

BRFSS Brief

Number 2022-01

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults developed by the Centers for Disease Control and Prevention conducted in all 50 States, the District of Columbia, and several US Territories. The New York BRFSS is administered by the New York State Department of Health to provide statewide and regional information on behaviors, risk factors, and use of preventive health services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

Cervical Cancer Screening

New York State Adult Females ages 21-65, 2020

Introduction and Key Findings

In New York State (NYS), approximately 843 cases of cervical cancer are diagnosed each year and nearly 255 females die from the disease annually.¹ All females are at risk for cervical cancer, but risk is increased for females over the age of 25 and varies across racial groups.^{2,3} Black females are more likely than white females to be diagnosed with cervical cancer and to die from the disease.³

Virtually all cervical cancer cases are caused by human papillomavirus (HPV), which can cause cervical cell abnormalities. The Pap test (also known as a Pap smear) 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.

Cervical cancer is preventable through HPV vaccination and regular screening. The United States Preventive Services Task Force (USPSTF) recommends screening for cervical cancer every 3 years with a Pap test alone in females ages 21 to 29 years. For females ages 30 to 65 years, the USPSTF recommends screening every 3 years with Pap test alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with Pap test (cotesting).^{4,5} The U.S. Department of Health and Human Services set a Healthy People 2030 goal of 84.3% of females screened for cervical cancer in accordance with this guidance.⁶ The NYS Cancer Consortium however has set a more ambitious goal of 86.3% of female New Yorkers screened by 2023.⁷

Based on estimates from the NYS BRFSS, in 2020, 84.0% of NYS females ages 21 to 65 years received cervical cancer screening in accordance with the USPSTF recommendations. Significant differences were seen across subpopulations: those 21 to 29 years of age, those identifying as “Other race, multiracial, non-Hispanic”, those without health insurance, those without a regular health care provider, those without a college degree, and those with incomes lower than \$50,000, were all less likely to report receiving a screening within the timeframe currently recommended (Figure 2).

Of NYS females who have not received cervical cancer screening based on the USPSTF recommendations (an estimated 668,000 females), 82.5% were insured and 64.8% 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?

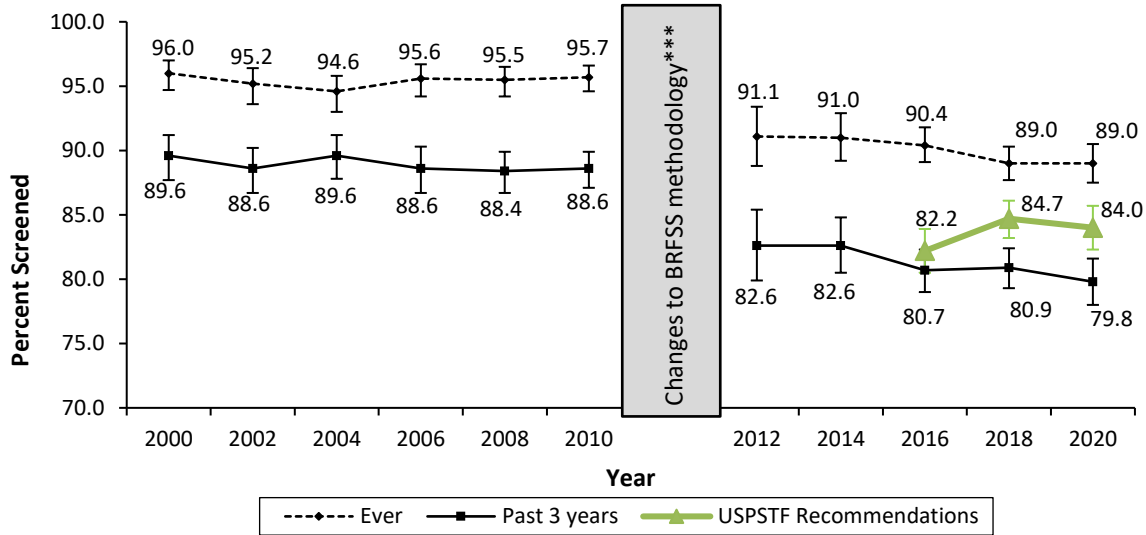
2. How long has it been since you had your last Pap test?

