

# BRFSS Brief

Number 2021-09

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention 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 ages 18 years and older.

## Cervical Cancer Screening

### New York State Adult Women ages 21-65, 2018

#### Introduction and Key Findings

In New York State (NYS), approximately 855 cases of cervical cancer are diagnosed each year and nearly 275 women die from the disease annually.<sup>1</sup> All women are at risk for cervical cancer, but risk is increased for women over the age of 30 and varies across racial groups.<sup>2,3</sup> Black women are more likely than white women to be diagnosed with cervical cancer and to die from the disease.<sup>3</sup>

Cervical cancer is preventable through regular screening and the HPV vaccine. The United States Preventive Services Task Force (USPSTF) recommends women ages 21 to 65 years be screened for cervical cancer with a Pap test (also known as a Pap smear) every three years or, for women ages 30 to 65 years screening with a test for human papillomavirus (HPV), with or without a Pap test, every 5 years.<sup>4,5</sup> The U.S. Department of Health and Human Services has set a Healthy People 2020 goal of 93.0% of women screened for cervical cancer in accordance with this guidance.<sup>6</sup>

Virtually all cervical cancer cases are caused by HPV, which can cause cervical cell abnormalities. The Pap test is one of the most reliable and effective screening tests available to prevent cervical cancer, as it detects cervical cell abnormalities that could become cervical cancer without proper treatment. The HPV test looks for the presence of HPV strains.

Based on estimates from the NYS BRFSS, in 2018, 84.7% of NYS women ages 21 to 65 years received cervical cancer screening in accordance with the USPSTF recommendations. Significant differences in adherence to screening were seen between women reporting: age 21-29 years (67.2%) compared to 30-65 years (90.1%), race/ethnicity as “Other non-Hispanic” (69.0%) compared to any other race/ethnicity (range 85.8% - 87.6%), having a routine healthcare provider (87.1% v 74.1%, respectively), a household income of less than \$50,000 (77.6% v 88.0%, respectively), obtainment of a college degree (90.2% v 81.2%, respectively), and private insurance (88.8%) compared to public or other insurance (80.7%). Adherence was not found to be different based on having a disability or for those living in NYC. Demographic differences in type of screening were noted. (Figure 2).

Of NYS women who have not received cervical cancer screening based on the USPSTF guidelines (an estimated 691,000 women), 84.5% were insured and 69.4% had a regular health care provider (data not shown).

#### BRFSS Questions\*

1. A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?

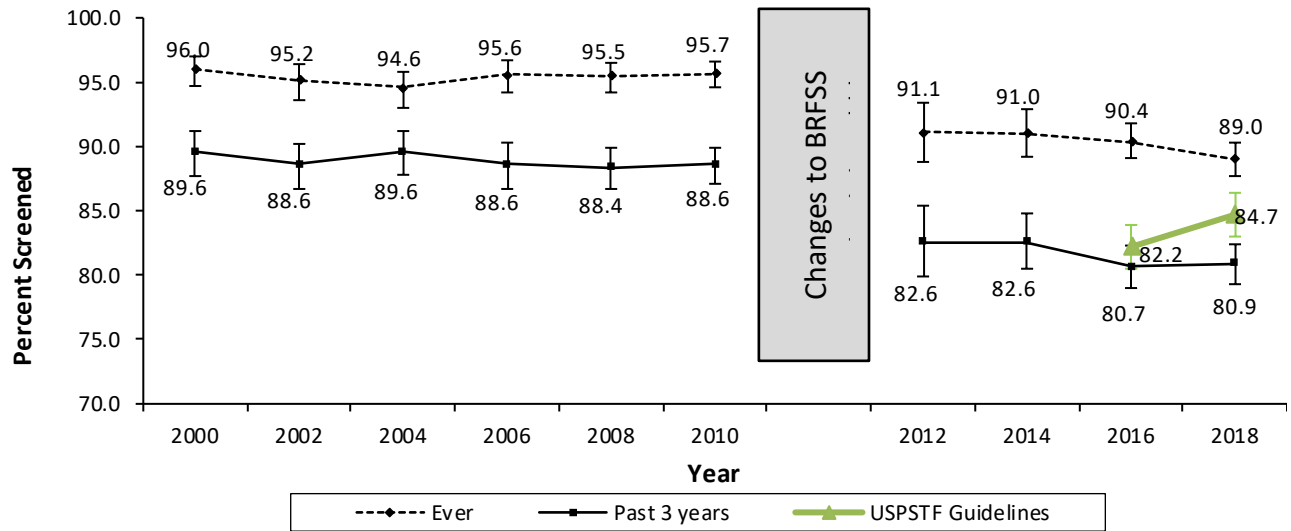
2. How long has it been since you had your last Pap test?

