

2016 Vermont Adult Tobacco Survey Report

Vermont Department of Health Division of Health Surveillance October 2017

Table of Contents

I.	Executive Summary4
II.	Chapter 1: Survey Background & Methodology6
	Survey Background
	Survey Methodology
III.	Chapter 2: Tobacco Use in Vermont10
	Cigarette Smoking Prevalence in Vermont
	Cigarette Smoking and Healthcare
	Use of Other Tobacco Products
IV.	Chapter 3: Quit Activity among Current &
	Former Smokers
	Former Smokers Quit Activity
	Past Year Smoking and Successful Quitting
	Quit Activity among Current Tobacco Users
V.	Chapter 4: Secondhand Smoke Exposure and
	Smoke-Free Policies32
	Secondhand Smoke Exposure
	Personal Home Smoking Bans
	Perceived Harm
	Support for Smoke-Free Policies
VI.	Chapter 5: Point of Sale and Tobacco Advertising
	Attitudes on Tobacco Advertisements
	Exposure to Tobacco Promotions
	Opinions on Point of Sale Policies
	Flavored Tobacco Product Use
VII.	Appendix A: Supplemental Tables41
VIII.	Appendix B: Methodology Notes45
IX	Endnotes

List of Tables & Figures

Table 1. Unweighted VIAIS Survey Respondent Demographic Characteristics	8
Figure 1. Smoking Prevalence among Vermont Adults	11
Figure 2. Smoking Prevalence by Insurance Type	11
Figure 3. Health Insurance & Self-Reported Health Status by Smoking Status	12
Figure 4. Other Tobacco Product (OTP) Use Overall & by Smoking Status	13
Table 2. Percent of Other Tobacco Product Use, by Demographic Characteristics	14
Figure 5. Perceived Harm of E-Cigarettes, Overall & by Smoking Status	15
Figure 6. Change in Perceived Harm of E-Cigarettes from 2014 to 2016	15
Figure 7. Percent of Tobacco Users Reporting Use of Multiple Tobacco Products, by	
Demographic Sub-Groups	16
Figure 8. Length of Time Since Former Smoker Last Smoked Regularly	17
Figure 9. Cessation Methods Used by Former Smokers (Quit Within Last 5 Yrs) in Recent Q)uit
Attempt	18
Table 3. Quit Ratios by Demographic Sub-Groups	20
Table 4. Past-Year Smoking and Successful Quitters, by Demographic Sub-Groups	22
Figure 10. Number of Past-Year Quit Attempts Among Current Tobacco Users	23
Figure 11. Past-Year Quit Attempts Among Current Tobacco Users (ATS, 2016)	24
Figure 12. Cessation Methods Used by Current Tobacco Users in Recent Quit Attempt	25
Figure 13. Cessation Assistance from Health Care Providers	26
Table 5. Assistance from Health Care Providers, by Demographic Sub-Groups	27
Figure 14. Awareness & Utilization of 802Quits Services Among Current Tobacco Users	28
Table 6. Awareness of 802Quits Services, by Demographic Sub-Groups	29
Figure 15. Reasons for Not Using 802Quits Services	30
Figure 16. Perceived Eligibility for Free/Reduced Cost NRT Among Current Tobacco Users	30
Figure 17. Perceived Eligibility for Free/Reduced Cost NRT Among Tobacco Users, by	
Insurance Type	31
Figure 18. Secondhand Smoke Exposure Among Adults, Stratified by Smoking Status	32
Figure 19. Secondhand Smoke (SHS) Exposure by Demographic Subgroups	33
Figure 20. Location of Secondhand Smoke Exposure, by Smoking Status	34
Figure 21. Rules About Allowing Smoking at Home	34
Figure 22. Personal Home Smoking Bans by Demographic Sub-Group	35
Figure 23. Perceived Harm of Secondhand Smoke Exposure, by Smoking Status	36
Figure 24. Change in Perceived Harm of Secondhand Smoke from 2014 to 2016	36
Figure 25. Smoke-Free Policy Opinions among Adults	37
Figure 26. Percent in Favor of Smoke-Free Policies, by Smoking Status	37
Figure 27. Adult Attitudes on Tobacco Advertising	38

Figure 28. Adult Exposure to Tobacco Promotions	39
Figure 29. Adult Opinions on Point of Sale Policies	40
Figure 30. Percent of Tobacco Product Users Who Report Using a Flavored Product	40
Table A-1. Percent of Tobacco Users Reporting Use of Multiple Tobacco Products, by	
Demographic Sub-Groups	41
Table A-2. Past-Year Quit Attempts Among Current Tobacco Users, by Demographic Sub-	
Groups	42
Table A-3. Secondhand Smoke Exposure (SHS), by Demographic Sub-Groups	43
Table A-4. Personal Home Smoking Bans, by Demographic Sub-Groups	44

For more information on this report, contact:

Erin Singer, PhD, Tobacco Analyst; erin.singer@vermont.gov; 802-865-7783

For more information on Vermont tobacco-related data:

 $\underline{\text{http://www.healthvermont.gov/health-statistics-vital-records/surveillance-reporting-}}\underline{\text{topic/tobacco}}$

For more information on the Vermont Tobacco Control Program:

http://healthvermont.gov/wellness/tobacco

Executive Summary

Vermont Adult Tobacco Survey

The 2016 Vermont Adult Tobacco Survey (VTATS) is a representative, population-based telephone survey that provides data for several key tobacco measures, including non-cigarette tobacco product use, quit activity, secondhand smoke exposure, and policy opinions. The VTATS helps to evaluate the effectiveness of the Vermont Tobacco Control Program's efforts.

Background of Cigarette Use in Vermont

Since 2001, the State of Vermont, the Vermont Tobacco Evaluation and Review Board and tobacco control advocates and community grantees have focused on preventing and reducing smoking and use of other tobacco products (OTP) in Vermont. As a success, a little over half of Vermont adults have never smoked. An additional 27% of Vermont adults formerly smoked and have since quit, and 18% currently smoke cigarettes (BRFSS, 2016). There are significant disparities in who is currently smoking. Adult smokers in Vermont are significantly more likely to be young (25-44), male, identify as a racial or ethnic minority, have less education, and lower annual household incomes (BRFSS, 2016).

Other Tobacco Product Use in Vermont

Other tobacco products (OTP), such as cigar products, smokeless tobacco, and electronic cigarettes, are rapidly evolving and are important to consider in addition to cigarette smoking prevalence. While 11% of Vermont adults currently use an OTP, use is significantly higher among smokers than non-smokers. In fact, 22% of those that use any tobacco product, including cigarettes, report currently using more than one product. Young adults (18-24 years old) are almost three times as likely to use multiple tobacco products compared to adults 45-64 years old.

Quit Activity among Current and Former Smokers

A priority of the VTCP is to assist Vermonters with quitting tobacco use. Over half of the former smokers in Vermont quit more than ten years ago. The one quarter of former smokers that quit smoking within the last five years report using an average of two cessation methods, with some using as many as six methods. Three-quarters report quitting on their own as at least one of their cessation methods.

Forty-three percent of current tobacco users made at least one attempt to quit in the last year. Current tobacco users report utilizing similar cessation methods as former smokers: a majority quit on their own. Despite VTCP media efforts to increase awareness of free quit resources available to all Vermonters, almost three-quarters of all current tobacco users don't know or incorrectly believe that they are ineligible for free or reduced cost NRT. Few current tobacco users report utilizing a smoking cessation service, such as group classes or the Quitline. In fact,

while about half of current tobacco users have heard of the Quitline and about one-third have heard of Quit Online and Quit Partners, less than 10% of those that made a quit attempt in the last year utilized 802Quits services in their most recent quit attempt. The most common reasons for not using these services was that they wanted to quit on their own or did not think that this type of program was what they needed to quit.

Secondhand Smoke Exposure and Smoke-Free Policies

Another one of the primary goals of the tobacco program is to eliminate exposure to secondhand smoke. Half of Vermont adults report exposure to secondhand smoke in the past seven days in their home, a vehicle, or a public place. In comparison to white, non-Hispanic adults, racial and ethnic minorities are significantly more likely to report secondhand smoke exposure (71% versus 49%). Consistent with smoking prevalence, secondhand smoke exposure decreases as age, education, and income increase. A majority of Vermont adults are in favor of secondhand smoke policies that ban smoking in multi-unit housing, entryways, and public outdoor areas. The most supported policy is to ban smoking in entryways. While a majority of adults do not allow smoking in their home, banning smoking in multi-unit housing is the least supported policy.

Point-of-Sale and Tobacco Advertising

The VTCP prioritizes its policy efforts to reduce the impact of industry tactics in promoting tobacco that occurs in hundreds of retail locations across the state. A majority of Vermont adults agree that tobacco advertising encourages young people to smoke and targets certain groups, such as those living on a low income and racial/ethnic minorities. While two-thirds believe that advertisements should be banned from the outside of stores, only about one-third or less actually notice tobacco advertisements in stores. There is varying level of support for point-of-sale policies. The most supported policy is banning the sale of tobacco products near schools and the least supported is limiting the number of stores that sell tobacco products in their community. Offering flavored tobacco products is another form of the tobacco industry's marketing and promotion strategies. About one-third of Vermont adult tobacco users report the use of a flavored product. Those that use e-cigarettes and smokeless tobacco have the highest rates of flavored tobacco product use.

The 2016 VTATS provides valuable data to evaluate the efforts of the VTCP in addressing tobacco use and prevention in the state. Notably, over half of former smokers in Vermont quit more than a decade ago. We find significant disparities in the 18% of Vermonters who continue to smoke, especially based on income and education. Furthermore, less than half of current smokers have made a quit attempt in the last year, and a majority of those that did make a quit attempt did so without the help of 802Quits services. While this provides some indication of successes and challenges, trend data (available in a future supplemental report) will provide the best indication of progress made and next steps for the VTCP initiatives.

