# VIRGINIA ADULT TOBACCO SURVEY







# Virginia Adult Tobacco Survey Report

# **Table of Contents**

Introduction	3
Who Smokes in Virginia	3
Young Adults and Tobacco Use	
Use of Menthol	6
Electronic Nicotine Delivery Systems (ENDS)	
Smoking and Perception of Health	12
Intention or Desire to Quit	13
Opinions and Attitudes Related to Tobacco	14
Tobacco Taxation and Licensure	16
Civic Activity	18
Residential Smoking	20
Survey Limitations	20
Conclusion	20
Appendix A Regions of Virginia	22
Appendix B Questions from the 2016/2017 Virginia Adult Tobacco Survey	23
Appendix C Survey Methodology	27

# Virginia Adult Tobacco Survey Report

# **List of Figures**

Figure 1 Smoking by Region	4
Figure 2 Smoking by Race and Ethnicity	4
Figure 3 Smoking by Education	
Figure 4 Smoking by Income	5
Figure 5 Tobacco Product Use: Young Adults vs. All Adults	5
Figure 6 Use of Menthol	ε
Figure 7 Menthol Use by Race and Ethnicity	7
Figure 8 Have you ever used ENDS devices even one time?	8
Figure 9 ENDS Use: All Adults vs. Young Adults	8
Figure 10 Use of ENDS by Race and Ethnicity	g
Figure 11 ENDS Devices: Length of Use	
Figure 12 Prohibition of ENDS Devices Where Smoking is Prohibited	10
Figure 13 Perception of Harm Associated with ENDS Use	10
Figure 14 ENDS Perception of Harm by Race and Ethnicity	11
Figure 15 ENDS Aerosol Perception of Harm by Race and Ethnicity	11
Figure 16 ENDS and ENDS Aerosol Perception of Harm by Smoking Status	12
Figure 17 Smoking Status and Perception of Health	12
Figure 18 Desire to Quit	13
Figure 19 Decided to Quit Since Last Cigarette by Race	13
Figure 20 Support Smoking Being Banned by Site	15
Figure 21 Support Tobacco Ban at Schools and Tobacco 21	16
Figure 22 Support for Increased Tobacco Taxes to be Used for Public Health Activity	17
Figure 23 Support for Increased Tobacco Taxes by Region	17
Figure 24 Civic Activity	18
Figure 25 Support for Increased Tobacco Taxes by Civic Activity	18
Figure 26 Civic Activity by Smoking Status	19
Figure 27 Opinions on Retail Tobacco Sales	19
Figure 28 Residential Smoking	20

# Virginia Adult Tobacco Survey Report

## Introduction

In 2016, the Virginia Department of Health (VDH) Tobacco Control Program (TCP) launched the first Virginia Adult Tobacco Survey (VATS) to guide the state's tobacco control activities. The survey assessed tobacco use, smoking cessation, secondhand smoke exposure, risk perception, social influences, and tobacco-related policy issues. This report provides an overview of the survey's findings. All non-institutionalized Virginians age 18 and older were qualified to participate in this random digit dialed telephone survey. There were 3,175 qualified respondents distributed among the five health regions of the Commonwealth of Virginia. The survey is based on a probability sample from all regions of the Commonwealth. The results may be generalized to adult residents of Virginia.

The survey findings will inform TCP's ongoing mission to reduce premature death, disease, disability, and the economic burden related to tobacco use and/or exposure to secondhand smoke by: preventing tobacco use among young people, eliminating nonsmokers' exposure to secondhand smoke, promoting quitting among adults and young people and identifying and eliminating tobacco related disparities.<sup>1</sup>

This survey contains the first state specific data with the needs of Virginians in mind to include tobacco product use and perception of harm, Electronic Nicotine Delivery Systems (ENDS), tobacco taxation, smokefree air, and the desire to quit using tobacco.

# Who Smokes in Virginia?

Of those surveyed, 13.9% consider themselves current, everyday, or someday smokers, while 25.9% consider themselves former smokers.

Results showed 39.9% (male = 44.7%, female = 35.4%) have smoked at least 100 cigarettes in their life. Responses to the question "How old were you when you smoked a whole cigarette for the first time?" indicated that 66.3% of respondents were under the age of 18. Of all respondents, 55.5% reported having tried at least one or two puffs from a cigarette.

<sup>&</sup>lt;sup>1</sup> http://www.vdh.virginia.gov/tobacco-free-living/tobacco-use-control-project-tucp/

Figure 1.

Smoking by Region		
Region		
Northwest	15.5%	
Northern	7.7%	
Southwest	18.1%	
Central	17.6%	
Eastern	14.7%	

The Southwest region has the highest prevalence rate at 18.1% with the Northern region having the lowest rate at 7.7%.

Figure 2.

Smoking by Race and Ethnicity		
Race and Ethnicity		
White	11.4%	
Black	17.1%	
Hispanic	8.7%	
Asian	7.1%	
Other	18.0%	
Refused/Unknown	7.8%	

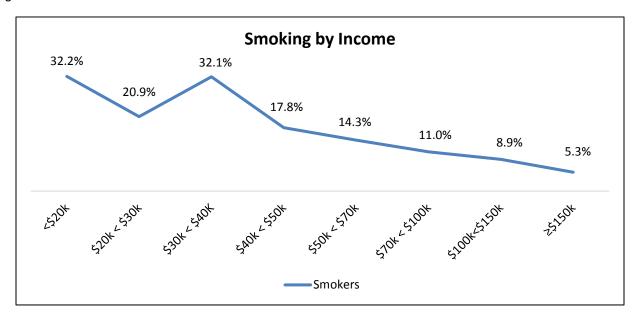
Respondents who described race or ethnicity as Other or Black smoked at the highest rates, 18.0% and 17.1% respectively. These are higher than the smoking percentages noted by Whites, Hispanics, or Asians. The "Other" category includes American Indian, Native Hawaiian, Other Pacific Islander, Multiracial, Unknown, and any survey respondent that did not self-identify with an existing racial or ethnic category.

