

Keck School of Medicine of USC

Jonathan M. Samet, M.D., M.S.
Distinguished Professor and Flora L. Thornton Chair
Department of Preventive Medicine
Director, USC Institute for Global Health
Director, Education, Career Development and Ethics
Southern California Clinical and Translational Science Institute

February 20, 2014

The Honorable Mitch O'Farrell, Chair
Arts, Parks, Health, Aging and River Committee
Los Angeles City Council
200 North Spring Street #450
Los Angeles, Ca 90012



RE: Council File CF-1204-S1 - E-Cigarettes

Dear Council Member O'Farrell:

I previously wrote to the Council concerning Council File CF-1204-S1-E-Cigarettes. I attach a copy of that letter along with a brief professional biography. Now, I write to provide input as you consider the draft ordinance amending Sections 41.50 and 63.44 of the Los Angeles Municipal Code. The draft ordinance would revise the definition of smoking to cover electronic smoking devices (e-cigarettes) and would also revise provisions concerning the prohibition of smoking in certain places.

These amendments are necessary because of the rapid rise in use of e-cigarettes in the United States. Because use has increased so fast, scientific evidence on long-term consequences of their use is limited and there is controversy concerning overall harms and benefits to public health from the availability of e-cigarettes.

The devices deliver a vapor to their users lacking most of the toxic compounds in cigarette smoke that contribute to the extremely high risks of disease and premature death in smokers. Given this promise of "harm reduction," there is great interest in these devices, but scientific understanding of consequences of their use is quite incomplete at present. Beyond the possibility of reduced health risks for users of e-cigarettes compared with cigarette smokers, there is concern that availability and widespread use of these devices will increase nicotine addiction among youth and young adults. Additionally, there is concern that the devices will affect the social norm around smoking and nicotine addiction, increasing the acceptability of tobacco product use generally. A powerful tobacco control tool, a social norm change towards unacceptability of tobacco use, could be lost as a result. Social norm change has prevented children from starting to smoke and motivated adults to quit. Consequently, there is concern within the tobacco control community that the rising use of e-cigarettes will have an overall adverse impact on public health, even if harm is reduced for some individuals who switch from combusted cigarettes to e-cigarettes. As summarized in the recent 2014 50th anniversary report of the Surgeon General, nicotine has adverse health consequences beyond its well documented ability to cause addiction.

Beyond this concern about overall impact on nicotine addiction and tobacco product use, secondhand exposure of non-smokers to vapor is of concern. E-cigarettes emit a nicotine-containing vapor that



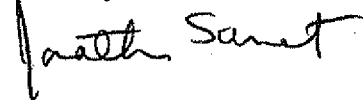
contaminates the air where the devices are used and the surfaces where the vapor particles settle. Although we lack quantification of the typical levels of nicotine that will be in air while e-cigarettes are in use, it is clear that non-smokers adjacent to people using e-cigarettes are exposed to a nicotine-containing vapor. Additionally, the surfaces where the nicotine is deposited will be contaminated with a pharmacologically-active agent—nicotine--that persists in materials. There is a potential for nicotine to be absorbed through the skin of non-smokers who contact these surfaces.

The Council has received various materials that address potential risks of e-cigarettes. I note that the study authored by Igor Bursteyn concludes that there is no evidence that use of e-cigarettes warrants health concern. This finding is based on comparison to Threshold Limit Values (TLV) that are developed for workers in occupational settings and intended to characterize maximum acceptable exposures for healthy worker populations. TLVs do not represent public health standard values.

The Council has also received correspondence from Dr. Richard H. Carmona, the 17th Surgeon General of the United States. I worked closely with Dr. Carmona in my capacity as Senior Scientific Editor for the 2004 and 2006 Reports of the Surgeon General on tobacco, the two reports released by Dr. Carmona while he was Surgeon General. While I respect Dr. Carmona's viewpoints, I note that the Surgeon Generals' reports are based on comprehensive reviews of all evidence available and conclusions are reached in the reports only when there is sufficient evidence to meet a high threshold of certainty. In the case of e-cigarettes, because data are lacking, Dr. Carmona can only offer opinions, but not evidence-based conclusions, on their role in harm reduction and on potential public health consequences of the proposed amendments.

Thus, the Council is making a critical decision for public health in Los Angeles while the scientific evidence on the increasing use of e-cigarettes is still quite limited. The Council's decision has important implications, particularly for youth and young adults. Given the present uncertainty and the potential for overall harm, the Council should pursue a public-health protective approach and pass the proposed amendments.

Sincerely,



Jonathan M. Samet, M.D., M.S.

/lmm

cc: Honorable Members of the Los Angeles City Council
Honorable Mayor Eric Garcetti