



Healthy Volusia Report

Adolescents & Tobacco Use

The Centers for Disease Control and Prevention (CDC) warns that youth use of tobacco in any form is unsafe regardless of the form of tobacco—smoked, smokeless or electronic. Tobacco use is associated with disease and disability and causes harm to nearly every organ of the body. Among middle and high school students, cigarette smoking declined from 2011 to 2015, but use of electronic cigarettes and hookahs increased. CDC notes tobacco use is primarily initiated during the adolescent phase of life, therefore new tobacco products are marketed towards this group.

National, state and local tobacco prevention programs have proven to be successful at reducing the rate tobacco use and initiation among youth according to the CDC.

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Tobacco prevention programs and initiatives include

- Raising the cost of tobacco products
- Prohibiting smoking in indoor areas of worksites and public places
- Raising the minimum age of sale for tobacco products to 21
- Creating TV/radio commercials and other media messages targeted toward youth to counter tobacco advertisement
- Community/school programs that encourage tobacco-free environments and lifestyles
- Community programs that reduce tobacco advertising, promotions, and availability of tobacco products

Tobacco use is the largest preventable cause of death in the nation. CDC estimates each year, approximately 480,000 Americans die from tobacco-related illnesses. The Volusia County death rate from tobacco-related cancer is 82.4. This rate is 13.3 points higher than Florida's rate (69.1). The Volusia County rate has consistently remained higher than Florida's over the past 15 years.

In Volusia County, 14.9% of adolescents reported trying cigarette smoking in 2016. This percentage is consistent with Florida's rate of 14.9% in 2015 (the most recently available data). There is a need to continue to address factors within the county that contribute to youth initiation. This report will explore "point of sale" leading to youth initiation, youth e-cigarette usage, tobacco retailers and school proximity, and tobacco retailer enforcement.

Report Card

Objectives	Volusia 2016	Florida 2015	U.S. 2015	Healthy People 2020 Target
Reduce percent of adolescents in grades 9 through 12 who smoked cigarettes in the past 30 days	6.1% ¹	9.9% ³	10.8% ³	16.0% ¹
Reduce percent of adolescent in grades 9 through 12 who used smokeless tobacco products in the past 30 days	4.7% ¹	DNA	7.3% ³	6.9% ¹
Increase percent of middle schools with tobacco free environments, including all school facilities, property, vehicles, and school events	57.8% ¹	77.3% ²	66.2% ⁴ (2014)	100% ¹
Increase percent of high schools with smoke-free environments, including all school facilities, property, vehicles, and school events	69.5% ¹	85.9% ²	74.5% ⁴ (2014)	100% ¹
Reduce the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco marketing at point of purchase (convenience store, supermarket, or gas station)	46.5% ¹	DNA	80.7% ⁶ (2013)	77.1% ¹
Increase percent of adolescent smokers in grades 9 through 12 who tried to stop smoking in the past 12 months	31% ¹	DNA	55.7% ³ (2013)	64% ¹
Reduce the percent of non-smoking adolescents aged 12 to 17 years exposed to secondhand smoke	35.7% ¹	DNA	33.6% ⁷ (2009-2012)	41% ¹

Note: The references for the report card data are listed below. Data collection years are displayed at the top of each column unless otherwise indicated. The year in parenthesis is the year of that specific indicator value. All data are the most recently available data.

DNA- Data Not Available.

Sources:

¹Centers for Disease Control and Prevention, Healthy People 2020
https://www.cdc.gov/nchs/healthy_people/hp2020.htm

²Florida Youth Tobacco Survey, Florida Department of Health
http://www.floridahealth.gov/statistics-and-data/survey-data/fl-youth-tobacco-survey/_documents/2015-state/index.html

³Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention
<https://www.cdc.gov/healthyyouth/data/yrbs/>

⁴School Health Policies and Practices Study, Centers for Disease Control and Prevention
<https://www.cdc.gov/healthyyouth/data/shpps/index.htm>

⁵State Tobacco Activities Tracking and Evaluation System, Centers for Disease Control and Prevention
<https://www.cdc.gov/STATESystem/>

⁶National Youth Tobacco Survey, Centers for Disease Control and Prevention
https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/

⁷National Health and Nutrition Examination Survey, Centers for Disease Control and Prevention
<https://www.cdc.gov/nchs/nhanes/>

⁸Synar Program, Substance Abuse and Mental Health Services Administration
<https://www.samhsa.gov/synar>

Report Card Summary

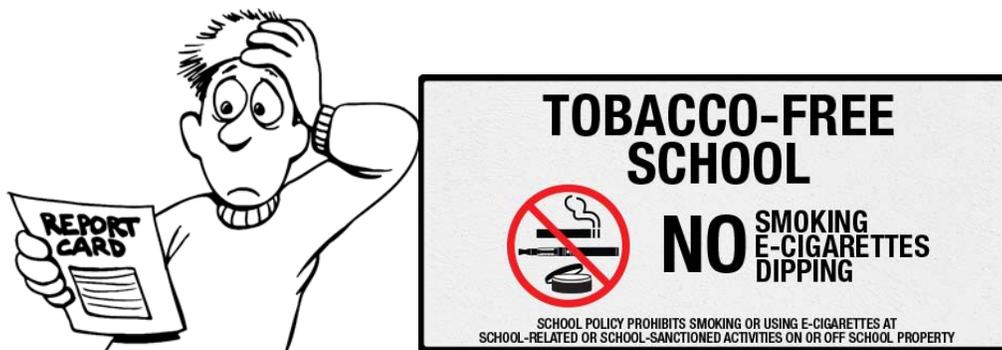
Reducing the rate of adolescent tobacco use, and decreasing the access and exposure adolescents have to tobacco products cover several major objectives for Healthy People 2020 (HP2020). HP2020 provides science-based, 10-year national objectives for improving the health of all Americans. The “Report Card” is meant to assess how Volusia County compares to Florida and the U.S. when measuring progress towards HP2020 objectives related to adolescent tobacco use. The first column of the report card details the HP2020 objectives, the next three columns represent Volusia, Florida, and U.S. rates/percentages respectively, and the last column indicates the HP2020 target for each objective.

