

BRFSS Brief

Number 1810

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 aged 18 years and older.

Perceived Food Security

New York State Adults, 2016

Introduction and Key Findings

The United States Department of Agriculture (USDA) defines food security as “access by all people at all times to enough food for an active, healthy life”.¹ In contrast, food insecurity is characterized by limited economic resources to consistently obtain adequate food.² Adults with food insecurity have a higher probability of numerous chronic diseases, including hypertension, heart disease, diabetes, stroke, cancer, hepatitis, asthma, arthritis, chronic obstructive pulmonary disease and kidney disease.² Statistics reported by the USDA indicate that in 2016 more than 41 million people in the United States (US) lived in food-insecure households highlighting the public health significance of the problem.³

Food security has been shown to vary by geographic location and individual or household characteristics (e.g. income or race/ethnicity).³ For example, in the US, households with food insecurity are more likely to be headed by non-Hispanic blacks or Hispanics, have incomes below 185% of the federal poverty level, and be located in rural areas or principal cities of metropolitan areas.³ A report analyzing 2013 data from the Behavioral Risk Factor Surveillance System (BRFSS) in 15 states showed that the prevalence of food security was highest among non-Hispanic whites, lower among non-Hispanic blacks and lowest among Hispanics.⁴ The prevalence of food security was also highest among persons with more than four years of college education and lowest among persons with less than a high school education.⁴ A 2017 study from Feeding America showed that in 2015 Bronx and Kings counties in New York City (NYC) had the highest rates of food insecurity in New York State (NYS) at 16.1% and 18.8%, respectively, exceeding the average county level food-insecurity rate of 14% in the United States.⁵