3. An HPV test is sometimes given with the Pap test for cervical cancer screening. Have you ever had an HPV test?

4. How long has it been since you had your last HPV test?

\*HPV questions added in 2016

**Figure 1. History of cervical cancer screening estimates (ever had a Pap test, Pap test within past 3 years, and adherence to USPSTF guidelines<sup>\*</sup>) among New York State women ages 21-65 years<sup>\*\*</sup> by BRFSS survey year**



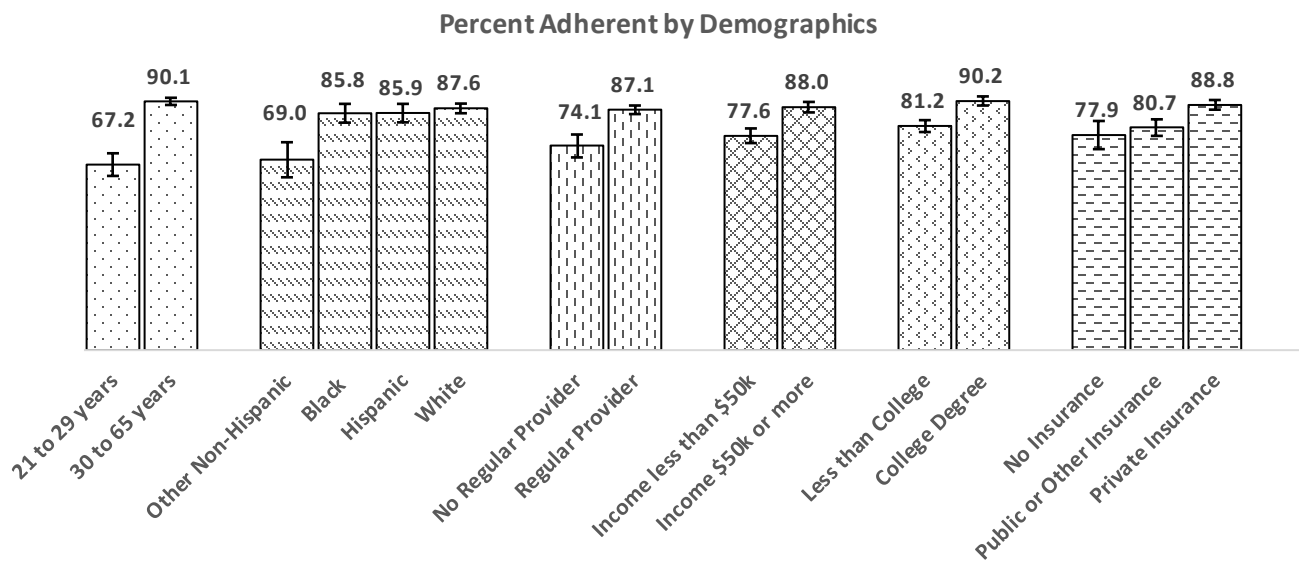
<sup>\*</sup>USPSTF guidelines are Pap test within 3 years for women ages 21 to 65 OR for women ages 30 to 65 an HPV test without or without a Pap (co-test) within the past 5 years.

<sup>\*\*</sup>Figure excludes data from women who reported having a hysterectomy and is limited to women ages 21 to 65. HPV test questions not available prior to 2016.

<sup>\*\*\*</sup>Data from 2012, 2014, 2016, and 2018 are not comparable to prior years because of changes to the BRFSS methods in 2011. See the following link for more information on these changes: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a3.htm?s\\_cid=mm6122a3\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a3.htm?s_cid=mm6122a3_w)

Note: Error bars represent 95% confidence intervals.

**Figure 2. Significant differences in adherence to USPSTF guidelines for cervical cancer screening<sup>\*\*</sup> BRFSS 2018 survey estimates**



<sup>\*</sup>Figure excludes data from women who reported having a hysterectomy and is limited to women ages 21 to 65.

<sup>\*\*</sup> USPSTF guidelines are Pap test within 3 years for women ages 21 to 65, OR for women ages 30 to 65 an HPV test within past 5 years with or without a Pap test (co-test).

Note: Error bars represent 95% confidence intervals.

**Table 1. Current adherence to screening guidelines and component screening history by selected characteristics, BRFSS 2018 survey estimates**

