

## BRFSS 2011 – TOBACCO USE

Lower tobacco use is a health priority in Vermont. Decreasing adult use of cigarettes and increasing the proportion of cigarette smokers who attempt cessation are Healthy Vermonters 2020 Objectives (HV2020). Each year, the Behavioral Risk Factor Surveillance System (BRFSS) results will be used to update these two HV2020 objectives and track other Vermont Department of Health (VDH) goals and indicators of interest. This data brief includes 2011 results for selected indicators and demographic subgroups.

### Adult Prevalence & Quit Attempts

	%	Estimated Vermonters**
Cigarette Use*	20.2	95,000
Smokeless Tobacco Use	2.7	13,000
Quit Attempts among cigarette users*	54.9	53,000

\* Percents age-adjusted to standard U.S. 2000 population according to Healthy People 2020 guidelines.

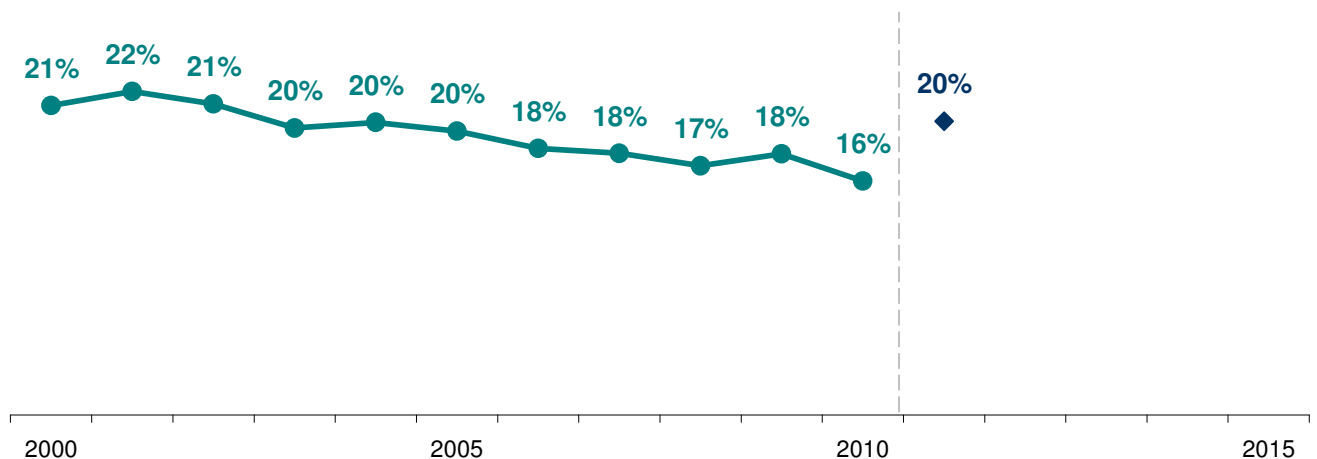
\*\* Estimated counts are rounded to the nearest thousand Vermonters and not age-adjusted.

In 2011, the Centers for Disease Control and Prevention implemented changes to the BRFSS weighting methodology in order to more accurately represent the adult population. Weights are now calculated using an iterative proportional fitting (or “raking”) methodology. This allows the weights to be calculated using a smaller sample size, adjusts for more demographic variables, and incorporates cell phone interview data into estimates. While these adjustments make the calculations more representative of the population, the changes in methodology also limit the ability to compare 2011 results to previous years.

VDH’s Center for Health Statistics recommends that comparisons between 2011 BRFSS data and earlier years be made with caution. Statistical differences between 2011 and earlier years may be due to methodological changes, rather than changes in opinion or behavior.

Going forward, trend lines for prevalence will separate pre- and post-2011 data. Currently, with only one year of data for the new methodology, the new trend line can be seen below:

**Vermont Adult Smoking Prevalence, 2000-2011**



## DEMOGRAPHICS

There continue to be differences in smoking prevalence and quit attempts by gender, age, education level, race-ethnicity, and Federal Poverty Level (FPL). These differences are similar to those noted in prior years of BRFSS data. Males, younger adults, Vermonters with lower education levels, those of racial or ethnic minorities, and those at less than 250% of FPL are more likely to be current smokers than females, older adults, Vermonters with higher education levels, white, non-Hispanics, and those at 250% of FPL or higher, respectively. Though there were some differences in the proportion of smokers with quit attempts, these did not reach the level of statistical significance nor follow this particular pattern.

