

# Obesity and Physical Activity among Adults with Disability in South Carolina

2019

## Adults with Disability in South Carolina

People with disability are identified as a possible health disparity group; therefore, to reduce these disparities, it is important to understand the health status of those with and without disability. The data presented here are from the 2017 South Carolina (SC) Behavioral Risk Factor Surveillance System (BRFSS). More details about SC BRFSS data and the definition of disability can be found on the back under ‘Data Details.’

A table comparing the demographics of adults with and without disability in SC is given below.

**Table 1. Demographic differences between adults in SC with and without disability (2017 SC BRFSS); % ± 95% confidence limit**

	WITH DISABILITY	WITHOUT DISABILITY
Prevalence	28.0 ± 1.1	72.0 ± 1.1
<b>Age</b>		
<65	<b>65.7 ± 1.9</b>	<b>82.4 ± 0.9</b>
65+	<b>34.3 ± 1.9</b>	<b>17.6 ± 0.9</b>
<b>Race/ethnicity*</b>		
NHW	66.1 ± 2.3	67.1 ± 1.6
NHB	26.6 ± 2.1	24.3 ± 1.4
Hispanic	3.7 ± 1.1	5.5 ± 0.9
NHO	3.6 ± 0.8	3.1 ± 0.5
<b>Sex</b>		
Male	<b>45.0 ± 2.3</b>	<b>49.1 ± 1.6</b>
Female	<b>55.0 ± 2.3</b>	<b>50.9 ± 1.6</b>
<b>Educational attainment</b>		
≤High school	<b>56.2 ± 2.3</b>	<b>39.3 ± 1.6</b>
>High school	<b>43.8 ± 2.3</b>	<b>60.7 ± 1.6</b>
<b>Annual household income</b>		
<\$50K	<b>77.6 ± 2.1</b>	<b>48.3 ± 1.8</b>
\$50K+	<b>22.4 ± 2.1</b>	<b>51.7 ± 1.8</b>

Bold: significantly different; \*NHW: Non-Hispanic White; NHB: Non-Hispanic Black; NHO: Non-Hispanic Other, includes multi-racial

Among adults with disability in SC in 2017, there was a significantly higher prevalence of older adults, females, those with low educational attainment, and those with low annual household income, when compared to those without disability (Table 1).

## Obesity, Physical Activity, and Disability

Obesity causes higher medical costs and a lower quality of life. Nationally, annual health care costs of obesity that are related to disability are estimated to be approximately \$44 billion.<sup>1</sup> One of the ways to prevent obesity is to obtain adequate physical activity. The 2018 Physical Activity Guidelines for American Adults state that for substantial health benefits, adults should engage in at least 150 minutes of moderate-intensity, or 75 minutes of vigorous-intensity aerobic physical activity per week.<sup>2</sup> Examples of moderate vs. vigorous activities are listed in Table 2. Some activity is better than no activity.<sup>2</sup>

**Table 2. Examples of moderate and vigorous physical activity (2017 SC BRFSS)**

MODERATE ACTIVITIES	VIGOROUS ACTIVITIES
Line dancing	Aerobic dance
Biking on level ground with few hills	Biking faster than 10 miles per hour
Walking briskly	Hiking uphill
Using your manual wheelchair	Martial arts (such as karate)
Using hand cyclers (ergometers)	Race walking, jogging, or running
Water aerobics	Swimming laps

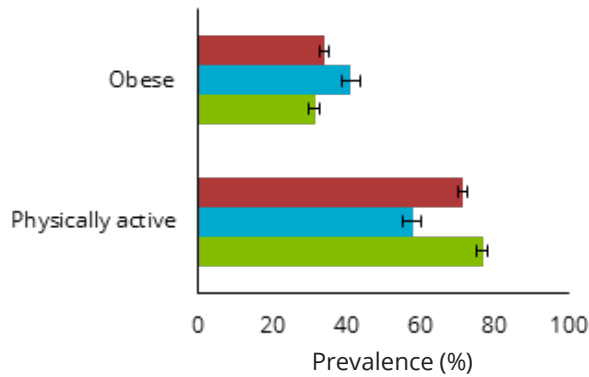
Adults with chronic conditions or disability, who are able, should follow the same aerobic activity guidelines as adults without disabilities.<sup>2,3</sup> Evidence shows that regular physical activity provides important health benefits for people with disabilities.<sup>3</sup> Benefits include improved cardiovascular and muscle fitness, mental health, balance, and a better ability to do tasks of daily life.<sup>4</sup>

