



NYS BRFSS Brief

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 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 services related to the leading causes of chronic and infectious diseases, disability, injury, and death.

Sun Exposure and Sunburn New York State Adults, 2021



Introduction

Skin cancer is the most common form of cancer in the United States (US). The main types are squamous cell carcinoma, basal cell carcinoma, and melanoma. Of these, melanoma is the least common but causes the most deaths because it is more likely to grow and spread to other parts of the body.¹ In New York State (NYS), melanoma is the ninth most common type of cancer among adults and ranks among the top four cancers for adults ages 20 to 34 years.² More than 4,000 New Yorkers are diagnosed with melanoma and nearly 400 die from melanoma each year.³ It is estimated that by 2040, melanoma will surpass colorectal and lung cancers to become the second most common cancer type in the US.⁴

Most cases of skin cancer, including melanoma, are caused by ultraviolet (UV) rays from the sun or indoor tanning devices. UV rays can damage skin cells leading to changes in skin texture, premature skin aging, and sometimes skin cancer. UV rays also cause sunburns; having five or more sunburns in one's lifetime more than doubles the risk of melanoma.⁵

Anyone, regardless of skin tone, can develop skin cancer.⁶ The NYS Department of Health recommends all New Yorkers do the following when outside for work or play to reduce their risk of skin cancer: stay in the shade under an umbrella, tree, or other shelter; wear protective clothing such as long-sleeved shirts and pants, a wide-brimmed hat, and sunglasses; and apply a broad-spectrum sunscreen with a sun protection factor (SPF) of 15 or higher before going outside and reapply after swimming or sweating.⁷

Health Equity

Equity in skin cancer outcomes will only be possible when everyone has the same opportunities to be informed about how to prevent it, find it early, and get proper treatment and follow-up care.⁸ Currently, many New Yorkers do not have these same opportunities, and skin cancer outcomes are not equal across all groups of people. While melanoma is less common in non-White racial-ethnic groups, when it does occur it is often diagnosed at a later stage and has a worse prognosis.⁹ Also, lower socioeconomic status is linked to more melanoma cases being diagnosed at a later stage.¹⁰ Sun protection policies, environmental interventions, laws that reduce UV exposure, provider education to look for skin changes in people of all skin tones, and raising awareness among all New Yorkers about sun protection can support equal opportunities to prevent skin cancer and improve skin cancer outcomes.

Key Findings

- In NYS, 28.0% of adults report they rarely or never protect themselves from the sun, which is a significant improvement from 33.6% of adults in 2019.
- Adults who live in New York City (NYC) (31.8%), are living with disability (32.0%), identify as Hispanic (34.7%) or Non-Hispanic Black (36.0%), are men (36.3%), and have less than a high school education (41.4%) are more likely to rarely or never protect themselves from the sun (Figure 1).
- Lack of practicing sun-protective behaviors is more common among adults who currently smoke, who binge or heavy drink, or who are physically inactive (Figure 2).
- 26.9% of NYS adults report having one or more sunburns in the past twelve months. Having a sunburn is more common among adults who are living without disability (29.8%), live outside of NYC (31.3%), are employed or self-employed (33.3%), earn an annual household income of \$50,000 or more (33.7%), and identify as non-Hispanic White (38.3%) (Figure 3).

Figure 1. Prevalence of rarely or never protecting oneself from the sun when outside on a warm sunny day for more than one hour by select demographics, BRFSS 2021

