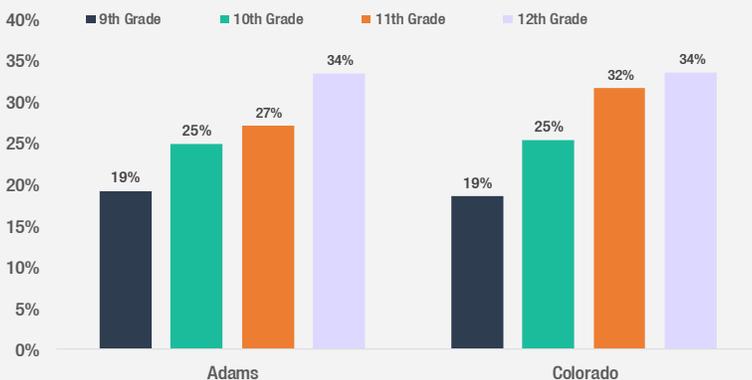


# 228% increase in youth vaping Adams County, Colorado 2013-2017

In 2017, according to the Healthy Kids Colorado Survey, 44.2% of high school students throughout Colorado reported ever having used an electronic vapor product, compared to 15.9% who have ever used a conventional cigarette. In Adams County, there is a similar trend. In 2017, 43% of Adams County high school students reported ever using electronic vapor products, similar to the state average. In addition, 25.7% of high school students reported current electronic vapor product use compared to 7.9% conventional cigarette use in Adams County. The age distribution of use is important to highlight, as older high school students report higher current use in Adams County and Colorado (Figure 1). As access occurs through peers that can legally acquire tobacco products, age is an important component of access among younger high school students. Preventing youth initiation is critically important for curbing adult use, as many adult cigarette smokers first initiate during their adolescence.<sup>1</sup>

Another important issue is perceived risk of harm of electronic vapor products by youth in our communities. Among high school students in Colorado 87.4% think smoking cigarettes every day puts an individual at moderate/severe risk, compared to only 49.8% who think vaping everyday puts an individual at moderate/severe risk. Electronic vapor products have steadily become known as a “healthier” alternative to standard cigarettes. This undocumented reputation has increased their popularity as an alternative to other tobacco products.<sup>2</sup>

**Figure 1: Current Electronic Vapor Product Use Among High School Students Adams County and Colorado by Grade Level, 2017**



Source: Healthy Kids Colorado Survey, Colorado Department of Public Health and Environment, 2017

**43% of Adams County High School students have used a vaping product, 2017**

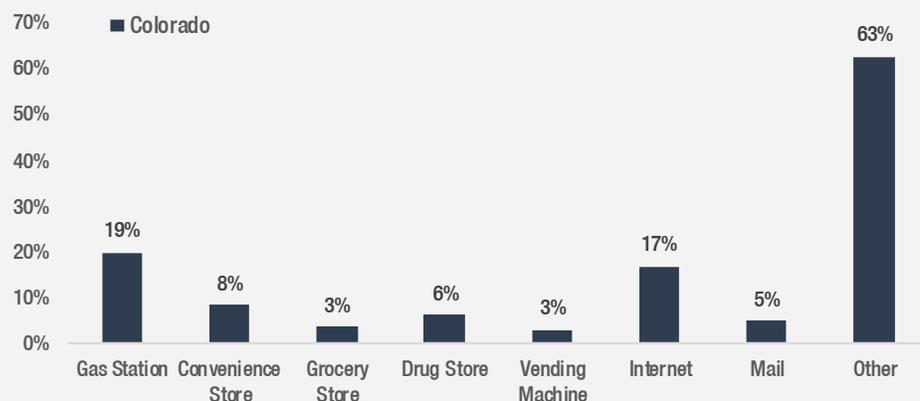
## Where are high school students getting their electronic vapor products?

Adams County, Colorado 2017

In 2017, 23.6% of Colorado high school students reported that, among those who acquired their own electronic vapor products, they purchased them at gas stations, convenience stores, drug stores, or grocery stores. Of Colorado high school students, 58.4% reported that it would be easy or very easy to get electronic vapor products if they wanted. Thus, tackling ease of access issues and perceived social availability of tobacco and electronic vapor products is important in limiting youth access in Adams County communities.

**Figure 2: Locations of Sale and Youth Access to Electronic Vapor Products\***

Colorado, 2017



**27% of Colorado High Schoolers purchased electronic vaping products at either a gas station or convenience store, 2017**

