

E-Epidemic: Vaping and Youth

What You Need to Know

Youth vaping, or e-cigarette use, has skyrocketed and the federal government has declared it a nationwide epidemic. Health and Human Services Secretary Alex Azar stated:

"In the data sets we use, we have never seen use of any substance by America's young people rise as rapidly as e-cigarette use is rising."

The bottom line is that vaping is unsafe for kids, teens, and young adults.² Getting accurate information about the youth vaping epidemic into the hands of our citizens is the first step to reverse the alarming trends.

Learn the Facts

- Youth vaping has increased dramatically across the country, including Florida. In 2018, about 25 percent of Florida high school students reported current use of electronic vaping—a 58 percent increase compared to 2017.³
- The FDA has stated that flavors play an important role in driving the youth appeal.⁶
- E-cigarette companies claim that their products are intended for adults, but skyrocketing prevalence rates among teens tell a different story. In fact, teens are vaping at much higher rates compared to adults.
 - One in four Florida high school students are vaping.⁴ Only about 4 percent percent of adults in Florida are vaping, according to the CDC.⁵

The most popular e-cigarette brand is JUUL,⁷ a device shaped like a USB flash drive.

- The JUUL comes in a variety of flavors, is easy to conceal,^{8,9} and delivers high levels of nicotine.¹⁰
- News outlets and social media sites have reported widespread use of JUUL by students in schools, including in classrooms and bathrooms.¹¹
- In December 2018, Marlboro cigarette maker AltriaGroup Inc. purchased a 35 percent stake in JUUL Labs Inc. for \$12.8 billion.¹²
- JUUL now dominates the e-cigarette market. The company went from 2 percent market share in 2016 to 76 percent market share by the end of 2018.^{13,14,15}
- Other manufacturers have started making JUUL-look-a-like e-cigarette products.

Know the Risks

- E-cigarette aerosol—aka “vapor”—is NOT harmless “water vapor,” as many youth mistakenly believe.¹⁶
- The aerosol that users breathe from an e-cigarette device and exhale can contain harmful and potentially harmful substances including cancer-causing chemicals and heavy metals such as nickel, tin, and lead.¹⁷
- While the long-term health effects of e-cigarettes are still unknown, some of the ingredients in e-cigarette aerosol could be harmful to your lungs.^{18,19}
- Evidence suggests that teens who use e-cigarettes may be at greater risk of starting to smoke regular cigarettes.^{20,21,22,23}
 - Cigarette smoking remains the single largest preventable cause of death and disease in the U.S.²⁴
- E-cigarettes, including JUUL, typically contain nicotine, which is highly addictive.²⁵
 - Teens may be more sensitive to nicotine and feel dependent on nicotine sooner compared to adults.^{26,27,28}
- The brain continues to develop until about age 25. The developing brain is more vulnerable to nicotine’s effects, including reduced impulse control, deficits in attention and cognition, and mood disorders.²⁹
- Using nicotine in your teens may also increase risk for future addiction to other drugs.³⁰
- A single JUUL pod (the liquid nicotine refill) contains as much nicotine as a pack of 20 regular cigarettes.³¹
- JUUL uses nicotine salts, which can allow high levels of nicotine to be inhaled more easily and with less irritation.³²
- It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.³³

You can help by educating yourself, dispelling myths among friends and family, and talking to your kids or students about the serious concerns around vaping and nicotine addiction.

