

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.

## Chronic Obstructive Pulmonary Disease

### New York State Adults, 2016

#### Introduction and Key Findings

Chronic obstructive pulmonary disease, or COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema and chronic bronchitis. In 2014, chronic lower respiratory diseases (predominantly COPD) was the third leading cause of death in the United States.<sup>1</sup> About 16 million Americans report that they have been diagnosed with COPD, and millions more people suffer from COPD, but have not been diagnosed and are not being treated.<sup>2</sup> Although there is no cure for COPD, symptoms can be managed with treatment.

Tobacco smoke continues to be the leading cause of COPD and about 85 to 90 percent of all COPD cases are caused by cigarette smoking.<sup>3</sup> Other risk factors for COPD include exposure to secondhand smoke, occupational exposure to chemicals or fumes, asthma, air pollution, and respiratory infections. Self-management of COPD, such as medication adherence, healthy eating, and exercise is associated with improved health-related quality of life and reduced hospital admissions.<sup>4,5</sup>

CDC collaborated with the National Institutes of Health and other federal agencies to develop the [COPD National Action Plan](#) which reflects input from patients, caregivers, health care providers, and nonprofit organizations. The goals of the plan are: 1) Empower people with COPD, their families, and caregivers to recognize and reduce the burden of COPD; 2) Improve the diagnosis, prevention, treatment, and management of COPD by improving the quality of care delivered across the health care continuum; 3) Collect, analyze, report, and disseminate COPD-related public health data that drive change and track progress; 4) Increase and sustain research to better understand the prevention, pathogenesis, diagnosis, treatment, and management of COPD; and, 5) Translate national policy, educational, and program recommendations into research and public health care actions.