Figure 3.

Smoking by Education		
Level of Education	Smokers	Nonsmokers
Less than high school diploma or GED	29.1%	70.2%
High school diploma or GED	19.4%	80.3%
Some college	12.3%	87.4%
Associate's degree	15.4%	84.4%
Bachelor's degree	7.0%	92.5%
Graduate degree	3.6%	94.6%

There appears to be an inverse relationship between those who smoke in Virginia and level of education attained; survey participants with higher levels of education were less likely to be smokers.

Figure 4.



Smoking generally decreases as annual income increases. In Virginia, the greatest percentage of smokers earn the least amount of money.

# **Young Adults and Tobacco Use**

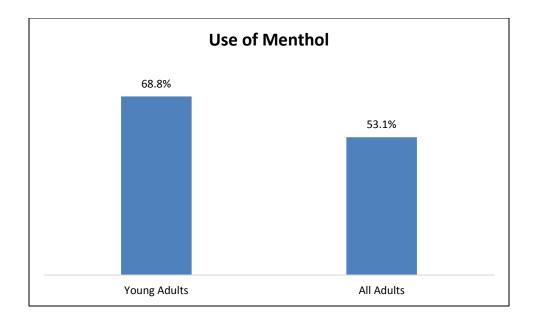
Figure 5.

Tobacco Product Use: Young Adults vs. All Adults		
Product	Young Adults	All Adults
Cigarette	12.9%	13.9%
Water pipe or hookah	35.5%	17.2%
Cigar	36.3%	38.0%
Smokeless product (chew, dip or snuff)	20.2%	21.4%

Young adults (18-25) presented some differences in their reported tobacco habits. Compared to all adults, they are significantly more likely to use a water pipe or hookah, but less likely to use cigarettes, cigars, or smokeless products.

# **Use of Menthol**

Figure 6.



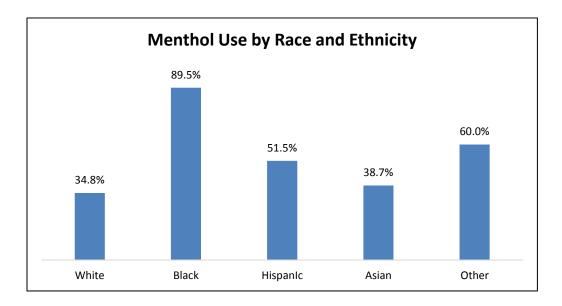
Menthol in cigarettes lets harmful chemicals be absorbed more easily in the body, likely because the menthol makes it easier to inhale smoke.<sup>2</sup>

Approximately one-fourth of all cigarettes sold in the United States are menthol. Research suggests that menthol cigarettes may have a greater impact on initiation rates than non-menthol cigarettes. The impact of menthol cigarettes on dependence, cessation, and health risks has been the topic of scientific inquiry and intense debate.<sup>3</sup> Young adults report using menthol at 68.8% versus 53.1% in the general population. VATS indicated that 51.5% of smokers had smoked menthol cigarettes in the last 30 days.

<sup>&</sup>lt;sup>2</sup> https://www.cdc.gov/tobacco/disparities/african-americans/index.htm

<sup>&</sup>lt;sup>3</sup> https://www.fda.gov/downloads/ucm361598.pdf

Figure 7.



Menthol use by race is a particular concern. Of those who report smoking cigarettes on the VATS, the Black population self-reports as high users of menthol products. According to the Centers for Disease Control and Prevention (CDC), nationally, 88.5% of Black smokers prefer menthol cigarettes.

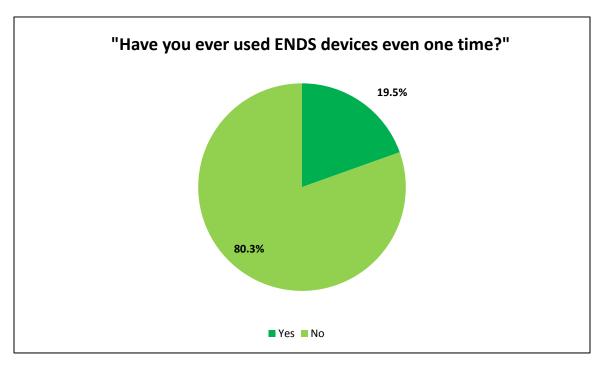
# **Electronic Nicotine Delivery Systems (ENDS)**

ENDS are products that typically deliver nicotine and usually contain flavorings. ENDS come in different forms, such as e-cigarettes, e-pens, tanks (larger ENDS systems) and mods (i.e., modified by the user). ENDS' primary function is to deliver nicotine. "Almost all ENDS contain nicotine, including many that claim they are nicotine free". Though commonly thought to produce a water vapor, ENDS produce an aerosol that may contain nicotine, propylene glycol, glycerin, and flavorings. ENDS also contain additional chemicals that are harmful or may be harmful such as volatile organic compounds, metals, and nitrosamines.