- 1 U.S. Department of Health & Human Services. “Surgeon General releases advisory on E-cigarette epidemic among youth.” 18 Dec. 2018. www.hhs.gov/about/news/2018/12/18/surgeon-general-releases-advisory-e-cigarette-epidemic-among-youth.html (Accessed 14 March 2019)
- 2 Centers for Disease Control and Prevention (CDC). “Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults.” CDC Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. 3 Dec 2018. www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html (Accessed 11 March 2019)
- 3 Florida Youth Tobacco Survey (FYTS), Florida Department of Health, Bureau of Epidemiology, 2018.
- 4 Florida Youth Tobacco Survey (FYTS), Florida Department of Health, Bureau of Epidemiology, 2018.
- 5 Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2017. [accessed Mar 29, 2019]. URL: <https://www.cdc.gov/brfss/brfssprevalence/>
- 6 FDA Statement. “Statement from FDA Commissioner Scott Gottlieb, M.D., on new steps to address epidemic of youth e-cigarette use.” U.S. Food and Drug Administration. 12 Sept. 2018. www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm620185.htm (Accessed 14 March 2019)
- 7 Craver, Richard. “Juul ends 2018 with 76 percent market share.” Winston-Salem Journal. 8 Jan. 2019. www.journalnow.com/business/juul-ends-with-percent-market-share/article_6f50f427-19ec-50be-8b0c-d3df18d08759.html (Accessed 8 March 2019)
- 8 Truth Initiative. “Nearly 1 in 5 youth say they have seen JUUL used in school.” 23 May 2018. truthinitiative.org/news/early-1-5-youth-say-they-have-seen-juul-used-in-school (Accessed 8 March 2019)
- 9 Zernike, Kate. “I Can’t Stop! Schools Struggle With Vaping Explosion.” The New York Times. 2 April 2018. www.nytimes.com/2018/04/02/health/vaping-cigarettes-addiction-teen.html (Accessed 8 March 2019)
- 10 CDC Newsroom Releases. “Sales of JUUL e-cigarettes skyrocket, posing danger to youth.” Centers for Disease Control and Prevention (CDC). 2 Oct. 2018. www.cdc.gov/media/releases/2018/p1002-e-Cigarettes-sales-danger-youth.html (Accessed 8 March 2019)
- 11 Centers for Disease Control and Prevention (CDC). “Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults.” CDC Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. 3 Dec 2018. www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html (Accessed 11 March 2019)
- 12 Kirkham, Chris. “Altria to Buy \$12.8 Billion Minority Stake in E-cigarette Company Juul.” Reuters. 20 Dec. 2018. www.reuters.com/article/us-juul-altriagroup-m-a/altria-to-buy-12-8-billion-minority-stake-in-e-cigarette-company-juul-idUSKCNK01J5 (Accessed 6 March 2019)
- 13 Craver, Richard. “Juul ends 2018 with 76 percent market share.” Winston-Salem Journal. 8 Jan. 2019. www.journalnow.com/business/juul-ends-with-percent-market-share/article_6f50f427-19ec-50be-8b0c-d3df18d08759.html (Accessed 8 March 2019)
- 14 King BA, Gammon DG, Marynak KL, Rogers T. Electronic Cigarette Sales in the United States, 2013-2017. JAMA. 2018;320(13):1379-1380. doi:10.1001/jama.2018.10488
- 15 CDC Newsroom Releases. “Sales of JUUL e-cigarettes skyrocket, posing danger to youth.” Centers for Disease Control and Prevention (CDC). 2 Oct. 2018. <https://www.cdc.gov/media/releases/2018/p1002-e-Cigarettes-sales-danger-youth.html> (Accessed 8 March 2019)
- 16 Centers for Disease Control and Prevention (CDC). “Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults.” CDC Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. 3 Dec 2018. www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html (Accessed 11 March 2019)
- 17 US Department of Health and Human Services. E-cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2016. Accessed July 27, 2018.
- 18 Centers for Disease Control and Prevention (CDC). “Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults.” CDC Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. 3 Dec 2018. www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html (Accessed 11 March 2019)
- 19 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 20 Berry KM, Fetterman JL, Benjamin EJ, et al. Association of Electronic Cigarette Use With Subsequent Initiation of Tobacco Cigarettes in US Youths. JAMA Netw Open. 2019;2(2):e187794. doi:10.1001/jamanetworkopen.2018.7794
- 21 Miech R, Patrick ME, O’Malley PM, et al E-cigarette use as a predictor of cigarette smoking: results from a 1-year follow-up of a national sample of 12th grade students Tobacco Control 2017;26:e106-e111.
- 22 National Academies of Sciences, Engineering, and Medicine. 2018. Public Health Consequences of E-Cigarettes. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24952>
- 23 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 24 U.S. Department of Health and Human Services. The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. 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, 2014. Printed with corrections, January 2014.
- 25 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 26 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 27 U.S. Department of Health and Human Services. The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. 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, 2014. Printed with corrections, January 2014.
- 28 U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults. A Report of the Surgeon General. 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, 2012.
- 29 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 30 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. 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.
- 31 Centers for Disease Control and Prevention (CDC). “E-cigarettes Shaped Like USB Flash Drives: Information for Parents, Educators and Health Care Providers.” CDC Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. 18 Oct. 2018. www.cdc.gov/tobacco/basic_information/e-cigarettes/factsheet/index.html (Accessed 11 March 2019)
- 32 CDC Newsroom Releases. “Sales of JUUL e-cigarettes skyrocket, posing danger to youth.” Centers for Disease Control and Prevention (CDC). 2 Oct. 2018. <https://www.cdc.gov/media/releases/2018/p1002-e-Cigarettes-sales-danger-youth.html> (Accessed 8 March 2019)
- 33 Goniewicz ML, Gupta R, Lee YH, et al. Nicotine levels in electronic cigarette refill solutions: a comparative analysis of products from the U.S., Korea, and Poland. Int J Drug Policy. 2015;26(6):583-588.



For more information about the youth vaping epidemic, please visit tobaccofreeflorida.com/eepidemic.