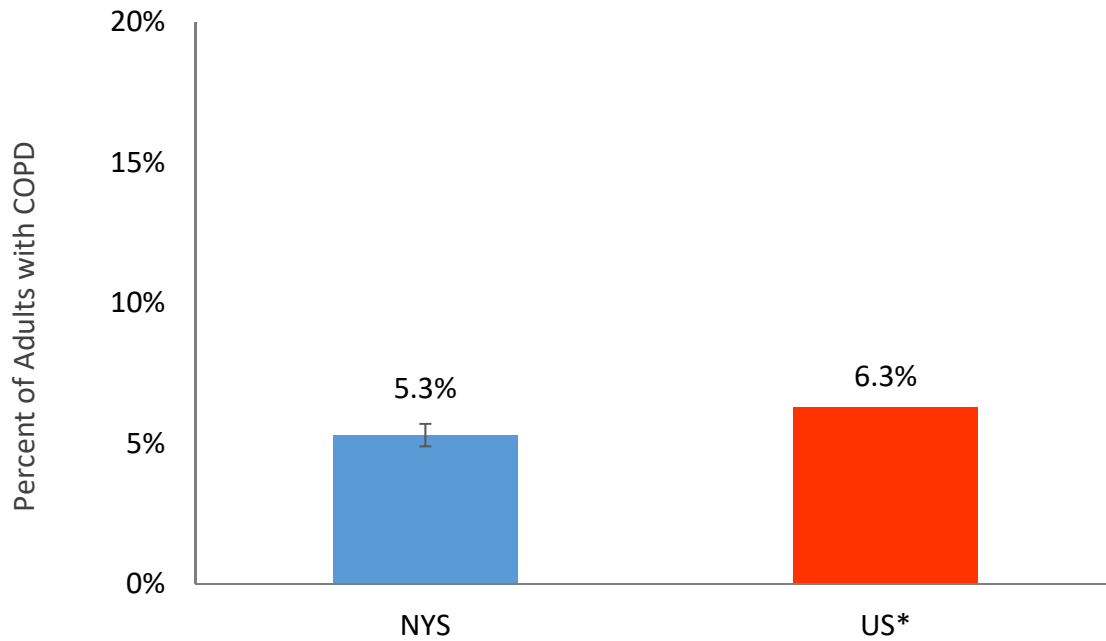
#### Key Findings

An estimated 5.3% of adults in New York State (an estimated 819,000 adults) report being told by a health professional that they have COPD (Figure 1, Table 1). Rates of COPD are highest among adults who report living with disability (14.3%), adults who are current smokers (12.8%), adults age 65 and older (11.1%), adults enrolled in Medicare (11.0%), and adults who are former smokers (8.6%) (Table 1). The rate of COPD in the Rest of State region (6.3%) is statistically higher than the rate in New York City (3.9%).

#### BRFSS Question

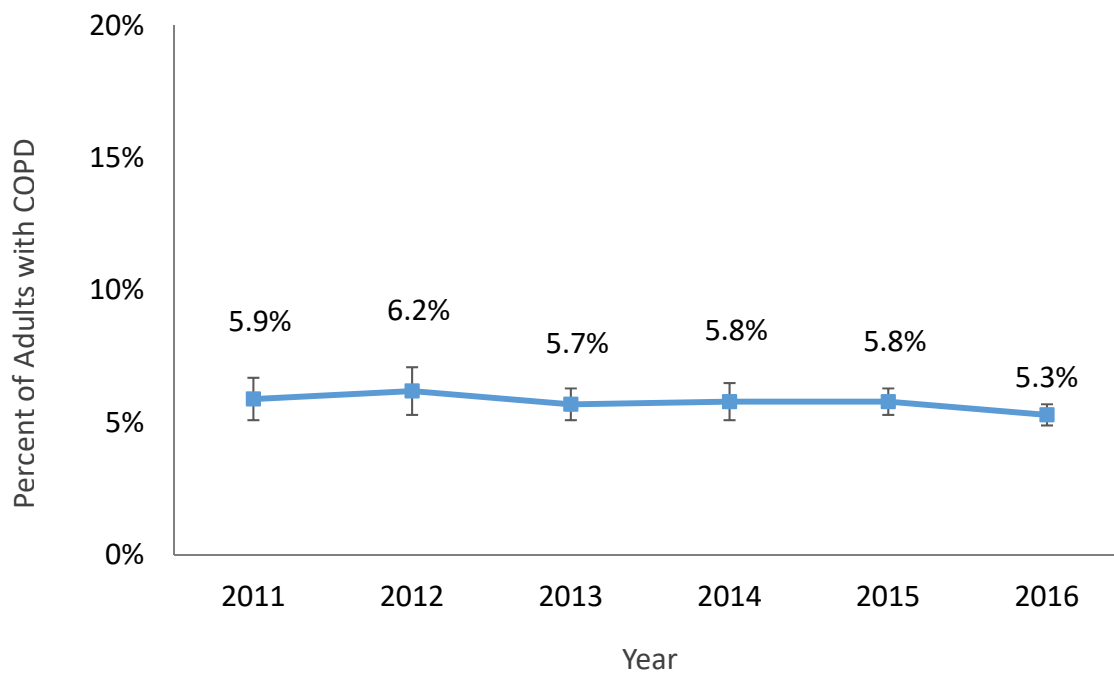
- Has a doctor, nurse, or other health professional ever told you that you have chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis?

**Figure 1. Comparison of Chronic Obstructive Pulmonary Disease (COPD) Prevalence: NYS and US Adults, BRFSS 2016**



\*U.S. data point is the median value for all states and D.C. combined. Confidence interval is not used with the median value.