Categories are not mutually exclusive

\* Estimates are not available for Adams County in 2017

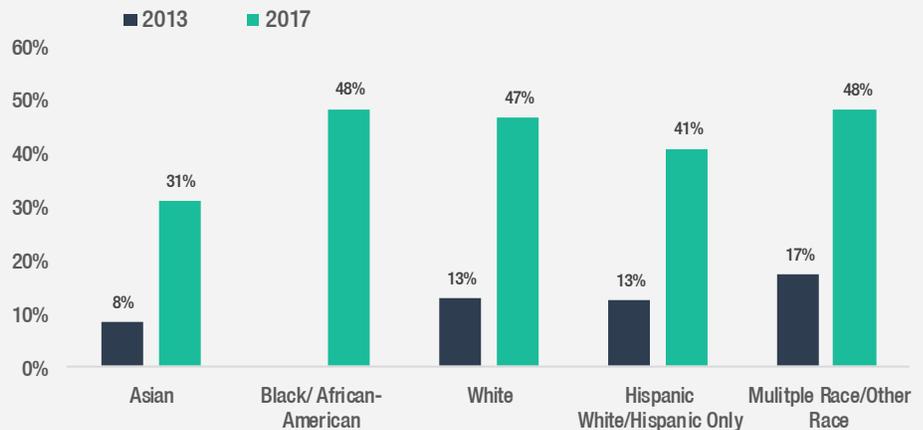
Source: Healthy Kids Colorado Survey, Colorado Department of Public Health and Environment, 2017

## Risk and Protective Factors for Adams County Youth

Between 2013 and 2017, youth initiating electronic vapor product use has increased dramatically throughout Colorado from 13% to 44%. In Colorado, youth identifying as different races/ethnicities have different reported use of electronic vapor products. In Adams County, there is a similar trend. In 2017, students who identified as multi-racial, other race, or white had a statistically higher percentage of reported current use compared to students who identified as Asian (Figure 3), putting these students at greater risk for cigarette use later in life. Understanding the risk and protective factors associated with tobacco use can help detect the causes of initiation among youth in our communities. Several risk and protective factors of note are mental health and alcohol use.

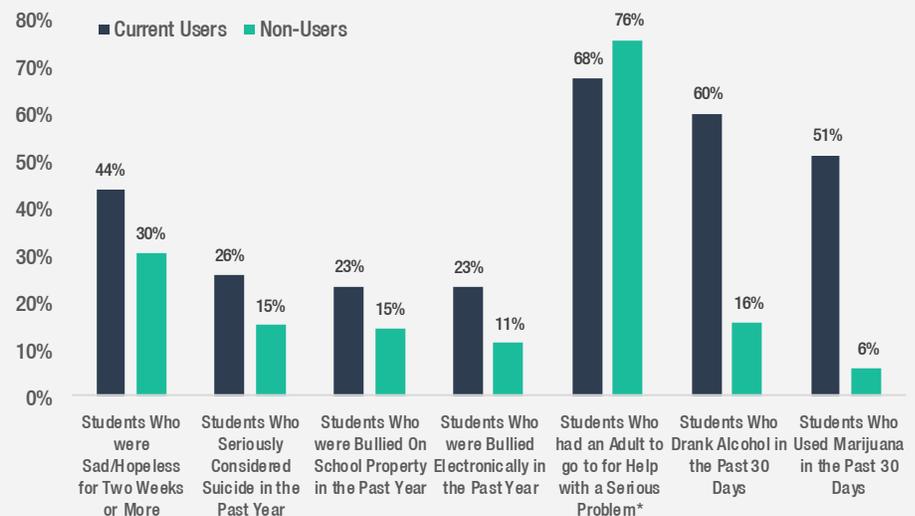
Good mental health has positive influences on one's own health behaviors. However, high school students who report substance use additionally report negatively on several mental health indicators. In Adams County, high school students who used electronic vapor products were more likely to report feeling sad or hopeless for two weeks or more compared to students who did not use electronic vapor products. High school students who currently vaped were also more likely to report they had seriously considered suicide in the last year, been bullied on school property, and been bullied electronically. Current vaping was also more likely to predict drinking alcohol in the past month compared to student who did not use vape products. These students were also more likely to report current marijuana use (Figure 4). These health indicators can help us understand the impact mental health may have on a high school student's substance use, as good mental health may keep students from adopting a substance use habit, like vaping, drinking alcohol, and smoking marijuana. Being aware of certain health behaviors can help us understand students who may also be struggling with mental health issues and looking for substance use as an outlet for these issues.

**Figure 3: Percentage of Students Who Have Ever Used an Electronic Vapor Product, Adams County and Colorado by Race/Ethnicity, 2013 and 2017**



Source: Healthy Kids Colorado Survey, Colorado Department of Public Health and Environment

**Figure 4: Mental Health Indicators for Electronic Vapor Product Use by High School Students, Adams County and Colorado, 2017**



Source: Healthy Kids Colorado Survey, Colorado Department of Public Health and Environment

## Summary and Next Steps



Youth access to tobacco products, especially electronic vapor products, is an important public health issue impacting our younger generations. We have found that different groups appear to have higher rates of vaping compared to others. These differences causes greater health burdens on adults populations as substance use habits become life-long. As initiation is concerned, 90% of current smokers began smoking before the age of 18, while 99% began before the age of 26.<sup>3</sup> Youth initiation, then, must be a top priority to help decrease adult smoking rates. Reducing underage sales through retailers and limiting opportunities to receive from peers may help curb youth initiation rates.

<sup>1</sup> Margolis, K. A., et al. (2016). "E-cigarette curiosity among U.S. middle and high school students: Findings from the 2014 national youth tobacco survey." *Prev Med* 89: 1-6.

<sup>2</sup> Arnold, C. (2014). "Vaping and health: what do we know about e-cigarettes?" *Environ Health Perspect* 122(9): A244-249.