

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, 2015

Introduction and Key Findings

Chronic obstructive pulmonary disease (COPD) is a group of diseases that cause airflow blockage and breathing-related problems, including emphysema, chronic bronchitis, and sometimes asthma. Chronic lower respiratory disease, including COPD, is the third leading cause of death in the United States and causes serious long-term disability.¹ A total of 15.7 million Americans report that they have been diagnosed with COPD.² More than 50% of adults with low pulmonary function may not be aware they have COPD, therefore the actual number of adults living with COPD may be higher.³ Tobacco smoke is the primary cause of the development and progression of COPD; exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role.⁴

The primary means of preventing COPD is to never smoke or to quit smoking tobacco. Avoiding the inhalation of secondhand smoke, air pollutants, chemical fumes, and dust are also key to COPD prevention.⁵ 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.^{6,7}

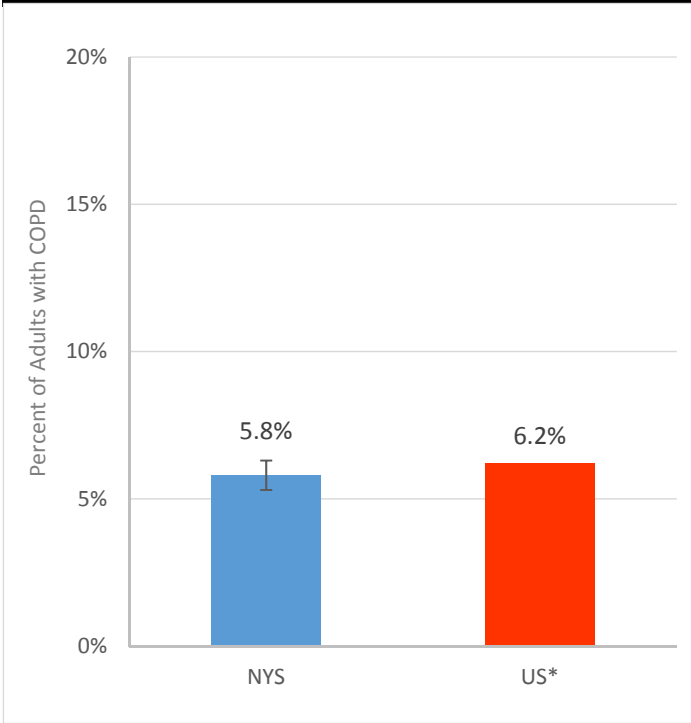
Key Findings

An estimated 5.8% of adults in New York State (900,000 adults) report being told by a health professional that they have COPD (Figure 1). Rates of COPD are highest among adults who report living with disability (15.4%), current smokers (14.9%), individuals covered by Medicare (12.6%), adults aged 65 and older (12.6%), former smokers (9.4%), and individuals with low socioeconomic status; i.e. adults with less than a high school education (9.1%) and those with an annual household income of less than \$25,000 (8.9%) (Table 1). The rate of COPD was stable between 2011 and 2015, with no significant variation in the rate of COPD by year (Figure 2). The COPD prevalence by region within the Delivery System Reform Incentive Payment (DSRIP) program is presented in Figure 3 and Table 2. DSRIP is a key component of the NYS Medicaid waiver to restructure and improve quality in the health care system focusing on primary and preventive care and reducing avoidable hospital use.⁷ Rates of COPD among adults are highest among those living in Central NY (8.6%) and Western NY (8.2%) and lowest among those living in New York City (5.0%) and Long Island (5.0%).