**Figure 2. Prevalence of Chronic Obstructive Pulmonary Disease (COPD), NYS BRFSS 2011-2016**



**Table 1. Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Groups, NYS BRFSS 2016**

	%	Estimated Weighted N	95% Conf. Int.
<b>New York State</b>	<b>5.3</b>	<b>819,000</b>	<b>(4.8,5.7)</b>
Rest of State (NYS excluding NYC)	6.3	558,000	(5.8,6.8)
New York City	3.9	261,000	(3.2,4.5)
<b>Sex</b>			
Male	4.4	325,000	(3.8,4.9)
Female	6.1	494,000	(5.4,6.7)
<b>Race/Ethnicity</b>			
White/Non-Hispanic	6.1	526,000	(5.6,6.7)
Black/Non-Hispanic	4.9	105,000	(3.5,6.3)
Other Race or Multiracial/Non-Hispanic	4.6	124,000	(3.6,5.7)
Hispanic	2.1	36,000	(1.3,3.0)
<b>Age</b>			
18-24 <sup>a</sup>	--	--	--
25-34	1.5	42,000	(1.0,1.9)
35-44	3.4	83,000	(2.4,4.5)
45-54	5.2	135,000	(4.1,6.2)
55-64	7.5	187,000	(6.4,8.6)
65+	11.1	343,000	(9.8,12.4)
<b>Educational Attainment</b>			
Less than High School Education	7.8	177,000	(6.3,9.3)
High School or GED	6.8	281,000	(5.9,7.7)
Some Post High School	5.6	237,000	(4.7,6.5)
College Graduate	2.5	120,000	(2.0,2.9)
<b>Annual Household Income</b>			
Less than \$25,000	8.1	303,000	(7.1,9.2)
\$25,000 - 34,999	4.9	63,000	(3.9,5.9)
\$35,000 - 49,999	5.2	78,000	(3.9,6.4)
\$50,000 - 74,999	4.1	72,000	(3.0,5.1)
More than \$75,000	3.3	153,000	(2.6,4.0)
Missing Income <sup>b</sup>	5.6	151,000	(4.4,6.7)
<b>Disability Status<sup>c</sup></b>			
Yes	14.3	474,000	(12.9,15.8)
No	2.7	298,000	(2.3,3.0)
<b>Smoking Status<sup>d</sup></b>			
Current Smoker	12.8	260,000	(11.0,14.6)
Former Smoker	8.6	288,000	(7.5,9.7)
Never Smoker	2.5	222,000	(2.1,2.8)
<b>Health Care Coverage</b>			
Private Insurance	3.5	226,000	(2.9,4.0)
Medicaid	6.9	120,000	(5.7,8.2)
Medicare	11.0	256,000	(9.5,12.5)
Other Insurance	8.2	47,000	(5.2,11.3)
No Insurance	3.3	53,000	(2.1,4.5)
Missing Insurance Status <sup>b</sup>	4.1	117,000	(3.1,5.0)

a. Prevalence estimate not available if the unweighted sample size for the denominator was < 50 or the Relative Standard Error (RSE) is > 0.3

b. Missing category is included due to more than 10% of the sample not reporting income.

c. 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).

d. 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. Kochanek KD, Murphy SL, Xu JQ, Tejada-Vera B. Deaths: Final data for 2014. National vital statistics reports; vol 65 no 4. Hyattsville, MD: National Center for Health Statistics. 2016.
2. Centers for Disease Control and Prevention. Chronic Obstructive Pulmonary Disease (COPD), 2019. Accessed April 4, 2019. <https://www.cdc.gov/copd/index.html>
3. American Lung Association. What Causes COPD. Accessed April 15, 2019. <https://www.lung.org/lung-health-and-diseases/lung-disease-lookup/copd/symptoms-causes-risk-factors/what-causes-copd.html>
4. Zwerink M, Brusse-Keizer M, van der Valk PD, et al. Self Management for Patients with Chronic Obstructive Pulmonary Disease. Cochrane Database of Systematic Reviews. 2014, Issue 3.
5. Jordan RE, Majothi S, Heneghan N, et al. Supported Self-Management for Patients with Moderate to Severe Chronic Obstructive Pulmonary Disease (COPD): An Evidence Synthesis and Economic Analysis. Health Technol Assess. 2015, 19(36).

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