.

Read more about the National Toxicology Program Study here

Evaluation of the Genotoxicity of Cell Phone Radiofrequency Radiation in Male and Female Rats and Mice Following Subchronic Exposure.

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The National Toxicology Program tested the two common radiofrequency radiation (RFR) modulations emitted by cellular telephones in a 2-year rodent cancer bioassay that included additional animal cohorts for interim assessments of genotoxicity endpoints. Male and female Sprague Dawley rats and B6C3F1/N mice were exposed from gestation day 5 or postnatal day 35, respectively, to code division multiple access (CDMA) or global system for mobile (GSM) modulations semi-continuously at 18 h/day in 10 min intervals in reverberation chambers at specific absorption rates (SAR) of 1.5, 3, or 6 W/kg (rats) or 2.5, 5, or 10 W/kg (mice). Rats and mice were exposed at 900 MHz or 1900 MHz, respectively. The interim cohorts, 5 animals per treatment group, were examined after 19 (rats) or 13 (mice) weeks of exposure for evidence of RFR-induced genotoxicity. DNA damage was assessed in three brain regions (frontal cortex, hippocampus, and cerebellum), and in liver cells and blood leukocytes using the comet assay. Chromosomal damage was assessed in peripheral blood erythrocytes using the micronucleus assay. DNA damage was significantly increased in the frontal cortex of male mice (both modulations), peripheral leukocytes of female mice (CDMA only), and hippocampus of male rats (CDMA only). DNA damage was nominally elevated in several other tissues of RFR-exposed rats, although statistical significance was not achieved. No significant increase in micronucleated red blood cells were observed in rats or mice. These results suggest that exposure to RFR has the potential to induce measurable DNA damage under certain exposure conditions.