

Alternative Tobacco Products Being Used in Virginia

October 2019



VCU

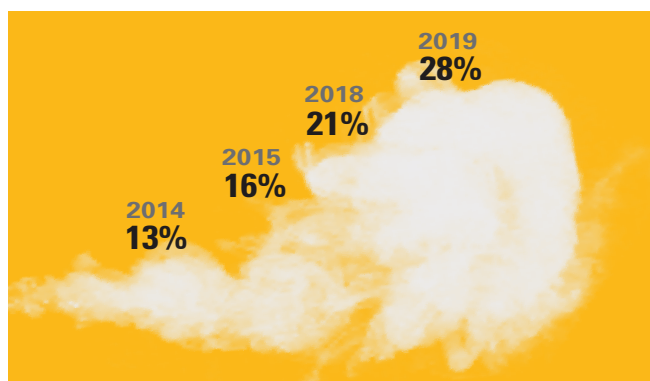
Center for the Study of Tobacco Products

KEY TAKEAWAYS

- **Tobacco use has increased recently, reversing decades of decline. In 2019, more than 25% of youth reported using an e-cigarette in the past month.**
- **Recent innovations have made e-cigarettes more attractive to users and more effective at delivering nicotine.**
- **Virginia has joined 18 states and D.C. in raising the legal age of sale for tobacco products to 21, however many states and the federal government are also looking for additional policy strategies that can combat rising rates of youth e-cigarette use.**

Tobacco use has increased for the first time in decades because more youth and young adults are using electronic cigarettes (e-cigarettes) (Figure 1).^{1,2} National data from 2019 indicate that over 25% of high school students reported using an e-cigarette in the past month.³ Virginia recently joined 18 states and D.C. in raising the legal age of sale for tobacco products to 21 to discourage youth initiation of e-cigarettes and other tobacco products.⁴

Figure 1. **Percentage of High School Students who Have Used E-cigarettes in the Past 30 Days**



Source: National Youth Tobacco Survey, United States

E-cigarettes typically contain nicotine, an addictive chemical that encourages continued use and makes quitting difficult. They are available in flavors that appeal to youth.^{1,5} Recently, thousands of cases of lung disease associated with use of e-cigarettes have been reported,⁶ prompting additional action by local, state, and federal authorities. More than a dozen states tax e-cigarettes, while the sale of flavored e-cigarettes are banned in two states⁷ and the Food and Drug Administration (FDA) has been directed by the President to clear the market of all flavored e-cigarette products.³

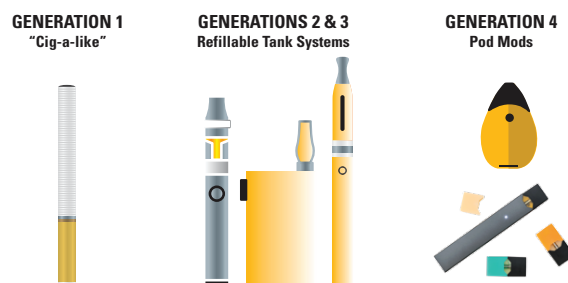
What are alternative tobacco products?

E-cigarettes and *heated tobacco products* are two alternative product classes that are currently the focus of debate among stakeholders as new evidence emerges about the harms of these products (see Box 2).^{8,9}

E-cigarettes: Using battery power, all e-cigarettes heat liquid, which usually contains nicotine, in order to produce an aerosol that users inhale.¹⁰ They vary considerably in design, electrical power, flavors, and how much nicotine they deliver. All of these characteristics can be regulated to make the products safer and less appealing to youth, but, with the exception of restricting flavors in a few jurisdictions, none currently are.

Innovation in the design of e-cigarette devices has resulted in several categories or “generations” of devices (Figure 2). First generation devices resemble a cigarette (called “cig-a-like”), are either disposable or rechargeable, and are typically much less effective at delivering nicotine than a combusted cigarette. Second and third generation devices have rechargeable batteries, larger reservoirs that can be refilled with liquid that can vary in nicotine concentration and flavor, and can be modified in other ways to tailor the user’s experience.

