

Frequency of Electronic Vapor Product Use and Other Risk Behaviors Among High School Students

2015 Vermont Youth Risk Behavior Survey

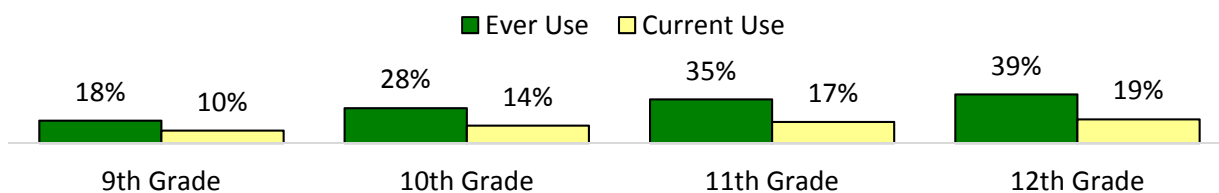
Background

Electronic vapor products, such as electronic cigarettes, are battery-powered devices that typically deliver nicotine through aerosol and are marketed as a cessation tool and an alternative to conventional tobacco products. Recent reports suggest dramatic increases in electronic vapor product use, while studies remain uncertain about the continued addictive nature of the products¹. In 2015, the Vermont high school youth risk behavior survey² (YRBS) asked students about electronic vapor products use, including current use and frequency of use.

Electronic Vapor Product Use

Overall, three in ten high school students have tried, and 15% currently use, electronic vapor products. The proportion of students who have tried or currently use electronic vapor products increases with grade. By the time they graduate, four in ten have tried and two in ten currently use these products. Males are more likely than females to have tried (33% vs. 27%) and currently use (18% vs. 13%) electronic vapor products. Among youth who currently use these products, about half (48%) use them rarely (1-2 days), four in ten (39%) use them occasionally (3-19 days), and 12% frequently (20+ days) (data not shown).

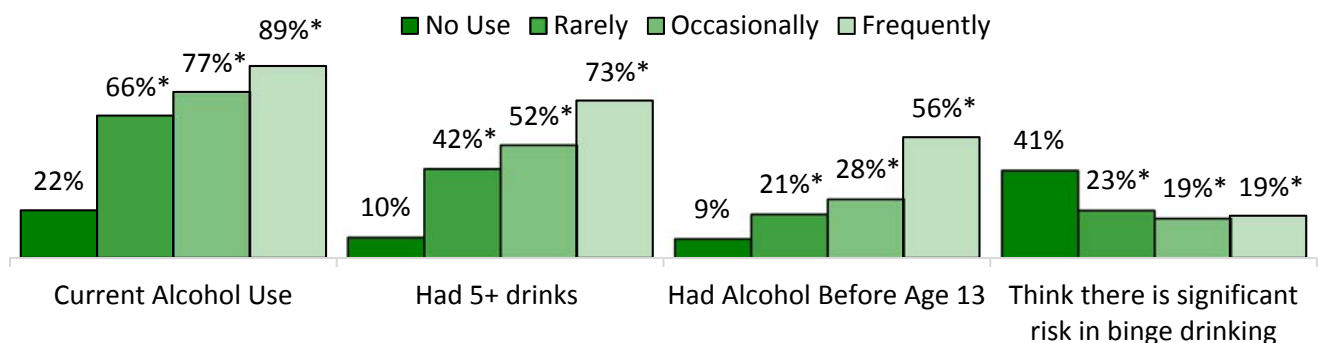
**Electronic Vapor Product Use by Grade
High School Students, 2015**



Alcohol Use

Use of alcohol is correlated with frequency of electronic vapor product use. Youth who do not use electronic vapor products are a third as likely to currently drink alcohol than those who rarely use electronic vapor products (66% vs. 22%), and about a quarter as likely (89%) as frequent users. Similar differences by use category are seen with binge drinking (had 5+ drinks) and alcohol use before age 13. In contrast, perceived risk of binge drinking decreases with electronic vapor product use. Compared with those who do not use electronic vapor products, youth who use electronic vapor products are far less likely to think there is significant risk in binge drinking once or twice a weekend.