Reducing the percent of adolescents who smoke or use smokeless tobacco products is one of the leading indicators for the success of tobacco intervention programs. Nationally cigarette smoking and the use of smokeless tobacco among adolescents has gone down substantially over the past two decades. The HP2020 target has been met for cigarette smoking among adolescents at all levels. The target for smokeless tobacco usage has not yet been met nationally, but locally Volusia County has met this target as well.

Reducing the exposure adolescents have to tobacco marketing at point of purchase is another aim of HP2020. Reduction in the exposure to tobacco marketing is associated with a reduction in tobacco use initiation. The target for this objective is to reduce the proportion of adolescents exposed to tobacco marketing at point of sale to 77.1%. While the national proportion is still making it’s way towards this target, Volusia County has already met this goal. Additionally, HP2020 aims to reduce the percent of non-smoking adolescents exposed to second-hand smoke. Second-hand smoke is associated with many of the same risk factors as smoking. Second-hand smoke can also lead to tobacco use initiation for some and impede the cessation process for others. The target is 41%. Volusia County has met the target, currently having 35.1% of non-smoking adolescents being exposed to second had smoke. For youth who have already begun smoking there is a target for 64% of them to attempt to quit smoking. This goal has not yet been met at the local or national level.

Another crucial objective is increasing the percent of middle and high schools with tobacco free environments. The HP2020 goal is for 100% of middle and high schools to have smoke-free environments. Schools with smoke-free environments are schools with policies prohibiting the use of tobacco products by students, staff, or visitors on school property, facilities, vehicles, or school events. Volusia County is behind the Florida a U.S. percentages for this objective.

With four years to go, Volusia County has met four out of the nine HP2020 objectives related to Tobacco use among youth.



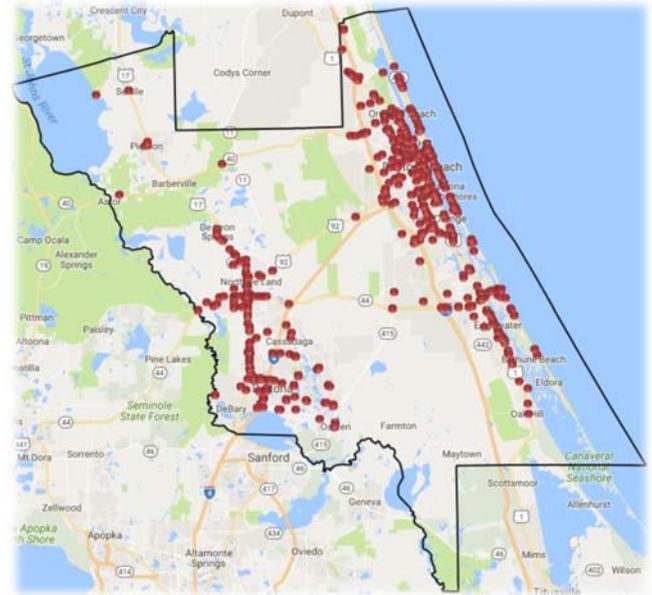
Tobacco Retailer Permitting and Enforcement

John Szabo, Special Agent, Division of Alcoholic Beverages and Tobacco

The Division of Alcoholic Beverages and Tobacco (AB&T) is the primary state agency charged with enforcing Florida laws regulating tobacco products. In 1992 the State of Florida began requiring retailer sellers of tobacco products to obtain a permit. Currently, In Volusia County, AB&T licenses 776 businesses to sell tobacco products. Out of the 776 businesses there are 109 that are licensed to sell only tobacco products, and 667 that are licensed to sell alcohol and tobacco products. Selling tobacco products without the required permit is a non-criminal offense punishable by a charge of not more than \$500.00.

Selling or giving tobacco products to a person under 18 years of age is prohibited. AB&T conducts business checks utilizing investigative aides between the ages of 14 and 16 to ensure businesses are in compliance with this law. A violation of this law is a second degree misdemeanor punishable by a \$500 fine and/or 60 days in jail. AB&T conducted 11 checks of Volusia County businesses in 2016 that resulted in 2 persons being arrested for selling tobacco products to an underage person. These arrest occurred in ZIP codes 32114 and 32174. There were no businesses administratively fined.

In 1992, the State of Florida made it a non-criminal offense for a person under 18 years of age to possess a tobacco product. An underage person who possesses a tobacco product, for a first violation, is subject to having to complete 16 hours of community service or, instead of community service, a \$25 fine. In addition, the person must attend a school-approved anti-tobacco program, if locally available. Additional sanctions are provided for subsequent offenses.