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 2015



*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 2011-2015

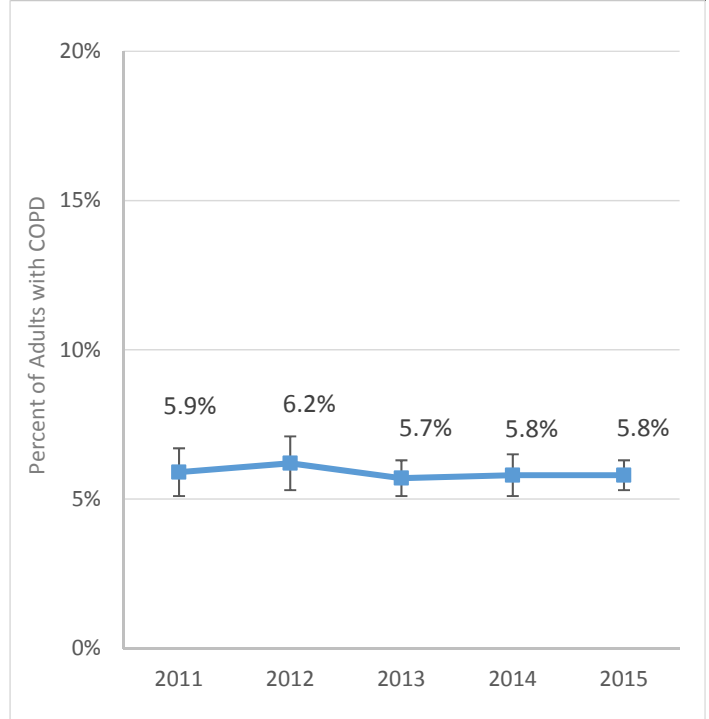


Figure 3. Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Delivery System Reform Incentive Payment (DSRIP) Region, NYS BRFSS 2015

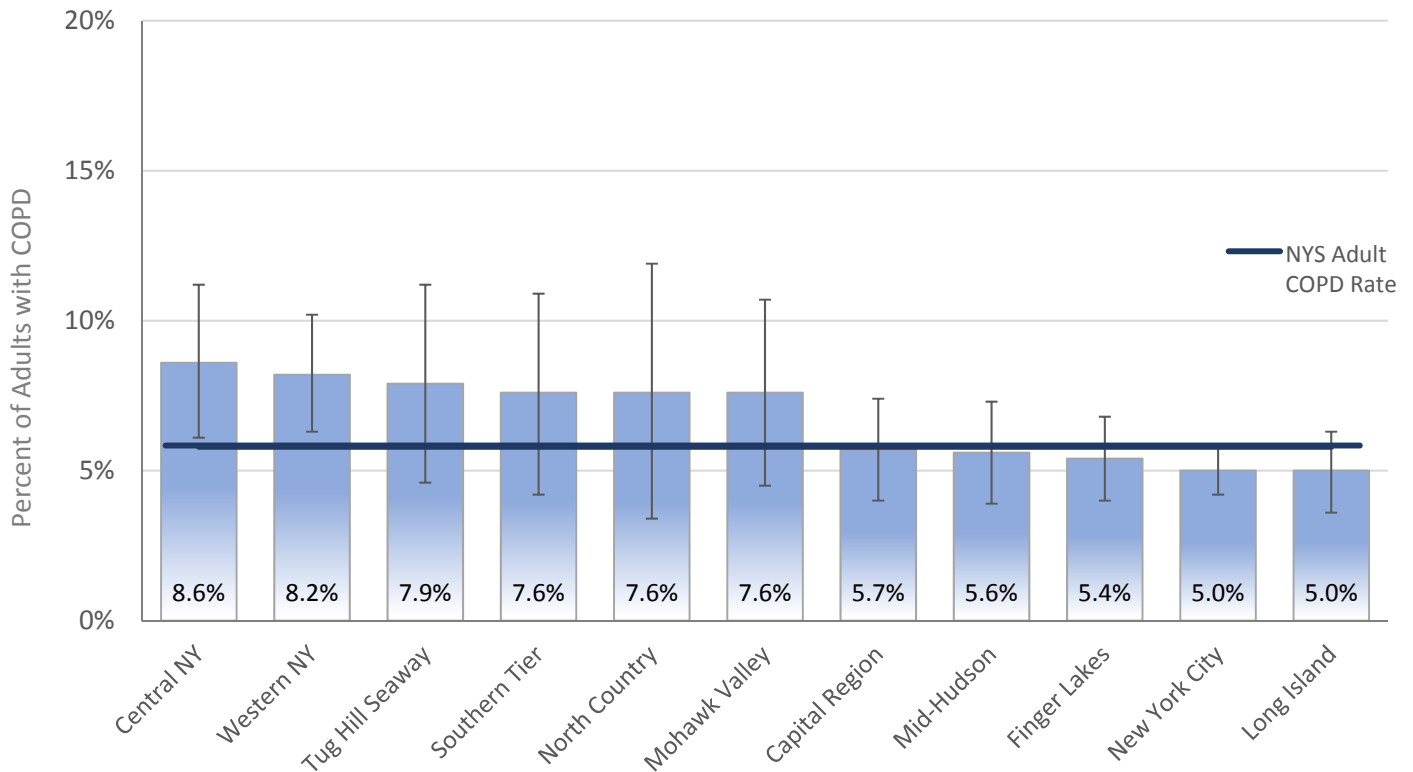


Table 1. Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Groups, NYS BRFSS 2015