Chapter 1: Survey Background & Methodology

This report contains results from the 2016 Vermont Adult Tobacco Survey (VTATS). This chapter first provides survey background information and a brief overview of the Vermont Tobacco Control Program (VTCP). Survey methodology is then discussed, including unweighted demographic characteristics of survey respondents. Appendix A provides supplemental tables and Appendix B includes additional methodology notes. The survey questionnaire is published independently and is available upon request.

Survey Background

The VTATS is a population-based telephone survey of non-institutionalized Vermont adults (18 years old and older). The survey began in 2001 and was conducted annually until 2008, at which point it was conducted biannually in even years (2010, 2012, 2014, and 2016). The 2016 Vermont Adult Tobacco Survey (VTATS) was conducted from September to November. The VTATS provides outcome data on several key tobacco measures for Vermont's adult population, as well as information on cessation activity among current tobacco users and former smokers, secondhand smoke exposure, and opinions on tobacco-related policies.

The VTATS is used to help evaluate the effectiveness of the Vermont Tobacco Control Program's (VTCP) efforts to reduce tobacco use and increase awareness and knowledge of tobacco-related issues among Vermont adults. The statewide tobacco control program includes the five components recommended by the Centers for Disease Control and Prevention (CDC) for eliminating tobacco use, including: state and community interventions, health communications interventions, cessation interventions, surveillance and evaluation, and administration and management. Since 2001, the VTCP has implemented best practice population-based policy, health systems, treatment, and environmental approaches to address tobacco prevention and control.

The 2015-2020 Vermont Tobacco Control State Plan, created in collaboration with stakeholders throughout Vermont, identifies five major goals that direct current tobacco prevention and control efforts. These include:

- 1. Prevent initiation of tobacco use among youth.
- 2. Reduce cigarette smoking and tobacco use among youth.
- 3. Reduce cigarette smoking and tobacco use among adults.
- 4. Reduce prevalence of other tobacco product use.
- 5. Reduce exposure to secondhand smoke.

To further reduce tobacco use in the state, the VTCP tailors strategies to reach priority populations that experience the greatest burden of tobacco use. These populations include adults who are Medicaid-insured and those with mental health and substance abuse conditions. Throughout this report, we look at outcome measures by several demographic factors to examine the disparate burden among different sub-groups of the population and assess the VTCP's efforts towards reducing these disparities.

Survey Methodology

The 2016 VTATS was administered from September 15, 2016 to November 22, 2016. Data was collected via a random-digit-dialed telephone survey on both landline and cellular telephones. Landline interviews were conducted with randomly-selected adults in telephone-equipped households in Vermont. Cellular telephone interviews were conducted with Vermont adults regardless of whether they also had a landline. The sample included about 2,000 respondents, half of which were current smokers or those who quit within the last five years, and the other half of which were those that never smoked or those that quit more than five years ago. The survey took an average of 15 minutes to complete.

Table 1 provides unweighted demographic characteristics of survey respondents (n=2,019). About half of the respondents identified as male and half as female. A small percentage of respondents were young adults (age 18-24), racial/ethnic minorities, had less than a high school education, or did not have health insurance. The sample was evenly distributed in terms of smoking status: 36% identified as current smokers, 30% as former smokers, and 34% of never smokers.

Table 1. Unweighted VTATS Survey Respondent Demographic Characteristics (N=2,019)

	Unweighted %	Sample Size (n)
Gender		
Male	50.1	1011
Female	49.9	1008
Age		
18-24	9.1	180
25-44	31.0	613
45-64	36.5	721
65+	23.4	462
Race/Ethnicity		
White, non-Hispanic	92.1	1814
Racial/Ethnic Minority	7.9	156
Education		
< High School	5.4	109
High School/GED	31.3	629
Some College	25.1	505
College or More	38.1	766
Income		
< \$25,000	26.4	441
\$25,000 - < \$50,000	27.1	453
\$50,000 - < \$75,000	17.0	284
\$75,000 +	29.5	492
Federal Poverty Level		
< 250% FPL	44.1	731
≥ 250% FPL	55.9	927
Health Insurance		
Private	46.2	919
Medicare	23.5	467
Medicaid	18.6	371
Other	6.1	121
None	5.7	113
Cigarette Smoking Status		
Current Every Day	26.5	530
Current Some Days	9.4	187
Former ≤ 1 year	6.1	122
Former $2-5$ years	7.4	147
Former > 5 years	16.6	331
Never	34.2	683

The VTATS methodology and questionnaire are based on the National Adult Tobacco Survey (NATS), designed by the U.S. Centers for Disease Control and Prevention (CDC). However, the VTATS is not part of the national survey and data should not be directly compared to that from other states due to minor methodological differences. The 2016 VTATS questionnaire was based

on past VTATS questionnaires. Several questions were removed in order to shorten the survey. The questionnaire was divided into the following sections:

- Introduction and screening
- General health
- Smoking status
- Tobacco use practices: current tobacco users
- Cigarette smoking practices: former smokers
- Health care visits in the last 12 months
- Risk perception, secondhand smoke exposure, policy opinions, and tobacco advertising exposure
- Demographics
- Closing

The Council of American Survey Research Organizations (CASRO) response rates for the 2016 VTATS were 41% and 27% for landline and cell phone respondents, respectively. Compared to 2014, this was an increase for landline respondents from 30% and a similar rate for cell phone respondents (27%).

All data were processed and weighted by a contracted vendor. Data are weighted by age, gender, county, household composition, telephone type, and smoking status in order to compensate for differences between the sample and the overall Vermont adult population. The weighting procedure ensured that the sample was representative of this population and permitted us to draw inferences about the whole Vermont adult population based on the results of this survey. Statistical differences between proportions were considered statistically significant when 95% confidence intervals did not overlap. All analyses were conducted using SAS 9.3.

The remainder of this report provides results from the 2016 VTATS. Trend data will be available in a supplemental report at a later date.

Chapter 2: Tobacco Use in Vermont

This chapter examines tobacco use by adults in Vermont, beginning with cigarette smoking. Information on other tobacco products and use of multiple tobacco products is also presented in this chapter. There are several terms used throughout this report to refer to Vermonters who use tobacco products. The terms "smoking" and "smoker" refer to cigarette smoking. Smoking status is defined as:

- A **current smoker** has smoked at least 100 cigarettes in their lifetime and now smokes every day or some days.
- A **former smoker** has smoked at least 100 cigarettes in their lifetime but now does not smoke at all.
- A **never smoker** has not smoked at least 100 cigarettes in their lifetime.
- Former and never smokers are collectively referred to as **non-smokers**.

The following definitions are used for tobacco product use:

- Other tobacco product (OTP) use includes some or everyday use of cigar products, ecigarette products, smokeless tobacco, or other OTP. This may alternatively be referred to as non-cigarette tobacco product use.
- Any tobacco product use includes current use of OTPs or cigarettes.

Cigarette Smoking Prevalence in Vermont

In 2016, 18% of Vermont adults report currently smoking cigarettes and 27% are former smokers. Fifty-five percent of Vermont adults have never smoked 100 cigarettes in their lifetime (BRFSS, 2016). While there was a statistically significant decrease in the smoking rate in 2015 compared to 2011, the smoking rate in 2016 is statistically similar to previous years (2011-2015) (Figure 1).

Cigarette use among demographic sub-groups can be found in the <u>VT BRFSS Annual Data Summary Report (http://www.healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/brfss).</u>

¹ In Vermont, adult cigarette smoking prevalence is measured with the Behavioral Risk Factor Surveillance System (BRFSS). The VT BRFSS is an annual telephone survey conducted with a random sample of more than 6,000 adults 18 and older in Vermont. Smoking status on the BRFSS has been consistently measured in every state and the District of Columbia for over 20 years. Given that this is a large sample and conducted throughout the year, BRFSS provides a more robust estimate of adult smoking prevalence in Vermont. Cigarette smoking prevalence is included in this VTATS report to provide context.

Figure 1. Smoking Prevalence among Vermont Adults (VT BRFSS, 2005-2016)

20%	18%	18%	17%	18%	16%	20%	17%	18%	18%	17%	18%
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016

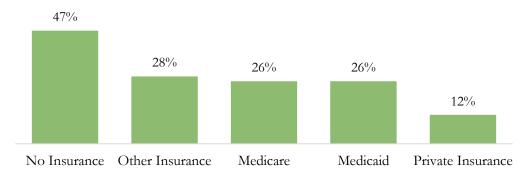
^{*} Statistical differences between data from 2011 and forward versus 2010 and earlier may be due to methodological changes, rather than changes in opinion or behavior. Comparisons between BRFSS data from 2011 and forward and earlier years should be made with caution.

Cigarette Smoking and Healthcare

Given that a priority of the VTCP is decreasing smoking among Medicaid-insured adults, this chapter of the VTATS report provides information on the relationship between cigarette smoking and two healthcare indicators: health insurance and general health.

Twelve percent of those with private health insurance currently smoke – this is significantly lower than all other insurance types (Figure 2). Those with no health insurance have the highest smoking rate (47%), which is significantly higher than those with Medicare (26%), Medicaid (26%) or private insurance (12%).

Figure 2. Smoking Prevalence by Insurance Type (ATS, 2016)



^{*}All data age-adjusted to the U.S. 2000 population.

We also assessed the healthcare characteristics of current smokers compared to former and never smokers (Figure 3). A significantly larger proportion of current smokers have Medicaid or no

insurance when compared to former and never smokers. Conversely, a significantly lower proportion of current smokers have private insurance compared to former and never smokers.

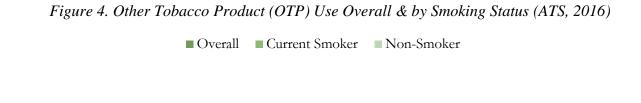
Former smokers are significantly more likely than current smokers to be insured by Medicare, most likely because a higher proportion of former smokers are 65 years or older. In terms of selfreported health, former and never smokers are significantly more likely to report excellent health compared to current smokers.