Figure 2. **E-cigarette Device Examples and Characteristics**



Source: Adapted from the CDC, 2018

New e-cigarette products entering the marketplace, such as JUUL, myblu, and Suorin Drop, offer a more high-tech, discreet appearance and use refillable or disposable pods. “Pod mod” devices typically contain a different form of nicotine (“nicotine salts”) than was used in first, second, and third generation devices (the “freebase” form). The nicotine salts in pod mod liquid allows consumers to inhale higher levels of nicotine more easily than products using freebase nicotine.¹¹

Heated Tobacco Products (Figure 3): Heated tobacco products such as Altria/Phillip Morris International’s IQOS, approved for sale in April 2019 by the FDA,¹² are also electronic devices; however, they heat tobacco to produce an aerosol containing nicotine.^{13,14} The FDA is reviewing an application from the tobacco industry to allow the IQOS to be marketed as a less harmful alternative to cigarettes. Altria/Phillip Morris International is beginning to sell IQOS in stand-alone stores in Virginia.

Figure 3. Heated Tobacco Product “IQOS” (I Quit Ordinary Smoking)



Why are alternative tobacco products growing in popularity?

Use of alternative tobacco products is rising among both youth and adults; however, these two demographic groups offer different reasons for finding e-cigarettes desirable. Adult e-cigarette users most frequently cite quitting or reducing smoking and health (85%) as major reasons for using e-cigarettes. In contrast, the most common reasons youth report using e-cigarettes are that a friend or family member uses them (39%) and e-cigarettes are available in flavors such as “mint, candy, fruit, or chocolate” (31%).¹⁵ In 2018, 68% of high school current e-cigarette users reported using a flavored product, and 51% reported that their flavor of choice was menthol or mint.²

Conclusion

Alternative tobacco products, if well-regulated, may offer a less harmful option for combusted tobacco for adult smokers, though the extent to which these products lead to smoking cessation is uncertain. However, these products are becoming very popular among youth, including youth who never smoked cigarettes. This popularity may be due to the variety of flavors available, discreet design offerings, early marketing campaigns on social media platforms, and high levels of easily-inhalable “salt”-form nicotine.^{2,16,17} Understanding what products help smokers quit effectively and how to prevent youth from becoming addicted to any of these products are important considerations for policymakers as they balance reducing the harms tobacco use while restricting the proliferation of nicotine delivery devices among youth.

WHAT WE KNOW ABOUT RISKS AND BENEFITS OF ALTERNATIVE TOBACCO PRODUCTS

E-CIGARETTES

- There is conflicting evidence about smokers using e-cigarettes to quit smoking successfully.
- The Centers for Disease Control and Prevention has advised people to stop using e-cigarettes.
- In many cases, e-cigarette use has led to hospitalization for respiratory illnesses such as difficulty breathing, shortness of breath and/or chest pain.
- In some cases, e-cigarette use has led to death.

HEATED TOBACCO PRODUCTS

- IQOS emits levels of nicotine similar to a cigarette.
- Harmful chemicals are produced when using IQOS that are linked to cancer, pulmonary disease, though significantly less than that for combustible cigarettes.

Sources: CDC, Salman et al. (2019).

FACTS ABOUT TOBACCO PRODUCT USE AND SALES IN VIRGINIA 2017

ADULT USE
19.3%
ADULTS USE ANY TOBACCO PRODUCT

4.9%
ADULTS USE E-CIGARETTES

YOUTH USE
12.4%
HIGH SCHOOL STUDENTS USE ANY TOBACCO PRODUCT

11.8%
HIGH SCHOOL STUDENTS USE E-CIGARETTES

RETAIL OUTLETS

More than 8,200 sell tobacco products, with over 220 selling only e-cigarettes.

Sources: CDC 2017 BRFSS and YRBS, Virginia Counter Tools

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APPENDIX

1. Campaign for Tobacco-Free Kids. JUUL and Youth: Rising E-Cigarette Popularity. 2018. <https://www.tobaccofreekids.org/assets/factsheets/0394.pdf>.
2. Cullen KA, Ambrose BK, Gentzke A, Apelberg BJ, Jamal A, King BA. Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students — United States, 2011–2018. *MMWR Morb Mortal Wkly Rep*. <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6745a5-H.pdf>. Published 2018.
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5. Truth Initiative. Behind the explosive growth of JUUL. <https://truthinitiative.org/research-resources/emerging-tobacco-products/behind-explosive-growth-juul>. Published 2019.
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13. Truth Initiative. What are “heat not burn” cigarettes? <https://truthinitiative.org/research-resources/emerging-tobacco-products/what-are-heat-not-burn-cigarettes>. Published 2017.
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