

# BRFSS Brief

Number 2020-01

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention (CDC) and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

## Electronic Cigarette Use

New York State Adults, 2017

### Introduction and Key Findings

Electronic cigarettes (e-cigarettes) are battery-powered devices that heat a solution of liquid nicotine, flavorings, and other chemicals creating an aerosol that is inhaled by the user. E-cigarettes are known by many different names including e-cigs, vapes, vape pens, e-hookahs, and electronic nicotine delivery systems (ENDS). Using an e-cigarette is called vaping. E-cigarettes are not a United States (US) Food and Drug Administration (FDA) approved smoking cessation aid and their usefulness as a cessation aid is unproven. With or without nicotine, e-cigarettes are not hazard-free and e-cigarette aerosol is not simply water vapor; the aerosol may contain heavy metals, volatile organic compounds, ultrafine particles, and other toxins.<sup>1</sup> In addition, e-cigarette use can undermine social norms about tobacco, delay cessation among cigarette smokers, and increase the risk of ever using combustible tobacco cigarettes among youth and young adults.<sup>1</sup>

The long-term health risks of e-cigarettes will not be known for decades. The FDA has extended regulatory authority to all tobacco products including e-cigarettes.<sup>2</sup> But the FDA approach to regulation of e-cigarettes is being phased in over time, may be delayed by litigation, and effective regulation may be years away. E-cigarettes are included in New York's (NY) Clean Indoor Air Act, which prohibits their use everywhere that smoking tobacco products are prohibited including workplaces, bars and restaurants.<sup>3</sup>

### Key Findings

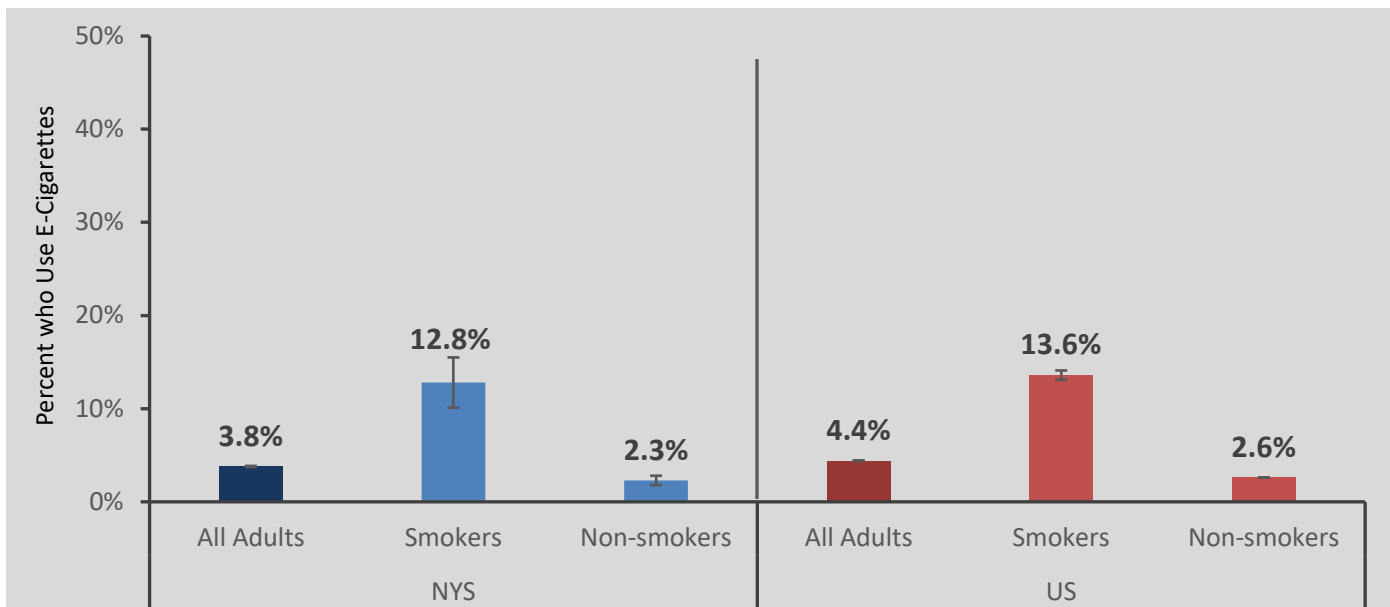
In New York State (NYS) an estimated 541,000 adults, or 3.8% of the state's adult population aged 18 years and older, currently use e-cigarettes every day or some days (Table 1, Figure 1). Among NYS adults, current use of e-cigarettes is highest among smokers (12.8%); young adults 18-24 years of age (9.7%); adults enrolled in Medicaid (6.5%); adults reporting frequent mental distress, defined as adults who report problems with stress, depression, or emotions on at least 14 of the previous 30 days (formerly referred to as poor mental health) (6.4%); and adults who are unemployed (6.3%). Within demographic groups, statistically significant differences in e-cigarette use are observed between males and females (5.7% vs. 2.0%), young adults 18-24 years of age and adults 25 years of age and older (9.7% vs. 3.0%), high school graduates and college graduates (5.4% vs. 2.5%), adults living with disability and adults who do not live with disability (5.6% vs. 3.2%), adults who are enrolled in Medicaid or Other Insurance and those enrolled in Medicare (4.1% and 3.3% vs. 0.8%), and between current smokers and former or never smokers (12.8% vs. 3.4% and 1.9%) (Figure 2). There are no significant differences in current e-cigarette use between NYS and the US<sup>4</sup>, or by region, race or Hispanic ethnicity, income, employment status, or frequent mental distress at the statewide level.

