

Electronic Vapor Product Use among High School Students in Vermont

August 2022

A third (33%) of U.S. high school students currently use an electronic vapor product (EVP), over two times the rate in 2017 (13%).¹ EVPs include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens and mods.² They are electronic devices that produce an aerosol through the heating of a liquid that usually contains nicotine, chemicals, flavorings and other ingredients.³

Those who use EVPs are exposed to heavy metals from the heating element of these devices as are bystanders when aerosols are exhaled into the air.³ The popularity of EVPs can be attributed to the thousands of available flavors, such as menthol, mint and fruit, which make them more attractive to young people.

This brief presents data from the Vermont Youth Risk Behavior Survey (YRBS) and represents current (past 30-day) use unless otherwise noted.²

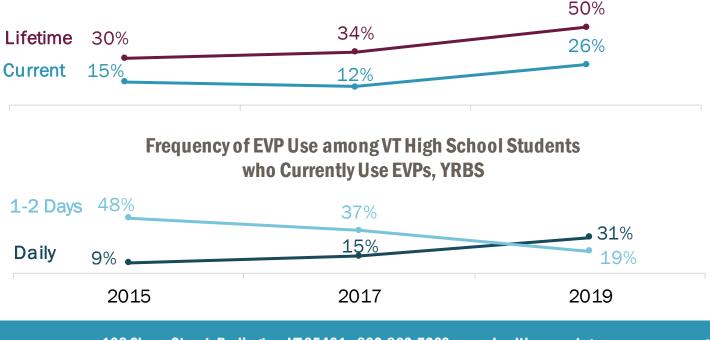
Current, Lifetime and Frequency of EVP Use

KEY POINTS

- Current and daily EVP use significantly increased from 2015 to 2019 among Vermont high school youth.
- Youth who smoke cigarettes, use cannabis or binge drink use EVPs at a higher rate and more frequently than youth who do not use these substances.
- Youth who experience protective behaviors, such as feeling valued in the community, use EVPs at a lower rate and less frequently than youth without these protective factors.

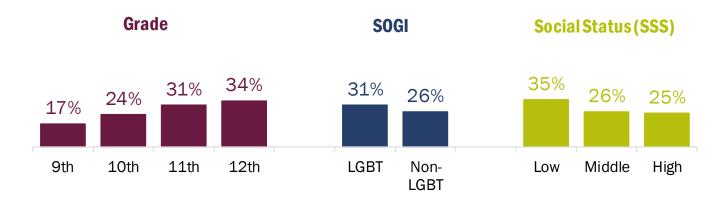
Among Vermont high school youth, the rate of current EVP use significantly increased from 15% in 2015 to 26% in 2019, as did lifetime EVP use (30% to 50%). Among students who currently use EVPs, daily use significantly increased from 9% in 2015 to 31% in 2019, while use of EVPs on 1 or 2 days in the past 30 days significantly decreased from 48% to 19%.

EVP Use among VT High School Youth, YRBS



Demographics

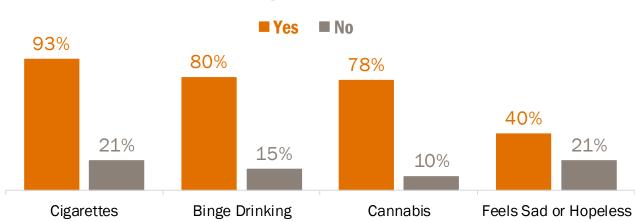
EVP use significantly differs by grade, sexual orientation/gender identity (SOGI)⁴ and subjective social status (SSS)⁵. Respectively, students in 11th and 12th grade, LGBT youth and those living at a low SSS use EVPs at a significantly higher rate than students in 9th and 10th grade, non-LGBT youth and those living at a middle or high SSS. EVP use does not statistically differ by race/ethnicity or sex (white, non-Hispanic 27%; Black, Indigenous and People of Color (BIPOC) 25%; female 27%; male 26%).



Current EVP Use by Demographics, VT High School YRBS 2019

High Rates of Current and Daily EVP Use among Youth who Use These Substances

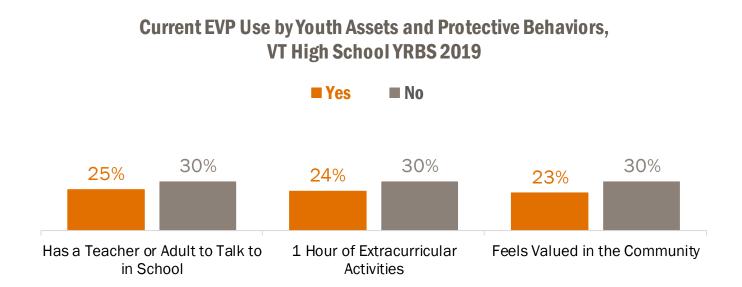
Current and daily⁶ EVP use are statistically higher among those who currently smoke cigarettes, binge drink⁷, use cannabis⁸ or who have mental health issues⁹. Youth who use these substances are five times as likely to currently use EVPs and twice as likely to use EVPs every day in the past 30 days compared to those who do not use these substances (data for daily EVP use is shown in Table 1 on page 4).