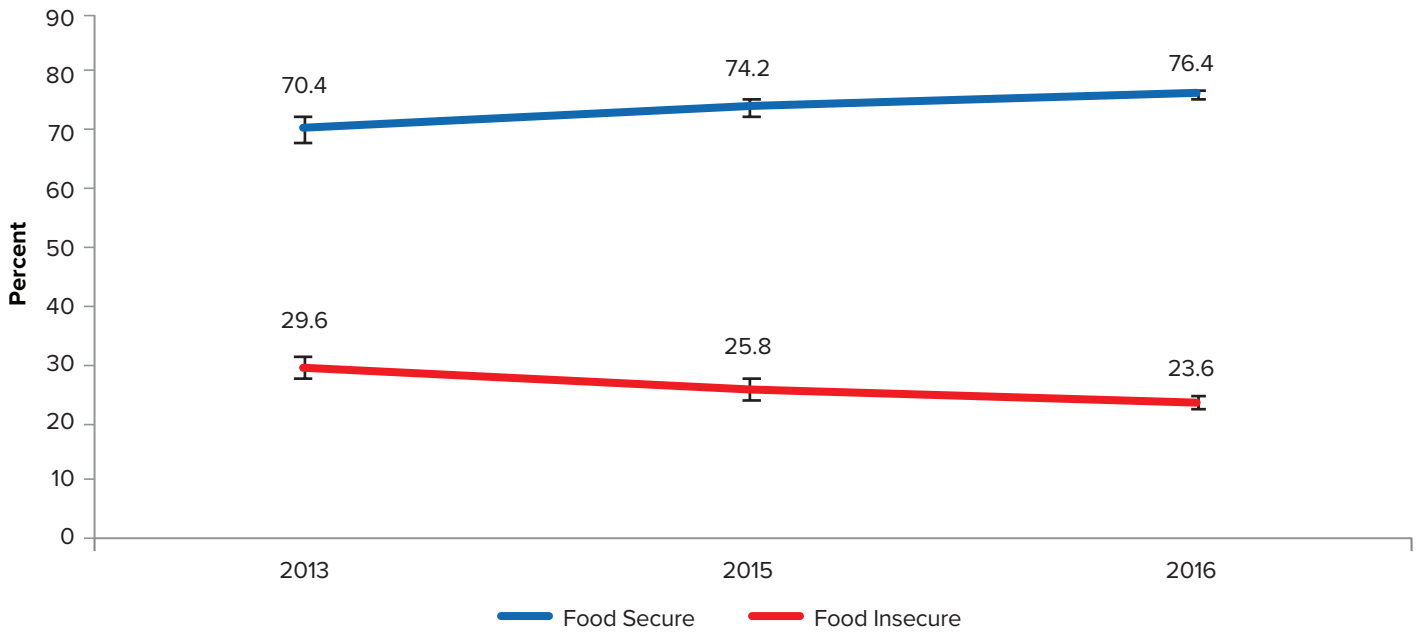
Key Findings

In 2016, one out of four adults (23.6%) in NYS indicated they were always, usually, or sometimes worried or stressed about having enough money to buy nutritious meals in the past 12 months (defined as “food insecure”), while 76.4% responded they rarely or never worried about accessing adequate food (defined as “food secure”) (Table 1). The prevalence of reported food insecurity is significantly higher among Hispanic (41.3%) and non-Hispanic black adults (31.8%) than among non-Hispanic white adults (16.5%) in NYS. Food insecurity is significantly more likely to be reported among females (25.9%), adults with a household income of less than \$15,000 (47.6%), those with less than a high school degree (43.2%) and those who are unemployed (42.5%). In addition, food insecurity is significantly higher for respondents living in NYC (28.3%) compared to those residing in the rest of the state (20.5%). Overall, there was a statistically significant increase in the prevalence of reported food security from 2013 (70.4%) to 2016 (76.4%) (Figure 1).

BRFSS questions

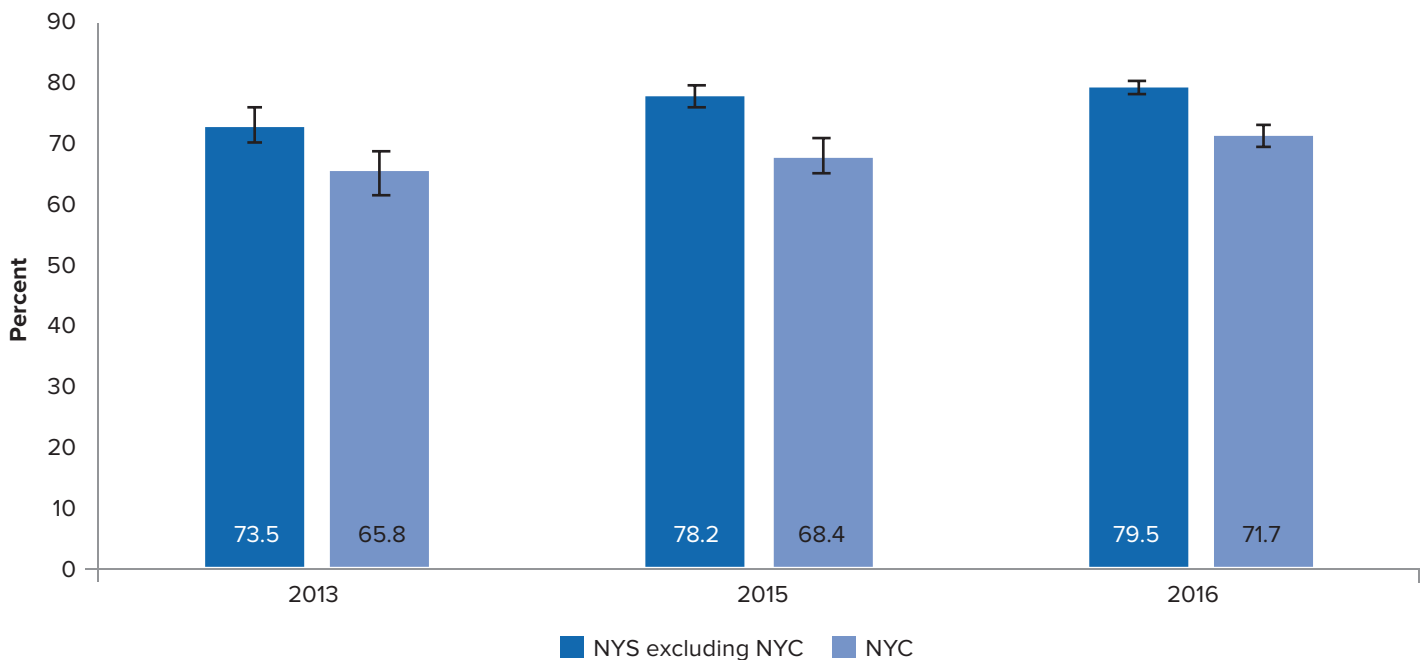
How often in the past 12 months would you say you were worried or stressed about having enough money to buy nutritious meals? Would you say you were worried or stressed — Always, Usually, Sometimes, Rarely, Never?