	%	Estimated Weighted N	95% Conf. Int.
New York State	5.8	900,000	(5.2,6.3)
Rest of State (NYS excluding NYC)	6.3	556,000	(5.9,7.0)
New York City	5.0	335,000	(4.2,5.8)
Sex			
Male	5.0	370,000	(4.3,5.7)
Female	6.4	521,000	(5.7,7.2)
Race/Ethnicity			
White/Non-Hispanic	6.9	605,000	(6.2,7.6)
Black/Non-Hispanic	6.0	126,000	(4.3,7.6)
Other Race or Multiracial/Non-Hispanic	3.5	55,000	(2.1,4.0)
Hispanic	3.0	82,000	(2.1,4.0)
Age			
18-24 ^a	--	--	--
25-34	1.6	46,000	(0.8,2.4)
35-44	2.1	50,000	(1.2,2.9)
45-54	5.7	153,000	(4.4,6.9)
55-64	8.5	209,000	(7.1,9.9)
65+	12.6	381,000	(11.1,14.1)
Educational Attainment			
Less than High School Education	9.1	209,000	(7.1,11.1)
High School or GED	7.6	316,000	(6.5,8.7)
Some Post High School	5.8	243,000	(4.9,6.8)
College Graduate	2.6	123,000	(2.1,3.1)
Annual Household Income			
Less than \$25,000	8.9	336,000	(7.6,10.2)
\$25,000 - 34,999	7.8	93,000	(5.8,9.9)
\$35,000 - 49,999	6.1	88,000	(4.4,7.8)
\$50,000 - 74,999	5.2	97,000	(3.9,6.6)
More than \$75,000	2.9	131,000	(2.2,3.6)
Missing Income ^b	5.4	147,000	(4.2,6.5)
Disability Status^c			
Yes	15.4	468,000	(13.6,17.1)
No	3.4	392,000	(2.9,3.9)
Smoking Status^d			
Current Smoker	14.9	330,000	(12.7,17.1)
Former Smoker	9.4	333,000	(8.2,10.6)
Never Smoker	2.0	180,000	(1.6,2.5)
Health Care Coverage			
Medicaid	7.8	118,000	(5.6,9.9)
Medicare	12.6	287,000	(10.8,14.4)
Private Insurance	3.9	250,000	(3.2,4.5)
Other Insurance	8.9	43,668	(4.9,13.0)
No Insurance	2.6	42,740	(1.6,3.6)
Missing Insurance Status ^b	4.7	150,000	(3.7,5.7)

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. All respondents who report having at least one type of disability based on Department of Health and Human Services definition for data reporting (self-care, independent living, cognitive, mobility, vision) are classified as Yes.

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.

Table 2. Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Delivery System Reform Incentive Payment (DSRIP) Region, NYS BRFSS 2015

	%	Estimated Weighted N	95% Conf. Int.
DSRIP Region			
Central NY <ul style="list-style-type: none"> Cayuga, Cortland, Madison, Oneida, Onondaga, Oswego 	8.6	68,000	(6.1,11.2)
Western NY <ul style="list-style-type: none"> Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming 	8.2	100,000	(6.3,10.2)
Tug Hill Seaway <ul style="list-style-type: none"> Jefferson, Lewis, St. Lawrence 	7.9	16,000	(4.6,11.2)
Southern Tier <ul style="list-style-type: none"> Broome, Chenango, Delaware, Tioga, Tompkins 	7.6	29,000	(4.2,10.9)
North Country <ul style="list-style-type: none"> Clinton, Essex, Franklin, Hamilton, Warren, Washington 	7.6	20,000	(3.4,11.9)
Mohawk Valley <ul style="list-style-type: none"> Fulton, Herkimer, Montgomery, Otsego, Schoharie 	7.6	14,000	(4.5,10.7)
Capital Region <ul style="list-style-type: none"> Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady 	5.7	44,000	(4.0,7.4)
Mid-Hudson <ul style="list-style-type: none"> Dutchess, Putnam, Orange, Rockland, Sullivan, Ulster, Westchester 	5.6	100,000	(3.9,7.3)
Finger Lakes <ul style="list-style-type: none"> Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, Yates 	5.4	54,000	(4.0,6.8)
New York City <ul style="list-style-type: none"> Bronx, Kings, New York, Queens, Richmond 	5.0	335,000	(4.2,5.8)
Long Island <ul style="list-style-type: none"> Nassau, Suffolk 	5.0	111,000	(3.6,6.3)

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