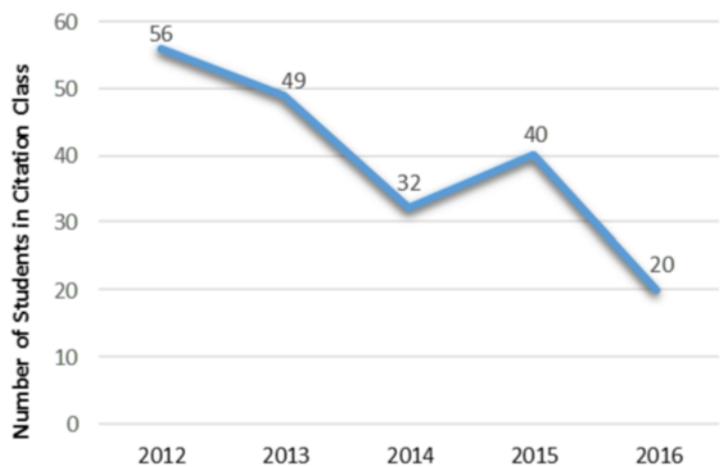


Volusia County Tobacco Retailers, Florida Tobacco Mapper, 2016

Anti-Tobacco Education Class

The Florida Department of Health in Volusia County’s Anti-Tobacco Education class is held monthly. Students who participate in the class have been cited for the use of tobacco products (including e-cigarettes), issued a fine of \$30.00 and mandated to attend the class. Those students mandated to attend the class but do not attend can have their driver’s license suspended for up to 12 weeks. Students can register for the class at VolusiaHealth.com. In 2016 a total of 20 students completed the Anti-Tobacco Education class. In the following graph a downward trend can be observed in the number of students who have been mandated to attend the course.

Anti-Tobacco Education Class Attendance, Volusia County, 2012-2016



Point of Sale and Youth Tobacco Use Initiation

Kristen Mialki, MPH, Tobacco Program Manager, Florida Department of Health in Volusia County

Tobacco companies now spend the vast majority of their advertising and promotional dollars at the point of sale. Many adolescents are exposed to these advertisements which sometimes leads to tobacco use initiation. The Centers for Disease Control and Prevention (CDC) notes that most smokers begin smoking before they are 18 however, if a person does not begin smoking before they are 18, they will most likely never start.

A Phillip Morris market research report once stated, “It’s important to know as much as possible about teenage smoking...the base of our business is the high school student.”

The CDC states that the following factors influence youth initiation:

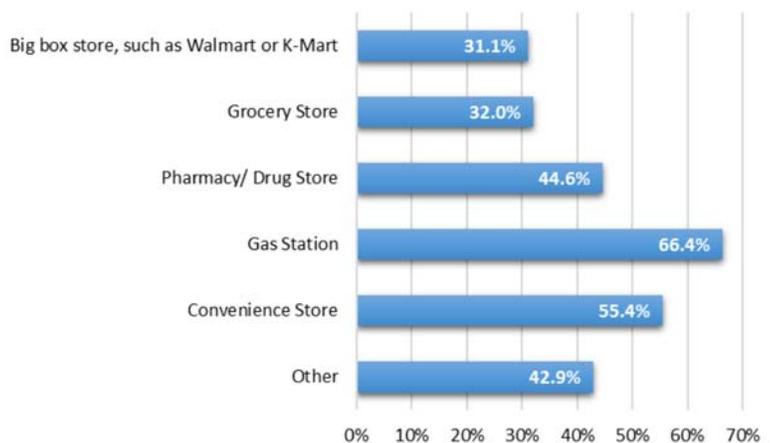
- The way mass media depicts tobacco use
- Accessibility, availability, and price of tobacco products
- Exposure to tobacco advertising

Advertising at the point of sale (POS) brings all of these factors into the retail environment. CounterTobacco.org, the first comprehensive resource for organizations working to counteract tobacco product sales and marketing at the point of sale, explains that cigarette companies have always valued the retail POS as an advertising channel. In the last decade, spending on branded advertising and promotions at the POS has soared. In fact, the retail environment is now the lead channel for cigarette marketing, advertising, and promotional efforts.

In Volusia County, the 2016 Florida Youth and Tobacco Survey states that 45.5% of adolescents reported being exposed to tobacco product advertising at point of sale. According to the Federal Trade Commission Cigarette and Smokeless Tobacco Report (2014), the tobacco industry spent over \$8.2 billion to advertise and promote their products in the retail environment.

The heavy spending on advertisement by the Tobacco industry leads to increased initiation and continuation of tobacco use by youth. The CDC notes that greater exposure to these POS ads and promotions is associated with greater likelihood of smoking. Two out of three youth visit a convenience store at least once a week, that is about 67% of youth. The 2016 Volusia County Store Assessment revealed that 63% of cigarette retailers surveyed had price promotions on cigarettes. The same survey also showed that 84% of retailers carrying cigarillos made these items available for less than a dollar, and 79% sold cigarillos as singles. These are a few of the actions that increase tobacco accessibility and facilitates early tobacco use initiation among youth in Volusia County communities and communities across the state.

