



E-Cigarettes and Public Health

Background

- The advent of new tobacco products, such as electronic cigarettes (e-cigarettes) and the dramatic rise of their use especially in adolescents and young adults is of significant concern. E-cigarettes have now become the most popular tobacco product for youth and adolescents in the United States and are attracting youth to different avenues for nicotine addiction.¹
- There is increasing evidence that the use of e-cigarettes may catalyze transition to the use of combustible tobacco products or recreational drugs, particularly in young adults.²
- The long-term health effects of e-cigarettes and the net public health effect associated with their use remain unclear. A 2018 review summarized the latest research on e-cigarettes and considered their impact on public health. Overall, the report found that e-cigarette aerosol contains fewer numbers and lower levels of toxicants than combustible tobacco cigarettes, but the evidence suggests that e-cigarettes are not without adverse biological effects; however, they are likely to pose less risk than continuing to smoke cigarettes.³

Fast Facts:

1. In 2020, 19.6% (3.02 million) of high school students and 4.7% (550,000) of middle school students reported being current e-cigarette users.⁴
2. In 2021, during the COVID-19 Pandemic when there may have been limited access to e-cigarette products, 7.6% (2.06 million) of high school and middle school students reported being current e-cigarette users.⁵
3. Between September 2014 to May 2020, there was a 122% increase in e-cigarette sales.⁶
4. It is estimated that almost 6 million U.S. adults reported current vaping in 2019.³

The American Heart Association's Position

- The American Heart Association supports further research to develop novel cessation products that can be approved by the FDA's Center for Drug and Evaluation Research.⁷ According to the 2016 National Academies of Science, Engineering, and Medicine report there is not substantial evidence to support that e-cigarettes serve as an effective cessation aid in comparison to other FDA approved smoking cessation treatments.⁸
- The American Heart Association supports the development of strong regulation at the federal, state, and local levels to protect against youth access and initiation, re-initiation by former smokers, and initiation by those who have never smoked.⁷ These regulations should address issues such as marketing and advertising, elimination of all flavors regardless of the electronic nicotine delivery system (ENDS), and retailer compliance in not selling to minors.⁷

FDA Policy for Flavored ENDS: In January 2020, the FDA issued a new policy that removed some flavored prefilled pod- or cartridge-based e-cigarettes from the market. The policy was developed in response to the dramatic increase in youth e-cigarette use and increased appeal of "sweet, fruity, and minty" flavorings. The FDA policy prohibited the sale of flavored cartridge-based ENDS. However, the policy did not apply to menthol- or tobacco-flavored cartridge-based ENDS, and any flavored disposable e-cigarettes, or e-liquids used in refillable open tank systems. Although prefilled pods or cartridges remained the most used devices among youth in 2020, disposable e-cigarette purchases increased from 2.4% to 26.5% among high school e-cigarette users and 3.0% to 15.2% among middle school e-cigarette users from 2019 to 2020.⁴ Additionally, in the 2021 NYTS, 53.7% of all youth users reported using disposable devices.⁵ Though due to limitations related to the COVID-19 pandemic limiting year-to-year comparisons of the 2021 data,⁵ the higher percentage use of disposable e-cigarettes occurred during a period where sales of disposable devices increased by 205.2%.⁹ Menthol continues to be one of the most common flavor additive used for e-cigarette products with a reported increase from 10.7% to 61.8% among prefilled-e-cigarettes between 2019 and 2020.⁶ In 2020, about 34% of high school and middle school e-cigarette users reported use of menthol flavored e-cigarettes, and was about 29% in 2021.^{4,5} The American Heart Association advocates for further investigation of the safety of ENDS and the elimination of all flavors, including menthol, by the FDA.⁷

For more information and resources from the American Heart Association's policy research department on tobacco please visit: <https://www.heart.org/en/about-us/policy-research>.

Policy At A Glance: E-Cigarettes

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