

BRFSS Brief

Number 1903

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, 2016

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, broadly referred to as electronic nicotine delivery systems (ENDS), are known by many different names including e-cigs and cigalikes; pens and vape pens; vapes, personal vaporizers and advanced personal vaporizers; e-cigars, e-pipes, hookah pens or e-hookahs.^{1,2} 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 such as diacetyl, a flavoring agent linked to lung disease.² 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.²

The long-term health risks of e-cigarettes will not be known for decades. The FDA recently extended its regulatory authority to all tobacco products including e-cigarettes.³ It now has the authority to regulate the manufacturing, import, packaging, labeling, advertising, promotion, sale, and distribution of e-cigarettes and similar devices, including components and parts of e-cigarettes but excluding accessories. But 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.⁴

Key Findings

In NY an estimated 589,000 adults, or 4.1% 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 current smokers in NY, 14.0% currently use e-cigarettes every day or some days (Figure 1). No statistically significant differences were observed between the rate of adult e-cigarette use in NY compared to the US (Figure 1). Among all adults, current use of e-cigarettes is higher among men than women (5.4% vs 2.9% respectively), among young adults 18-24 years of age compared to adults 25 years of age and older (9.1% vs 3.4% respectively), among adults who report poor mental health compared to adults with good mental health (8.4% vs 3.6% respectively), among adults with Medicaid health insurance compared to adults with private health insurance (6.3% vs 3.9% respectively) and among adults with less than a high school education, high school graduates and those with some college compared to those who are college graduates (3.8%, 5.5%, 5.0% vs 2.3% respectively) (Table 1, Figure 2). There are no significant differences in current e-cigarette use among adults by race or Hispanic ethnicity, income, or employment status (Table 1, Figure 2).

