

Environmental Health Committee Smoking Ordinance Recommendations

Parks, Trails, & the Environment Committee March 4, 2024

Folashade Afolabi, MD Environmental Health Committee Environmental Commission

SEC. 41-1. DEFINITIONS



(7) ELECTRONIC SMOKING DEVICE means any product containing or delivering nicotine or any other substance intended for human consumption that can be used by a person in any manner for the purpose of inhaling vapor or aérosol from the product. The term includes any such device, whether manufactured, distributed, marketed, or sold as an e-cigarette, e-cigar, e-pipe, e-hookah, dab rig or vape pen, or under any other product name or descriptor.



SEC. 41-1. DEFINITIONS



(1817) SMOKE OR SMOKING means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, pipe, hookah, or any other lighted or heated tobacco or plant product intended for inhalation, whether natural or synthetic, including marijuana/cannabis, in any manner or in any form. "Smoking" includes the use of an electronic smoking device which creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in this Article means inhaling, exhaling, possessing, or carrying any lighted or burning cigar or cigarette, or any pipe or other device that contains lighted or burning tobacco or tobacco products.



What are E-Cigarettes

- First on the market around 2006
- e-pens, e-pipes, e-hookah and e-cigars
- Battery-operated and use a heating element to heat eliquid from a cartridge to release a chemical filled aerosol
- e-liquid can contain formaldehyde, acrolein, flavorings, propylene glycol and vegetable glycerin
- Nicotine salts in e-cigarettes has faster onset of action and can be highly addictive



E-Cigarette Use



- E-cigarettes are the most commonly used tobacco product by youth since 2014 and use has nearly doubled since 2018
- Surgeon General reports e-cigarette use among youth is a significant public health concern
- Many adolescents have never used combustible cigarettes prior to Ecigarette use
- E cigarettes contain nicotine salt, formaldehyde, and other volatile compounds
- Flavored E-cigarettes have been associated with popcorn lung
- E-Cigarette/Vaping Associated Lung Injury has been associated with severe lung disease, low oxygen and death
- The amount of nicotine in devices varies, some have more than a carton of cigarettes worth of nicotine.



Surgeon General Report



- The 2016 U.S. Surgeon General's Report states that including ESDs in smoke free indoor air policies eliminates health risks from exposure to secondhand aerosol from ESDs. It is the right and responsibility of our elected officials to take action to protect public health and safety (7).
- They also noted emissions contain, "nicotine; ultrafine particles; flavorings such as diacetyl, a chemical linked to serious lung disease; volatile organic compounds such as benzene, which is found in car exhaust; and heavy metals, such as nickel, tin, and lead." (7)



7

Secondhand E-cigarette Exposure

- Adolescents with asthma have increased risk of asthma exacerbations when exposed to second-hand aerosol exposure.
 (1)
- Prevalence of secondhand nicotine e-cigarette aerosol exposure has increased from 12-16% from 2014-2019 (2)
- Exposure has been linked to increased bronchitic symptoms and shortness of breath in young adults (2)
- Secondhand-aerosol exposure from heated tobacco products was associated with both asthma attacks/asthma-like symptoms and persistent cough in a recent study in Japan (3).
- Forty percent of US adults believe that children's exposure to secondhand aerosol from e-cigarettes causes only some or little harm (4).







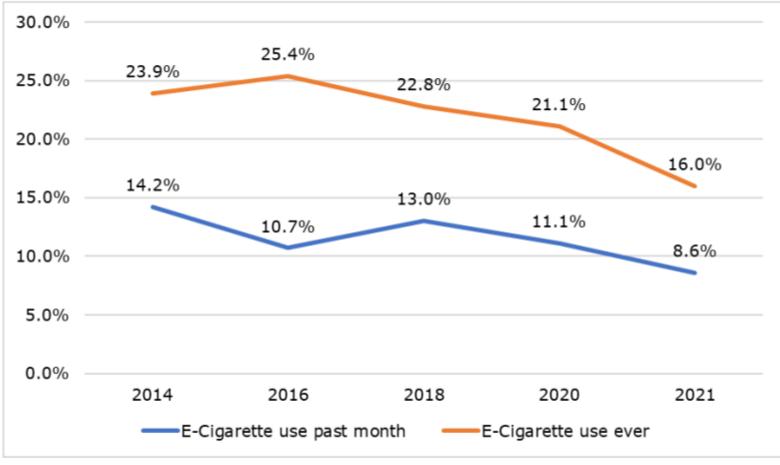
Secondhand E-cigarette Exposure

- Homes with e-cigarette use found increased PM2.5 levels when compared to non-smoking homes (5)
- Bystanders may experience irritation of the respiratory tract as a result of exposure to propylene glycol and glycerol
- American Industrial Hygiene Association (AIHA) recommends that e-cigarettes should be consider a source of aerosols, volatile organic compounds and particulates in the indoor environment (6).