Percent of Adolescents Exposed to Tobacco Marketing at



Sources:

Florida Department of Health, Volusia County, Florida Youth and Tobacco Survey, 2016; Florida Department of Health, Volusia County, Store Assessment, 2016; Centers for Disease Control and Prevention, Youth and Tobacco Use, 2017; CounterTobacco.org, The War in the Store, 2017

E-Cigarette Usage

Jennifer Anderson, Tobacco Prevention Intern, Florida Department of Health in Volusia County

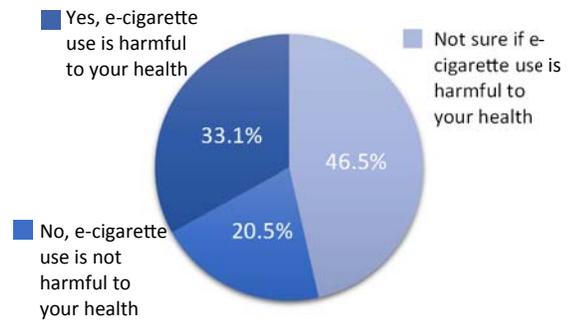
The use of Electronic Cigarettes (e-cigarettes) is an emerging trend among middle and high school students. We have seen a steady decrease for more than a decade in the number of adolescent cigarette smokers, but the number of adolescent e-cigarette users has increased. According to the Centers for Disease Control and Prevention (CDC), there has been a ten-fold increase in the use of e-cigarettes among high school students since 2011. In 2015, 1 out of every 6 high school students reported using e-cigarettes in the past month.

E-cigarettes are now the most commonly used form of tobacco among youth in the United States according to the US Surgeon General. In 2016, the Volusia County Florida Youth Tobacco Survey revealed that 26.6% of middle and high school students had used e-cigarettes.

Most Volusia County adolescents reported that they were unsure whether or not e-cigarette use is harmful to their health. Another 20.5% reported that they believe e-cigarette use to not be harmful. Despite this misinformation, the use of e-cigarettes gives a new way to deliver nicotine without burning tobacco. At the adolescent stage of life the brain has not yet completely matured thus it is highly susceptible to adverse health outcomes related to nicotine consumption. CDC explains that nicotine consumption in teenagers is associated with a higher risk of developing psychiatric disorders and cognitive impairment later on in life.

The adverse side effects of nicotine in the development of the teen brain is alarming, but according to a 2015 report in the Journal of the American Medical Association, many of the other chemicals found in the vaping liquids used in e-cigarettes have been shown to be carcinogenic. It is important for e-cigarette users to note that the use of an e-cigarette is not a safe-alternative to cigarette smoking. More than a fourth of Volusia County’s middle and high school students believe e-cigarettes are a less harmful product than cigarettes (Florida Youth and Tobacco Survey, 2016).

Adolescent’s Perception of E-Cigarette Harm, Volusia County, 2016



When compared to cigarette smoking...



According to the National Institute on Drug Abuse, a positive correlation can be seen between e-cigarette usage and other tobacco products. Students who try e-cigarettes by the time they start 9th grade are more likely than others to start smoking traditional cigarettes and other tobacco products within the next year. It is important that tobacco prevention efforts tailored for adolescents address the growing problem of e-cigarettes usage.

Sources:

Centers for disease Control and Prevention, *MMWR* 65(14): 361-367, April 14, 2016.
 U.S. Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General*
 Rigotti NA. e-Cigarette use and subsequent tobacco use by adolescents: new evidence about a potential risk of e-cigarettes. *JAMA*.
 Florida Department of Health, Volusia County, Florida Youth and Tobacco Survey, 2016.
 National Institute on Drug Abuse, Electronic Cigarettes. <https://www.drugabuse.gov/publications/drugfacts/electronic-cigarettes-e-cigarettes>.

Schools & Retailer Proximity

Kayla Jones-Willis, Tobacco Prevention Health Educator, Florida Department of Health in Volusia County

Over the past decade tobacco companies have begun to increase product advertisement at retailers within close proximity to schools. This is being done in an effort to attract youth to tobacco products. Tobacco retailers that are located closer to public schools tend to have higher levels of tobacco product advertisements. There are three times more cigarette advertisements in stores that adolescents tend to frequent. These advertisements typically focus on marketing products that are more pleasing to a younger audience, and often include candy or fruit flavored varieties.

When youth are exposed to higher levels of tobacco advertising they have a higher risk of becoming tobacco users. In Volusia County the majority of schools located within 500 ft. or less of tobacco retailers are elementary schools. The exceptions are two charter schools and AMIkids Volusia, an alternative school dedicated to aiding students who have committed non-violent offenses in transforming their lives and strengthening their communities.

As of now, there is no regulation in the state of Florida regarding zoning of tobacco retailers. Implementing zoning policies that restrict the proximity to schools to which new tobacco retailers are allowed to open stores within will be a major step in continuing to reduce youth tobacco use initiation.

Number of Retailers Near Schools in Volusia County, 2016, Florida Tobacco Mapper

Within 300 Ft	13
Within 500 Ft	18
Within 1000 Ft	37
Within 1/2 Mile	20 7

Schools Within 500 ft. or less of Tobacco Retailers, Volusia County, 2016, Florida Tobacco Mapper	Within 300 ft.	Within 500 ft.
Pierson Elementary School	X	X
Louise S. McInnis Elementary School	X	X
Edith Starke Elementary School		X
Manatee Cove Elementary School	X	X
Sunrise Elementary School		X
Spruce Creek Elementary School		X
Ormond Beach Elementary School	X	X
Reading Edge Academy	X	X
Richard Milburn Academy	X	X
Ivy Hawn Charter School	X	X
AMIkids Volusia	X	X