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 2016 and US BRFSS 2016

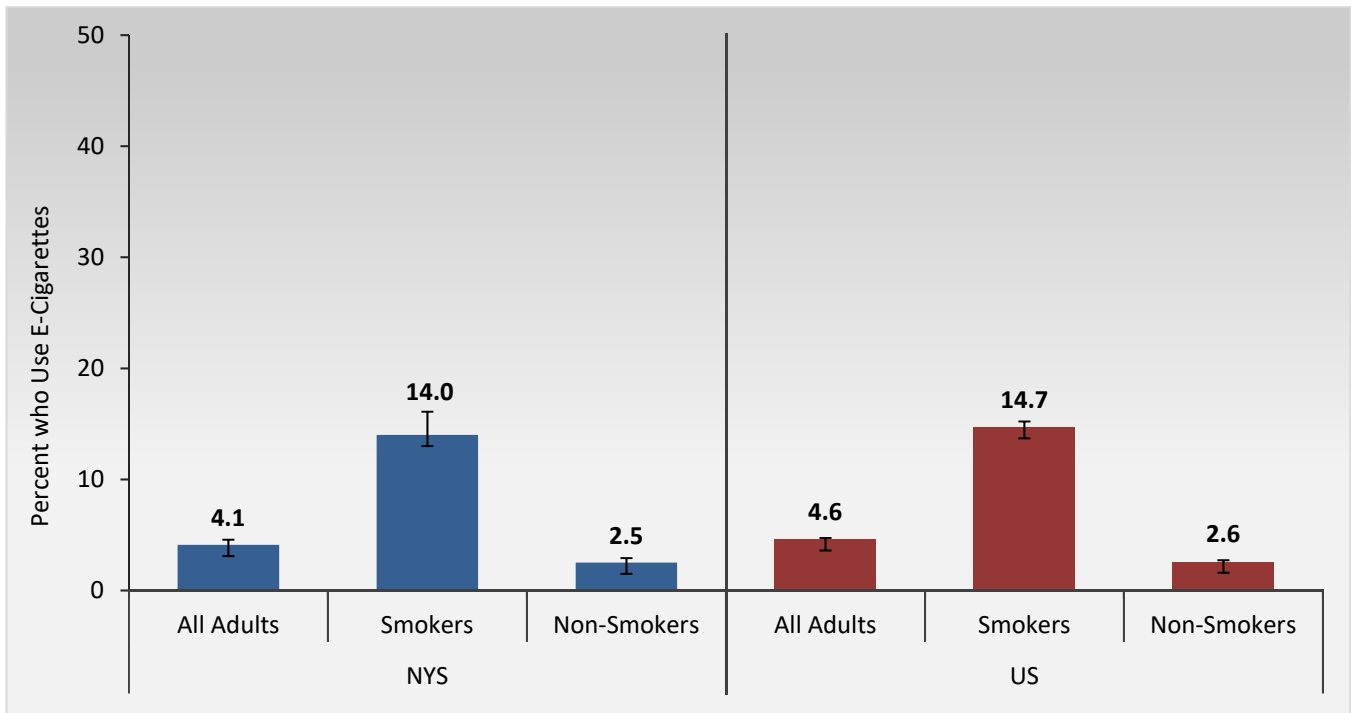


Figure 2. Percent of Current E-Cigarette Use among Adults 18 Years of Age and Older by Select Demographic Indicators. NYS BRFSS 2016