Figure 1. Food security¹ among New York State adults, BRFSS 2013, 2015, 2016



¹ Food secure is defined as those who responded they were rarely or never worried about having enough money to buy nutritious meals in the past 12 months. Food insecure are those who indicated they were always, usually, or sometimes worried or stressed about having enough money to buy nutritious meals in the past 12 months.

Figure 2. Food security¹ by region² among New York State adults, BRFSS 2013, 2015, 2016



¹ Food secure is defined as those who responded they were rarely or never worried or stressed about having enough money to buy nutritious meals in the past 12 months.

² Regions defined as New York City (NYC) and NYS excluding NYC.

Table 1. Food security among New York State adults, 2016 BRFSS

	Food Insecure ¹		Food Secure ¹	
	%	95% CI ²	%	95% CI ²
New York State (NYS) [n=29,508]	23.6	22.6-24.7	76.4	75.3-77.4
Gender				
Female	25.9	24.4-27.3	74.1	72.7-75.6
Male	21.2	19.6-22.8	78.8	77.2-80.4
Age (years)				
18-24	23.8	19.9-27.8	76.2	72.2- 80.1
25-44	28.3	26.2-30.3	71.7	69.7-73.8
45-64	24.6	22.9-26.3	75.4	73.7-77.1
65+	14.8	13.0-16.6	85.2	83.4- 87.0
Race/ethnicity				
White non-Hispanic	16.5	15.4-17.6	83.5	82.4- 84.6
Black non-Hispanic	31.8	28.2-35.3	68.2	64.7- 71.8
Hispanic	41.3	38.2-44.4	58.7	55.6- 61.8
Other non-Hispanic	22.4	17.9-26.9	77.6	73.1-82.1
Education				
Less than high school	43.2	39.5-47.0	56.8	53.0-60.5
High school graduate or GED	27.8	25.5-30.1	72.2	69.9- 74.5
Some post-high school	23.2	21.2-25.1	76.8	74.9- 78.8
College graduate	12.2	11.0-13.4	87.8	86.6- 89.1
Income				
<\$15,000	47.6	43.6-51.6	52.4	48.4- 56.4
\$15,000 to < \$25,000	42.0	38.8-45.1	58.0	54.9- 61.2
\$25,000 to < \$35,000	29.8	26.0-33.6	70.2	66.4-74.0
\$35,000 to < \$50,000	24.3	20.9-27.7	75.7	72.3- 79.1
\$50,000 to < \$75,000	16.6	13.9-19.3	83.4	80.7- 86.1
\$75,000 or more	7.7	6.5-9.0	92.3	91.0- 93.5
Missing ³	27.3	23.8-30.7	72.7	69.3-76.2
Employment status				
Employed/self-employed	21.6	20.1-23.0	78.4	77.0-79.9
Unemployed	42.5	36.8-48.1	57.5	51.9-63.2
Not in labor force	23.4	21.8-25.1	76.6	74.9-78.2
Disability⁴				
Yes	40.1	37.7-42.6	59.9	57.4-62.3
No	18.7	17.6-19.9	81.3	80.1-82.4
Region				
New York City (NYC)	28.3	26.2-30.3	71.7	69.7-73.8
NYS excluding NYC	20.5	19.3-21.7	79.5	78.3-80.7

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² % = weighted percentage; CI = confidence interval.

³ "Missing" category included because more than 10% of the sample did not report income.

⁴ 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).

Discussion

Although these results show demographic disparities, the prevalence of reported food security has increased in NYS consistent with the national trend.⁴ Federal food assistance programs such as the Supplemental Nutrition Assistance Program (SNAP) and the Supplemental Nutrition Program for Women, Infants, and Children (WIC) are available to help lessen food insecurity in income-eligible populations. Other resources, such as food banks, food pantries and soup kitchens, can further assist those in need. In NYS, the Hunger Prevention and Nutrition Assistance Program (HPNAP) increases access to safe and nutritious food by providing state and federal funds to improve the quality of food distributed to approximately 2,600 Emergency Food Relief Organizations (EFRO) across NYS. Additional initiatives focused in NYC, such as the Commodity Supplemental Foods Program and Stellar Farmers' Market help to address food insecurity in those locations. BRFSS can be used to support policies and initiatives to screen for food insecurity and strengthen federal food assistance programs.

References

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Program Contributions

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