Current EVP Use by Current Substance Use and Mental Health, VT High School YRBS 2019

Lower Current and Daily EVP Use among Youth with Protective Assets

Current and daily⁶ EVP use are statistically lower among students who have a teacher or adult to talk to in school, who participate in extracurricular activities or who feel valued in the community¹⁰. Strikingly, youth who participate in at least one hour of extracurricular activities per week are nearly half as likely to use EVPs every day compared to youth who do not participate in any extracurricular activities (data for daily EVP use is shown in Table 1 on page 4).

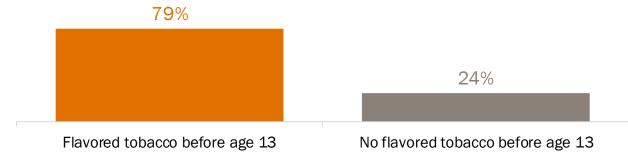


Early Initiation of Flavored Tobacco Products Increases EVP Use

Nearly four out of five youth who tried a flavored tobacco product before age 13 use EVPs, a statistically higher rate than the one out of four youth who use EVPs and did not try a flavored tobacco product before age 13. One in 10 youth report using EVPs due to the availability of many flavors.

Youth who try flavored tobacco before age 13 are three times as likely to use EVPs.

Current EVP Use by Trying Flavored Tobacco Before Age 13, VT High School YRBS 2019



Vermont's Response to Increased Vaping among VT Youth

The Vermont legislature passed three laws in 2019 to limit youth access to EVPs in the state.

- Tax e-cigarettes at 92% of the wholesale price.
- Ban the online sale of e-cigarettes.
- Raise the legal age to purchase any tobacco product from 18 to 21.

The results in this data brief were collected in spring 2019, prior to these new laws going into effect. Results of the 2021 YRBS will inform if and how these laws may impact the vaping prevalence among Vermont youth.

The Vermont Tobacco Control Program (VTCP) is invested in reducing the percentage of youth who use EVPs and have launched the <u>Unhyped</u> and <u>CounterBalance</u> campaigns to educate adults and youth about the harms of vaping.

In addition, the VTCP oversees <u>My Life, My Quit</u> (12-17 years of age) and <u>802Quits</u> (18+ years of age) to assist Vermonters with quitting smoking, vaping and all tobacco use.

The VTCP funds the Vermont Kids Against Tobacco (VKAT) and Our Voices Xposed (OVX) student leaders to engage, educate and reduce youth use of flavored tobacco products. Additionally, state-funded tobacco grantees work in communities to promote smoke-free policies and provide substance-free signage, along with tobacco prevention and cessation resources.

Substance Use and Mental Health		Protective Behaviors and Youth As	Protective Behaviors and Youth Assets	
	%		%	
Cigarette Smoking		School Connectedness		
Cigarettes	48	A teacher or adult to talk to	28	
No Cigarettes	24	No teacher or adult to talk to	36	
Binge Drinking		Extracurricular Activities		
Binge drink	41	Participates in at least one hour	24	
No binge drink	21	Does not participate	40	
Cannabis Use		Community Connectedness		
Cannabis	37	Feels valued	26	
No cannabis	17	Does not feel valued	35	
Mental Health				
Feels sad or hopeless	36			
Doesn't feel sad or hopeless	27			

Table 1: Daily⁶ EVP Use by Substance Use, Mental Health and Protective Behaviors

References, Data Sources and Data Notes:

¹U.S. Youth Risk Behavior Surveillance System (YRBSS): https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

² Vermont Youth Risk Behavior Survey (YRBS): <u>www.healthvermont.gov/health-statisticsvital-records/population-health-surveys-data/youth-risk-behavior-survey-yrbs</u>

³ About Electronic Cigarettes (E-Cigarettes): <u>https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html</u>

⁴*LGBT:* The YRBS only allows assessment of LGBT. We acknowledge this definition does not allow us to fully represent the other ways in which people identify.

⁵ Subjective Social Status (SSS): asks students to compare their family to others in American society by imagining a ladder. At the top of the ladder are people who are the best off – they have the most money, highest amount of schooling and jobs that bring the most money. At the bottom of the ladder are people who are the worst off – they have the least money, little or no education, no job or jobs that no one wants or respects.

⁶ Daily Use: Among students who currently use EVPs.

⁷ Binge Drinking: A male youth who has five or more drinks or a female youth who has four or more drinks in one sitting in the past 30 days.

⁸*Cannabis:* Use in the past 30 days. The YRBS uses the term "marijuana" to refer to cannabis. We have used "cannabis" in this data brief to reflect updated terminology.

⁹ Feeling Sad or Hopeless: A youth who felt so sad or hopeless almost every day for two works or more in a row that stopped them from doing usual activities in the past 12 months.

¹⁰ Feeling Valued in the Community: Youth who agree or strongly agree that in their community they matter to people.

For More Information

Vermont Tobacco Data

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www.healthvermont.gov/health-statistics-vital-records/surveillance-reporting-topic/tobacco

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