<sup>&</sup>lt;sup>4</sup> http://www.lung.org/stop-smoking/smoking-facts/myths-and-facts-about-e-cigs.html

<sup>5</sup> https://www.cdc.gov/reproductivehealth/maternalinfanthealth/tobaccousepregnancy/healthcare-providers-end-systems-pregnancy.htm

Figure 8.



Of all respondents, 19.5% have used an ENDS product at least once in their life. However, 35.4% of young adults report using ENDS at least once in their life.

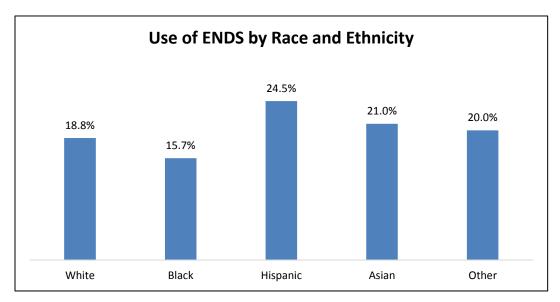
Figure 9.

ENDS Use: All Adults vs. Young Adults			
ENDS Use Young Adults All Adults			
Used ENDS	35.4%	19.5%	
Used flavored ENDS	94.6%	84.4%	

Young adults in Virginia use ENDS almost twice as often as all adults surveyed. Use of flavored ENDS is high, with many ENDS flavors appealing to a young population. Research suggests that flavors could be especially enticing to young people, at onset, and with continued use.<sup>6</sup>

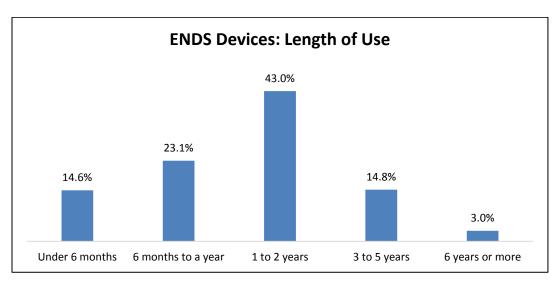
<sup>&</sup>lt;sup>6</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5121224/

Figure 10.



ENDS experimentation is most common among current cigarette smokers and young adults, daily use is highest among former smokers who quit in the past year and older adults. Compared to daily cigarette smokers, smokers who recently quit were more than four times as likely to be daily users of ENDS.<sup>7</sup>

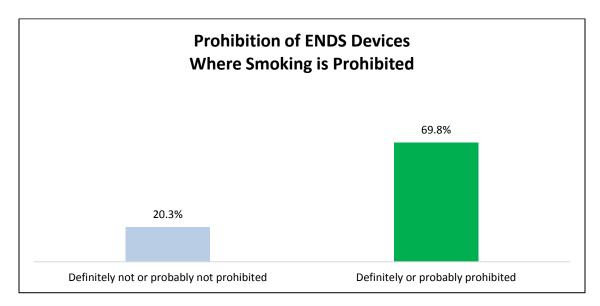
Figure 11.



ENDS have been available in different forms for more than a decade though their popularity has greatly increased in recent years. As evidenced here, 43% of users started in the last 1 to 2 years.

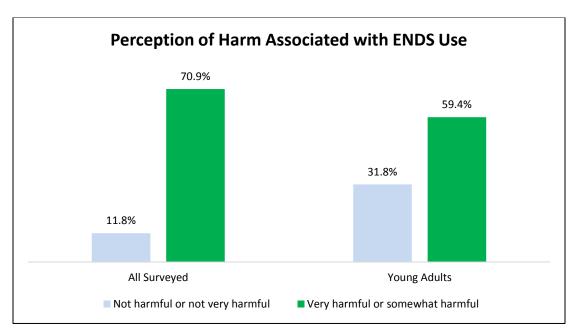
<sup>&</sup>lt;sup>7</sup> https://academic.oup.com/ntr/article-abstract/18/5/715/2511612

Figure 12.



Of all surveyed, 69.8% believe ENDS should definitely or probably be prohibited where smoking is prohibited. A number of states as well as the National Park Service already restrict the use of ENDS in public.<sup>8,9</sup>

Figure 13.

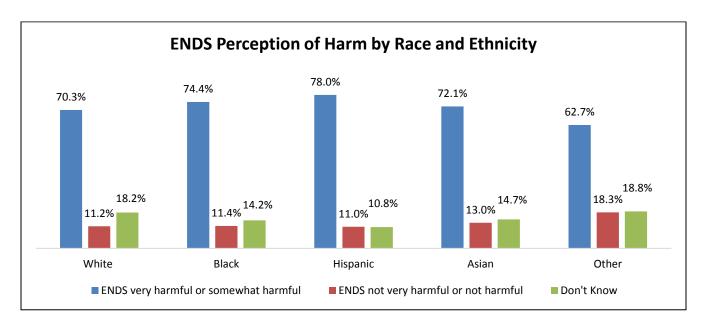


Of all VATS respondents, 70.9% believe ENDS are somewhat harmful or very harmful. However, only 59.4% of young adults agree that ENDS are somewhat or very harmful.

 $<sup>^{8}\</sup> http://www.publichealthlawcenter.org/resources/us-e-cigarette-regulations-50-state-review$ 

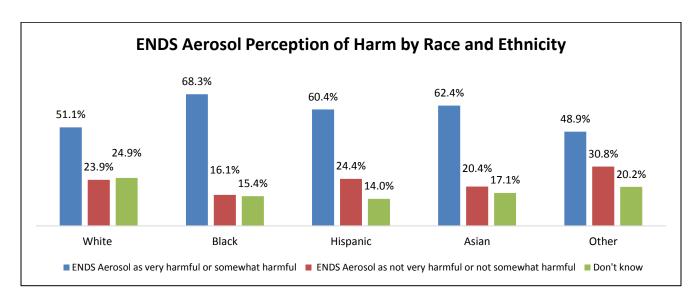
 $<sup>^9\,</sup>https://www.usnews.com/news/articles/2015/09/14/national-park-service-bans-e-cigarette-use-where-smoking-prohibited$ 

Figure 14.