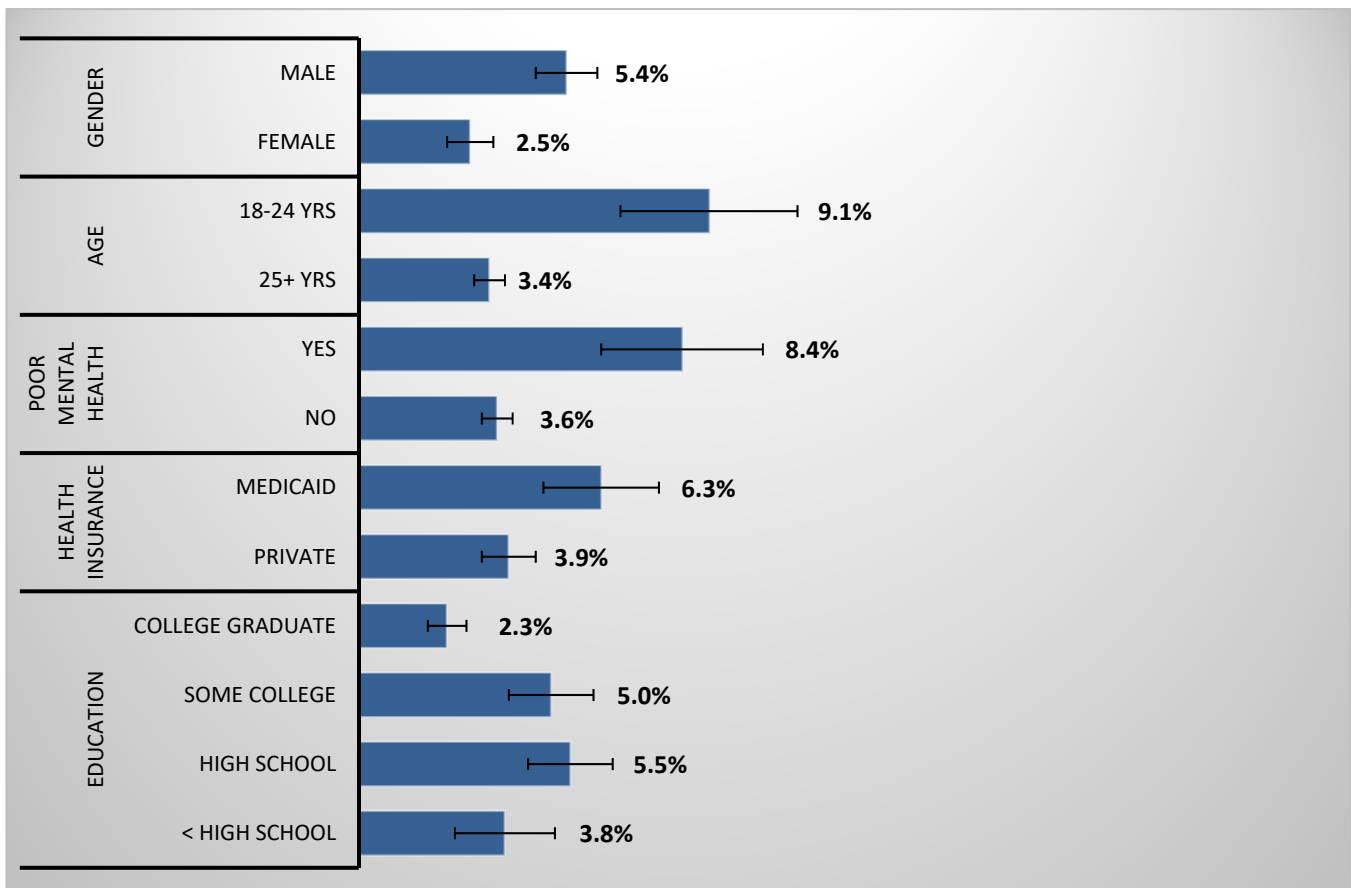


Table 1. Percent of Current E-Cigarette Use among Adults 18 Years of Age and Older by Demographic Indicators. NYS BRFS 2016

	Percent who Currently Use E-Cigarettes	Estimated Weighted Number	95% Confidence Interval
New York State	4.1	589,000	[3.6,4.6]
Region			
Rest of State (NYS excluding NYC)	3.9	323,000	[3.4,4.4]
New York City	4.3	267,000	[3.5,5.2]
Sex			
Male	5.4	369,000	[4.6,6.2]
Female	2.9	220,000	[2.4,3.5]
Race/Ethnicity			
White/Non-Hispanic	4.2	344,000	[3.7,4.8]
Black/Non-Hispanic	3.9	76,000	[2.5,5.3]
Other Race or Multiracial/Non-Hispanic	4.0	96,000	[2.2,5.7]
Hispanic	3.9	60,000	[2.6,5.2]
Age			
18-24 Years Old	9.1	160,000	[6.8,11.4]
25-34	5.8	152,000	[4.5,7.0]
35-44	4.2	92,000	[3.0,5.4]
45-54	3.3	81,000	[2.4,4.3]
55-64	2.8	66,000	[2.1,3.6]
65+	1.1	32,000	[0.5,1.7]
Educational Attainment			
Less than High School	3.8	78,000	[2.5,5.1]
High School or GED	5.5	208,000	[4.4,6.6]
Some College	5.0	196,000	[4.0,6.1]
College Graduate	2.3	106,000	[1.8,2.8]
Annual Household Income			
Less than \$25,000	5.3	189,000	[4.2,6.5]
\$25,000-34,999	3.6	44,000	[2.1,5.1]
\$35,000-49,999	4.0	58,000	[2.6,5.4]
\$50,000-74,999	3.7	63,000	[2.5,4.9]
\$75,000+	4.0	177,000	[3.1,4.8]
Employment Status			
Employed/Self-Employed	4.3	344,000	[3.7,4.9]
Unemployed	4.0	33,000	[2.2,5.9]
Not in Labor Force	3.9	208,000	[3.1,4.7]
Health Insurance Status			
Private Health Insurance	3.9	255,000	[3.2,4.6]
Medicare	1.7	39,000	[1.2,2.1]
Medicaid	6.3	109,000	[4.7,7.8]
Other	6.7	38,000	[3.2,10.2]
Not Insured	5.1	72,000	[3.1,7.0]
Poor Mental Health^a			
Yes	8.4	126,000	[6.3,10.5]
No	3.6	448,000	[3.1,4.0]
Disability Status^b			
Yes	4.2	135,000	[3.4,4.9]
No	4.1	452,000	[3.5,4.7]

a) Poor mental health is defined as reported problems with stress, depression, or emotions on at least 14 of the previous 30 days.

b) Living with any disability is defined as having at least one type of a disability (cognitive, independent living, self-care, mobility, vision or hearing).

References

1. CDC Office on Smoking and Health. Electronic Cigarettes. Updated November 6, 2017. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm
2. 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
3. U.S. Food & Drug Administration. The Facts on the FDA's New Tobacco Rule. Updated 11/09/2017.
4. 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/
5. 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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