# E-Cigarette Use – Data Brief **Behavioral Risk Factor Surveillance System 2016**

### Background

In 2016, three percent of Vermont adults were current users of e-cigarettes.<sup>1</sup> This is significantly lower than the US average of five percent. E-cigarettes, also called personal vaporizers, vape pens, e-cigars, e-hookah, or vaping devices are products that typically deliver nicotine, flavorings, and other additives to users through an inhaled aerosol. This aerosol can contain harmful substances including nicotine, and it is difficult for the consumer to know what ecigarette products contain.<sup>2</sup> There is sufficient evidence to show that e-cigarettes are harmful for youth, and use as a young adult increases the risk of using combustible tobacco cigarettes. We are still learning about the long-term health effects of e-cigarettes and their potential as a cessation aide for adults.<sup>3,4</sup> Since e-cigarette use was asked on BRFSS in 2016, the Vermont Health Department is now able to gain a better understanding of who is using ecigarettes and the associated health effects and risk behaviors among Vermont adults.

### What Use Looks Like

Nearly two in ten Vermont adults indicate that they have ever used e-cigarettes, while the majority (81%) indicate that they have never used e-cigarettes. Only three percent of Vermont adults indicate that they are current users: one percent use every day and two percent use some days. Fifteen percent of adults are former users of e-cigarettes.



# **Demographics**

Men are over twice as likely as women to currently use e-cigarettes, a statistically significant difference. Current use of e-cigarettes decreases as age increases. All differences by age are statistically significant, except for adults 18-24 and 25-44. Adults with a college degree or higher are significantly less likely to use e-cigarettes compared to those with less education. White, non-Hispanics and people of color report similar rates of current e-cigarette use. There are no statistically significant differences in current use of e-cigarettes by annual household income level.

Current E-Cigarette Use, by Gender, Age and Education, 2016 9%								
5%	2%		5%	2%	1%	5%	4%	1%
Male	Female	18-24	25-44	45-64	65+	HS or Le	ss Some Colle	ege College+

Compared to those who do not use e-cigarettes, current e-cigarette users are significantly more likely to currently

smoke (54% vs 17%) or use smokeless tobacco (13% vs 3%). This is true for everyday and occasional smoking (data not shown). Additionally, among adults who currently smoke cigarettes and have made any quit attempt in the past year 12% report currently using e-cigarettes. Eight percent of those who quit smoking cigarettes within the last five years currently use e-cigarettes.



<sup>&</sup>lt;sup>1</sup> The questions used to determine e-cigarette use asked: "Have you ever used an e-cigarette or other electronic vaping product." We cannot determine who may be using these for marijuana or as an electronic nicotine delivery system.

<sup>&</sup>lt;sup>2</sup> https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/index.htm

<sup>&</sup>lt;sup>3</sup> https://e-cigarettes.surgeongeneral.gov/documents/2016\_SGR\_Full\_Report\_508.pdf

<sup>&</sup>lt;sup>4</sup> https://www.nap.edu/resource/24952/012318ecigaretteHighlights.pdf

<sup>\*</sup>Statistically significant difference.

# A Profile of Adult E-cigarette Users⁵

An estimated 8,000 Vermonters use e-cigarettes only, 70,000 use cigarettes only, 9,000 use both, and 400,000 use neither. Those who use e-cigarettes and cigarettes, either alone or both, are significantly more likely to report current marijuana use compared to those who do not use either. Binge drinking and not participating in leisure time physical activity are statistically more likely among adults who use cigarettes or both cigarettes and e-cigarettes compared with those not using either tobacco product. Binge drinking and not participating in leisure time physical activity is similar for those using just e-cigarettes and using neither e-cigarettes or cigarettes.

#### **Risk Behaviors**



# Chronic Conditions

Those who use both e-cigarettes and cigarettes have a significantly higher rate of cardiovascular disease (CVD) compared to those who do not use either product. Those who use only cigarettes have statistically similar rates of CVD compared to those that do not use either tobacco product. Vermont adults report having similar rates of the following chronic conditions regardless of whether they use e-cigarettes or cigarettes: asthma, chronic obstructive pulmonary disease (COPD), diabetes, arthritis, obesity and cancer.

#### Prevalence of CVD by Current E-Cigarette User Profile, 2016





# Perceptions of Health Status & Mental Health

Adults who use e-cigarettes and cigarettes, either alone or together, have statistically higher rates of depression compared to those who report using neither cigarettes or e-cigarettes. Fair or poor general health, poor physical health, and poor mental health are all similar for adults using only e-cigarettes and neither e-cigarettes or cigarettes.<sup>6</sup> However, adults using both tobacco products or only cigarettes are statistically more likely to have fair or poor health as well as poor physical and mental health. Those who use both e-cigarettes and cigarettes have the highest prevalence of poor health status across all indicators.



# Health Status by Current E-Cigarette User Profile, 2016

For more information on the VT Tobacco Program: <u>Vermont Department of Health Tobacco program</u>. For more information on tobacco data contact Erin Singer, PhD (<u>erin.singer@vermont.gov</u>) or visit <u>Tobacco Surveillance</u>. For more information on BRFSS data contact Leslie Barnard, M.P.H. (<u>leslie.barnard@vermont.gov</u>).



<sup>&</sup>lt;sup>5</sup> No categories exclude those who use smokeless tobacco, other tobacco products or cigars.

<sup>&</sup>lt;sup>6</sup> Fair/Poor health=general health reported as fair or poor; Poor physical/mental health=reported 14 or more days in the past month when physical or mental health was not good.