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 (ever had a Pap test, Pap test within past 3 years, and USPSTF recommendations*) among New York State females ages 21-65 by BRFSS survey year from 2000 to 2020



*USPSTF recommendations are screening for cervical cancer every 3 years with cervical cytology alone in females aged 21 to 29 years, and for females aged 30 to 65 years, screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting). HPV test questions not available prior to 2016.

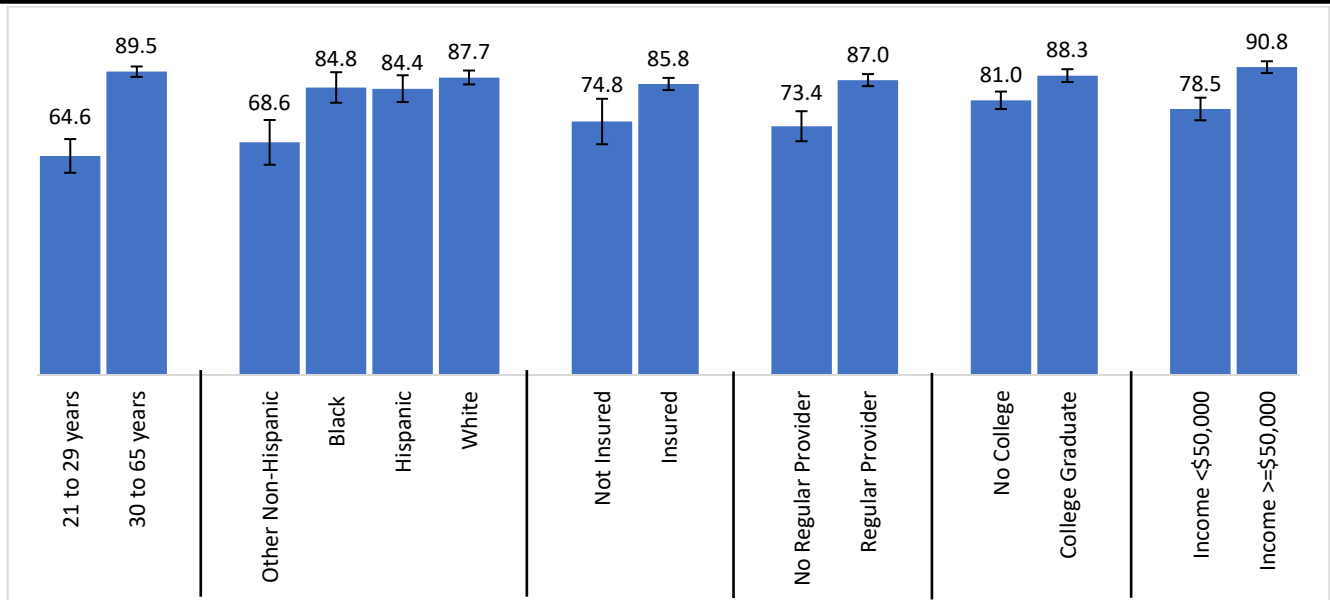
**Figure excludes data from females who reported having a hysterectomy.

***Data prior to 2011 are not comparable due to changes to BRFSS methodology. See the following link for more information on these changes:

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 the estimated percent of age eligible females reporting a cervical cancer screening history aligning with USPSTF recommendations*



*USPSTF recommendations are screening for cervical cancer every 3 years with cervical cytology alone in females aged 21 to 29 years, and for females aged 30 to 65 years, screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting).

**Figure excludes data from females who reported having a hysterectomy.

Note: Error bars represent 95% confidence intervals.

Table 1. History of cervical cancer screening as reported by New York State (NYS) females ages 21-65, by selected characteristics, BRFSS 2020 survey

