California Medical Association House of Delegates Resolution Wireless Standards Reevaluation 2014 Resolution 107- 14 PASSED Date Adopted Dec 7, 2014

Resolved 1 That CMA supports efforts to reevaluate microwave safety exposure levels associated with wireless communication devices, including consideration of adverse non-thermal biologic and health effects from non-ionizing electromagnetic radiation used in wireless communications; and be it further

Resolved 2 That CMA support efforts to implement new safety exposure limits for wireless devices to levels that do not cause human or environmental harm based on scientific research.

CALIFORNIA MEDICAL ASSOCIATION HOUSE OF DELEGATES 2014 Wireless Communications Public Safety Standards Reevaluation Introduced by Cindy Lee Russell, M.D. AND Ken Yew, M.D.

Whereas there are over 6 billion active cell phones worldwide and dependence of wireless communication networks is rapidly expanding including cell phones, cell towers, wireless routers for home use, medical devices and utility smart meters; and (1)

Whereas scientists are increasingly identifying EMF from wireless devices as a new form of environmental pollution with a growing body of peer reviewed scientific evidence finding significant adverse health and biologic effects on living organisms with exposure to low levels of non-ionizing microwaves currently approved and used in wireless communication, and

Whereas peer reviewed research has demonstrated adverse biological effects of wireless EMF including single and double stranded DNA breaks, creation of reactive oxygen species, immune dysfunction, cognitive processing effects, stress protein synthesis in the brain, altered brain development, sleep and memory disturbances, ADHD, abnormal behavior, sperm dysfunction, and brain tumors; and (2-55)

Whereas there is a long latency period of years to decades to study and identify adverse health effects such as brain cancer, neurodegenerative damage and autism; and

Whereas children's brains are developmentally immature until adolescence, their skulls are thinner and the brain is considerably more vulnerable to toxin exposure , and (23,24)

Whereas the World Health Organization in 2011 designated wireless communications including cell phones to be a possible carcinogenic, and (63)

Whereas many scientists, researchers, public health officials and agencies conclude that wireless electromagnetic frequency (EMF) standards established by the Federal Communications Commission are outdated as they are based only on heat effects which damage to the organism and not biological effects of non –ionizing EMF microwave radiation which are scientifically demonstrated at levels hundreds of times less than current safety exposure limits and thus current standards are inadequate to protect public health; and (49-51)(57)

Whereas the American Academy of Pediatrics in 2013 has asked for reassessment of exposure to radiofrequency electromagnetic fields limits and policies that protect children's health and wellbeing throughout their lifetimes and reflect current use patterns (58)

RESOLVED; that the CMA understands that existing public safety limits for microwave EMF devices are outdated and inadequate to protect public health thus endorses efforts of the Federal Communications Commission to reevaluate its safety standards to include consideration of adverse non thermal biologic and health effects from non ionizing electromagnetic radiation used in wireless communications; and be it further

RESOLVED; that the CMA supports efforts to implement microwave safety exposure limits to levels that do not cause human or environmental harm based on scientific research, and be it further

RESOLVED; that the CMA set up a task force to determine adequate precautionary recommendations for the use of cell phones and wireless devices for schools and children

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