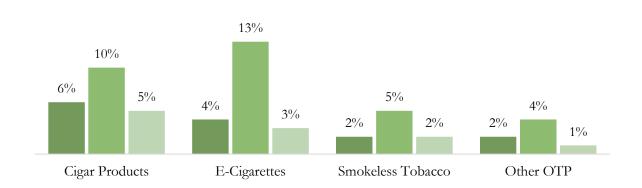
Figure 3. Health Insurance & Self-Reported Health Status by Smoking Status (ATS, 2016) ■ No Insurance ■ Medicaid ■ Medicare ■ Private Insurance ■ Other Insurance Current Smoker 39% 8% 26% 18% Former Smoker 14% 27% 51% 5% Never Smoker 5% 12% 17% 62% ■ Excellent Health ■ Very Good/Good Health ■ Fair/Poor Health Current Smoker 39% 21% Former Smoker 38% 13% Never Smoker 34% 11%

Use of Other Tobacco Products

In addition to cigarette smoking, tobacco use can include other tobacco products (OTP), including cigar products, smokeless tobacco, and electronic cigarettes (e-cigarettes). The last section of this chapter examines overall OTP use and use among several demographic subgroups. Finally, we explore simultaneous use of multiple tobacco products and perceived harm of e-cigarettes.

Among tobacco products other than cigarettes, cigar products (6%) and electronic cigarettes, commonly referred to as e-cigarettes (4%), are the most commonly used (Figure 4). Two percent of Vermont adults use smokeless tobacco or another form of tobacco product other than cigarettes. Overall, 11% of Vermont adults use at least one non-cigarette tobacco product. The prevalence of OTP use is significantly higher among current smokers than non-smokers. This is especially evident for cigar product and e-cigarette use.





As shown in Table 2, males are significantly more likely than females to use cigar products. There are several significant differences across tobacco products by age, with young adults (age 18-24) reporting the highest rates of each product. This is especially true for cigar products and smokeless tobacco. E-cigarettes are used among a slightly older age group: the prevalence of e-cigarettes is statistically similar between 18-24 and 25-44 year olds. There are additional disparities in the use of e-cigarettes: prevalence is significantly higher among those with lower income and less education. Those with Medicaid are also significantly more likely to use e-cigarettes compared to those with private insurance. Interestingly, unlike other tobacco products, cigar use does not increase consistently with education. Instead, those with a high school

education or less report significantly lower rates of cigar use in comparison to those with some college (3% versus 10%).

Table 2. Percent of Other Tobacco Product Use, by Demographic Characteristics (ATS, 2016)

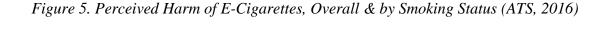
	Cigar Products	E-Cigarettes	Smokeless Tobacco	Other OTP
Overall	5.7	4.5	2.4	1.7
Gender				
Male	10.2^{A}	5.5 ^A	4.5	2.2^{A}
Female	1.3^{B}	3.5^{A}		1.2^{A}
Age				
18-24	16.9 ^A	8.9^{A}	7.7^{A}	4.5^{A}
25-44	7.6^{B}	6.9^{A}	2.4^{B}	$1.9^{A,B}$
45-64	2.2^{C}	2.7^{B}	1.1^{B}	0.8^{B}
65+	1.6 ^C	1.7^{B}		$1.1^{A,B}$
Race/Ethnicity				
White, non-Hispanic	5.7 ^A	4.1 ^A	2.3^{A}	1.5 ^A
Racial/Ethnic Minority	4.8^{A}	8.7 ^A	3.4^{A}	4.2^{A}
Education				
< High School	$3.1^{A,B}$	8.9^{A}	4.1 ^A	2.3^{A}
High School/GED	$7.5^{B,C}$	6.3 ^A	3.6^{A}	1.5^{A}
Some College	9.8 ^C	6.6^{A}	2.7^{A}	1.6 ^A
College or More	2.6^{A}	1.9^{B}	1.3 ^A	1.8^{A}
Income				
< \$25,000	4.2^{A}	7.8^{A}	1.7 ^A	1.7^{A}
\$25,000 - < \$50,000	8.0^{A}	6.5^{A}	2.9^{A}	4.0^{A}
\$50,000 - < \$75,000	2.6^{A}	$3.7^{A,B}$	2.5^{A}	2.0^{A}
\$75,000 +	6.4^{A}	2.2^{B}	1.5 ^A	
Federal Poverty Level				
< 250% FPL	4.5^{A}	7.9^{A}	2.3^{A}	2.2^{A}
≥ 250% FPL	6.0^{A}	2.4^{B}	1.9 ^A	1.5 ^A
Health Insurance				
Private	$6.2^{A,B}$	3.5^{A}	2.1^{A}	1.7^{A}
Medicare	2.2^{A}	$3.0^{A,B}$	1.5 ^A	1.5^{A}
Medicaid	$5.9^{A,B}$	8.0^{B}	2.5^{A}	2.4^{A}
Other	$7.0^{A,B}$	$5.4^{\mathrm{A,B}}$	4.1 ^A	
None	12.4^{B}	$8.0^{\mathrm{A,B}}$	4.4^{A}	

⁻⁻ Suppressed due to small sample size

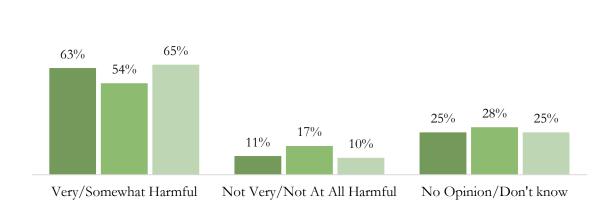
When asked about the perceived harm to one's health of using electronic cigarettes, almost two thirds of Vermont adults believe that these products are very or somewhat harmful (Figure 5). Current smokers are significantly less likely than non-smokers to believe that e-cigarettes are

A,B,C,D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another. For example, cigar use among males and females is significantly different while e-cigarette use is statistically similar.

harmful. A quarter of Vermont adults do not have an opinion about the harmfulness of ecigarettes. Interestingly, current smokers and non-smokers are statistically similar in the rate at which they report not having an opinion about the harm of e-cigarettes.

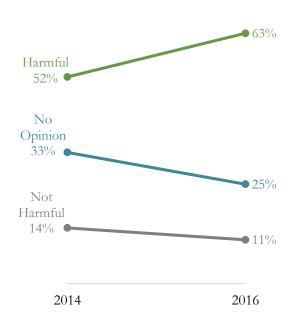


■ Overall ■ Current Smoker ■ Non-Smoker



There was a notable increase in the perceived harm of electronic cigarettes from 2014 to 2016 (Figure 6). In 2016, 63% of Vermont adults believe that e-cigarettes are very or somewhat harmful to one's health. This is significantly more than the 52% who perceived e-cigarettes to be very or somewhat harmful in 2014. This change mostly occurred among Vermont adults who did not have an opinion or were not sure about the harm of e-cigarettes in 2014. There was no significant difference in the use of e-cigarettes from 2014 to 2016 (data not shown).

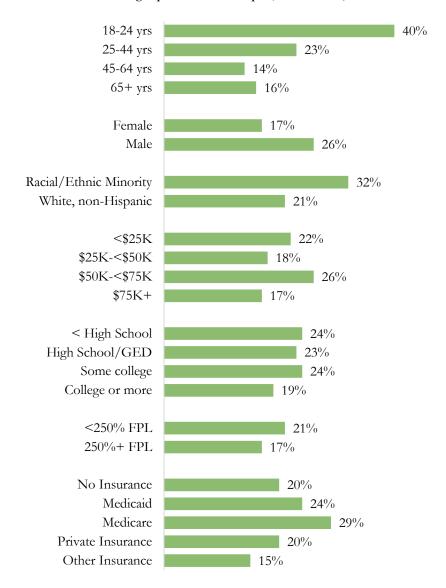
Figure 6. Change in Perceived Harm of E-Cigarettes from 2014 to 2016



Use of Multiple Tobacco Products

Of the 24% of Vermont adults that use any tobacco product, including cigarettes, 22% report currently using at least two products. There are some differences in the use of multiple tobacco products based on demographic sub-groups (Figure 7; Table A-1 in Appendix A). Namely, young adults (18-24 years) have significantly higher rates of multiple tobacco product use compared to adults 45-64 years old.

Figure 7. Percent of Tobacco Users Reporting Use of Multiple Tobacco Products, by Demographic Sub-Groups (ATS, 2016)



Chapter 3: Quit Activity among Current & Former Smokers

Quitting smoking improves health and reduces one's risk of heart disease, cancer, lung disease, and other smoking-related illnesses. Still, quitting is difficult and may require multiple attempts.¹ As part of efforts to help Vermonters stop smoking, the VTCP has maintained an evidence-based statewide cessation program, 802Quits, that offers three established ways for residents to access free help with quitting tobacco: the Quitline (phone-based support), Quit Online, and Quit Partners (in-person program).

This chapter examines quitting behaviors among Vermont's adults. We first explore quit activity among former cigarette smokers, including the length of time since they last smoked regularly, use of cessation methods, and quit ratios. Next, we examine past-year smoking and recent quitters. The last section looks at quit attempts among current tobacco users, including use of 802Quits services, medications, and assistance from health care providers.

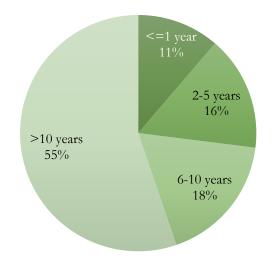
Former Smokers Quit Activity

Overall, 27% of Vermont adults are former cigarette smokers (BRFSS, 2016). That is, they have smoked 100 cigarettes in their lifetime but do not currently smoke. Of Vermont adults that have formerly smoked, over half (55%) last smoked more than 10 years ago, 18% quit 6-10 years ago,

16% quit 2-5 years ago, and 11% quit within the last year (Figure 8).

