

# Substance Abuse Trends Alert!



# Cigarette Alternatives and Florida's Youth

## **Background**

Florida has made dramatic strides in reducing youth cigarette smoking. Lifetime and thirty-day use of cigarettes among middle school and high school students has dropped precipitously as shown in Table 1. (Florida Youth Substance Abuse Surveys (FYSAS), 2010 and 2017)

Table 1: 30 Day Cigarette Lifetime and 30 Day Prevalence FYSAS 2000 vs. 2017

	2000		2017	
	Lifetime	30 Day	Lifetime	30 Day
Middle School	33.4	12.5	6.7	1.2
High School	53.5	23.3	16.4	3.7

Source: Florida Youth Substance Abuse Surveys, 2010 and 2017

However, during the past five years, alternative methods of consuming nicotine have developed. These include electronic cigarettes, vaping and, most recently, the introduction of heat-not burn devices (HNB). HNB devices, widely used in many nations and available online, produce smokeless tobacco vapors that manufacturers claim are more satisfying to adult cigarette smokers than electronic cigarettes. Adult cigarette smokers' satisfaction with HNB devices may be because those devices deliver nicotine levels comparable to cigarettes (Farsalinos et al, 2017).

HNB devices aerosolize mini tobacco sticks by heating them without burning or producing smoke. The practice of using them is called "juuling." Some of these devices resemble portable music players, pens or flash drives and are easily concealed in purses or backpacks by underage users. To date, only anecdotal reports of the use of HNB devices among American youth exist because the devices are not yet included in youth substance abuse surveys. In addition, claims by HNB manufacturers of reduced risk relative to other forms of tobacco have not been adequately demonstrated to the FDA. (FDA Modified Risk Tobacco Products).

#### **Current Use**

Cigarette alternatives, such as vaping and e-cigarettes, were only recently added to youth substance use surveys. In 2016, new questions about the use of e-cigarettes and other vaporizing alternatives to cigarette smoking were added to the FYSAS. Approximately one in four students surveyed in 2017 reported lifetime use of these products. About one in eight Florida middle school students and nearly one of three high school students reported one or more uses in their lifetime. Thirty-day prevalence rates were lower with 4.3% of middle schoolers and 10.1% of high school students reporting such use. These rates were notably higher than those for cigarette smoking.

The Monitoring the Future national survey began collecting data on vaping in 2015. In 2017 the survey began asking whether students were vaping nicotine, marijuana or non-psychoactive flavored liquids. Trend data from 2015 to 2017 show no marked increase in overall vaping among youth. Table 2 compares past 30-day cigarette smoking to overall vaping reports by youth in 2017, including all three substances. According to these reports, vaping is a more prevalent avenue for nicotine use today in each grade.

	Vaping					
Grade	Cigarettes	Any Vaping	Nicotine	Marijuana	Flavoring	
8	1.9	6.6	3.5	1.6	5.3	
10	5.0	13.1	8.2	4.3	9.2	
12	9.7	16.6	11	4.9	9.7	

Perhaps the most positive Florida finding from the 2017 FYSAS is that 30-day use of electronic vaporizers among all students dropped from 9.6% in the 2016 survey to 7.7%. That reflects a reduction from 5.1% to 4.3% for middle schoolers and from 31.5% to 10.1% for high schoolers.

Adult use of e-cigarettes in Florida, as reported in the 2016 BRFSS survey, decreases as individuals age (BRFSS online, 2018). Of the 18-24 age group, 9.8% reported current e-cigarette use. By comparison, 1.4% of the 65 and over age group reported current use. For the six age categories reported in the BRFSS, each ascending age group reported less e-cigarette use than the previous one. It will be important in the future to assess whether this is an age effect or whether this represents a cohort effect in which a relatively new product will continue to be used at a higher rate by the current young adult population as they age.

### Summary

Additional research on cigarette alternatives is needed. Concerns have been expressed about the negative health effects of e-cigarettes and other vaporizing products. Currently, consumers have no way of assessing the degree of long-term risk associated with cigarette alternatives or even what potentially harmful chemicals the products may contain. While we await better data on the long-term effects of "vaping," it is prudent to discourage use, especially among teens.

#### Resources

Resources that can be used to discourage youths' use of e-cigarettes and other cigarette alternatives include: Florida Department of Children and Families resources on youth tobacco prevention, the Surgeon General's Know the Risks: E-cigarettes and Young People, and the Centers for Disease Control and Prevention's Talk with Your Teen about E-cigarettes: A Tip Sheet for Parents.

