



Susan D. Foster

15957 Avenida Calma
Rancho Santa Fe, California 92091
susan.foster04@gmail.com

September 20, 2017

Honorable Edmund G. Brown
State Capitol, Suite 1173
Sacramento, CA 95814

Re: **STRONGLY OPPOSE SB 649 – PLEASE VETO**

Dear Gov. Brown:

I respectfully urge you to veto SB 649. I have opposed it throughout the Senate and Assembly votes. I previously sent the enclosed information to the Appropriations Committee Chair regarding a SPECT brain scan pilot study I organized of California firefighters who had lived and worked with a cell tower adjacent to their station. **All six firefighters tested were found to have brain abnormalities.** My information on the 2004 firefighter study and the impact of the cell tower was included in the legislative analysis for SB 649. Accompanying this letter is my FCC filing regarding the pilot study.

I am asking that this bill never become law.

I would like to take this opportunity to address the firefighter exemption. I believe the firefighters, whose health risk from radiation the state has accommodated to an extent, are the harbingers of health risks that may severely alter the morbidity and mortality of the entire population of California. As a result, I believe the firefighters are also the harbingers of a substantial cost risk to the state.

The firefighter study I organized in 2004 and the exemption are referenced in the legislative analysis submitted to all members of the Assembly Appropriations Committee:

According to Susan Foster, a medical writer who organized a brain study of California firefighters in 2004, the 2004 SPECT brain scan study of firefighters in

Central California found brain abnormalities in all the men tested, as well as delayed reaction time, lack of impulse control and cognitive impairment. All the firefighters tested had suffered from sleep disturbances, headaches, lack of focus and memory loss following installation of a tower adjacent to their station five years earlier. This bill exempts fire stations from its provisions.

Though the fire station exemption is not stated as being granted for health reasons, I can attest to the fact the California firefighters' fight against cell towers on their stations was indeed for health reason. For over 17 years California firefighters have complained of myriad symptoms following activation of cell towers on or adjacent to their stations. This is relevant because we are looking at 50,000 new cell sites in California if SB 649 becomes law, and former FCC Chair Tom Wheeler has talked about "millions and millions" of new cell towers across the nation for the coming 5G build out.

Thus I believe the 50,000 estimate is low. There will be no restraints on the industry. I also believe the present regulations are irrelevant because nowhere in the bill is monitoring of RF (wireless) radiation called for. This lack of oversight is occurring at the same time the FCC is closing its regional monitoring office. **If radiation is not monitored, regulations are irrelevant.** Regardless, the regulations are severely outdated. They were created in 1996 and never updated in spite of thousands of concerning studies regarding the biological effects of RF radiation.

HISTORY: Beginning in 2001 I was asked by San Diego firefighters to write appeals when cell towers were permitted for their stations. I began hearing more and more stories of firefighters who literally could not function in the job that clearly establishes firefighters as the guardians of society. Once cell towers were activated on or adjacent to their stations, they could no longer function without severe headache, inability to sleep, and foggy thinking. These are not symptoms we wish to see in our First Responders.

In 2004 I organized a SPECT brain scan pilot study of California firefighters who has been exposed to a cell tower on their station for over five years. We found brain abnormalities in all firefighters tested.

In 2004 I co-authored Resolution 15 which was passed overwhelmingly by the International Association of Firefighters. Res. 15 urging a moratorium on the placement of cell towers on fire stations in the US and Canada. I then helped the Los Angeles IAFF locals as they aligned with law enforcement unions to fight FirstNET towers on their stations. I am currently following a brain tumor cluster in a California fire station with a wireless hub next door to their station.

There is a solid history of firefighters becoming ill in close proximity to cell towers. There are human and financial costs associated and you need to hear their story.