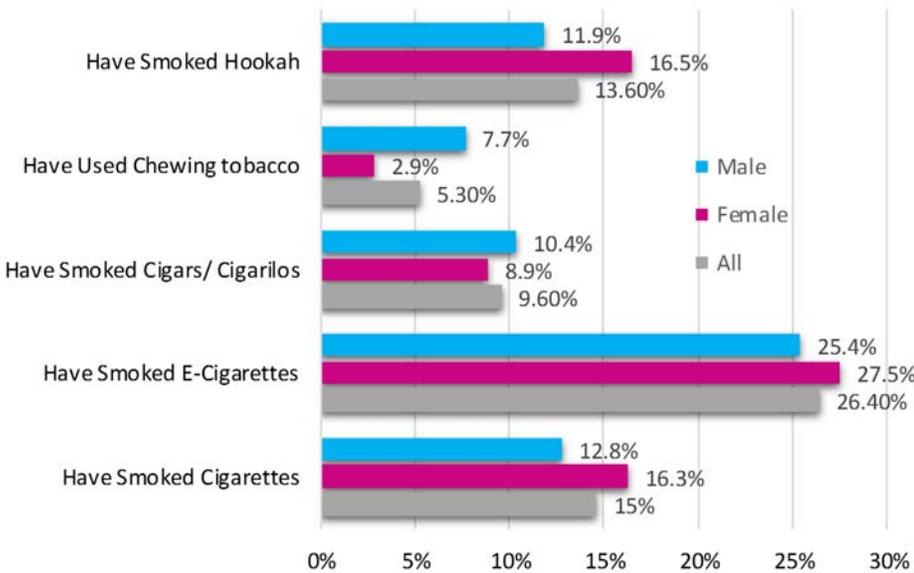


Sources:

Henrikson, L, et al., "Reaching youth at the point of sale: Cigarette marketing is more prevalent in stores where adolescents shop frequently," Tobacco Control 13:315-318, 2004.
 Henriksen, L, et al., "Association of retail tobacco marketing with adolescent smoking," American Journal of Public Health 94(12):2081-3, 2004.
 US Department of Health & Human Services. Preventing Tobacco Use Among Youth and Young Adults. A Report of the Surgeon General. 2012.

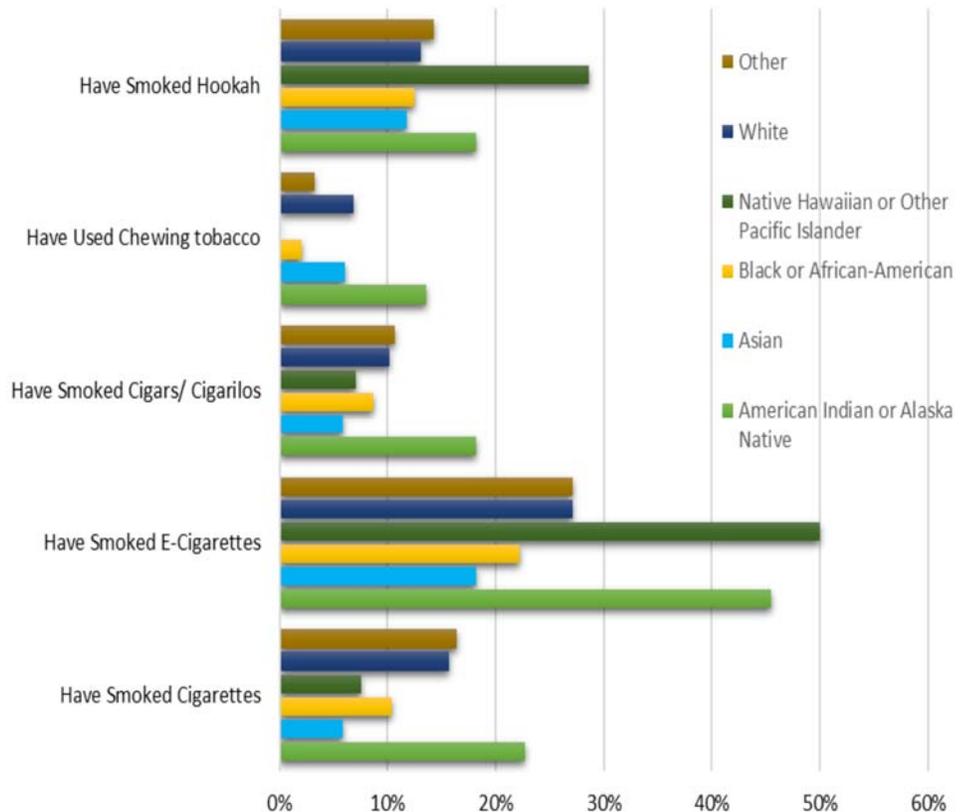
Adolescent Tobacco use Patterns, Florida Youth & Tobacco survey, Volusia County, 2016

Tobacco use Patterns by Gender, Volusia County, 2016



- The most popular tobacco products used by Volusia County adolescents are e-cigarettes
- Cigarettes and hookah are the second and third most popular products respectively
- When comparing genders, young women tend to prefer cigarettes, e-cigarettes and hookah more than their male counterparts do
- Young men tend to prefer chewing tobacco and cigars more than their female counterparts do
- Hookah is popular among Volusia County teens. Smoking hookah is associated with many of the same health risk as smoking cigarettes.