**Alcohol Use by Frequency of Vapor Use
High School Students, 2015**

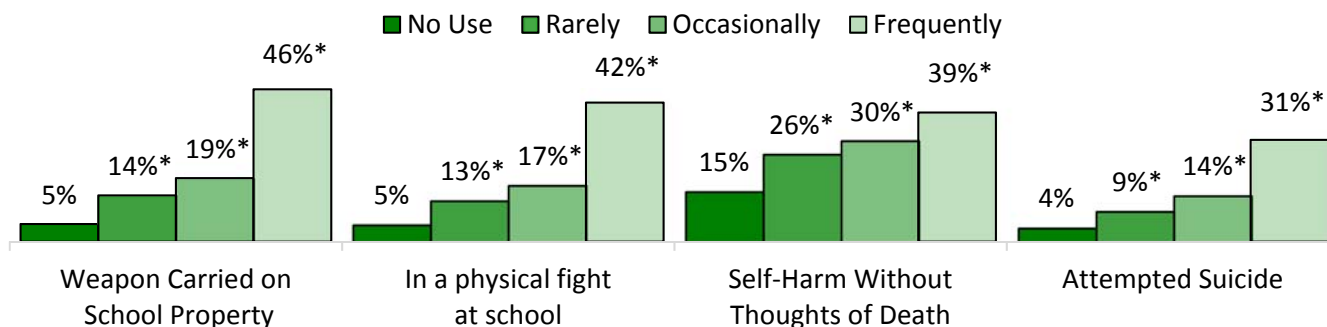


*Statistically different compared with no use group.

Mental Health and Other Risk Behaviors

Participation in risk behaviors such as bringing a weapon to school and fighting at school increases significantly with frequency of electronic vapor use; there is a particularly sharp increase between youth who occasionally use and frequently use the products. Youth who frequently use electronic vapor products are more than twice as likely as those who occasionally use them to report having brought weapons to school (46% vs. 19%) and getting into a fight at school (42% vs. 17%) during the last 12 months. Similarly, self-harm and suicide attempts in the last year increase with frequency of use. Fifteen percent of non-users report self-harming behavior compared with four in ten frequent users. Suicide attempts increase from four percent among those who do not use electronic vapor products, to 14% among occasional users, and 31% among frequent users.

**Risk Behaviors by Frequency of Vapor Use
High School Students, 2015**

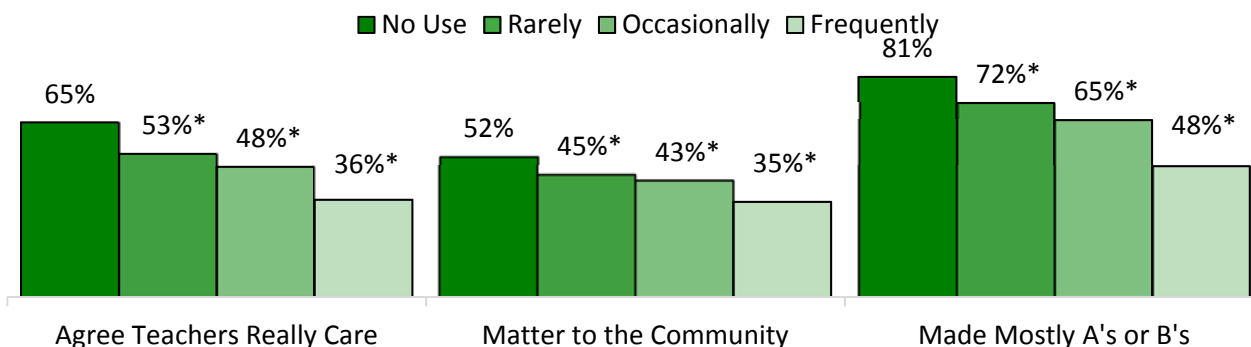


*Statistically different compared with no use group.

Youth Assets

Frequency of electronic vapor product use is negatively correlated to measures of youth assets. As frequency of use increases, student assets decrease. Youth who frequently use electronic vapor products are about half as likely as non-users to think teachers care, that they matter in their community, and to get grades of A's and B's. For each of these measures, every use group was significantly different compared to the no use group.

**Student Assets by Frequency of Vapor Use
High School Students, 2015**



*Statistically different compared with no use group.

For questions on this data brief, please contact: Kristen Murray, PhD (kristen.murray@vermont.gov) or Erin Singer, PhD (erin.singer@vermont.gov). Visit the following websites for information about [Tobacco Control](#) and [Tobacco Surveillance](#) in Vermont.

Analysis completed by Samuel Brown, Vermont Department of Health Intern.

¹ For more information on electronic vapor products and youth tobacco use, visit: <https://www.cdc.gov/vitalsigns/ecigarette-ads/>; https://www.cdc.gov/tobacco/data_statistics/sgr/e-cigarettes/pdfs/2016_sgr_entire_report_508.pdf