The symptoms experienced by the firefighters who participated in the SPECT brain scan study were similar to firefighters in other stations who live in the shadow of cell towers. Yet specific to the men we studied, it is important to note all the men had passed rigorous physical and cognitive exams prior to being hired by the fire department. Their symptoms included:

- headaches
- extreme fatigue
- cognitive impairment
- anesthesia-like sleep where the men woke up for 911 calls “as if they were drugged”
- inability to sleep
- depression
- anxiety
- unexplained anger
- immune-suppression manifest in frequent colds and flu-like symptoms
- infertility

Real life examples of these symptoms are best briefly characterized by:

- 1) Firefighters got lost on 911 calls in the town they grew up on several occasions.
- 2) In one instance, four firefighters sat in the rig in a stupor with the alarm sounding in the background, unable to remember how to start the engine.
- 3) A medic with 20 years of experience who had never made a mistake forgot basic CPR in the midst of resuscitating a coronary victim.

The brain scans of these six men revealed a pervasive, hyper-excitability of the neurons which suggested the exposure to RF (microwave) radiation was causing the neurons to continually fire without benefit of rest. When neurons (brain cells) cannot rest, they ultimately die.

All of the symptoms I detail above and the failure of appropriate response and performance I briefly describe, occurred at a station where the cell tower was measured at **1/1000th of the allowed limit set by the FCC**. And these men were the strongest of the strong, and none of the men tested had worked HazMat, so chemical spills were not a confounding factor.

The firefighters’ most important lesson to us as a state, and as a society, may be that if we allow a build out of cell towers such that they are as commonplace in front of homes and schools as they are now on fire stations, we will be facing a tsunami of Alzheimer’s and dementia.

The rate of people dying from Alzheimer's disease in the United States rose by 55% over a 15-year period according to new data from the Centers for Disease Control. In May 2017 Acting CDC Director Dr. Anne Schuchat issued the following statement in response to this alarming increase: "As the number of older Americans with Alzheimer's disease rises, more family members are taking on the emotionally and physically challenging role of caregiver than ever before." The direct and indirect costs to the state for Alzheimer’s and a host of related neurological and immunological diseases could be catastrophic for California.

I support the fire station exemption of SB 649. If the firefighters are impaired, we are all at risk. **Clearly the state honors the sacrifice of California’s firefighters and is concerned about the health risks they face from cell towers, having granted an exemption to them from SB 649.** Yet this exemption protects the strongest of the strong and forces the most vulnerable among us to live with the greatest exposure. This is unacceptable.

Yesterday the National Toxicology Program released their Abstract of the \$25,000,000 study on laboratory animals which showed a link between the RF (wireless) radiation and two types of cancer, as well as DNA damage. Gov. Brown, a U.S. study has confirmed RF radiation promotes cancer. This study used 2G technology. With SB 649 we are talking about 5G, which is a different animal altogether utilizing a millimeter wave that is absorbed by the eyes, skin, and testes.

The NTP study has been released in stages. An earlier release of data showing the link between RFR and brain and heart cancer prompted the American Cancer Society's chief medical officer to note that the results "mark a paradigm shift in our understanding of radiation and cancer risk."

The NTP study's finding of DNA breakage in brain cells confirms multiples studies dating back to 1994. The NTP study follows the 2011 classification by IARC, the World Health Organization's cancer committee, of radiofrequency electromagnetic fields -- including cell tower radiation -- as possibly carcinogenic to humans. This puts RF radiation in the same category as DDT.

The firefighters with their fire station exemption from SB 649 are here to remind us this decision to sign or veto is not just about cell towers. It is about our future. Are we going to be about driverless cars and appliances talking to each other?

Or, shall we put a face on this bill. Based on the exemption the state has granted on health grounds, the face that has been looking to you for relief for 17 years and is looking to you for relief into the future, is that of firefighters everywhere. The firefighters do not want these cell towers on their stations, nor do they want to leave the stations where they are protected in the language of SB 649, and drive home to find cell towers radiating their children's second-story bedroom windows.

Please, Gov. Brown, veto SB 649. When firefighters become the canaries in the coal mine, we must seriously consider what legacy SB 649 would leave California.

Respectfully,

SUSAN FOSTER
Medical Writer
U.S. Adviser, Radiation Research Trust
Honorary Firefighter, San Diego Fire Department

Cc: Tom Dyer

Attachment