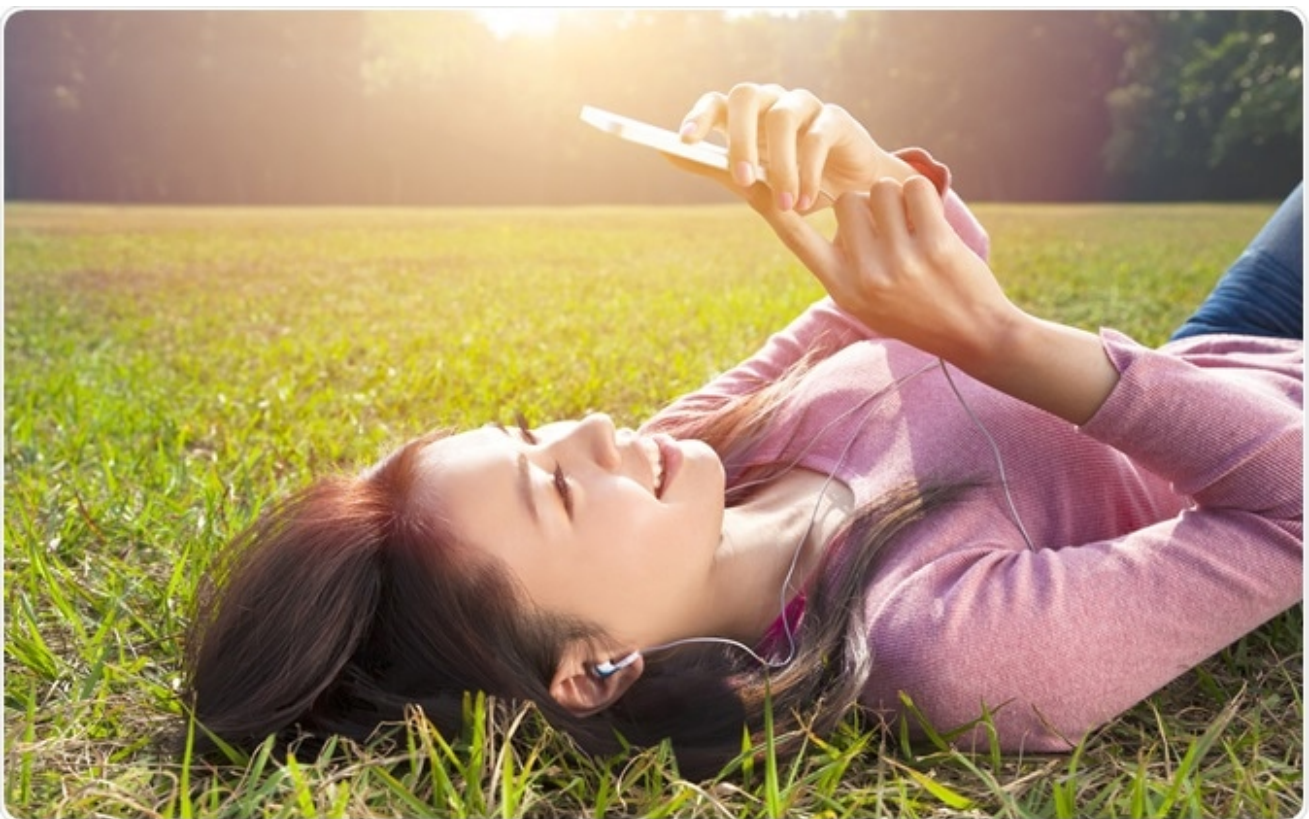


# Cell phone radiation bad for rats but OK for humans: study

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*Dr Ananya Mandal, MD*

Much has been said and studied regarding the ill effects of cell phone radiation on human health. A new study has found that high levels of radiation from cell phones is capable of causing cancers in the heart of laboratory animals. However the levels of radiation emitted by cell phones is much less than this threshold level.



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According to National Toxicology Program senior scientist Dr. John Boucher, their 10-year, \$25 million study looked at the effects of these radiations on mice and rats in the laboratories. The study was supported by the Food and Drug Administration (FDA). Two reports have been released this week

at the NTP website for public comment and review. The reports would be again assessed by experts next month to see if the conclusions drawn are in agreement with the scientists.

Dr. Boucher says that the studies showed that male rats have an increased risk of schwannoma or cancerous tumors in the heart with the radiation exposure.

Schwannomas are a rare type of nerve cell tumors. These have been found in the heart muscles of the tested rodents. However he added, "The typical cell phone call has Radio Frequency Radiation Emission that are very, very, much lower than what we studied." This means that usual cell phone use is not related to these cancers. He explained that this type of radiation is the same as when a person is making a call during poor connection. During poor connections, the cell phones emit higher radiation to connect to the signal towers. When the mice and rats were exposed to these high radiations for over nine hours per day continuously for two years, they are seen to develop the tumors, said Dr. Boucher.

A range of 1.5 to 6 watts per kilogram (W/kg) in rats, and 2.5 to 10 W/kg in mice of exposure was made in 10 minutes off and 10 minutes on periods for total of nine hours a day he said. Thus it is unlikely that humans would be placed in such high radiation exposure situations.

What this study shows is that there is a biological connection between these tumors and the radiation exposure. As of now it is safe to use cell phones at current levels. This study reveals that although cell phone radiations are a risk to health, the risk is not as great as perceived. There was also no connection between high doses of exposures and brain tumors as has been speculated.

Dr. Boucher said that after these results, he is not altering his or his family's usage of cell phones. Some experts however still believe that this is a rodent study and it is not clear

how much of it can be extrapolated to humans and their real life cell phone usage. FDA radiation health chief Dr. Jeffrey Shuren said in a statement, "The current safety limits for cellphones are acceptable for protecting the public health."

Source:

<https://www.niehs.nih.gov/news/newsroom/releases/2018/february2/index.cfm>

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