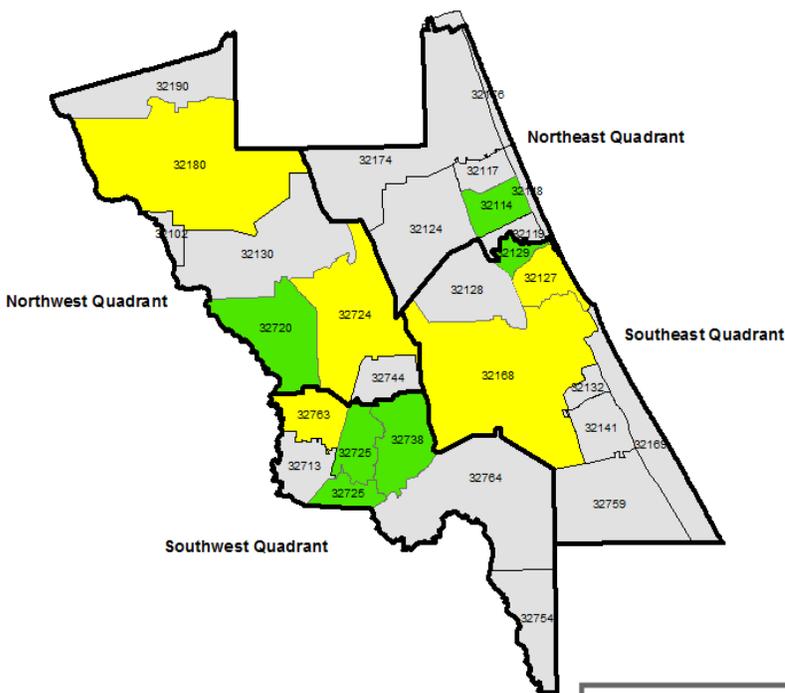
Tobacco use Patterns by Race, Volusia County, 2016



- E-cigarettes are the preferred tobacco product among all races
- E-cigarette use was twice as high among Native Hawaiian and Pacific Islander adolescents than all other groups
- Adolescents who identified as white or other preferred cigarettes as their second tobacco preference
- All other groups preferred hookah as their second preference

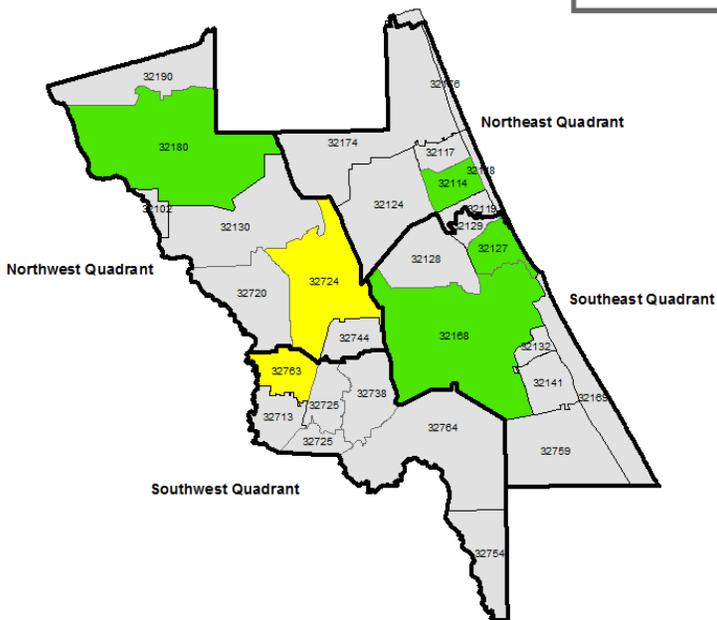
Tobacco use Patterns, Volusia County, 2016

Rate of Adolescent Cigarette Smokers by ZIP Code, Volusia County, 2016



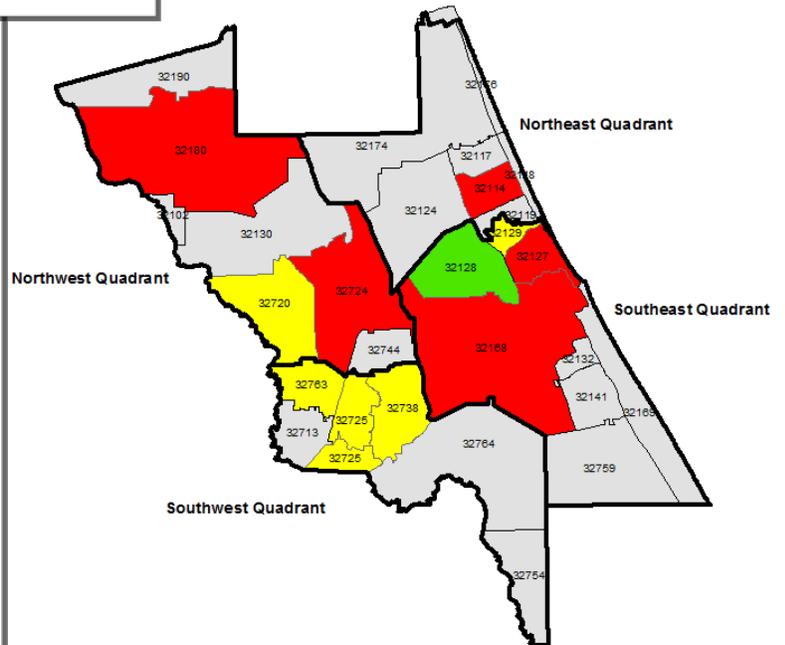
- The highest rate of adolescent cigarette smoking (24,615.4) was reported in Zip Code 32724
- The highest rate of adolescent cigarette smoking (24,615.4) is almost 50% less than the highest rate of e-cigarette smoking (43,076.9)
- The highest rates for cigarette smoking, e-cigarette smoking, and smokeless tobacco use among adolescents were observed in zip code 32724