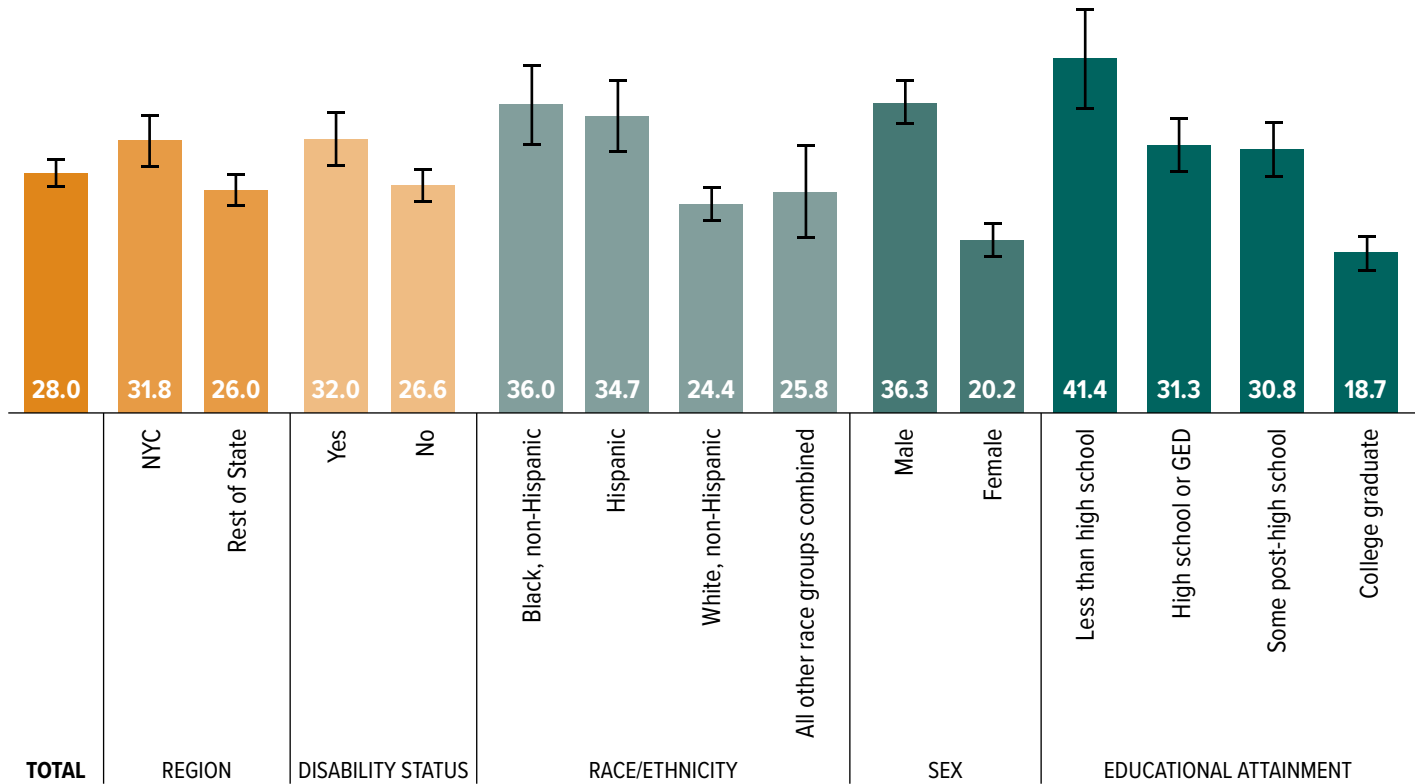
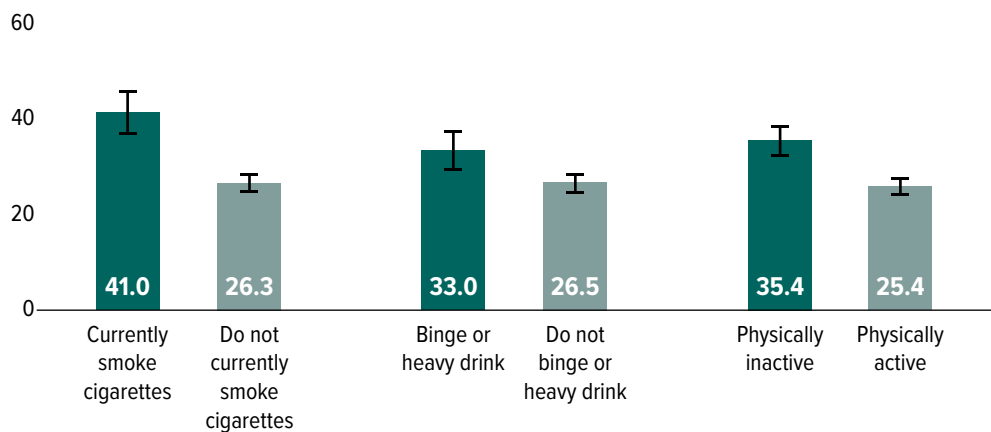


Figure 2. Prevalence of rarely or never protecting oneself from the sun when outside on a warm sunny day for more than one hour by other modifiable cancer risk factors, BRFSS 2021



Lack of practicing sun-protective behaviors is more common among adults who currently smoke cigarettes (41.0%), who binge or heavy drink (33.0%), and who are physically inactive (35.4%) as compared to their counterparts who do not smoke cigarettes, who do not binge or heavy drink, and who are physically active.