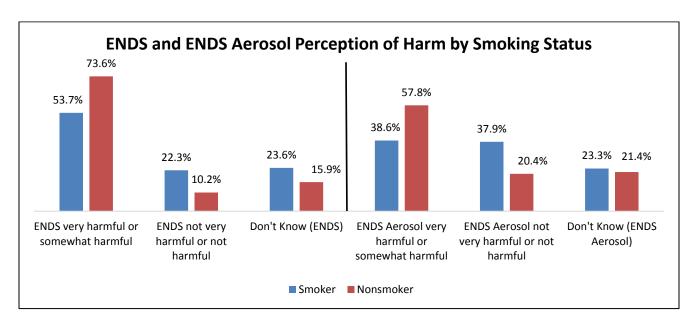
It appears the Black and Hispanic populations have the highest responses for considering ENDS very harmful or somewhat harmful. However, all racial and ethnic populations perceive ENDS to be harmful.

Figure 15.



Blacks, Hispanics, and Asians appear to have the most concern regarding secondhand aerosol exhalation from ENDS products.

Figure 16.



When examining ENDS perception of harm and perception of harm of aerosol by smoking status, nonsmokers indicated a greater perception of harm associated with ENDS use and the aerosol produced by ENDS use than smokers.

# **Smoking and Perception of Health**

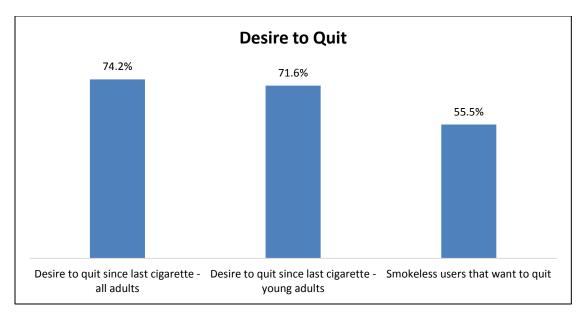
Figure 17.

Smoking Status and Perception of Health			
Perception of Health	Smokers	Nonsmokers	
Excellent	27.8%	71.1%	
Very Good	35.4%	64.4%	
Good	44.4%	54.8%	
Fair	58.0%	41.9%	
Poor	58.6%	41.3%	

Smokers were more likely to perceive their health as poor than nonsmokers. Only 27.8% of smokers perceive their health to be excellent compared to 71.1% of nonsmokers. The lower health perception of nonsmokers likely contributes to the desire to quit smoking.

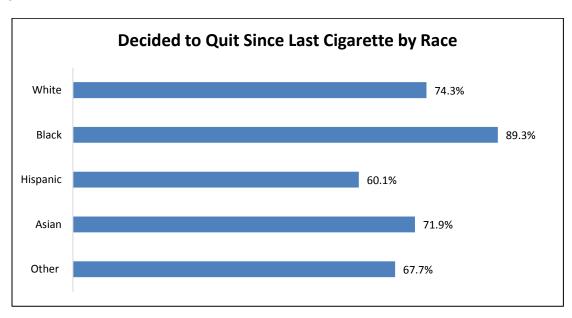
# Intention or Desire to Quit

Figure 18.



VATS found 74.2% of all smokers indicate a desire to quit since their last cigarette. Of the young adult smoking population, 71.6% indicate a desire to quit since their last cigarette. Of smokeless users, 55.5% indicated they want to quit.

Figure 19.



Despite reductions in smoking prevalence since the first U.S. Surgeon General's report on the consequences of smoking in 1964, smoking remains the leading cause of preventable death in the United States. More than 43 million Americans and 1,000,800 Virginians

continue to use tobacco.<sup>10</sup> In Virginia, 10,300 adults die each year from smoking.<sup>11</sup> Smoking is a major risk factor for the four leading causes of death: heart disease, cancer, stroke, and chronic obstructive pulmonary disease. Numerous studies have demonstrated quitting tobacco improves health and quality of life.

Among smokers in Virginia, 89.3% of Black smokers, 74.3% of White smokers, 71.9% of Asian smokers and 60.1% of Hispanic smokers had decided to quit since their last cigarette. The desire to quit is strongly expressed by the majority of all smokers, though the inability to do so successfully demonstrates the strength of nicotine addiction.

# **Opinions and Attitudes Related to Tobacco**

Secondhand smoke is smoke from burning tobacco products such as cigarettes, cigars, or pipes, as well as smoke exhaled by the person smoking. Tobacco smoke contains more than 7,000 chemicals, including hundreds that are toxic and about 70 that can cause cancer. Decades of research has determined there is no safe level of exposure to secondhand smoke including in outdoor settings.