Among Vermont adults that quit within the last five years, 75% quit on their own (Figure 9). Nearly a third (31%) used nicotine replacement therapy (NRT), 29% spoke with their health care provider, and 21% used ecigarettes. Less than 10% of Vermont adults used a cessation medication or cessation services such as the Quitline or group classes. Former smokers used an average of two cessation methods, with some using as many as six methods (data not shown). Of those that quit smoking within the last year, 26% switched completely to e-cigarettes.

Figure 8. Length of Time Since Former Smoker Last Smoked Regularly (ATS, 2016)



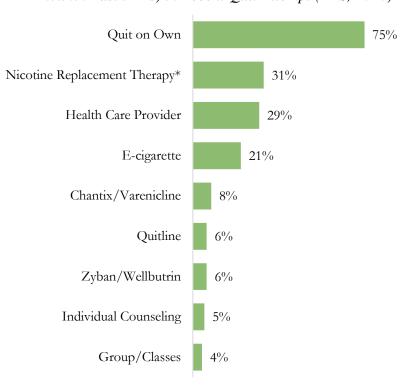


Figure 9. Cessation Methods Used by Former Smokers (Quit Within Last 5 Yrs) in Recent Quit Attempt (ATS, 2016)

Note: Total is greater than 100% because respondents could choose multiple cessation methods. *Nicotine Replacement Therapy (NRT), includes use of nicotine patch, gum, or lozenges.

Quit Ratios

Analyzing quitting behaviors based on the prevalence of former smokers within demographic subgroups has limitations. Namely, to be a former smoker it is necessary to have once been a smoker. Therefore, the percentage of former smokers in a group is partly a function of the number of people in the group who have ever been smokers.² For example, there might be a lower percentage of former smokers among those with a college degree. However, this lower percentage of former smokers may be due to a smaller number of those with a college degree who have ever been smokers, and not to a lower quit rate. A better comparison is the quit ratio.

• **Quit ratio** is defined as the proportion (expressed as a percentage) of ever smokers (the sum of current and former smokers) who are former smokers at a given time.

$$Quit Ratio = \frac{\# Former Smokers}{\# Ever Smokers}$$

Consider the following hypothetical example: among 175 people with a college degree, 50 are former smokers, 25 are current smokers, and 100 are never smokers. The prevalence of former

smokers among those with a college degree is 29% (50/175). However, the quit ratio for those with a college degree is 67% (50/75). The quit ratio provides information about whether those who have ever smoked are currently smoking, and can be analyzed for the entire population or within demographic subgroups.

The overall quit ratio among Vermont adults is 64%. There are some significant differences in the quit ratio among demographic subgroups (Table 3). Racial/ethnic minorities have a significantly lower quit ratio compared to white, non-Hispanic adults (46% versus 66%). While young adults (age 18-24) have a significantly lower quit ratio than those 45 years and older, it is important to note that this is somewhat confounded by survivor bias. In other words, smokers die at younger ages than nonsmokers, an effect realized in later years. Consequently, the pool of ever smokers will be smaller in older age groups than in younger age groups and former smokers tend to dominate in these older age groups.³

Overall, we find similar disparities in quit ratios based on socio-economic status (SES) indicators as we do with smoking prevalence – those that have lower income and education have lower quit ratios. However, when looking at those that quit within the last 5 years we find that quit ratios are statistically similar based on income and education, while there are still significant differences among those that quit greater than 5 years ago (Table 3). This may be an indication of the impact of previous tobacco control efforts in reducing smoking among certain demographic sub-groups, leaving a disproportionate burden among those with lower SES today. This is evident when looking at quit ratios by health insurance type: quit ratios decline over time for those with Medicare or private insurance, while they stay the same for those with Medicaid.

Table 3. Quit Ratios by Demographic Sub-Groups (ATS, 2016)

	All Former Smokers	Quit ≤ 5 Years	Quit > 5 Years
Overall	64.0	17.0	47.0
Gender			
Male	62.8^{A}	17.2 ^A	45.6^{A}
Female	65.2^{A}	16.7 ^A	48.5^{A}
Age			
18-24	33.4^{A}	26.5^{A}	
25-44	53.4 ^A	$22.6^{A,B}$	30.8^{A}
45-64	66.4^{B}	$14.8^{A.B}$	51.6 ^B
65+	79.4^{B}	11.2^{B}	68.2^{C}
Race/Ethnicity			
White, non-Hispanic	65.6^{A}	17.5 ^A	48.2^{A}
Racial/Ethnic Minority	46.2^{B}	12.5 ^A	33.7^{A}
Education			
< High School	38.1 ^A	11.1 ^A	26.9^{A}
High School/GED	52.3 ^A	20.6^{A}	31.6 ^A
Some College	60.7^{A}	15.3 ^A	45.5^{A}
College or More	80.4^{B}	16.2 ^A	64.2^{B}
Income			
< \$25,000	50.5^{A}	17.2^{A}	33.3^{A}
\$25,000 - < \$50,000	$58.5^{A,B}$	17.8 ^A	40.7^{A}
\$50,000 - < \$75,000	$67.3^{B,C}$	17.2 ^A	$50.1^{A,B}$
\$75,000 +	75.6 ^C	17.3 ^A	58.3^{B}
Federal Poverty Level			
< 250% FPL	52.9^{A}	18.1 ^A	34.8^{A}
≥ 250% FPL	71.6^{B}	17.0^{A}	54.6^{B}
Health Insurance			
Private	70.1^{A}	15.5 ^A	54.7 ^A
Medicare	73.5^{A}	13.6 ^A	59.9 ^A
Medicaid	50.1^{B}	24.3 ^A	25.8^{B}
Other	53.0^{B}	22.7^{A}	30.3^{B}
None	34.1^{B}	11.7 ^A	22.3^{B}

⁻⁻ Suppressed due to small sample size

Past Year Smoking and Successful Quitting

This section examines the prevalence of past-year smoking and successful quitting. We look within demographic sub-groups to see if there are significant differences among past year smokers in having a successful quit attempt.

A,B,C,D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another. For example, among all former smokers, quit ratios are statistically similar between males and females, but significantly different between white, non-Hispanic and racial/ethnic minorities.

- **Past-year smokers** are defined as individuals who have smoked at any time during the past year. This includes all current smokers as of the date of the interview and former smokers if they last smoked regularly at any time within the last year.
- Past-year successful quitters are defined as former smokers that last smoked regularly at any time within the last year. The prevalence of past-year successful quitting is examined among all past-year smokers. Past-year successful quitters may alternately be referred to as "recent quitters" throughout this report.

Caution must be used in interpreting the prevalence of past-year successful quitters. Some current smokers may have been quit for many of the past 12 months and recently relapsed. Conversely, some former smokers may have been smoking much of the past 12 months and only recently quit.

Table 4 presents data for past-year smokers and past-year successful quitters overall and by demographic sub-groups. Overall, 20% of Vermont adults were past-year smokers. There are similar demographic differences in past-year smoking as are found among all current smokers. Vermonters age 25-44 are significantly more likely to smoke in the past year compared to all other age categories. About half of Vermont adults with less than a high school education smoked in the past year; this is significantly higher than those with some college or more. Those with a college degree have significantly lower rates of smoking in the past year compared to all other education categories. Those with incomes less than \$50,000 and those living at less than 250% FPL have significantly higher rates of past-year smoking compared to those with higher incomes and those living at 250% FPL or more. Those with Medicaid (35%) or no insurance (41%) have significantly higher rates of past-year smoking compared to those with private insurance (14%) or Medicare (18%).

Among all past-year smokers, 16% successfully quit within the past year. Among this group of recent quitters, there are no statistically significant differences based on demographic characteristics. It is worth noting that a lack of significant differences in the proportion of successful past-year quitters may be due to large confidence intervals because of small samples within some demographic sub-groups.

Table 4. Past-Year Smoking and Successful Quitters, by Demographic Sub-Groups (ATS, 2016)

_	% Past-Year Smokers (among all VT adults)	% Successful Past-Year Quitters (among past-year smokers)
Overall	20.1	16.5
Gender		
Male	22.0^{A}	18.1 ^A
Female	18.3 ^A	14.6^{A}
Age		
18-24	17.4 ^A	19.7 ^A
25-44	27.2^{B}	16.5 ^A
45-64	19.7 ^A	15.6 ^A
65+	13.1 ^A	15.8 ^A
Race/Ethnicity		
White, non-Hispanic	19.2 ^A	16.8 ^A
Racial/Ethnic Minority	30.6^{B}	13.6 ^A
Education		
< High School	46.6^{A}	9.5^{A}
High School/GED	$30.8^{A,B}$	15.1 ^A
Some College	22.8^{B}	16.7 ^A
College or More	9.7 ^C	22.3 ^A
Income		
< \$25,000	34.4 ^A	14.3 ^A
\$25,000 - < \$50,000	27.7 ^A	16.9 ^A
\$50,000 - < \$75,000	16.5 ^B	15.4 ^A
\$75,000 +	11.7 ^B	21.2 ^A
Federal Poverty Level		
< 250% FPL	30.9^{A}	14.6 ^A
≥ 250% FPL	15.1 ^B	19.7 ^A
Health Insurance		
Private	14.4 ^A	18.1 ^A
Medicare	$17.6^{A,B}$	15.4 ^A
Medicaid	35.4 ^C	18.0^{A}
Other	27.1 ^{B,C}	16.3 ^A
None	40.6^{C}	8.0^{A}

A,B,C,D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

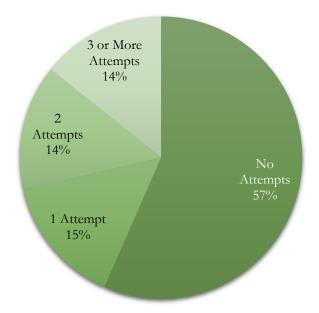
Quit Activity among Current Tobacco Users

This section examines the prevalence of pastyear quit attempts among current tobacco users, interaction and assistance from health care providers, and the awareness and use of Vermont 802 Quit services. Of note, in 2014 the VTATS adapted existing questions about quit behaviors and health care visits to include users of OTP rather than just cigarette smokers. For multi-product users of cigarettes and OTP, we cannot distinguish if their responses refer to behaviors related to their cigarette use or their OTP use.