Figure 3. Prevalence of at least one sunburn in the last 12 months by select demographics, BRFSS 2021

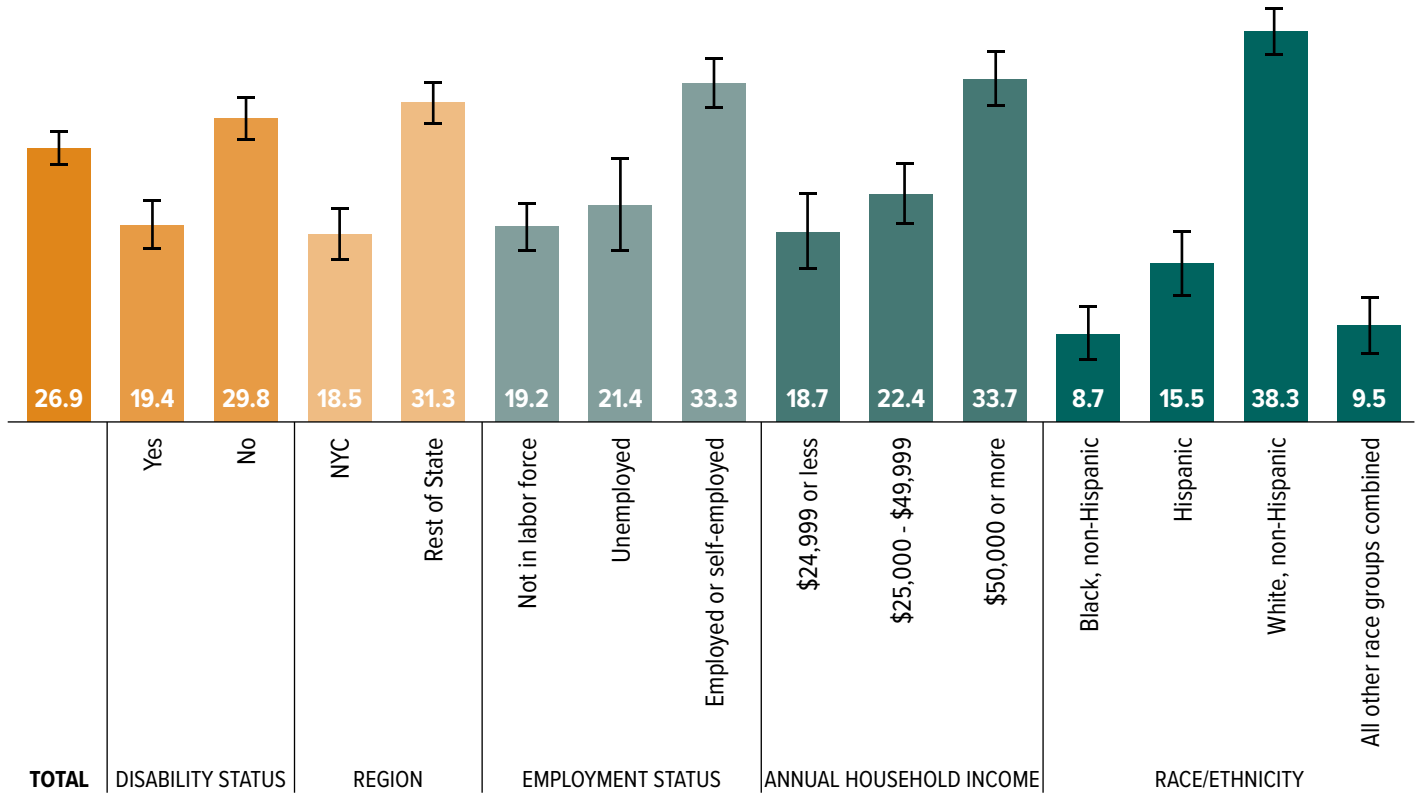


Table 1. Prevalence of rarely or never protecting oneself from the sun when outside on a warm sunny day for more than one hour and prevalence of at least one sunburn in past 12 months by selected demographics in NYS, BRFSS 2021