The CDC encourages all states to establish a comprehensive clean indoor air act to prohibit smoking in indoor workplaces. Currently, 27 states and the District of Columbia (DC) have instituted comprehensive clean indoor air laws ensuring restaurants, bars, and other workplaces are 100% smokefree. Ten states are 100% smokefree in one or two places, (either restaurants, bars, and/or workplaces). Virginia is one of 13 states that are not 100% smokefree in restaurants, bars, or workplaces. In Virginia, smoking is allowed in most workplaces and designated areas of restaurants.<sup>13</sup>

As of now, 12 states and DC have updated clean indoor air legislation to also prohibit ENDS use in smokefree venues. 14 Virginia does not regulate ENDS use in public places though the Code of Virginia does require each school board to develop and implement a policy to prohibit the use of electronic cigarettes on school buses, on school property, and at school-sponsored events. 15,16

VATS asked participants about their opinions to determine support of smoking and tobacco bans in Virginia.

<sup>10</sup> https://www.tobaccofreekids.org/assets/factsheets/0246.pdf

<sup>11</sup> IBID

<sup>&</sup>lt;sup>12</sup> https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/secondhand\_smoke/general\_facts/index.htm

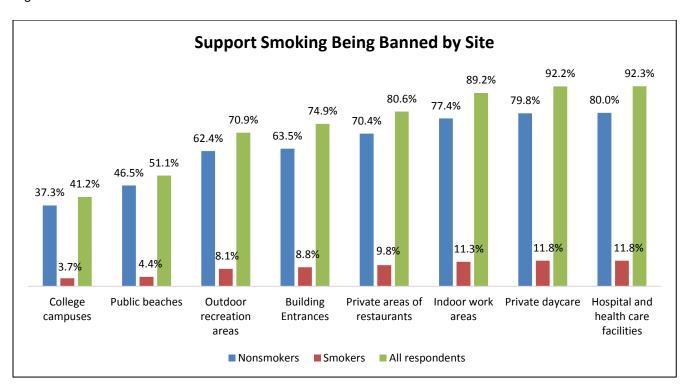
<sup>&</sup>lt;sup>13</sup> https://www.cdc.gov/statesystem/smokefreeindoorair.html

 $<sup>^{14}\,</sup>http://no\text{-smoke.org/wp-content/uploads/pdf/ecigslaws.pdf}$ 

<sup>&</sup>lt;sup>15</sup> https://law.lis.virginia.gov/vacode/title22.1/chapter7/section22.1-79.5

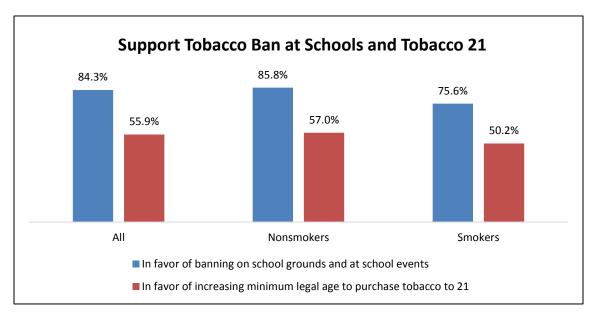
<sup>&</sup>lt;sup>16</sup> https://law.lis.virginia.gov/vacode/title22.1/chapter14/section22.1-279.6

Figure 20.



Most Virginians are in favor of banning smoking at outdoor recreation areas, building entrances, private areas of restaurants, and in private daycares. Further, most Virginians support a ban on smoking at work with 83.5% indicating they currently are not allowed to smoke in indoor areas of the workplace.

Figure 21.



Of those surveyed, 84.3% are in favor of tobacco being completely banned on school grounds including fields and parking lots and at all school events, even for teachers and other adults. Tobacco 21 is a national campaign seeking to raise the minimum legal age to purchase tobacco and nicotine products to 21; 55.9% of respondents would support raising the age of sale from 18 to 21.

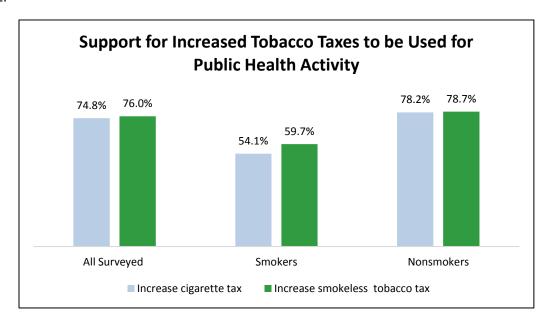
## **Tobacco Taxation and Licensure**

Currently, Virginia has the second lowest tobacco tax in the United States and is one of twelve states that do not require a license to sell tobacco.<sup>17</sup> Numerous economic studies in peer-reviewed journals have documented cigarette taxes or price increases reduce both adult and underage smoking. The consensus, nationally, is that every 10% increase in the real price of cigarettes reduces adult smoking by approximately 2.0%, smoking among young adults by 3.5%, the number of minors who smoke by at least 6.0%, and overall cigarette consumption by at least 3.0%.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> https://www.law.umaryland.edu/programs/publichealth/documents/Tobacco\_50\_State\_Survey.pdf

<sup>18</sup> https://www.tobaccofreekids.org/assets/factsheets/0146.pdf

Figure 22.



Of all respondents, 74.8% would accept increased cigarette taxes to benefit public health activities. Similarly, 76.0% would support a raise on smokeless tobacco taxes for the purpose of public health activities. Not surprisingly, more nonsmokers are in favor of increased cigarette taxes than smokers.

In the young adult population, 80.0% are in favor of a tax increase on smokeless tobacco products and 79.1% are in favor of a tax increase on cigarettes.

Figure 23.

Support for Increased Tobacco Taxes by Region		
Region	In favor of increasing cigarette tax	In favor of increasing smokeless tobacco tax
Northwest	73.3%	77.3%
Northern	81.0%	81.1%
Southwest	71.0%	68.3%
Central	70.7%	71.5%
Eastern	73.8%	74.9%

Support of these tax increases is present throughout the Commonwealth.