Challenges to obtaining adequate physical activity for people with disabilities include: medications that contribute to weight gain or weight loss, changes in appetite, physical limitations that can reduce a person’s ability to exercise, pain, a lack of energy, and a lack of resources (for example, money, transportation, and social support from family, friends, neighbors, and community members).

Figure 1 shows the prevalence of being physically active and obese comparing those with and without disability in SC. These data are self-reported, so people may not accurately report their weight or physical activity.

In SC in 2017, compared to those without disability, those with disability had a significantly higher prevalence of obesity and a significantly lower prevalence of being physically active (Figure 1).

**Figure 1. The prevalence of being physically active and obesity among all adults and those with or without disability in SC (error bar: 95% confidence limit)**



After accounting for the demographic differences listed in Table 1, significant differences remained between the odds of people with and without disability of reporting being obese and being physically active. Compared to those without disability, those with disability had:

- 53% higher odds of being obese.
- 48% lower odds of being physically active.

## Wellness Programs

Wellness programs can help individuals learn about maintaining a healthy lifestyle and strategies to stop negative health behaviors. Also, sometimes, they can be a source of social support, which also has a positive benefit. Among adults with disability in SC, 9% reported attending a wellness program for the general population in the past year, and 8% reported attending a wellness program specifically for people with disability in the past year. In SC, among those with disability, those who attended either type of wellness program were significantly more physically active than those who did not attend. There was no difference between those who did attend and those who did not in terms of their obesity status.



## Data Details

The SC BRFSS is administered by the South Carolina Department of Health and Environmental Control. It is a random digit-dialing, telephone-based survey of non-institutionalized adults (ages 18+) in the state. It is funded through a cooperative agreement with CDC. For more information, visit [cdc.gov/brfss](http://cdc.gov/brfss).

The 2017 SC BRFSS survey includes six questions relating to disability:

- Are you deaf or do you have serious difficulty hearing?
- Are you blind or do you have serious difficulty seeing, even when wearing glasses?
- Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?
- Do you have serious difficulty walking or climbing stairs?
- Do you have difficulty dressing or bathing?
- Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

For this report, the criteria to determine disability status is as follows:

- Individual with disability: They answered "Yes" to any one of the six questions.
- Individual without disability: They answered "No" to 4 questions and had 2 missing responses; "No" to 5 questions and had 1 missing response; or "No" to all 6 questions.
- Individual excluded from analysis, disability status undetermined: 3 or more questions were missing a response.

## References

1. Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual Medical Spending Attributable To Obesity: Payer-And Service-Specific Estimates. *Health Aff.* 2009;28(5):w822-w831.
2. "Physical Activity Guidelines for Americans: 2nd edition." US DHHS. Accessed 10 Jul 2019. [URL: [https://health.gov/paguidelines/second-edition/pdf/Physical\\_Activity\\_Guidelines\\_2nd\\_edition.pdf](https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf)].
3. Piercy KL, Troiano RP, Ballard RM, et al. The Physical Activity Guidelines for Americans. *JAMA.* 2018;320(19):2020. doi:10.1001/jama.2018.14854
4. Office of Disease Prevention and Health Promotion. Be Active Your Way: A Fact Sheet for Adults - [health.gov](https://health.gov). <https://health.gov/paguidelines/2008/resources/factSheetAdults.aspx>. Accessed May 7, 2019.

## For more information about SC BRFSS

visit <https://scdhec.gov/health/sc-public-health-statistics-maps/behavioral-risk-factor-surveys>