### BRFSS Questions

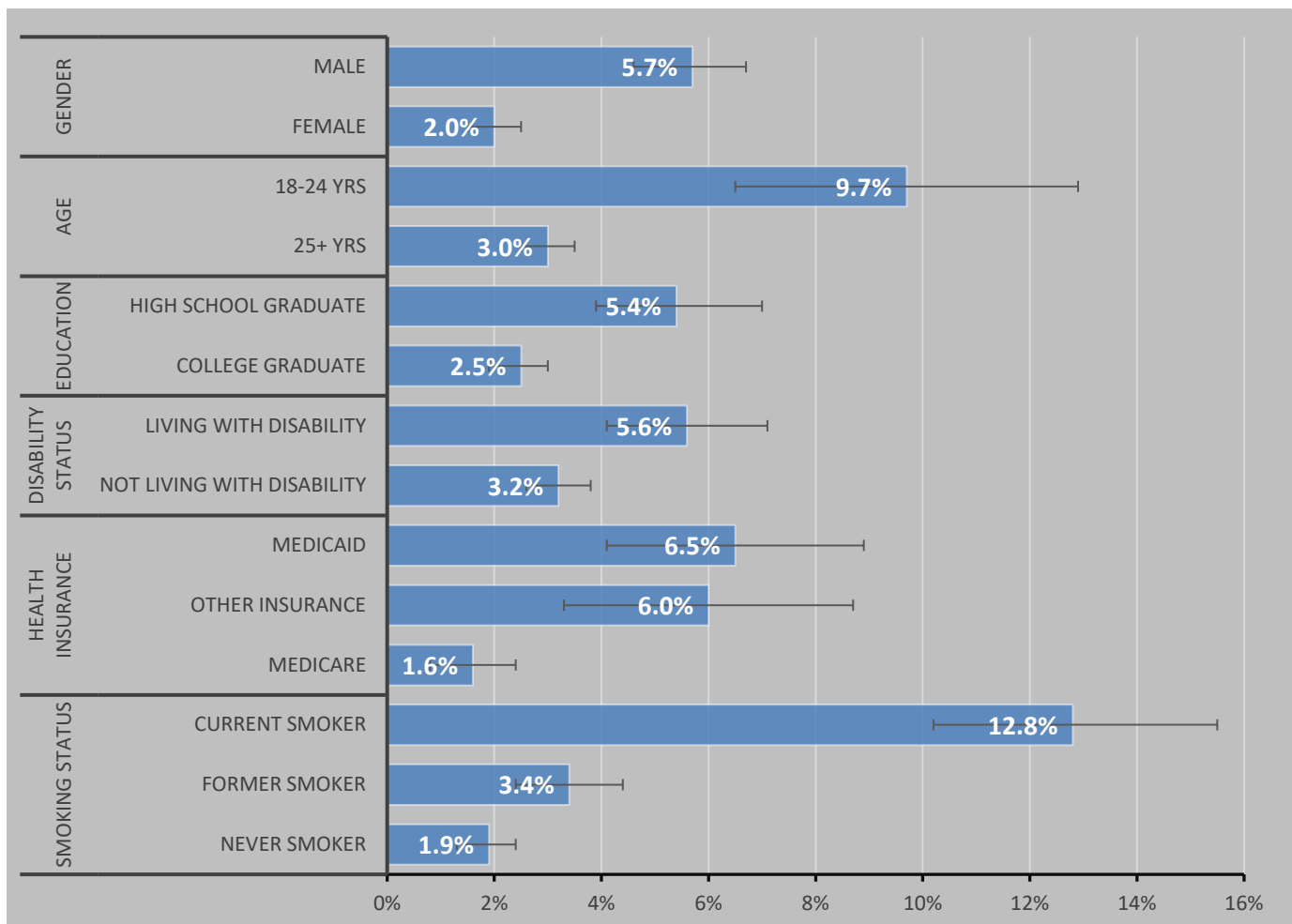
- *Have you ever used an e-cigarette or other electronic "vaping" product, even just one time, in your entire life?*
- *Do you now use e-cigarettes or other electronic "vaping" products every day, some days, or not at all?*

Current e-cigarette use is defined as an adult over the age of 18 years who answered 'yes' to ever using an e-cigarette or other electronic vaping product and who also now uses e-cigarettes or other electronic vaping products every day or some days.