	Rarely or Never Use Sun Protection		Sunburned in Past 12 Months	
	% ^a	95% CI ^a	% ^a	95% CI ^a
New York State (NYS) [n=39,095]	28.0	26.4-29.6	26.9	25.3-28.5
Region				
NYC	31.8	28.9-34.8	18.5	16.0-21.0
Rest of State (NYS excluding NYC)	26.0	24.2-27.8	31.3	29.3-33.3
Sex^b				
Female	20.2	18.4-22.1	25.5	23.4-27.5
Male	36.3	33.8-38.8	28.4	26.0-30.9
Race/Ethnicity				
Black, non-Hispanic	36.0	31.3-40.7	8.7	6.0-11.4
Hispanic	34.7	30.6-38.8	15.5	12.4-18.7
White, non-Hispanic	24.4	22.4-26.3	38.3	36.0-40.6
All other race groups combined, non-Hispanic ^c	25.8	20.4-31.2	9.5	6.8-12.3
Age (Years)				
18-24	34.0	27.7-40.3	38.9	32.3-45.5
25-64	27.5	25.6-29.4	30.3	28.3-32.3
65+	26.2	23.5-29.0	12.6	10.9-14.2
Educational Attainment				
Less than high school	41.4	35.6-47.2	15.3	10.6-20.0
High school or GED	31.3	28.2-34.4	26.4	23.1-29.6
Some post-high school	30.8	27.5-34.0	27.7	24.6-30.8
College graduate	18.7	16.7-20.7	31.2	28.6-33.7
Annual Household Income				
<\$25,000	31.9	27.7-36.1	18.7	15.1-22.4
\$25,000-\$49,999	29.0	25.7-32.3	22.4	19.4-25.4
\$50,000 and greater	25.7	23.2-28.1	33.7	31.0-36.3
Missing ^d	29.2	25.8-32.6	23.2	19.9-26.5
Employment Status				
Employed or self-employed	28.1	25.9-30.3	33.3	30.9-35.7
Unemployed	31.7	26.2-37.2	21.4	16.9-25.9
Not in labor force	26.3	23.8-28.9	19.2	16.9-21.5
Disability^e				
Yes	32.0	29.0-35.0	19.4	17.1-21.8
No	26.6	24.7-28.5	29.8	27.8-31.8
Frequent Mental Distress^f				
Yes	30.7	26.2-35.3	32.0	27.3-36.7
No	27.4	25.7-29.1	26.3	24.6-28.0
Currently Smoke^g				
Yes	41.0	36.2-45.7	29.6	24.9-34.4
No	26.3	24.6-28.0	26.5	24.8-28.2
Binge or Heavy Drink				
Yes	33.0	28.9-37.1	41.4	36.9-45.9
No	26.5	24.8-28.3	24.1	22.4-25.8
Physically Inactive^h				
Yes	35.4	32.2-38.7	17.2	14.5-19.8
No	25.4	23.6-27.2	30.5	28.5-32.4

Notes: ^a%= Weighted percentage; 95% CI= 95% confidence interval. ^bBased on respondent's sex at birth or current gender identity at time of interview if sex at birth is missing. ^cIncludes individuals who identify as American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, Multiracial, or other race. ^d"Missing" category included because more than 10% of the sample did not report income. ^eRespondents who reported at least one type of disability (cognitive, self-care, independent living, vision, mobility, or hearing). ^fFrequent mental distress is defined as yes if respondents reported problems with stress, depression, or emotions on at least 14 of the previous 30 days. ^gCurrently smoke is an adult over age 18 who has smoked at least 100 cigarettes in their lifetime and currently smokes on at least some days. ^hPhysically inactive is defined as yes if respondents reported no leisure-time physical activity during the past month.



References

1. National Cancer Institute. Skin Cancer. Retrieved on July 13, 2023. <https://www.cancer.gov/types/skin>.
2. New York State Department of Health, Skin Cancer in New York State, 2020. https://www.health.ny.gov/statistics/diseases/cancer/skin/report/docs/2020_report.pdf.
3. New York State Department of Health. Cancer Incidence and Mortality Trends for New York State, 1976-2020. Retrieved on July 15, 2023. <https://www.health.ny.gov/statistics/cancer/registry/vol3/v3nys.htm>.
4. Rahib L, Wehner MR, Matrisian LM, Nead KT. Estimated Projection of US Cancer Incidence and Death to 2040. JAMA 2021;4(4):e214708.
5. Skin Cancer Foundation. Sunburn & Your Skin. Retrieved on July 13, 2023. <https://www.skincancer.org/risk-factors/sunburn/>.
6. CDC. Skin Cancer. Retrieved on July 13, 2023. <https://www.cdc.gov/cancer/skin/index.htm>.
7. Centers for Disease Control and Prevention (CDC). Sun Safety. Retrieved on July 13, 2023. https://www.cdc.gov/cancer/skin/basic_info/sun-safety.htm.
8. CDC. Equity in Cancer Prevention and Control. Retrieved on July 13, 2023. <https://www.cdc.gov/cancer/health-equity/equity.htm>.
9. American Academy of Dermatology Association. Skin Cancer in People of Color. Retrieved July 13, 2023. <https://www.aad.org/public/diseases/skin-cancer/types/common/melanoma/skin-color>.
10. Shah, P. D., Shao, Y., Geller, A. C., & Polsky, D. (2021). Late-Stage Melanoma in New York State: Associations with Socioeconomic Factors and Healthcare Access at the County Level. 141(7), 1699-1706.e7.



BRFSS Questions

1. When you go outside on a warm sunny day for more than an hour, how often do you protect yourself from the sun?
2. During the past 12 months, how many times have you had a sunburn?

Suggested Citation



Haile, K., O'Sullivan, G., and Collins, E. Sun Exposure and Sunburn. New York State BRFSS Brief., No. 2023-13. Albany, NY: New York State Department of Health, Division of Chronic Disease Prevention, Bureau of Chronic Disease Evaluation and Research and Bureau of Cancer Prevention and Control, July 2023

Program Contributions



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



Contact Information

Contact us by
Phone: (518) 473-0673
Email: BRFSS@health.ny.gov
Visit: health.ny.gov



Department
of Health