	Estimated Population Size <sup>a</sup>	USPSTF Guidelines		Pap Test in Past 3 Years		HPV Test in Past 5 Years	
		% <sup>b</sup>	95% CI <sup>b</sup>	% <sup>b</sup>	95% CI <sup>b</sup>	% <sup>b</sup>	95% CI <sup>b</sup>
<b>Total</b>	4,716	84.7	83.2-86.1	81.0	79.4-82.5	55.7	53.6-57.7
<b>Age</b>							
21-29 years	1,090	67.2	63.1-71.3	67.2	63.1-71.3	54.1	49.7-58.6
30-65 years	3,626	90.1	88.8-91.4	85.1	83.6-86.6	56.2	53.9-58.5
<b>Race/Ethnicity</b>							
White non-Hispanic	2,495	87.6	85.8-89.3	83.7	81.8-85.6	52.6	49.9-55.2
Black non-Hispanic	689	85.8	82.4-89.2	82.8	79.2-86.3	63.3	58.3-68.3
Hispanic	901	85.9	82.5-89.2	81.8	78.3-85.4	65.4	60.8-69.9
Other non-Hispanic	556	69.0	62.6-75.3	65.9	59.4-72.3	41.6	34.7-48.4
<b>Annual Income</b>							
< \$50,000	1,667	77.6	75.0-80.3	75.9	73.2-78.7	46.8	43.8-49.8
≥ \$50,000	2,130	88.0	86.1-89.9	86.6	84.6-88.5	41.9	39.4-44.4
Missing <sup>c</sup>	919	70.8	66.6-75.0	68.8	64.6-73.0	32.5	28.6-36.3
<b>Educational Attainment</b>							
Less than College	2,824	81.2	79.0-83.3	77.4	75.2-79.6	53.5	50.7-56.3
College Graduate	1,869	90.2	88.6-91.9	86.7	84.8-88.5	59.4	56.5-62.3
<b>Health Insurance</b>							
Private	2,665	88.8	87.1-90.6	85.3	83.4-87.1	57.7	55.0-60.4
Public or Other <sup>d</sup>	1,350	80.7	77.7-83.6	76.2	73.2-79.2	55.3	51.5-59.0
None	457	77.9	72.8-83.0	74.9	69.8-80.0	48.2	41.4-55.0
<b>Health Care Provider</b>							
Yes	3,824	87.1	85.6-88.6	83.5	81.9-85.1	57.2	55.0-59.5
No	859	74.1	69.8-78.4	69.9	65.7-74.2	50.6	45.6-55.5
<b>Disability<sup>e</sup></b>							
Yes	994	81.5	78.2-84.7	75.5	72.0-79.0	56.9	52.4-61.3
No	3,671	85.6	84.0-87.3	82.5	80.8-84.2	55.6	53.3-58.0
<b>Residence</b>							
New York City (NYC)	2,113	82.8	80.4-85.3	78.8	76.2-81.4	58.3	55.0-61.6
NYS excluding NYC	2,603	86.1	84.4-87.9	82.7	80.9-84.5	53.4	50.9-56.0

\* USPSTF guidelines are Pap test within 3 years for women ages 21 to 65 OR Pap and HPV co-test within past 5 years, or HPV test alone within the past 5 years for women ages 30 to 65.

<sup>a</sup> Estimated based on weighted frequencies from BRFSS, in thousands. Excludes individuals with missing data on each characteristic of interest and women ages 21 to 65 who reported having a hysterectomy. Stratifications may not sum to total due to exclusions.

<sup>b</sup> %=Percentage; 95% CI=Confidence Interval. Percentages are weighted to population characteristics.

<sup>c</sup> "Missing" category included because more than 10% of the sample did not report income.

<sup>d</sup> Health care coverage through Medicare; Medicaid or other state program; TRICARE, VA, or Military; Alaska Native, Indian Health Service, or Tribal Health Services; or some other source.

<sup>e</sup> Based on report of at least one type of disability (cognitive, ambulatory, vision, hearing, self-care, or independent living).

## References

1. Cervical Cancer Incidence and Mortality for New York State, 2012-2016. New York State Cancer Registry. New York State Department of Health, revised Nov. 2018. Available at <https://www.health.ny.gov/statistics/cancer/registry/vol1/v1rnys.htm>
2. Cervical Cancer Incidence and Mortality by Age Group, New York State, 2012-2016. New York State Cancer Registry. New York State Department of Health, revised Nov. 2018. Available at <http://www.health.ny.gov/statistics/cancer/registry/table6/tb6cervixnys.htm>
3. Cancer Incidence and Mortality by Gender and Race, New York State, 2010-2014. New York State Cancer Registry. New York State Department of Health, revised Nov. 2016. Available at <http://www.health.ny.gov/statistics/cancer/registry/pdf/table4.pdf>
4. Final Update Statement, Cervical Cancer: Screening. U.S. Preventive Services Task Force, Rockville, MD, updated Aug. 2018. Available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/cervical-cancer-screening>
5. Cervical Cancer: What Should I Know About Screening? Division of Cancer Prevention and Control, Centers for Disease Control and Prevention, updated Aug. 2019. Available at [http://www.cdc.gov/cancer/cervical/basic\\_info/screening.htm](http://www.cdc.gov/cancer/cervical/basic_info/screening.htm)
6. HealthyPeople.gov, 2020 Topics and Objectives: Cancer. U.S. Department of Health and Human Services, updated Oct. 2019. Available at <http://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives>

## Program Contributions

New York State Department of Health  
Bureau of Chronic Disease Evaluation and Research  
Bureau of Cancer Prevention and Control

## Order Information

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