**Figure 1. Percent of Current E-Cigarette Use among Adults 18 Years of Age and Older by Smoking Status, NYS BRFSS 2017 and US BRFSS 2017<sup>4</sup>**



**Figure 2. Percent of Current E-Cigarette Use among Adults 18 Years of Age and Older by Select Demographic Indicators, NYS BRFSS 2017**



**Table 1. Percent of Current E-Cigarette Use among Adults 18 Years of Age and Older by Demographic Indicators, NYS BRFS 2017**

	Current E-Cigarette Use		
	% <sup>a</sup>	95% CI <sup>a</sup>	Estimated Weighted N <sup>a</sup>
<b>New York State</b>	3.8	(3.1,4.3)	<b>541,000</b>
<b>Region</b>			
Rest of State (NYS excluding NYC)	4.3	(3.5,5.2)	356,000
New York City	3.0	(2.3,3.7)	185,000
<b>Sex</b>			
Male	5.7	(4.6,6.7)	393,000
Female	2.0	(1.5,2.5)	148,000
<b>Race/Ethnicity</b>			
White, Non-Hispanic	4.2	(3.4,5.0)	338,000
Black, Non-Hispanic	2.5	(1.4,3.6)	49,000
Other Race or Multiracial, Non-Hispanic	3.6	(2.2,4.9)	87,000
Hispanic	3.2	(1.3,5.0)	49,000
<b>Age</b>			
18-24 Years Old	9.7	(6.5,12.9)	165,000
25 Years and Older	3.0	(2.5,3.5)	374,000
25-34	5.6	(4.1,7.1)	147,000
35-44	3.4	(2.2,4.5)	74,000
45-54	3.4	(2.3,4.5)	79,000
55-64	2.0	(1.2,2.7)	47,000
65+	0.9	(0.4,1.4)	26,000
<b>Educational Attainment</b>			
Less than High School	2.7	(1.4,4.0)	54,000
High School or GED	5.4	(3.9,7.0)	205,000
Some College	4.1	(3.0,5.2)	162,000
College Graduate	2.5	(1.9,3.0)	115,000
<b>Annual Household Income</b>			
Less than \$25,000	4.6	(3.3,5.8)	159,000
\$25,000-34,999	3.6	(1.9,5.3)	44,000
\$35,000-49,999	2.8	(1.4,4.2)	45,000
\$50,000-74,999	3.2	(1.8,4.6)	51,000
\$75,000+	3.9	(2.8,5.0)	181,000
<b>Employment Status</b>			
Employed/Self-Employed	3.9	(3.2,4.6)	316,000
Unemployed	6.3	(2.6,10.0)	54,000
Not in Labor Force	3.2	(2.3,4.1)	167,000
<b>Health Insurance Status</b>			
Private Health Insurance	3.6	(2.8,4.5)	229,000
Medicare	1.6	(0.8,2.4)	37,000
Medicaid	6.5	(4.1,8.9)	107,000
Other	6.0	(3.3,8.7)	34,000
Not Insured	3.8	(2.2,5.4)	56,000
<b>Frequent Mental Distress<sup>b</sup></b>			
Yes	6.4	(3.9,8.9)	107,000
No	3.4	(2.9,4.0)	426,000
<b>Disability Status<sup>c</sup></b>			
Yes	5.6	(4.1,7.1)	186,000
No	3.2	(2.6,3.8)	351,000
<b>Smoking Status<sup>d</sup></b>			
Current Smoker	12.8	(10.2,15.5)	259,000
Former Smoker	3.4	(2.4,4.4)	113,000
Never Smoker	1.9	(1.3,2.4)	169,000

<sup>a</sup> %=weighted percentages to population characteristics; 95% CI= 95% confidence interval; N=number. <sup>b</sup> Frequent mental distress is defined as yes if respondents report problems with stress, depression, or emotions on at least 14 of the previous 30 days. This indicator was formerly referred to as poor mental health. <sup>c</sup> Disability status is defined as yes if respondents report having at least one type of disability (cognitive, independent living, self-care, mobility, vision, or hearing). <sup>d</sup> A current smoker is defined as an adult over the age of 18 who has smoked at least 100 cigarettes in their lifetime and currently smokes on at least some days. A former smoker is an adult over the age of 18 who has smoked at least 100 cigarettes in their lifetime but does not smoke currently.

## References

1. U.S. Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General*. Atlanta, GA: 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, 2016. [https://e-cigarettes.surgeongeneral.gov/documents/2016\\_SGR\\_Full\\_Report\\_non-508.pdf](https://e-cigarettes.surgeongeneral.gov/documents/2016_SGR_Full_Report_non-508.pdf)
2. U.S. Food & Drug Administration. The Facts on the FDA's New Tobacco Rule. Content current as of 06/16/2016.
3. New York State Department of Health. Clean Indoor Air Act. Update October 2017. [https://www.health.ny.gov/prevention/tobacco\\_control/clean\\_indoor\\_air\\_act/](https://www.health.ny.gov/prevention/tobacco_control/clean_indoor_air_act/)
4. Centers for Disease Control and Prevention. (2016). Nationwide- 2016 Tobacco Use. Behavioral Risk Factor Surveillance System (BRFSS). Updated December 4, 2017. <http://www.cdc.gov/brfss>

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