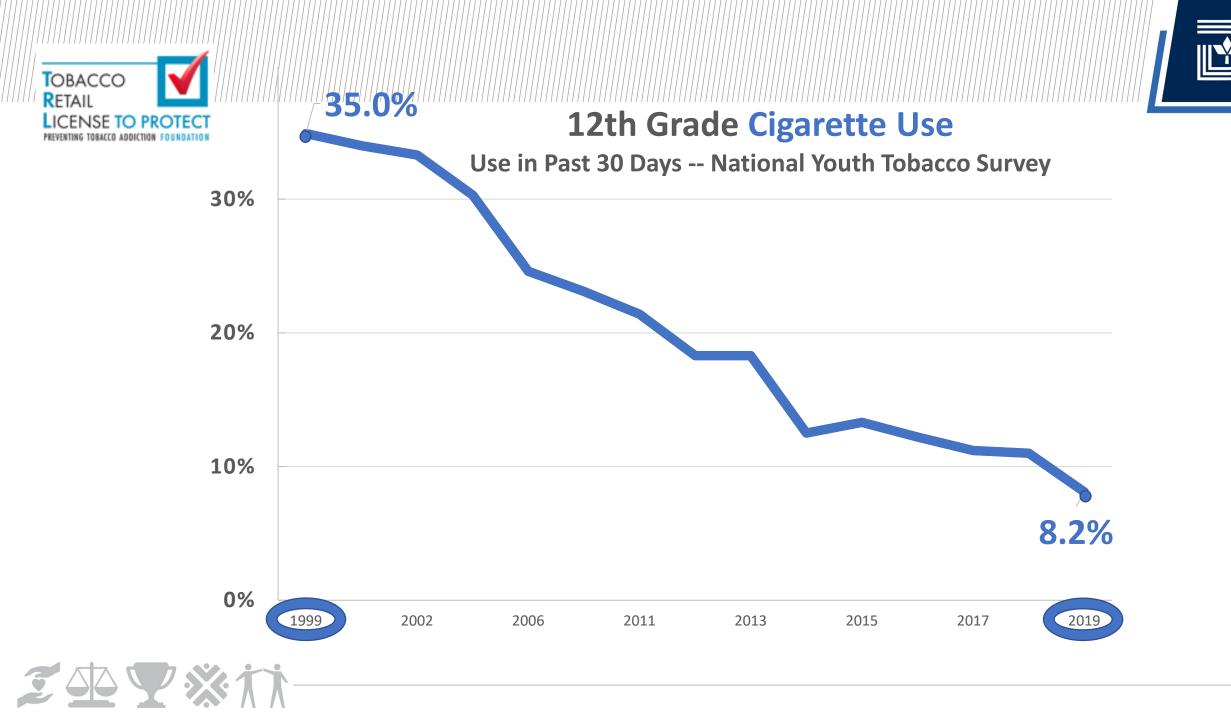


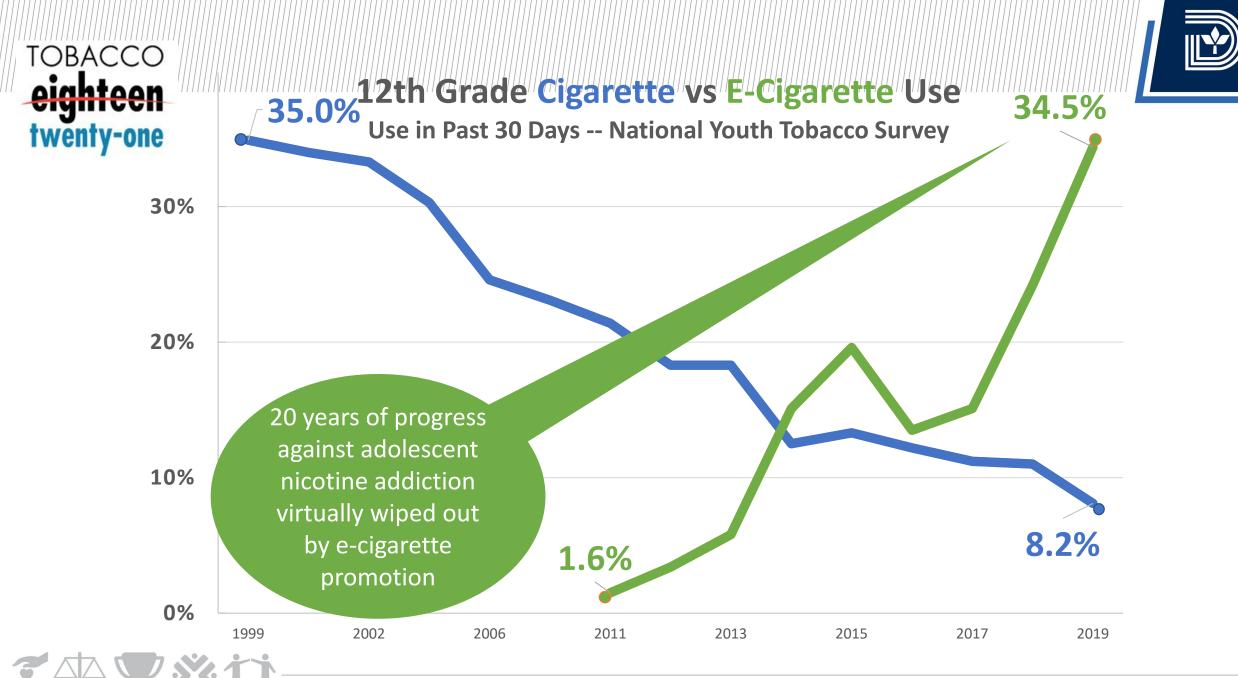
Graph 1: Trends in Youth E-Cigarette Use, Texas, 2014-2021



Data Source: Texas A&M University, 2014-2021 Texas Youth Tobacco Survey.







National Recommendations

- American Lung Association
- American Heart Association
- World Health Organization
- Centers for Disease Control
- Surgeon General



Dallas Benefits



- CityHealth Smoke Free GOLD Status
- Protect Indoor Air Quality of Dallasites
- Protect vulnerable populations
- Improve the health of Dallasites



References



1. Bayly JE, Bernat D, Porter L, et al. Secondhand exposure to aerosols from electronic nicotine delivery systems and asthma exacerbations among youth with asthma. Chest 2019; 155:88–93.

2. Islam T, Braymiller J, Eckel SP, et al Secondhand nicotine vaping at home and respiratory symptoms in young adults Thorax 2022;77:663-668.

3. Takashi, Y., Tomohiro, S., Ai, H., Sumiyo, O., Kei, N., & Takahiro, T. (2023). Association between exposure to secondhand aerosol from heated tobacco products and respiratory symptoms among current non-smokers in Japan: a cross-sectional study. *BMJ Open*, 13(3), e065322. <u>https://doi.org/10.1136/bmjopen-2022-065322</u>