Rate of Smokeless Tobacco Users by ZIP Code, Volusia County, 2016



- Adolescent smokeless tobacco use rates were lower than the rates of cigarette smoking and e-cigarette smoking across all zip codes
- Smokeless tobacco rate was lowest in zip code 32114 (5,072.5) and highest in ZIP code 32724 (16,923.10)

Rate of E-Cigarette Smokers by ZIP Code, Volusia County, 2016



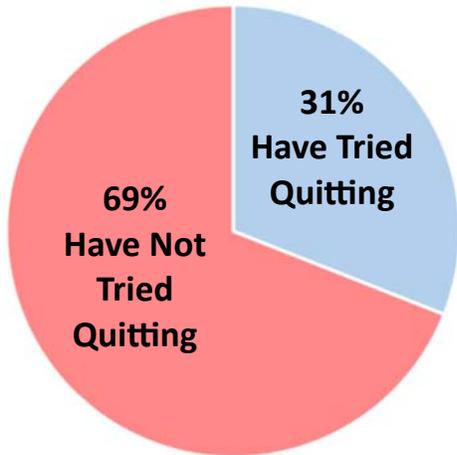
- Adolescent e-cigarette smoking rate were higher than cigarette smoking rates across all zip codes
- highest rate of e-cigarette use was observed in zip code 32724 (43,076.9) and the lowest was observed in zip code 32128

Rate per 100,000 Adolescents Surveyed

- 0 - 15,000
- 15,001 - 30,000
- 30,001 - 45,000
- No Data Collected

Adolescent Tobacco Cessation, Volusia County, 2016

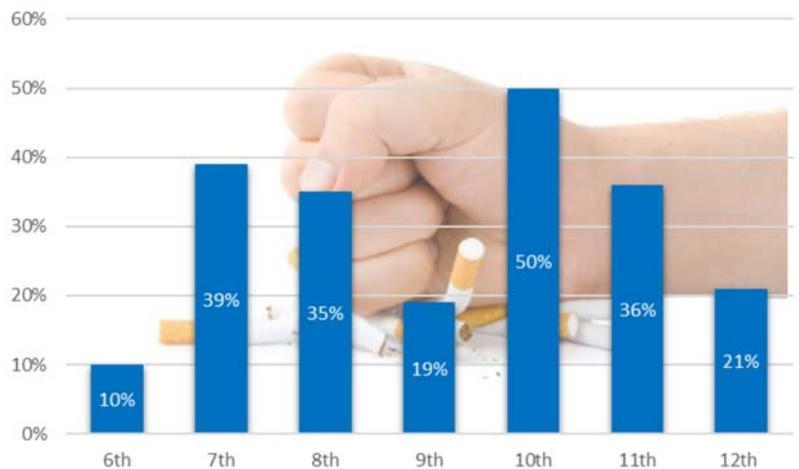
Adolescent Smokers Who Have Attempted To Quit Smoking, Volusia County, 2016



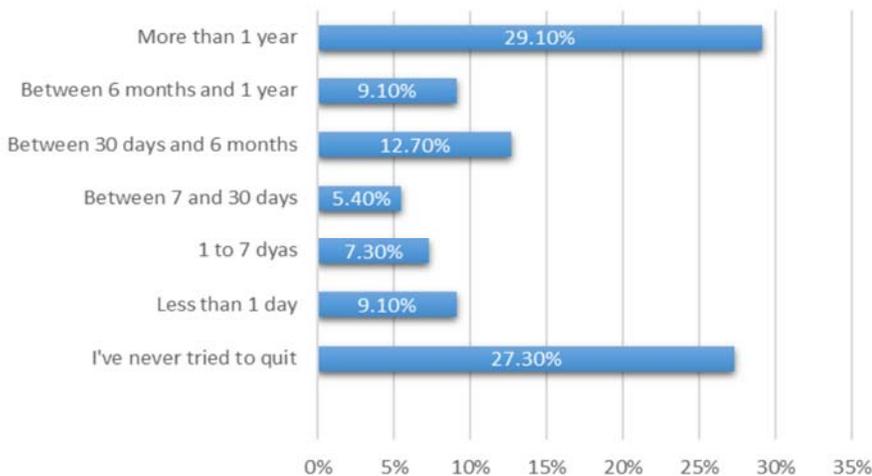
Nicotine is particularly addictive in adolescents, and quitting is difficult. Most Volusia County adolescents who have started smoking do not make an attempt at quitting.

