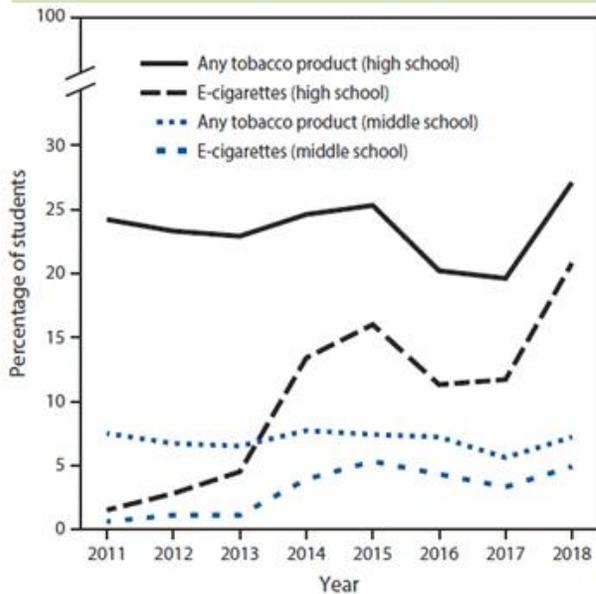


E-Cigarettes & Youth Use



“The data ... show astonishing increases in kids’ use of e-cigarettes and other ENDS (Electronic Nicotine Delivery Systems), reversing years of favorable trends in our nation’s fight to prevent youth addiction to tobacco products. *These data shock my conscience: from 2017 to 2018, there was a 78% increase in current e-cigarette use among high school students and a 48% increase among middle school students.*”

– FDA Commissioner, Scott Gottlieb, MD

Percentage of middle and high school students who currently use e-cigarettes and any tobacco product — NYTS, 2011–2018

What Are E-Cigarettes? Are They Safe?

- E-cigarettes heat a liquid and produce an aerosol, which users breathe into their lungs.¹ The aerosol contains tiny chemical particles from both the liquid solution and the device (e.g., metals from the heating coil).² Bystanders can also breathe in this aerosol.
- They can be called: “e-cigs,” “e-hookahs,” “mods,” “vape pens,” “vapes,” “tank systems,” and “electronic nicotine delivery systems”; or brand name (JUUL, Vuse).¹
- Some look like regular cigarettes, cigars, or pipes; or resemble pens, USB sticks, and other everyday items.¹ **The devices are purposefully made to be discreet and hard to detect.**
- E-cigarettes can cause unintended injuries. Defective batteries have caused fires and explosions. Acute nicotine exposure can be toxic to children, adults, and even pets, who have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid.¹
- E-cigarettes can be used to deliver marijuana and other drugs.¹

E-Cigarettes Contain Nicotine

- 99% of e-cigarettes contain nicotine – the addictive drug in regular cigarettes.³
- **A single JUUL pod contains as much nicotine as a pack of 20 regular cigarettes.**⁴
- E-cigarettes are **not approved by the FDA** as a quit smoking aid.¹
- E-cigarettes are used to quit smoking but some adults continue to smoke (“dual use”).¹

E-Cigarette Use Among Youth

- E-cigarettes are the most commonly used tobacco product among US youth.⁵
- **Youth who use e-cigarettes are 2 times more likely to start smoking cigarettes within 2 years** than youth who never used any tobacco product.⁶
- 31% of youth who use e-cigarettes have used cannabis in e-cigarettes.⁷
- Nicotine exposure during young adulthood can change the way the brain works, leading to a lifetime of addiction and, in some cases, increased impulsivity and mood disorders.⁵

E-cigarette ads reach nearly 7 in 10 U.S. youth.



More than 90% of surveyed youth say that marketing, advertising and promotions make e-cigarettes appealing.⁷



Teen smoking image from TipHero: <https://tiphero.com/dangers-of-juuling-craze1/>

- Industry uses celebrities and social media “Influencers” to promote products.⁵
- Youth say e-cigarettes are “trendy,” like “electronics” with unique packaging & dispensers.⁸
- Youth don’t view e-cigarettes as tobacco products: 72% think they are “cleaner” and “safer” than traditional cigarettes; 76% believe they are less addictive.⁸
- While 99% of e-cigarettes contain nicotine, 54% of Maine youth⁹ think it’s “just flavoring.”
- More than 85% of e-cigarette users ages 12-17 use flavored e-cigarettes, and flavors are the leading reason for youth use. More than 90% of young adult e-cigarette users use ones flavored to taste like menthol, alcohol, fruit, chocolate, or other sweets.⁵

Policy Actions to Take

Evidence-based prevention and treatment strategies, including culturally appropriate anti-smoking health marketing and mass media campaigns, and CDC-recommended prevention and control programs, will reduce the burden of nicotine use in Maine. Specific policy actions include:

1. Increase the price of **all** tobacco products, including e-cigarettes, through regular and significant tobacco tax increases. Currently, **e-cigarettes are only assessed sales tax.**
2. Implement and enforce comprehensive smoke-free and tobacco-free policies that specifically include e-cigarettes, particularly given secondhand smoke risks.
3. Fully fund and sustain, evidence-based, statewide tobacco use prevention and treatment programs. **Maine’s program is funded at approximately 30% of the U.S. CDC recommended level of \$15.9M.**
 - a. Aggressive, focused counter-marketing and education campaigns
 - b. Increase support for schools through youth, staff and parent education, and policy assistance
 - c. Investments in surveillance and evaluation to build data specific to e-cigarettes
 - d. Increase reach of effective intervention and treatment programs (e.g., ME Tobacco Helpline)

*This fact sheet was supported by the Maine Cancer Foundation.
To learn more, please visit www.MainePublicHealth.org.*

¹U.S. Centers for Disease Control and Prevention. Electronic Cigarettes: What’s the Bottom Line?

²Truth Initiative. E-cigarettes: Facts, stats, and regulations. July 2018. <https://truthinitiative.org/news/e-cigarettes-facts-stats-and-regulations>.

³Marynak, K.L.; Gammon, D.G.; Rogers, T.; Coats, E.M.; Singh, T.; King, B.A. Sales of nicotine-containing electronic cigarette products: United States, 2015. *Am. J. of Pub. Hlth* 2017.

⁴Willett JG, Bennett M, Hair EC, et al Recognition, use and perceptions of JUUL among youth and young adults. *Tobacco Control*. 18 April 2018.

⁵US Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health;2016.

⁶Watkins SL, Glantz SA, Chaffee BW. Association of Noncigarette Tobacco Product Use with Future Cigarette Smoking Among Youth in the Population Assessment of Tobacco and Health (PATH) Study, 2013-2015. *JAMA Pediatr*. 2018;172(2):181-187.

⁷Trivers KF, Phillips E, Gentzke AS, Tynan MA, Neff LJ. Prevalence of Cannabis Use in Electronic Cigarettes Among US Youth. *JAMA Pediatr*. 2018;172(11).

⁸Adolescents’ Awareness and Perceptions of E-Cigarettes: Implications for Intervention and Tobacco Regulation. Kirsten B Hawkins, Andrea C Johnson, Molly Denzel, Kenneth P Tercyak, Darren Mays *Pediatrics* Sep 2017, 140 (1 MeetingAbstract) 132; DOI: 10.1542/peds.140.1_MeetingAbstract.132

⁹ Maine Department of Health and Human Services and the Maine Department of Education. Maine Integrated Youth Health Survey. 2017.