Past-Year Quit Attempts

Forty-three percent of current tobacco users (including all cigarette and non-cigarette tobacco products) made a quit attempt in the last year.

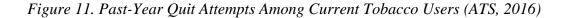
Figure 10. Number of Past-Year Quit
Attempts Among Current Tobacco Users
(ATS, 2016)

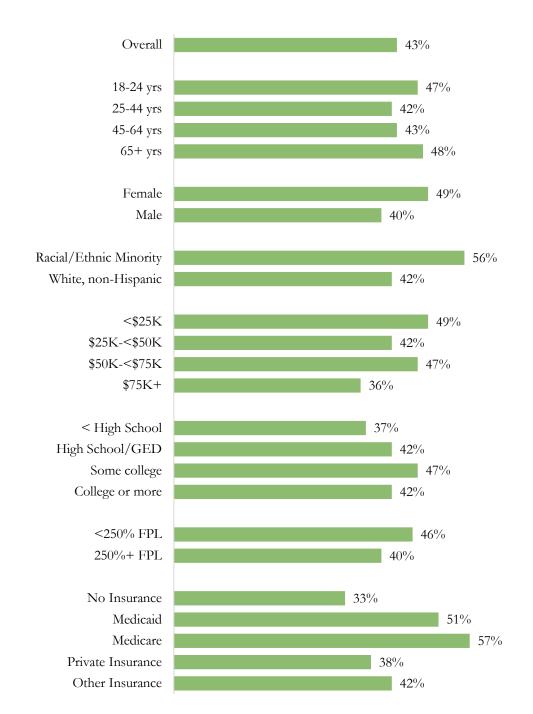


The median number of quit attempts in the past year is two, with a range of 0 to 36 attempts. A similar proportion of current tobacco users who make a quit attempt made one, two, or three or more attempts within the past year (Figure 10).

There are no significant differences in quit attempts based on type of tobacco product used (cigarettes versus non-cigarettes) or among demographic sub-groups (Figure 11; Table A-2 in Appendix A).

It is important to note that information about quit attempts throughout the rest of this chapter is in reference to the most recent quit attempt. This may not capture what has been accomplished in previous attempts and how that influences their most recent attempt.





Cessation Methods: Most Recent Past-Year Quit Attempt

Among current tobacco users who made a quit attempt within the past year, 70% tried to quit on their own (Figure 12). It is possible that some respondents consider some support, such as receiving brief advice from a health care provider (HCP) as "quitting on their own". Over a third did report speaking with a health care provider (39%) or using nicotine replacement therapy (NRT; 34%). Twenty-four percent used e-cigarettes. Ten percent or less of current tobacco users utilized cessation medication or a cessation service, such as the Quitline or group classes. Those that made a quit attempt in the last year, in their most recent attempt used an average of two cessation methods, with one using as many as eight methods (data not shown).

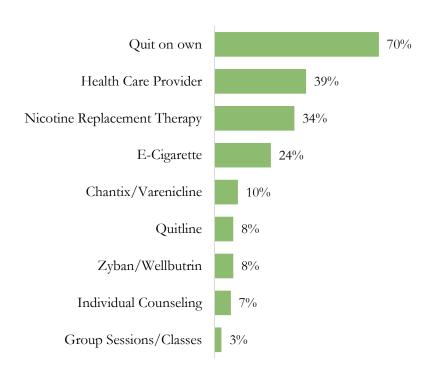


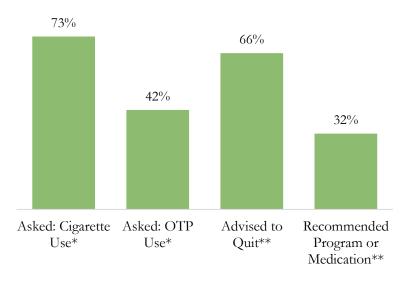
Figure 12. Cessation Methods Used by Current Tobacco Users in Recent Quit Attempt (ATS, 2016)

Total is greater than 100% because respondents could choose multiple cessation methods. *NRT, or Nicotine Replacement Therapy, includes use of nicotine patch, gum, or lozenges.

Assistance from Health Care Providers

Within the last year, 87% of Vermont adults visited a health care provider (HCP). A HCP includes a doctor, nurse, physician's assistant, or nurse practitioner. Past-year smokers and non-smokers visited a HCP at statistically similar rates. Of those that visited a HCP in the last year,

Figure 13. Cessation Assistance from Health Care Providers (ATS, 2016)



almost three quarters (73%) were asked if they currently use cigarettes (Figure 13). Less than half (42%) were asked if they currently use a tobacco product other than cigarettes. Of those that used a tobacco product within the last year and visited a HCP, 66% were advised to quit. However, only 32% were recommended a specific cessation program or medication. Half (51%) of pastyear tobacco users with children in their home under 13 years old reported that their HCP asked if they smoke around their children (data not shown).

Table 5 provides information about HCP interactions for several demographic sub-groups. Compared to those that are older, younger Vermonters were significantly more likely to be asked about smoking and OTP use, but significantly less likely to be recommended to a specific cessation program or medication. Those with Medicare were significantly less likely to be asked about cigarette and OTP use (compared to private insurance, Medicaid, and "other insurance type") and more likely to be recommended to a program or medication (compared to those with private insurance); a result most likely confounded with age. There were no significant differences based on gender, race, education, or income in whether a HCP asked about tobacco use, advised to quit, or made a recommendation.

^{*}Asked of all respondents who visited a HCP in the last year.

^{**}Asked of subset of respondents who visited a HCP in the last year and used a tobacco product.

Table 5. Assistance from Health Care Providers, by Demographic Sub-Groups (ATS, 2016)

	Asked About Cigarette Use* (%)	Asked About OTP Use* (%)	Advised to Quit** (%)	Recommended Program or Medication** (%)
Overall	72.7	41.7	66.4	32.4
Gender	,,		0011	02
Male	72.5^{A}	45.5^{A}	64.6 ^A	29.3^{A}
Female	72.9^{A}	38.5^{A}	68.8^{A}	36.5 ^A
Age				
18-24	85.6^{A}	61.2 ^A	55.5 ^A	13.9 ^A
25-44	$78.7^{A,B}$	48.6 ^{A,B}	60.4 ^A	31.5^{B}
45-64	71.0 ^{B,C}	38.4 ^{B,C}	74.8 ^A	41.6 ^B
65+	60.7 ^C	26.9 ^C	73.1 ^A	38.6^{B}
Race/Ethnicity				
White, non-Hispanic	72.2^{A}	42.0^{A}	66.0^{A}	32.4^{A}
Racial/Ethnic Minority	77.7 ^A	41.2 ^A	68.6 ^A	37.8^{A}
Education				
< High School	88.8^{A}	47.5 ^A	79.0^{A}	40.8^{A}
High School/GED	71.2^{A}	44.4 ^A	70.8^{A}	35.8^{A}
Some College	76.2^{A}	47.5 ^A	67.2 ^A	31.1^{A}
College or More	70.5^{A}	36.6 ^A	55.0 ^A	26.2^{A}
Income				
< \$25,000	69.8^{A}	40.5^{A}	72.3 ^A	36.7^{A}
\$25,000 - < \$50,000	72.4^{A}	43.1 ^A	63.9 ^A	30.3^{A}
\$50,000 - < \$75,000	80.5^{A}	42.8^{A}	72.6^{A}	42.1^{A}
\$75,000 +	72.1 ^A	41.0^{A}	62.4 ^A	24.4^{A}
Federal Poverty Level				
< 250% FPL	72.6^{A}	43.5^{A}	69.7 ^A	36.0^{A}
≥ 250% FPL	73.4^{A}	40.3^{A}	65.1 ^A	29.0^{A}
Health Insurance				
Private	76.5^{A}	44.2^{A}	62.2^{A}	24.7^{A}
Medicare	57.8^{B}	26.6^{B}	72.9^{A}	43.8^{B}
Medicaid	74.8^{A}	49.6^{A}	68.0^{A}	$38.7^{A,B}$
Other	78.8^{A}	55.1 ^A	65.3 ^A	$40.6^{A,B}$
None	$77.2^{A,B}$	$39.4^{A,B}$	70.3^{A}	$15.3^{A,B}$

^{*}Asked of all respondents who visited a health care provider in the last year.

Awareness and Use of Vermont 802Quit Services

About half of current tobacco users (53%) have heard of the Quitline, while a third (36%) have heard of Quit Partners and Quit Online services (Figure 14). About a third (36%) of current tobacco users have not heard of any 802Quits services (data not shown). Few current tobacco

^{**}Asked of subset of respondents who visited a health care provider in the last year and used a tobacco product.

A,B,C,D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

users who made a quit attempt in the last year and have heard of these services used them in their most recent quit attempt: 7% used the Quitline, 3% used Quit Partners, and 4% used Quit Online.

