

Governor Jerry Brown
State Capitol, Suite 1173
Sacramento, CA 95814

Dear Governor Brown:

As a public health physician with extensive experience in environmental health, I urge you to **veto SB 649**. This bill would allow telecommunications companies to install 5G small cell transmission equipment on street lights and other public property, with no input on siting decisions from local government or from residents who would be exposed 24/7 to new electromagnetic signals beamed into their homes and workplaces.

Although there are many reasons to veto this bill, I list below only a few related to public health:

There has been virtually no study of the health impacts of the high-frequency signals transmitted by 5G networks; earlier this month over 180 doctors and scientists requested the European Union to [impose a moratorium](#) on 5G rollout until independent researchers are able to investigate potential health effects of this technology.

The scientists' concern about premature establishment of 5G networks is well founded: knowledge about the health impacts of cell phones did not emerge until well after they had become an integral feature of daily life.

Unlike many industry-funded studies, laboratory and human health investigations designed and conducted by independent researchers have reported associations linking exposure to radiation from cell phones or similar devices with multiple adverse effects (e.g., headaches, impacts on brain function, memory, learning and sleep; decreased sperm counts and quality) as well as with DNA damage and tumors of the brain and nervous system. Potential genetic and carcinogenic effects of such exposures were recently strengthened by results from the [largest and most expensive study](#) ever conducted by the U.S. National Toxicology Program (part of the National Institutes of Health).

People have several options to reduce their exposures to cell phone emissions, including keeping the phone away from the head, putting it in airplane mode or turning it off. No such exposure reduction measures would be available with a California 5G grid, estimated to require up to 50,000 additional transmitters, which would be located closer to where people live, work and play than the current network of cell towers. Therefore, most Californians would be involuntarily exposed to 5G frequencies 24/7.

Potential health impacts of wireless communication have been ignored or obscured for decades by the telecommunications industry, which has implied that cell phones and other devices are safe because they comply with federal safety standards. However, these standards were established more than 20 years ago and were based on assumptions that have since been called into question by health research studies. The push to establish a 5G network, exemplified by SB 649, is based on a similarly unproven assumption: i.e., that round-the-clock exposure to 5G frequencies will not affect human health or the environment.

Establishment of a 5G network will be irreversible, as will the pattern of near-universal exposure of California residents to high-frequency, as-yet-untested 5G electromagnetic radiation.

As Governor, you can protect public health by insisting that independent scientists show that continuous 5G exposures are safe for everyone before the grid is put into place. **Please veto SB 649.**

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