4. Nguyen KH, Tong VT, Marynak K, King BA. Perceptions of Harm to Children Exposed to Secondhand Aerosol From Electronic Vapor Products, Styles Survey, 2015. Prev Chronic Dis 2017;14:160567. DOI: http://dx.doi.org/10.5888/pcd14.160567

5. Shearston JA, Eazor J, Lee L, Vilcassim MJR, Reed TA, Ort D, Weitzman M, Gordon T. Effects of electronic cigarettes and hookah (waterpipe) use on home air quality. Tob Control. 2023 Jan;32(1):36-41. doi: 10.1136/tobaccocontrol-2020-056437. Epub 2021 May 21. PMID: 34021062; PMCID: PMC10787574.

5. Visser WF, Klerx WN, Cremers HWJM, Ramlal R, Schwillens PL, Talhout R. The Health Risks of Electronic Cigarette Use to Bystanders. Int J Environ Res Public Health. 2019 Apr 30;16(9):1525. doi: 10.3390/ijerph16091525. PMID: 31052162; PMCID: PMC6539638.

6. Marcham CL, Springston JP. Electronic cigarettes in the indoor environment. Rev Environ Health. 2019 Jun 26;34(2):105-124. doi: 10.1515/reven-2019-0012. PMID: 31112510.

7. U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General—Executive Summary. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016





Environmental Health Committee Smoking Ordinance Recommendations

Parks, Trails, & the Environment Committee March 4, 2024

Folashade Afolabi, MD Environmental Health Committee Environmental Commission