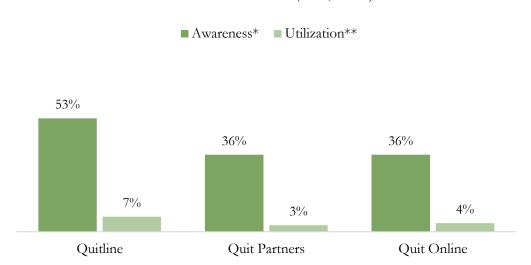


Figure 14. Awareness & Utilization of 802Quits Services Among Current Tobacco Users (ATS, 2016)

Table 6 provides information about awareness of 802Quits services among several demographic sub-groups. In terms of awareness of each service, the only significant difference is related to the Quitline based on measures of income. Vermont adults with annual household incomes less than \$25,000, those living below 250% FPL, and those with Medicaid were significantly more likely to have heard of the Quitline compared to those with incomes greater than \$75,000, those living at or above 250% FPL, and those with private insurance. When looking across all 802Quits services, significantly more men than women lack awareness of any 802Quits services (43% versus 26%).

^{*}Asked of current tobacco users.

^{**}Asked of current tobacco users who heard of 802Quits service and made a quit attempt in the last year.

Table 6. Awareness of 802Quits Services, by Demographic Sub-Groups (ATS, 2016)*

	Quitline	Quit Partners	Quit Online
_	(%)	(%)	(%)
Overall	53.4	36.3	36.3
Gender			
Male	45.5^{A}	33.3^{A}	33.8^{A}
Female	66.0^{B}	41.2^{A}	40.2^{A}
Age			
18-24	51.5 ^A	29.6 ^A	35.9^{A}
25-44	55.8 ^A	38.9^{A}	43.5^{A}
45-64	51.8^{A}	36.0^{A}	29.6^{A}
65+	57.5 ^A	41.5 ^A	33.5^{A}
Race/Ethnicity			
White, non-Hispanic	52.9 ^A	36.8^{A}	37.3^{A}
Racial/Ethnic Minority	60.5^{A}	35.5^{A}	30.6^{A}
Education			
< High School	53.7 ^A	29.9^{A}	23.9^{A}
High School/GED	55.2 ^A	39.7 ^A	40.2^{A}
Some College	58.3 ^A	41.2^{A}	39.6 ^A
College or More	43.0^{A}	25.4^{A}	28.4^{A}
Income			
< \$25,000	61.1 ^A	34.9^{A}	32.4^{A}
\$25,000 - < \$50,000	$57.0^{A,B}$	38.8^{A}	39.5 ^A
\$50,000 - < \$75,000	56.1 ^{A,B}	41.6^{A}	47.5^{A}
\$75,000 +	39.2^{B}	28.2^{A}	32.0^{A}
Federal Poverty Level			
< 250% FPL	61.8 ^A	38.1 ^A	37.2^{A}
≥ 250% FPL	45.0^{B}	31.7 ^A	35.5^{A}
Health Insurance			
Private	46.1 ^A	32.4^{A}	37.5^{A}
Medicare	$59.6^{A,B}$	36.2^{A}	32.4^{A}
Medicaid	64.0^{B}	43.7 ^A	37.1 ^A
Other	$57.0^{A,B}$	47.3 ^A	47.9^{A}
None	$56.8^{A,B}$	33.2^{A}	28.0^{A}

^{*}Asked of current tobacco users.

As mentioned, only a small percentage of Vermonters that were aware of 802Quits services used them in their most recent quit attempt. In fact, 91% of current adult tobacco users who made a quit attempt in the last year did so without using any 802Quits services. There are several reasons that respondents gave for why they did not use 802Quits services in their most recent quit attempt (Figure 15). A majority (75%) wanted to quit on their own and about half (45%) reported that they didn't think this type of a program is what they needed to quit. About a third of

^{A,B,C,D} Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Vermont tobacco users cited reasons related to phone counseling, such as not wanting to talk on the phone too long. About a quarter reported a lack of understanding about how the program works or what services are offered, scheduling conflicts, or feeling as though a counselor would not understand their problems with quitting. Fewer tobacco users reported not wanting to give personal information, feeling as though the amount of counseling would not be enough, using the service previously and not wanting to use it again, or thinking the cost was too much.

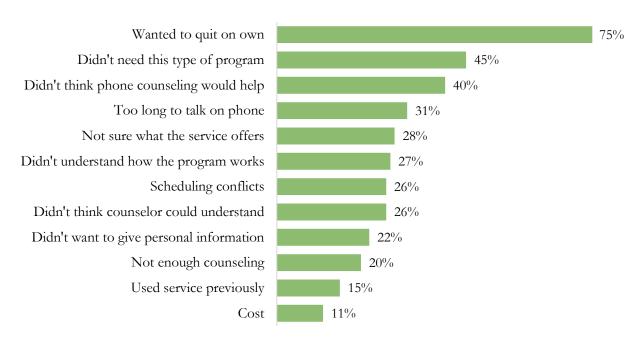
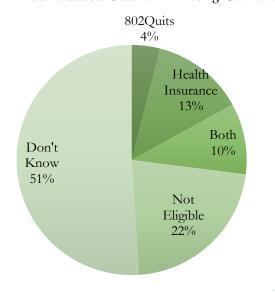


Figure 15. Reasons for Not Using 802Quits Services (ATS, 2016)*

Eligibility for Assistance

Unless medically contraindicated, all current tobacco users in Vermont are eligible for free or reduced cost NRT through 802Quits services or their health insurance provider. Still, about half of current tobacco users do not know that they are eligible. A further 22% believe incorrectly that they are not eligible for free or reduced NRT (Figure 17). A higher proportion of tobacco users believe that they could get free or reduced NRT from their

Figure 16. Perceived Eligibility for Free/Reduced Cost NRT Among Current



^{*}Respondents include those that have not used any 802Quits services in the last 12 months. Total is greater than 100% because respondents could choose multiple reasons.

health insurance provider than 802Quits services.

When looking at differences in perceived eligibility based on insurance type (Figure 17), we found that those with private insurance are significantly less likely to believe that they are eligible for free or reduced NRT (19%) compared to those with Medicare (40%) or Medicaid (43%). Alternatively, a significantly higher proportion of those with no insurance believe that they are ineligible (59%) compared to those with private insurance (22%), Medicare (13%), or Medicaid (10%). A significantly higher percentage of those with private insurance don't know if they are eligible for free or reduced NRT compared to those with no insurance (59% versus 29%).

■ Private ■ Medicare ■ Medicaid ■ Other ■ None 59% 59% 53% 47% 47% 43% 40% 29% 27% 22% 20% 19% 13% 10% N/AEligible Not Eligible Don't Know

Figure 17. Perceived Eligibility for Free/Reduced Cost NRT Among
Tobacco Users, by Insurance Type (ATS, 2016)

*N/A=suppressed due to small sample size.

Chapter 4: Secondhand Smoke Exposure and Smoke-Free Policies

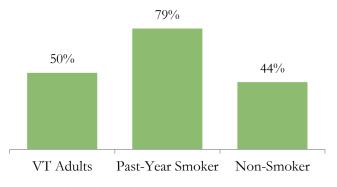
Secondhand smoke is created from burning or combusting tobacco products, such as cigarettes, cigars, or pipes. Tobacco smoke contains more than 7,000 chemicals, including hundreds that are toxic and about 70 that can cause cancer. The VTCP has worked to protect Vermonters from the harms of secondhand smoke exposure by promoting smoke-free policies in places across the state, including multi-unit housing, college campuses, cars when children are present, public parks, and building entryways. Additionally, the VTCP works with community coalitions to positively influence attitudes, behaviors, and norms in Vermont towns and cities. The following chapter contains information on secondhand smoke exposure, personal smoking bans, perceived harm of secondhand smoke and opinions on policies related to reducing secondhand smoke exposure.

Secondhand Smoke Exposure

This section explores secondhand smoke exposure among all Vermont adults, and stratified by smoking status (i.e., past-year smoker and never/former smoker who quit more than one year ago). We examine overall exposure and exposure by location, including at home, in a vehicle, and in an indoor or outdoor public space.

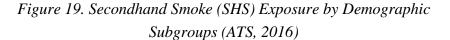
Among all Vermont adults, 50% report exposure to secondhand smoke in the past seven days (Figure 18). When compared to non-smokers, past-year smokers are significantly more likely to report secondhand smoke exposure (79% versus 44%).

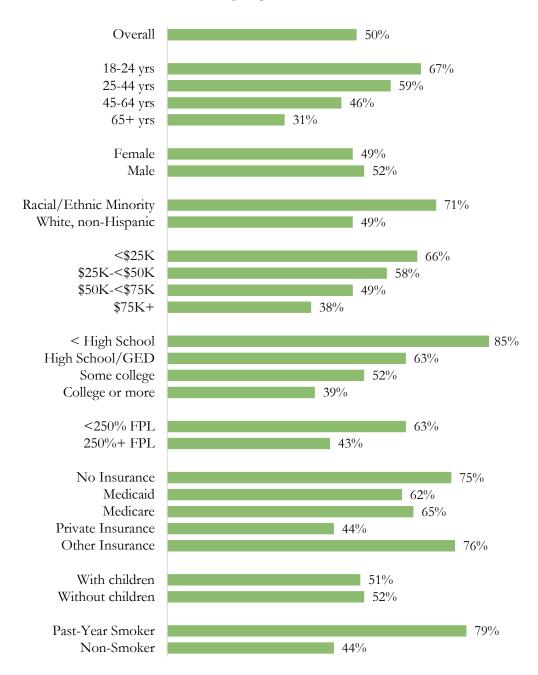
Figure 18. Secondhand Smoke Exposure Among Adults, Stratified by Smoking Status (ATS, 2016)*



*Age-adjusted to the U.S. 2000 population

Younger adults (age 18-44), racial/ethnic minorities, and those with lower education and income are significantly more likely to report secondhand smoke exposure compared to adults 45 and older, white, non-Hispanic adults, and those with more education and income (Figure 19; Table A-3 in Appendix A). Less than half of those with private insurance report secondhand smoke exposure, significantly less than those with any other insurance type. There are no statistical differences in secondhand smoke exposure based on gender or whether there are children living at home.



