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.  
- 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.  
- 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.  

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.  
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.  
3. Between September 2014 to May 2020, there was a 122% increase in e-cigarette sales.  
4. It is estimated that almost 6 million U.S. adults reported current vaping in 2019.  

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. According to the 2016 National Academics 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.  
- 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.  

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. Additionally, in the 2021 NYTS, 53.7% of all youth users reported using disposable e-cigarettes. Though due to limitations related to the COVID-19 pandemic limiting year-to-year comparisons of the 2021 data, the higher percentage use of disposable e-cigarettes occurred during a period where sales of disposable devices increased by 205.2%. 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. 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. The American Heart Association advocates for further investigation of the safety of ENDS and the elimination of all flavors, including menthol, by the FDA.

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

References:

5. Park-Lee

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