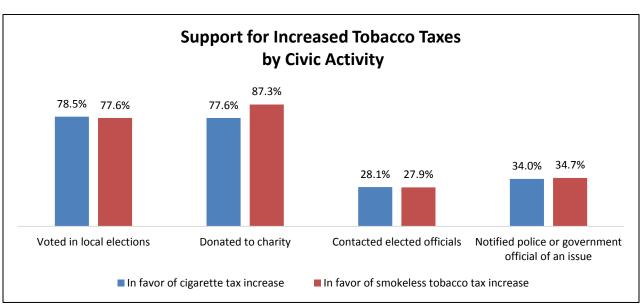
# **Civic Activity**

Figure 24.

Civic Activity		
Within the last three years	All Respondents	
Voted in a local election	77.5%	
Donated to charity	86.5%	
Contacted an elected official	29.9%	
Notified police or government agency on an issue	35.6%	

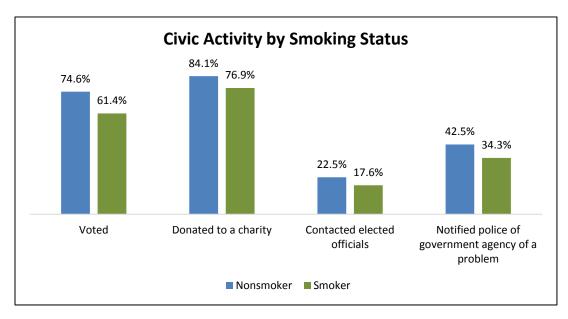
The VATS accessed participation in civic behaviors within three years of participation in the survey. A majority of those participating in the survey voted in local elections and donated to charity.

Figure 25.



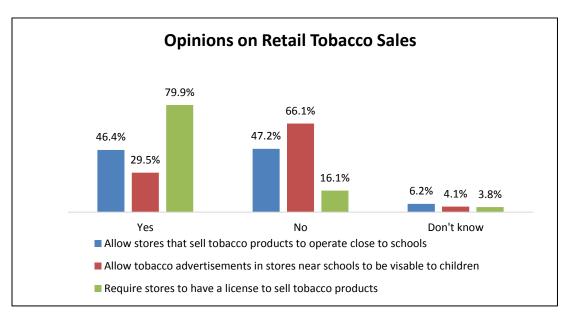
Those in favor of these tobacco tax increases are more likely to vote and donate to charity.

Figure 26.



In Virginia, nonsmokers appear to have greater civic activity when compared to smokers.

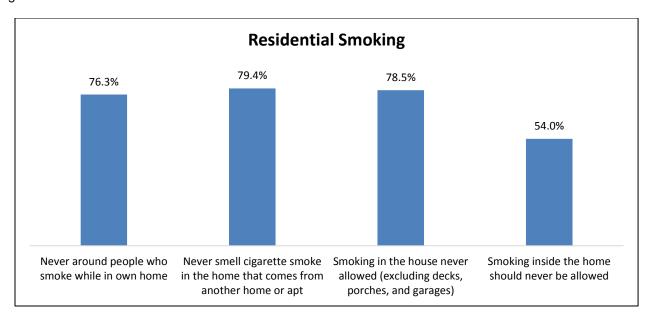
Figure 27.



Opinions regarding the sale of tobacco products, licensure, and advertisement near schools were assessed. This data indicates support for retail licensing for stores that sell tobacco. Most respondents also agree that stores located near schools should not have tobacco advertisements visible to children.

# **Residential Smoking**

Figure 28.



Of those surveyed, 76.3% are not around others that are smoking in their own home and 79.4% never smell cigarette smoke in their home that comes from another home or apartment. Smoking is never allowed in the homes of 78.5% of the VATS respondents.

# **Survey Limitations**

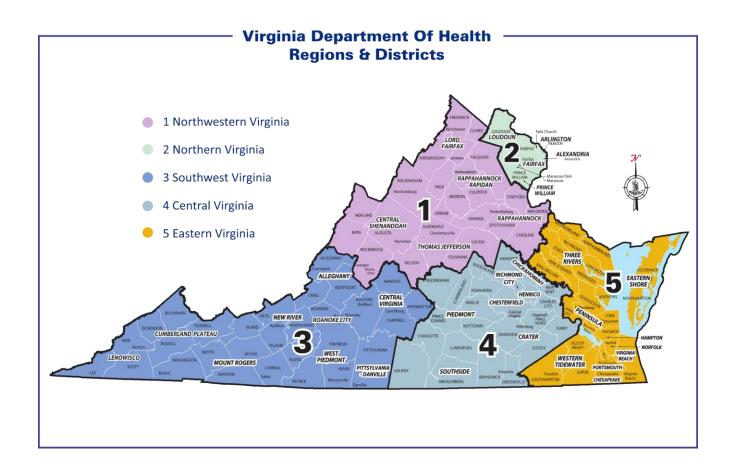
This is the first iteration of VATS. The data reported are subject to responder-bias based on self-reported behaviors. This survey detects general trends and uncovers points of interest for further study in the adult non-institutionalized population in Virginia.

## Conclusion

VATS demonstrates that Virginians are concerned about the effects of tobacco and secondhand smoke, and support policy changes to promote cessation and prevention of tobacco use. TCP staff will be able to use this data to fine-tune efforts within communities across the Commonwealth. External stakeholders will be able to use data products from this survey for education and legislative advocacy on a variety of issues surrounding tobacco use and prevention.

