

Diabetes 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
Age		
<65	65.7 ± 1.9	82.4 ± 0.9
65+	34.3 ± 1.9	17.6 ± 0.9
Race/ethnicity*		
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
Sex		
Male	45.0 ± 2.3	49.1 ± 1.6
Female	55.0 ± 2.3	50.9 ± 1.6
Educational attainment		
≤High school	56.2 ± 2.3	39.3 ± 1.6
>High school	43.8 ± 2.3	60.7 ± 1.6
Annual household income		
<\$50K	77.6 ± 2.1	48.3 ± 1.8
\$50K+	22.4 ± 2.1	51.7 ± 1.8

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).

Diabetes Fundamentals

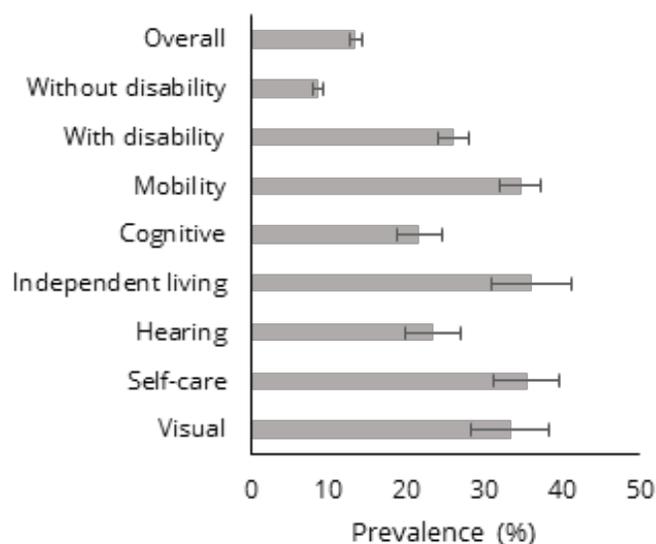
Millions of people around the globe are living with diabetes, which is an excess of glucose, or sugar, in the bloodstream.¹ Insulin is the hormone in our body that is responsible for taking glucose out of the bloodstream and delivering it to cells to be used for cellular functions.¹ There are different types of diabetes, which are characterized by differing insulin functions:¹

- Type 1: the body does not produce insulin
- Type 2: the body does not use insulin properly
- Gestational: like type 2, but occurs during pregnancy

Diabetes and Disability among Adults in South Carolina

Depending on the severity of the condition, diabetes can sometimes be a contributing factor to disability status. From the 2017 SC BRFSS, we were able to determine the prevalence of people with diabetes who also reported having a disability, but we could not determine which came first – a diagnosis of diabetes or a designation of disability. We also do not know what type of diabetes each person had, because they were only asked to report whether they had ever been diagnosed.

Figure 1. Prevalence of self-reported diabetes among each functional limitation type (error bar: 95% confidence limit)



Diabetes Management

While there is no cure, diabetes can be managed by living a healthy lifestyle and taking medication for the condition, if prescribed.² Management regimens differ from person to person, and it is best to consult with a health care provider about how to best manage your diabetes. Some measures of diabetes management are listed in Table 2, which also compares the prevalence of those measures between those with and without disability.

Table 2. Prevalence of different aspects of managing diabetes between adults in SC with and without disability (2017 SC BRFSS); % ± 95% confidence limit

	WITH DISABILITY	WITHOUT DISABILITY
Diabetes	26.0 ± 1.9	8.7 ± 0.8
Age		
Yes	37.6 ± 4.0	29.7 ± 4.2
No	62.4 ± 4.0	70.3 ± 4.2
Frequency of checking own blood glucose		
1+ times/day	67.8 ± 4.0	67.1 ± 1.6
<1 time/day	17.4 ± 3.0	26.0 ± 3.9
Never	14.8 ± 3.4	11.7 ± 2.7
Frequency of checking own feet for sores		
1+ times/day	68.8 ± 4.0	63.6 ± 4.4
<1 time/day	18.3 ± 3.3	26.0 ± 3.9
Never	12.9 ± 3.0	15.8 ± 3.4
Frequency of visiting a healthcare professional for diabetes in the past year		
1-5 times	74.7 ± 4.1	82.1 ± 3.9
6+ times	17.1 ± 3.6	8.1 ± 3.2
Never	8.2 ± 2.7	9.9 ± 2.7
Been told that diabetes affected eye sight/have retinopathy*		
Yes	23.0 ± 3.5	10.8 ± 2.9
No	77.0 ± 3.5	89.2 ± 2.9
Taken a diabetes self-management class		
Yes	52.6 ± 4.2	57.6 ± 4.3
No	47.4 ± 4.2	42.4 ± 4.3

Bold: significantly different; *retinopathy is disease of the retina that results in impaired or loss of vision

Compared to those without disability, those with disability have significantly higher rates of:

- Seeing a healthcare professional 6+ times for diabetes in the past year.
- Being told that diabetes has affected their eyes or that they have retinopathy.

Those with disability had a significantly lower rate of checking their own blood glucose <1 time per day, compared to those without disability (Table 2).

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.

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

- Do you have serious difficulty walking or climbing stairs? (labeled as 'Mobility' in Figure 1)
- Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (labeled as 'Cognitive' in Figure 1)
- Do you have difficulty dressing or bathing? (labeled as 'Independent living' in Figure 1)
- Are you deaf or do you have serious difficulty hearing? (labeled as 'Hearing' in Figure 1)
- Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? (labeled as 'Self-care' in Figure 1)
- Are you blind or do you have serious difficulty seeing, even when wearing glasses? (labeled as 'Visual' in Figure 1)

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. "Diabetes Basics." American Diabetes Association. Accessed 25 Jun 2019. [URL: <http://www.diabetes.org/diabetes-basics/>].
2. "Living with Diabetes." American Diabetes Association. Accessed 25 Jun 2019. [URL: <http://www.diabetes.org/living-with-diabetes/>].

For more information about living with diabetes

visit <https://www.cdc.gov/diabetes/ndep/people-with-diabetes/index.html>

For more information about SC BRFSS

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