	Estimated population size ^a	USPSTF Recommendations* % ^b	95% CI ^b	Pap Test in Past 3 Years % ^b	95% CI ^b	HPV Test in Past 5 Years % ^b	95% CI ^b
Total NYS [BRFSS sample size: N=3,998]	4,369	84.0	82.4-85.7	79.8	78.0-81.6	53.4	51.0-55.8
Age							
21-29 years	937	64.6	59.6-69.6	64.6	59.6-69.6	47.2	41.7-52.8
30-65 years	3,432	89.5	87.9-91.0	83.9	82.2-85.7	55.2	52.5-57.9
Race/Ethnicity							
White non-Hispanic	2,273	87.7	85.6-89.7	82.5	80.2-84.7	54.7	51.4-57.9
Black non-Hispanic	675	84.8	80.3-89.3	83.2	78.6-87.8	57.8	51.6-64.0
Hispanic	830	84.4	80.4-88.3	79.9	75.8-84.1	57.3	51.8-62.7
Other race, multiracial, non-Hispanic**	512	68.6	62.0-75.2	65.5	58.9-72.1	36.1	29.0-43.3
Annual household income							
< \$25,000	883	77.9	73.2-82.5	74.0	69.4-78.6	51.3	45.7-57.0
\$25,000 - <\$50,000	626	79.3	74.6-84.0	74.0	69.1-78.8	50.9	44.9-56.9
≥ \$50,000	2,041	90.8	89.0-92.5	87.0	85.1-88.9	57.9	54.6-61.3
Missing ^c	819	77.3	72.5-82.0	72.3	67.2-77.4	46.7	40.4-52.9
Educational attainment							
Less than high school	467	77.0	69.8-84.2	73.0	65.4-80.6	46.2	37.4-55.0
High school or GED	896	79.5	75.1-83.9	75.0	70.6-79.5	42.8	37.3-48.2
Some post-high school	1,155	83.8	80.4-87.1	79.4	75.8-83.0	57.3	52.5-62.1
College graduate	1,839	88.3	86.4-90.2	84.2	82.2-86.3	58.7	55.5-61.8
Primary health care coverage							
Private insurance	2,413	89.5	87.7-91.3	85.4	83.4-87.4	56.7	53.5-59.8
Public or other insurance ^d	1,171	78.1	74.1-82.1	74.1	70.1-78.1	50.8	45.8-55.8
No insurance	439	74.8	68.1-81.5	69.1	62.0-76.2	44.2	36.3-52.2
Regular health care provider							
Yes	3,436	87.0	85.2-88.7	82.5	80.6-84.4	55.5	52.8-58.2
No	904	73.4	68.9-77.8	69.7	65.3-74.2	47.7	42.4-52.9
Disability^e							
Yes	767	82.8	78.7-86.8	74.4	69.9-78.8	60.8	55.3-66.2
No	3,575	84.3	82.4-86.1	80.9	79.0-82.9	51.6	49.0-54.3
Residence							
New York City (NYC)	1,998	82.5	79.7-85.2	78.9	76.1-81.7	55.5	51.9-59.2
NYS excluding NYC	2,371	85.4	83.3-87.5	80.6	78.3-82.9	51.4	48.2-54.7

*USPSTF recommendations are screening for cervical cancer every 3 years with cervical cytology alone in females aged 21 to 29 years, and for females aged 30 to 65 years, screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting).

**American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, Other, or Multiracial.

^a Estimated population size based on weighted frequencies from BRFSS, in thousands. Excludes individuals with missing data on each characteristic of interest, and females ages 21 to 65 who reported having a hysterectomy.

^b %=Percentage; 95% CI=Confidence Interval. Percentages are weighted to population characteristics.

^c "Missing" category included because more than 10% of the sample did not report income.

^d 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.

^e 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, 2014-2018. New York State Cancer Registry. New York State Department of Health, revised Mar. 2021. Most recent data 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, 2014-2018. New York State Cancer Registry. New York State Department of Health, revised Mar. 2021. Most recent data 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, 2014-2018. New York State Cancer Registry. New York State Department of Health, revised Mar. 2021. Most recent data available at <http://www.health.ny.gov/statistics/cancer/registry/pdf/table4.pdf>
4. Final Recommendation 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 Dec. 2021. Available at http://www.cdc.gov/cancer/cervical/basic_info/screening.htm
6. Health.gov. Healthy People 2030. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Available at <https://health.gov/healthypeople/objectives-and-data/browse-objectives/cancer/increase-proportion-females-who-get-screened-cervical-cancer-c-09>
7. New York State Cancer Consortium. Cancer Plan. Available at <https://www.nycancerconsortium.org/plan/>

Program Contributions

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

Order Information

Copies may be obtained by contacting:

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