VATS will determine and champion those evidence-based practices and activities that are most promising and successful. The baseline results will support TCP goals and the five-year strategic plan of the Tobacco Free Alliance of Virginia. In 2019, a second iteration of VATS

will be conducted. With the help of its partners, TCP will continue to monitor tobacco use and opinions to inform and shape the direction of tobacco control in Virginia.		



#### **General Health**

1. Would you say that in general your health is (Excellent, Very Good, Good, Fair, Poor)?

## **Tobacco Use/Cigarette Smoking**

- 2. Have you smoked at least 100 cigarettes in your entire life?
- 3. Do you now smoke cigarettes everyday, some days, or not at all?
- 4. On the average, about how many cigarettes a day do you now smoke?
- 5. Have you ever tried cigarette smoking, even one or two puffs?
- 6. How old were you when you smoked a whole cigarette for the first time?
- 7. Was the last time you smoked a cigarette, even one or two puffs...?
- 8. Since the last time you smoked a cigarette, have you decided that you are going to stop smoking cigarettes completely?
- 9. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke cigarettes?
- 10. On the average, on days when you smoked during the past 30 days, that is, since [DATE FILL], about how many cigarettes did you smoke a day?
- 11. During the past 30 days, that is, since [DATE FILL], were the cigarettes that you usually smoked menthol?
- 12. The last time you bought cigarettes for yourself, did you buy them by the pack or by the carton?
- 13. The last time you bought cigarettes, did you take advantage of coupons, rebates, buy 1 get 1 free, 2 for 1, or any other special promotions for cigarettes?
- 14. Do you want to quit smoking cigarettes for good?

#### Cessation

15. During the past 12 months, that is, since [DATE FILL], how many times have you stopped smoking for one day or longer because you were trying to quit smoking cigarettes for good?

#### Other Tobacco Use

- 16. Have you ever tried chewing tobacco, snuff, or dip, such as Skoal, Copenhagen, Grizzly, Levi Garrett, Red Man, or Day's Work, even just one time in your entire life?
- 17. During the past 30 days that is since [DATE FILL], on how many days did you use chewing tobacco, snuff or dip?
- 18. During the past 30 days, that is, since [DATE FILL], was any of the chewing tobacco or dip that you use flavored to taste like mint, wintermint, menthol, spice, alcohol, candy, fruit, or other sweets?
- 19. During the past 12 months, have you stopped using chewing tobacco for one day or longer because you were trying to guit chewing tobacco?
- 20. Do you want to quit using chewing tobacco for good?
- 21. Have you ever tried snus, even just one time in your entire life?
- 22. During the past 30 days, that is, since [DATE FILL], on how many days did you use snus?

- 23. During the past 30 days, that is, since [DATE FILL], was any of the snus that you use flavored to taste like mint, wintermint, menthol, spice, alcohol, candy, fruit, or other sweets?
- 24. During the past 12 months, have you stopped using snus for one day or longer because you were trying to quit using snus?
- 25. Do you want to quit using for good?
- 26. Have you ever used chewing tobacco, snuff, dip, or snus instead of smoking a cigarette or other tobacco product because you were in a place where smoking was not allowed?
- 27. Have you ever tried smoking cigars, cigarillos, or very small cigars that look like cigarettes in your entire life, even one or two puffs?
- 28. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke cigars, cigarillos, or very small cigars that look like cigarettes?
- 29. Were any of the cigars, cigarillos, or very small cigars that look like cigarettes that you smoked in the past 30 days flavored to taste like candy, fruit, chocolate, or other sweets?
- 30. Have you ever smoked tobacco in a regular pipe in your entire life, even one or two puffs?
- 31. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke tobacco in a regular pipe?
- 32. Have you ever smoked tobacco in a hookah or other water pipe in your entire life, even one or two puffs?
- 33. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke tobacco in a hookah or other water pipe?
- 34. Have you EVER used e-cigarettes or other electronic vapor devices EVEN ONE TIME?
- 35. Do you now use e-cigarettes or other electronic vapor devices everyday, some days or not at all?
- 36. How long have you been using e-cigarettes or other electronic vapor devices?
- 37. Are the electronic cigarettes or vapor devices you use flavored to taste like menthol, mint, clove, spice, fruit, alcohol, candy, chocolate, or other sweet flavor?
- 38. Do you think breathing vapor from other people's e-cigarettes or other vaping devices is ...?
- 39. Do you think smoking e-cigarettes or other vapor devices is ...?
- 40. Should using electronic cigarettes and other vapor devices be prohibited in the same places smoking is prohibited?

#### In the Home and Workplace

- 41. Which of the following best describes where you live?
- 42. When you are at home, how often are you around other people when they are smoking?
- 43. Not counting decks, porches, or garages, during the past 7 days, that is, since last [TODAY'S DAY OF WEEK], on how many days did someone other than you smoke tobacco inside your home while you were at home?
- 44. How often do you smell cigarette smoke in your home that comes from another home or apartment?
- 45. Not counting decks, porches, or garages, inside your home, is smoking (allowed, not allowed)?
- 46. In your opinion, inside a home, should smoking be (allowed, not allowed)?
- 47. Are you currently working for pay or are you self-employed, either part-time or full-time?
- 48. Do you currently have one job or more than one job?
- 49. Most of the time do you work.... (outdoors, indoors)?

- 50. During the past seven days, on how many days did you breathe the smoke at your workplace from someone other than you who was smoking?
- 51. At your workplace, is smoking in indoor areas (allowed, not allowed)?