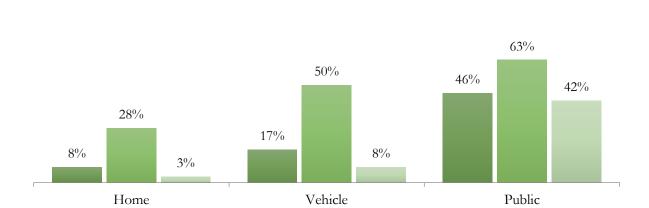


^{*}Data age-adjusted to the U.S. 2000 population, except that broken down by age.

Among all adults, secondhand smoke exposure is most likely in a public place (Figure 20). Past-year smokers are significantly more likely than non-smokers to report secondhand smoke exposure in the last week, regardless of location.

Figure 20. Location of Secondhand Smoke Exposure, by Smoking Status (ATS, 2016)*

■ Past-Year Smokers



*Age-adjusted to the U.S. 2000 population

■ All VT Adults

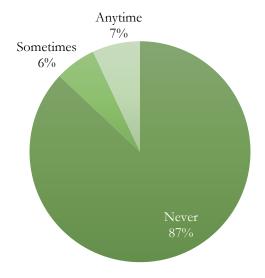
Personal Home Smoking Bans

This section explores rules that Vermont adults have about smoking inside their home. Among all Vermont adults, 87% report that they do not allow smoking anywhere inside their home (Figure 21). A further 6% allow smoking at some times or in some places and 7% allow smoking anywhere inside their home or do not have any rules.

Adults age 25-44 are significantly more likely to report a home smoking ban compared to older adults (65+). Those with higher education and income are also significantly more likely to have a home

Figure 21. Rules About Allowing Smoking at Home (ATS, 2016)

■ Non-Smokers



smoking ban. Non-smokers and Vermont adults with children in their home are significantly more likely to report a home smoking ban than past-year smokers and those without children in

their home. There are no statistical differences in home smoking bans based on gender or race/ethnicity (Figure 22; Table A-4 in Appendix A).

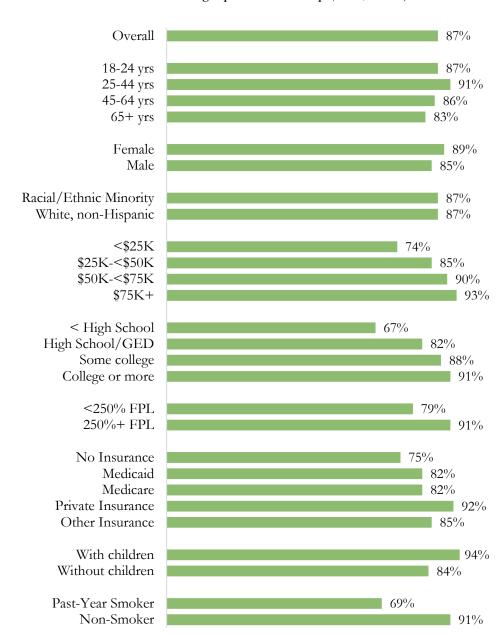
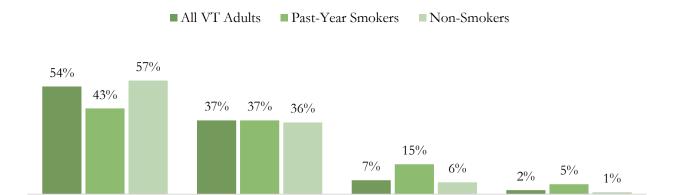


Figure 22. Personal Home Smoking Bans by Demographic Sub-Group (ATS, 2016)

Perceived Harm

Very harmful

When asked about the perceived harm to one's health of secondhand smoke exposure, 91% of Vermont adults believe that exposure is very or somewhat harmful (Figure 23). Past-year smokers are significantly less likely than non-smokers to believe that exposure is harmful. Among past-year smokers, 5% report not having an opinion or not knowing about the harm of secondhand smoke. This is significantly higher than that reported by non-smokers (1%).



Somewhat harmful

Not very/Not at all

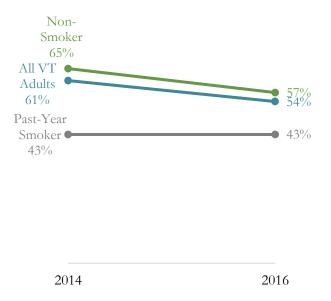
harmful

Figure 23. Perceived Harm of Secondhand Smoke Exposure, by Smoking Status (ATS, 2016)

There was a notable decrease in the perceived harm of secondhand smoke exposure from 2014 to 2016 (61% to 54%) among all Vermont adults (Figure 24). Interestingly, this decrease was only significant for non-smokers: 65% of non-smokers believed that secondhand smoke exposure was very harmful to one's health in 2014 compared to 57% who believe this in 2016. There was no significant difference in secondhand smoke exposure among non-smokers from 2014 to 2016 (data not shown).

Figure 24. Change in Perceived Harm of Secondhand Smoke from 2014 to 2016 (ATS, 2014, 2016)

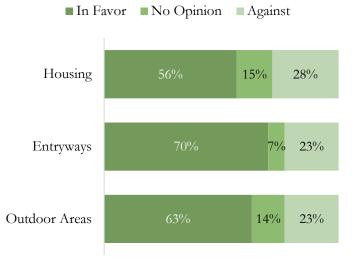
No opinion/Don't know



Support for Smoke-Free Policies

A majority of Vermont adults are in favor of secondhand smoke policies that ban smoking in multi-unit housing (i.e., apartment buildings, condominiums, and other multi-unit complexes, including indoor areas, private balconies, and patios), entrance ways of public buildings and workplaces, and outdoor public places such as beaches or parks (Figure 25). The most supported policy is to ban smoking in entryways: 70% of adults are in favor. The least supported policy is to ban smoking in multi-unit housing, in which 56% of adults are in

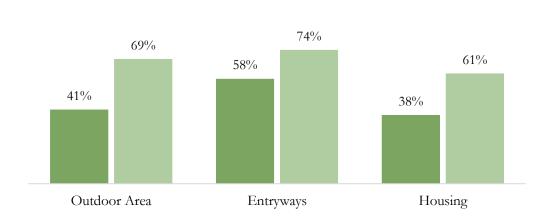
Figure 25. Smoke-Free Policy Opinions among Adults (ATS, 2016)



favor. When compared to past-year smokers, non-smokers are significantly more likely to support each secondhand smoke policy (Figure 26). The largest difference is in support for policies that ban smoking in outdoor public places: 69% of non-smokers favor this policy compared to 41% of past-year smokers.

Figure 26. Percent in Favor of Smoke-Free Policies, by Smoking Status (ATS, 2016)

■ Past-Year Smokers ■ Non-Smokers



Chapter 5: Point of Sale and Tobacco Advertising

Every year, the tobacco industry spends billions of dollars on promotions to reduce tobacco prices and keep tobacco visible. In 2014 in Vermont, the industry spent about \$17.2 million on marketing.⁵ Tobacco industry marketing and promotion strategies include store location, product displays and packaging, flavored products, and promotions that keep prices low. For those trying to quit, exposure to marketing makes it harder to be successful. Additionally, youth exposed to tobacco advertising at the retail point of sale are more likely to use tobacco.⁶ To counter the tobacco industry's marketing efforts, the VTCP has led media campaigns, supported point of sale policy efforts, and conducted Counter Tools store audits throughout the state.

The following chapter contains information on point of sale and tobacco advertising exposure and opinions among all Vermont adults, as well as by smoking status (past-year smokers versus non-smokers). We also assess the use of flavored tobacco products among those who report using each product.

Attitudes on Tobacco Advertisements

A majority of all Vermont adults somewhat or strongly agree that tobacco advertising encourages young people to smoke, targets certain groups such as young adults, low income groups, and specific ethnic groups, and that ads should be banned from the outside of stores (Figure 27). When compared to non-smokers, past-year smokers are significantly more likely to agree with each of these statements about tobacco advertising. The largest difference in agreement is whether tobacco advertisements target certain groups: only half of past-year smokers agree compared to three-quarters of non-smokers.

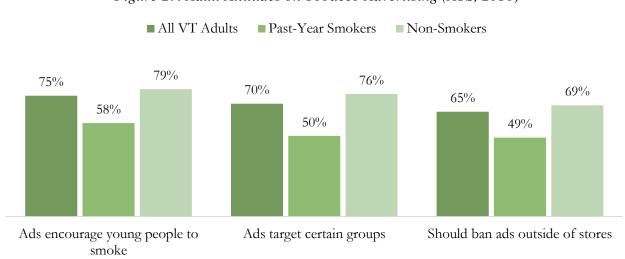


Figure 27. Adult Attitudes on Tobacco Advertising (ATS, 2016)

Exposure to Tobacco Promotions

While only about one-third or less of Vermont adults report noticing tobacco advertisements in stores in the last six months, they are most likely to notice tobacco at sale prices (36%) and least likely to notice coupons (14%) (Figure 28). Compared to non-smokers, past-year smokers are significantly more likely to notice tobacco promotions. For example, 39% of past-year smokers report noticing special promotions for tobacco products, such as Buy-One-Get-One-Free offers, compared to 15% of non-smokers.