- 10th graders have the largest percent of smokers who attempt to quit smoking
- The percent of 10th grade student smoker's who have attempted to quit more than double 9th grade smokers attempting to quit
- When comparing 10th graders to 12th graders, the percent of 10th graders who attempted to quit smoking is over twice as high

Adolescent Smokers Who Have Attempted To Quit Smoking by Grade, Volusia County, 2016



Time Adolescent Smokers Remained Cigarette Free After Quitting, Volusia County, 2016

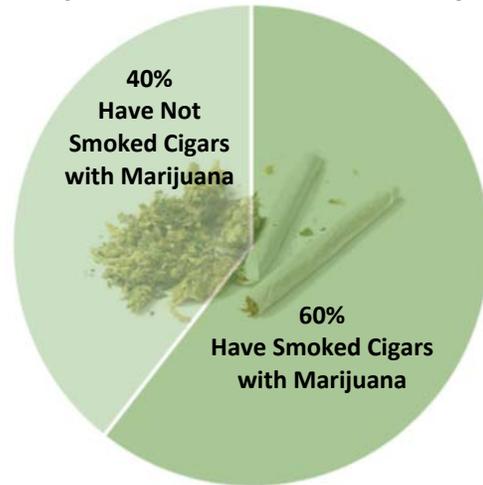


- The majority of adolescents who smoked cigarettes either remained cigarette free for more than a year, or never tried to quit

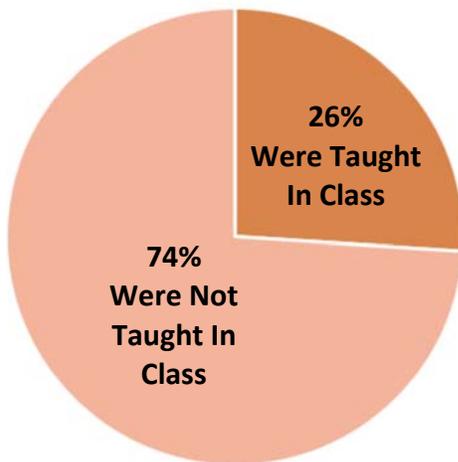
Other Points of Interest, Volusia County, 2016

Adolescent Cigar Smokers Who Have Smoked Cigars With Marijuana in Them, Volusia County, 2016

Sometimes people replace tobacco with marijuana in cigars. Smoking marijuana can lead to greater risk of bronchitis, cough, and phlegm production. Marijuana can slow reaction time and ability to make decisions when driving. 60% of Volusia County adolescent cigar smokers have smoked cigars with marijuana in them.

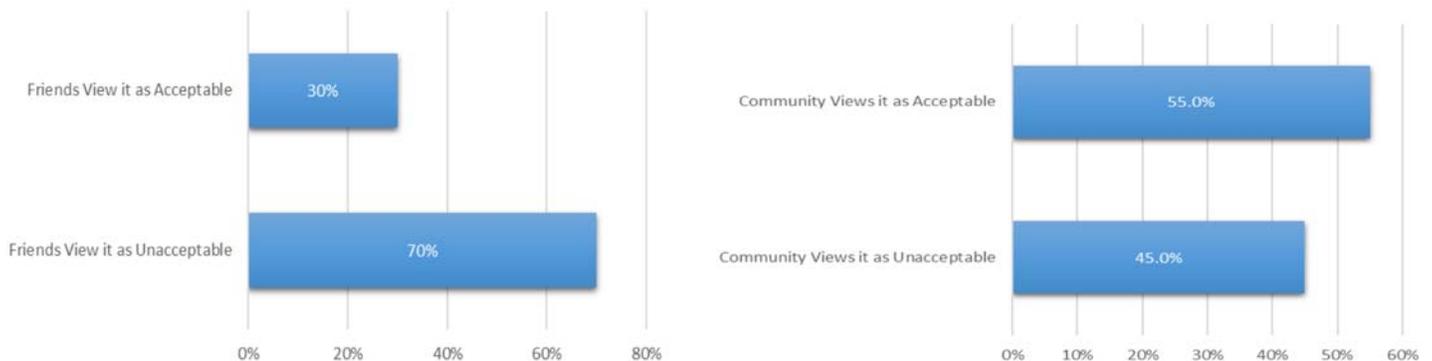


Adolescents Who Were Taught in Class About Tobacco Use, Volusia County, 2016



- The majority of Volusia County students were not exposed to tobacco education in their regular classes
- With only 3% of Volusia County adolescents participating in Students Working Against Tobacco (SWAT), a large portion of young people are not exposed to formal tobacco use education

Adolescents' Perception of How Adult Cigarette Smoking is Viewed, Volusia County, 2016



Adolescents' perception of how adult cigarette smoking is viewed by their friends and community plays a significant role in tobacco use initiation. Cigarette smoking viewed as an acceptable behavior can facilitate tobacco use initiation among youth. In Volusia County, most adolescents believed their friends viewed adult cigarette smoking as unacceptable. However, the majority of adolescents believed adult cigarette smoking to be acceptable in the eyes of the community as a whole.

Report Key Points

- Tobacco use is the largest preventable cause of death in the nation
- Reducing the percent of adolescents who smoke or use smokeless tobacco products is one of the leading indicators for the success of tobacco intervention programs
- It is a non-criminal offense for a person under 18 years of age to possess a tobacco product
- The media's depiction of tobacco use, tobacco accessibility, and exposure to tobacco advertising influence youth tobacco use initiation
- Cigarette smoking among adolescents is trending downwards, but e-cigarette usage is going up
- E-cigarettes are the most popular form of tobacco among adolescents
- Youth who are exposed to higher levels of tobacco advertising have a higher risk of becoming tobacco users
- The majority of schools in Volusia County located within 500 ft. or less of tobacco retailers are elementary schools

Florida Department of Health in Volusia County
Office of Planning and Performance Management
(386) 274-0500 x-0582
www.volusiahealth.com/stats

For information related to quitting tobacco please contact the Florida Quitline. A Quit Coach is waiting for your call to help you on your journey to be tobacco free!

