

February 5, 2021

Public Health Committee

Connecticut General Assembly

Regarding: **S.B. No. 326.** “An Act Prohibiting the Sale of Flavored Cigarettes, Tobacco Products, Electronic Nicotine Delivery Systems and Vapor Products”

To Co-Chairs Daugherty Abrams, and Steinberg; Vice Chairs Anwar, Kushner, and Gilchrest; and esteemed members of the Public Health Committee:

I am providing this testimony regarding S.B. No. 326 in my personal capacity as a Connecticut resident. In no way should my input be construed as reflecting a position or perspective of Yale University, or any schools or centers therein.

As an Assistant Professor of Health Policy at the Yale School of Public Health, I study how policies affect tobacco product use and disparities therein. I have particular expertise relevant to this bill, as my publications include work on the relationship between electronic and conventional cigarette use, and flavorings.

First, I want to commend you for tackling the longstanding issue of flavorings in combustible tobacco products. In the United States, smoking—that is, combustible tobacco use—has been the leading cause of preventable mortality for at least half a century, responsible for about 1 in 5 adult deaths annually. As flavorings have long been used to attract smokers to combustible tobacco products, federal policy limits conventional cigarettes to menthol and tobacco flavors. Yet this constraint does not apply to cigars, little cigars, and cigarillos, which are now at least as popular as conventional cigarette use among high school students (5.0% vs. 4.6% report past 30 day use, respectively). Indeed, among non-Hispanic Black youth, cigars, little cigars, and cigarillos are more than three times as popular as conventional cigarettes (9.2% vs. 2.8%), with rates of recent use similar to e-cigarettes (9.1%).¹ Given extensive health costs and the disproportionate burden of menthol and flavored combustible tobacco products in minority communities, flavored combustible tobacco products pose health equity issues as well as public health concerns. Banning all flavors in combustible tobacco products offers a high value, evidence-based means to improve population health and health equity in our state.

This argument cannot be made for electronic nicotine delivery systems (ENDS), such as e-cigarettes. The bulk of the evidence on nicotine e-cigarettes’ health effects suggests that, while by no means harmless, these products are likely far less harmful than combustible cigarettes.²

¹ Gentzke AS, Wang TW, Jamal A, et al. (2020). Tobacco Product Use Among Middle and High School Students — United States, 2020. *MMWR Morb Mortal Wkly Rep*, 69, 1881–1888. <http://dx.doi.org/10.15585/mmwr.mm6950a1>.

² Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT), "Statement on the potential toxicological risks from electronic nicotine (and non-nicotine) delivery systems (E(N)NDS—e-cigarettes)," September 2020. [Online]. Available: <https://cot.food.gov.uk/sites/default/files/2020-09/COT%20E%28N%29NDS%20statement%202020-04.pdf>.

Goniewicz ML, Smith DM, Edwards KC, et al., "Comparison of Nicotine and Toxicant Exposure in Users of Electronic Cigarettes and Combustible Cigarettes," *JAMA Netw Open*, vol. 1, no. 8, p. e185937, 2018.

MacDonald A, Middlekauff HR, "Electronic cigarettes and cardiovascular health: what do we know so far?," *Vasc Health Risk Manag*, vol. 15, pp. 159-174, 2019.

Glasser, Collins L, Pearson JL, Abudayyeh H, Niaura RS, Abrams DB, Villanti AC, "Overview of Electronic Nicotine Delivery Systems: A Systematic Review," *Am J Prev Med*, vol. 52, no. 2, pp. e33-e66, 2017.

Moreover, they appear to be as or more effective than FDA-approved nicotine replacement therapy for smoking cessation.³ Studies have found that adult smokers who used non-tobacco-flavored e-cigarettes were more likely to subsequently quit conventional cigarettes than those who using tobacco-flavored e-cigarettes.⁴ Thus, there is an evidence-based concern that banning flavors in these products may increase smoking by reducing substitution towards e-cigarettes.

Critically, the potential value of flavored e-cigarettes to adult smokers does not eliminate legitimate concerns about flavors increasing e-cigarettes' appeal to and use by youths. Indeed, these concurrent realities should lead you to be skeptical of advocates who characterize ENDS in extremes, as either 100% good or 100% bad. That framing does not match the evidence, and does a disservice to our policymaking process. E-cigarettes offer a potential tool for harm reduction,⁵ and we need to be vigilant about disincentivizing youth vaping. Public health policy must respond to both of these interests.

The U.S. Food and Drug Administration (FDA) is attempting to navigate this as they review thousands of e-cigarette pre-market tobacco product applications (PMTAs). Their process requires firms to provide evidence that neither their product nor its marketing induces youth use, and that both are appropriate for the protection of public health. Indeed, from a public health perspective, prohibiting products that both pass this test and have the potential to help adults quit would be a mistake.

The caveat, of course, is that the FDA review process takes time. In the meantime, there are a range of other policies that could reduce youth access to flavored products without precluding adult use; particularly, limiting flavored tobacco product sales to retailers that prohibit underage entry, in order to reduce routes of access and incidental exposure to flavored products (e.g., at grocery stores, drug stores, convenience stores, and gas stations).

Given current evidence and the ongoing FDA review process, I strongly encourage the committee to proceed in banning non-tobacco flavors—including menthol—in all *combustible* tobacco products, but not in non-combustible products where (1) the evidence indicates reduced health risks relative to smoking and (2) non-tobacco flavors may assist adults in dropping the more lethal habit. While a regulatory option is being pursued that balances the interests of adult smokers and youth, a full ban on flavored ENDS sales is not in the public's interest.

Thank you for your consideration,


Dr. Abigail S. Friedman, PhD

Stephens WE, "Comparing the cancer potencies of emissions from vapourised nicotine products including e-cigarettes with those of tobacco smoke," *Tobacco Control*, vol. 27, pp. 10-17, 2018.

³ Hartmann-Boyce J et al. (2020). Electronic cigarettes for smoking cessation. *Cochrane Database of Systematic Reviews* (10), Art. No.: CD010216.

⁴ Jones DM, Ashley DL, Weaver SR, Eriksen MP, "Flavored ENDS Use among Adults Who Have Used Cigarettes and ENDS, 2016-2017.," *Tob Regul Sci*, vol. 5, no. 6, pp. 518-531, 2019.

Friedman AS, Xu S, "Associations of Flavored e-Cigarette Uptake With Subsequent Smoking Initiation and Cessation," *JAMA Netw Open*, vol. 3, no. 6, p. e203826, 2020.

⁵ David Mendez, PhD, Kenneth E Warner, PhD, A Magic Bullet? The Potential Impact of E-Cigarettes on the Toll of Cigarette Smoking, *Nicotine Tob Res*, 2020;, ntaa160, <https://doi.org/10.1093/ntr/ntaa160>