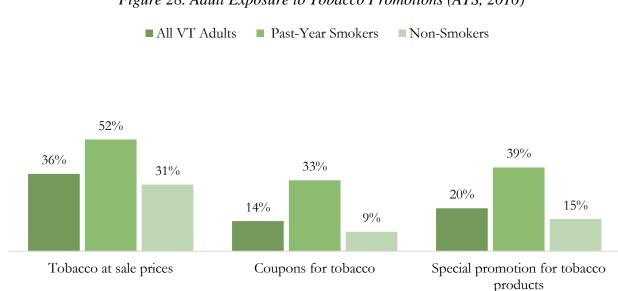
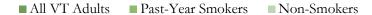


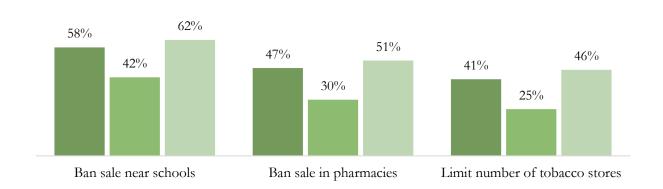
Figure 28. Adult Exposure to Tobacco Promotions (ATS, 2016)

Opinions on Point of Sale Policies

Overall, 58% of VT adults are somewhat or strongly in favor of banning the sale of tobacco products near schools, 47% are in favor of banning the sale of tobacco products in pharmacies, and 41% are in favor of limiting the number of stores that sell tobacco products in their community (Figure 29). Compared to non-smokers, past-year smokers are significantly less likely to support these point of sale policies.

Figure 29. Adult Opinions on Point of Sale Policies (ATS, 2016)

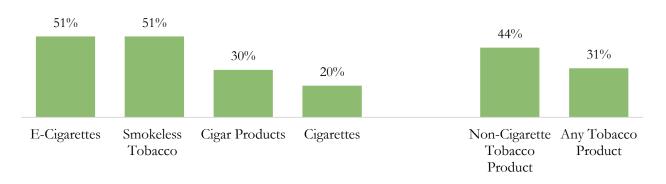




Flavored Tobacco Product Use

Compared to current cigarette smokers, those using non-cigarette tobacco products report higher rates of flavored tobacco product use, especially those using e-cigarettes and smokeless tobacco (Figure 30). Overall, 44% of current non-cigarette tobacco product users report use of a flavored product. About one-third of Vermont adults who use any tobacco product, including cigarettes, report use of a flavored version.

Figure 30. Percent of Tobacco Product Users Who Report
Using a Flavored Product (ATS, 2016)



*The 2016 ATS asked respondents about the use of the following flavors for each tobacco product: menthol (mint), clove, spice, alcohol (wine, cognac), candy, fruit, chocolate, or other sweets.

Appendix A: Supplemental Tables

Table A-1. Percent of Tobacco Users Reporting Use of Multiple Tobacco Products, by Demographic Sub-Groups (ATS, 2016)

	Multiple Tobacco
	Product Use (%)*
Overall	22.5
Gender	
Male	25.7 ^A
Female	17.4 ^A
Age	
18-24	40.4^{A}
25-44	$22.9^{A,B}$
45-64	13.9^{B}
65+	$16.4^{A,B}$
Race/Ethnicity	
White, non-Hispanic	21.3^{A}
Racial/Ethnic Minority	31.8^{A}
Education	
< High School	24.2^{A}
High School/GED	23.2^{A}
Some College	23.7^{A}
College or More	19.3 ^A
Income	
< \$25,000	22.3^{A}
\$25,000 - < \$50,000	17.5 ^A
\$50,000 - < \$75,000	26.1 ^A
\$75,000 +	16.5 ^A
Federal Poverty Level	
< 250% FPL	21.1 ^A
≥ 250% FPL	17.3 ^A
Health Insurance	
Private	19.9 ^A
Medicare	23.7^{A}
Medicaid	29.0^{A}
Other	15.3 ^A
None	20.2^{A}

A.B.C.D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Table A-2. Past-Year Quit Attempts Among Current Tobacco Users, by Demographic Sub-Groups (ATS, 2016)

	Past-Year Quit
_	Attempts (%)
Overall	43.4
Gender	
Male	39.6^{A}
Female	49.3 ^A
Age	
18-24	47.3^{A}
25-44	41.5^{A}
45-64	42.7^{A}
65+	48.0^{A}
Race/Ethnicity	
White, non-Hispanic	42.3^{A}
Racial/Ethnic Minority	56.0^{A}
Education	
< High School	36.7^{A}
High School/GED	42.5^{A}
Some College	47.4^{A}
College or More	42.5^{A}
ncome	
< \$25,000	49.2^{A}
\$25,000 - < \$50,000	41.7^{A}
\$50,000 - < \$75,000	47.0^{A}
\$75,000 +	35.9 ^A
Federal Poverty Level	
< 250% FPL	46.4 ^A
≥ 250% FPL	40.3 ^A
Health Insurance	
Private	37.9^{A}
Medicare	56.6 ^A
Medicaid	51.0^{A}
Other	41.6 ^A
None	32.6^{A}

A.B.C.D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Table A-3. Secondhand Smoke Exposure (SHS), by Demographic Sub-Groups (ATS, 2016)*

	SHS Exposure (%)
Overall	50.4
Gender	
Male	52.3 ^A
Female	48.6^{A}
Age	
18-24	67.5 ^A
25-44	58.6^{A}
45-64	45.5^{B}
65+	30.5 ^C
Race/Ethnicity	
White, non-Hispanic	48.6^{A}
Racial/Ethnic Minority	71.2^{B}
Education	
< High School	84.8^{A}
High School/GED	62.7^{B}
Some College	51.6 ^B
College or More	38.8^{C}
Income	
< \$25,000	66.2^{A}
\$25,000 - < \$50,000	$58.0^{A,B}$
\$50,000 - < \$75,000	$49.2^{\mathrm{B,C}}$
\$75,000 +	37.5 ^C
Federal Poverty Level	
< 250% FPL	62.8^{A}
≥ 250% FPL	42.7^{B}
Health Insurance	
Private	43.7^{A}
Medicare	65.4^{B}
Medicaid	61.9 ^B
Other	75.9^{B}
None	75.1 ^B
Children in Home	
Yes	50.7 ^A
No	51.7 ^A

^{*}Secondhand smoke exposure age-adjusted to the U.S. 2000 population, except that broken down by age. ^{A,B,C,D} Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Table A-4. Personal Home Smoking Bans, by Demographic Sub-Groups (ATS, 2016)

	Personal Home Ban
	(%)
Overall	86.9
Gender	
Male	85.1 ^A
Female	88.7 ^A
Age	
18-24	86.5 ^{A,B,C}
25-44	91.1 ^{A,B}
45-64	$85.8^{A,B,C}$
65+	82.8 ^{A,C}
Race/Ethnicity	
White, non-Hispanic	87.1 ^A
Racial/Ethnic Minority	86.5 ^A
Education	
< High School	66.9 ^A
High School/GED	$82.4^{A,B}$
Some College	87.6 ^{B,C}
College or More	91.1 ^C
Income	
< \$25,000	73.9 ^A
\$25,000 - < \$50,000	85.5^{B}
\$50,000 - < \$75,000	90.1 ^{B,C}
\$75,000 +	93.0^{C}
Federal Poverty Level	
< 250% FPL	79.4 ^A
≥ 250% FPL	91.2 ^B
Health Insurance	
Private	91.6 ^A
Medicare	82.0^{B}
Medicaid	81.9 ^B
Other	85.0 ^{A,B}
None	75.1^{B}
Smoking Status	
Past-Year Smoker	68.9^{A}
Non-Smoker	91.2 ^B
Children in Home	
Yes	93.8 ^A
No	84.1 ^B

No

84.1^B

A,B,C,D Groups within demographic categories that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Appendix B: Methodology Notes

Definitions

The following definitions are used throughout the 2016 VTATS Report.

Measure	Definition
Current Smoker	Smoked at least 100 cigarettes in their lifetime and now smokes
	every day or some days.
Former Smoker	Smoked at least 100 cigarettes in their lifetime but does not currently smoke at all.
Never Smoker	Has not smoked at least 100 cigarettes in their lifetime.
Non-Smoker	Former and never smokers are collectively referred to as non-
	smokers. Non-smokers may also be used in comparison to past-
	year smokers (see below). In this case, non-smoker includes
	never and former smokers who quit greater than one year ago
Past-Year Smoker	Smoked at any time during the past year. This includes all
	current smokers as of the date of the interview and former
	smokers if they last smoked regularly at any time within the last
	year.
Other Tobacco Product	Individuals who report some or everyday use of cigar products,
(OTP)	e-cigarette products, smokeless tobacco, or other OTP. This
	may alternatively be referred to as non-cigarette tobacco
	product use.
Any Tobacco Product	Current use of OTPs or cigarettes.
Secondhand Smoke	Individuals who report exposure in a home, car, or public space
Exposure	within the past seven days.

Age-Adjusting

In Vermont, variables are age-adjusted when they are a Healthy Vermonters 2020 goal and their Healthy People 2020 counterpart is age-adjusted. This is done primarily when we are using the same data source to estimate the measure. In the 2016 VTATS Report, the following variables were age-adjusted to the U.S. 2000 population, except when the measure was broken down by age: cigarette smoking prevalence and secondhand smoke exposure. When a measure was age-adjusted, it was conveyed in a footnote in the table or figure.

Suppression Rules

Data were not reported if the unweighted numerator was less than 5 or the unweighted denominator was less than 50.

Statistical Significance

Statistical differences between proportions were considered statistically significant when 95% confidence intervals did not overlap. When exploring demographic differences, statistical significance within a category is noted with letters: A, B, C, D. Groups within a demographic

category that share a common letter are statistically similar to each other. Groups not sharing a common letter are statistically different from one another.

Endnotes

¹ https://www.cdc.gov/tobacco/data_statistics/fact_sheets/cessation/quitting/index.htm

² Tobacco Use in Minnesota: 2014 Update. Minneapolis, MN: ClearWay Minnesota and Minnesota Department of Health; January 2015.

³ Tobacco Use in Minnesota: 2014 Update. Minneapolis, MN: ClearWay Minnesota and Minnesota Department of Health; January 2015.

⁴ https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/general_facts/index.htm

⁵ https://www.tobaccofreekids.org/research/factsheets/pdf/0271.pdf

⁶ U.S. Department of Health and Human Services. <u>The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General</u>. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. 2014.