### Adult smoking prevalence and quit attempts by selected demographic characteristics:

	Smoking Prevalence			Quit Attempts		
	%	Estimated Vermonters	Statistical Difference	%	Estimated Vermonters	Statistical Difference
<b>Overall</b>	<b>20.2</b>	95,000	--	<b>54.9</b>	53,000	--
<b>Gender</b>			Yes			No
Female	17.6	42,000		56.9	24,000	
Male	22.7	53,000		52.9	29,000	
<b>Age Group*</b>			Yes			No
18 to 24 years	23.9	16,000		62.3	10,000	
25 to 44 years	26.9	40,000		55.5	22,000	
45 years and older	13.9	39,000		53.5	21,000	
18-24 years	23.9	16,000		62.3	10,000	
25-34 years	33.1	23,000		57.6	13,000	
35-44 years	21.2	16,000		52.3	8,000	
45-54 years	19.2	19,000		53.9	10,000	
55-64 years	16.4	14,000		53.9	8,000	
65+ years	6.1	6,000		51.1	3,000	
<b>Education</b>			Yes			No
High school or less	32.6	61,000		54.4	34,000	
Greater than high school	11.9	33,000		55.6	19,000	
Less than high school	55.8	22,000		49.1	11,000	
High school	26.5	40,000		58.2	23,000	
Some college	17.0	23,000		56.0	13,000	
College or higher	7.5	11,000		53.0	6,000	
<b>Race-Ethnicity</b>			Yes			No
White, non-Hispanic	19.2	85,000		55.3	47,000	
Racial/Ethnic Minority	34.5	8,000		52.2	5,000	
<b>Federal Poverty Level***</b>			Yes			No
<250% of FPL	25.8	N/A		56.2	N/A	
≥250% of FPL	8.7	N/A		55.0	N/A	

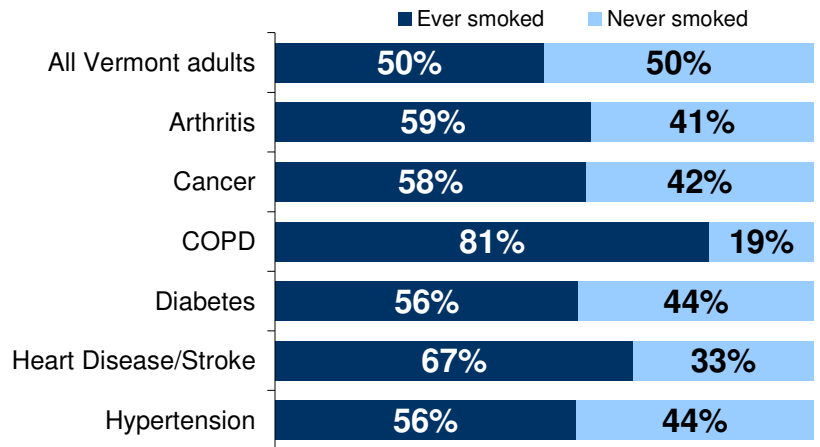
\* All percents with the exception of age group categories are age-adjusted to standard U.S. 2000 population according to Healthy People 2020 guidelines.

\*\* Estimated counts are rounded to the nearest thousand Vermonters and not age-adjusted.

\*\*\* Estimated Vermonters for Federal Poverty Level cannot be calculated due to survey methodology.

## CHRONIC DISEASE

In those with chronic disease and disease risk factors, a statistically significant higher proportion are ever smokers compared to all adults for hypertension, heart disease, COPD diabetes, cancer, and arthritis. There are no significant differences for asthma, any history of depression, obesity, or meeting physical activity recommendations (not shown).



## YOUNG ADULTS

As noted, younger adults are more likely to be current smokers than older adults. Given this disparity, subgroup analyses are presented below. Among young adults 18 to 34, those 25 to 29 have the highest smoking prevalence (36.1%). Most demographic differences in prevalence mirror those of all adults; gender, however, is no longer statistically significant in any of these age groups. No demographic subgroups of the 5-year age categories contain enough respondents to provide statistically stable point estimates for quit attempts with the exception of the white, non-Hispanic race-ethnicity. The proportion of quit attempts among white, non-Hispanic 18-24 year olds is 61.5%, among 25-29 year olds, 54.6%, and among 30-34 year olds 58.6%. The prevalence of smokeless tobacco use is 6.0% in 18-24 year olds, 5.9% in 25-29 year olds, and 4.8% in 30-34 year olds (not shown).

### Adults 18-34 years old: prevalence by selected demographic characteristics:

	Age 18-24*	Age 25-29*	Age 30-34*	Age 25-34*	
<b>Vermonters**</b>	64,873	35,441	34,181	69,622	
<b>Estimated Smokers</b>	16,000	12,000	11,000	23,000	
	Prev %	Prev %	Prev %	Prev %	Quit Attempts %
<b>Overall Prevalence</b>	<b>24.0</b>	<b>36.1</b>	<b>30.2</b>	<b>33.1</b>	<b>57.6</b>
<b>Gender</b>					
Female	24.3	34.9	22.8	28.9	54.9
Male	23.6	37.4	36.8	37.1	59.7
<b>Education</b>					
High school or less	33.3	60.9	45.5	52.8	52.1
Greater than high school	13.8	21.5	20.9	21.2	65.8
Less than high school	--	--	--	--	--
High school	31.2	45.6	36.7	40.6	--
Some college	15.5	30.5	37.0	34.0	--
College or higher	10.4	15.5	7.7	11.6	--
<b>Race/Ethnicity</b>					
White, non-Hispanic	24.9	32.5	28.4	30.3	56.6
Racial/Ethnic Minority	--	--	--	--	--
<b>Federal Poverty Level</b>					
<250% of FPL	26.8	48.8	34.5	40.7	64.1
≥250% of FPL	--	11.4	13.2	12.4	--

\* Percents are not age-adjusted due of the small age ranges. This differs slightly from analyses of all adults.

\*\* 2010 Census.

-- Suppressed due to small numbers.