## **Opinions and Attitudes Related to Tobacco**

- 52. Should smoking be prohibited in all outdoor areas on college and university campuses?
- 53. Should smoking be prohibited in all public parks?
- 54. Should smoking be prohibited in recreational areas, such as basketball courts and baseball fields?
- 55. Should smoking be prohibited in all restaurants, including those areas used for private functions?
- 56. Should smoking be prohibited on all public beaches?
- 57. Should smoking be prohibited inside of apartments, condominiums and other multiunit housing?
- 58. Should smoking be prohibited in all indoor workplaces, including offices?
- 59. Should smoking be prohibited in front of the entrances to buildings?
- 60. Should smoking be prohibited on porches/balconies & other outdoor areas near apartments, condominiums, or other multiunit housing?
- 61. Should smoking be prohibited in outdoor seating areas of restaurants?
- 62. Should smoking be prohibited in all areas of all hospital and health care facilities, including nursing homes?
- 63. Should smoking be prohibited in all private day care facilities, including home-based day care facilities that are also used for residential purposes?
- 64. Would you be in favor of an increase in the tax on a pack of cigarettes if the money were used to improve the public's health?
- 65. Would you be in favor of an increase in the tax on chewing tobacco, snuff, dip, or snus if the money were used to improve the public's health?
- 66. Should stores that sell tobacco products be allowed to operate in areas that are close to schools?
- 67. Should stores that are located near schools be allowed to have advertisements for tobacco products that are visible to children?
- 68. Should stores that sell tobacco products be required to have a license in order to sell tobacco products?

#### Youth Issues

- 69. Should tobacco use be completely banned on school grounds, including fields and parking lots, and at all school events, even for teachers and other adults?
- 70. Do you favor or oppose raising the legal minimum age to purchase all tobacco products from 18 to 21?

#### **Demographic Items**

- 71. In the last three years have you personally voted in local elections?
- 72. In the last three years have you personally contacted your elected officials?
- 73. In the last three years have you personally notified the police or other government agency about a problem?

- 74. In the last three years have you personally made a donation of money or goods to charity?
- 75. Are you now (marital status)?
- 76. Are you Hispanic or Latino?
- 77. Which one or more of the following describe your Hispanic origin or ancestry?
- 78. Which of the following best represents your race?
- 79. Which one or more of the following describe your Asian ancestry?
- 80. What is the highest level of school you have completed or the highest degree you have received?
- 81. What is your age?
- 82. Are you male or female?
- 83. Is your annual household income from all sources less than \$150,000?
- 84. In what county or independent city do you live in?

#### **Cell Phone Use**

- 85. Do you have more than one landline telephone number in your household?
- 86. How many of these are residential numbers?
- 87. As far as you know, is the number I dialed listed or unlisted?
- 88. Is the number not in the phone book because you chose to have an unlisted number, or because you got this number after the current phone book came out?
- 89. As far as you know, is the landline or regular phone for your household listed or unlisted?
- 90. Are you speaking to me on a cellular phone or on a regular, landline phone located in your home?
- 91. Are you in a position to answer some questions without distraction or in conditions that are comfortable to you?
- 92. Do you also have a cell phone for your personal use?
- 93. Do you also have a regular telephone at home?

## Appendix C – Survey Methodology

The Virginia Adult Tobacco Survey is a random digit dialed survey targeting all noninstitutionalized Virginians. Both landline and cell phone users were contacted to attain 3,175 responses throughout the five health regions of the Commonwealth of Virginia. Survey participants were 48.5% male and 51.2% female with an age range of 18-94. The proc surveyfreq procedure (SAS 9.4) was used to analyze this data. Responses with cell counts under 20 were suppressed. All weighted percentages were truncated following the first decimal.

This weighted survey allows a finite sample to be used to represent the opinions and behaviors of the population of the Commonwealth of Virginia. The use of skip patterns created a smaller pool of responses for some questions. Omissions of refused or 'don't know' responses decrease totals of some data from 100%.

## **Survey Responses by Region**

Region	Number of Responses	Percentage of Responses
Northwest	758	23.9%
Northern	555	17.5%
Southwest	714	22.5%
Central	597	18.8%
Eastern	551	17.4%

A total of 3.5% of all participants identified themselves as Hispanic, while 70.0% identified as White (Non-Hispanic), 17.9% identified as Black (Non-Hispanic) and 2.5% identified as Asian (Non-Hispanic). The "Other" category includes American Indian, Native Hawaiian, Other Pacific Islander, Multiracial, Unknown, and any survey respondent that did not self-identify with an existing racial or ethnic category. Refused or 'don't know' responses were excluded unless otherwise noted.

VDH contracted with the University of Virginia (UVA) Center for Survey Research to conduct the data collection. The VDH and UVA institutional review boards approved the research protocol.

All charts and graphs are from the Virginia Adult Tobacco Survey 2016-2017. Please cite Virginia Adult Tobacco Survey data in publications.

The CDC provided technical assistance and funding for this survey. Core and supplemental questions developed by the CDC, VDH, and an external stakeholder workgroup were used to gather Virginia specific information regarding tobacco products and issues.

Virginia offers QUIT NOW VIRGINIA, a free tobacco cessation counseling service to individuals age 13 and over. Quit Coaches help to develop a quit plan and offer self-help materials based on the individual's needs. QUIT NOW VIRGINIA is available 24/7 and offers specialized services for youth, the uninsured, pregnant women, and other special populations. Spanish-speaking Quit Coaches and interpretation services for over 140 languages are available.

This service is available at 1-800 QUITNOW (1-800-784-8669)



www.QuitNow.net/Virginia