

MICHIGAN BRFSS SURVEILLANCE BRIEF



A newsletter from the Lifecourse Epidemiology & Genomics Division, MDHHS

Vol. 14 No. 2

August 2023

Health Status of Michigan Caregivers

In 2021, one in every five Michigan adults provided regular care or assistance to a friend or family member. Using data from the 2021 Michigan Behavioral Risk Factor Survey (MiBRFS), this surveillance brief examines the prevalence of caregiver status among Michigan adults by demographic characteristics. This brief also compares the prevalence of health risk behavior/chronic disease among adults who are caregivers compared to non-caregivers.

Background

For many people, providing care, support and assistance to a family member or friend is not viewed as a separate responsibility. Rather, it is a part of the relationship. Over the years, as the number of older adults has increased, the cost of out-of-home care has skyrocketed and staffing shortages have worsened. Family members and friends are the linchpin in the long-term care system. The major factor that keeps a person at home is the presence of an unpaid caregiver. In the U.S. 2020 study, there are about 48 million individuals providing unpaid care to an adult family or friend. Family caregivers are facing physical, emotional, and financial challenges. Nearly eight in 10 caregivers report having routine out-of-pocket expenses related to caregiving costs (NAC/AARP 2021¹). Caregiving occurs among all age groups, racial/ethnic groups, income, educational levels, family types, gender identities and sexual orientation (NAC/AARP 2020²). In fact, caregiving is an expected role in the life cycle.

Methods

The Michigan Behavioral Risk Factor Surveillance System (BRFSS) is a telephone-based health survey of adult Michigan residents that provides statewide data on the prevalence of chronic health conditions, health-related behaviors, medical conditions, and preventive health care practices. The Michigan BRFSS provides cross-sectional data, and a temporal relationship cannot be established. To improve the generalizability of the data, making it possible to draw conclusions about the health of Michiganders, CDC weighted survey data using iterative proportional fitting, also known as raking, to account for demographic differences between the survey sample and Michigan's population.

What is the Michigan Behavioral Risk Factor Surveillance System (MiBRFSS)?

The MiBRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC.

The MiBRFSS follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various health behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Landline and cell phone interviews are conducted across each calendar year.

Data are weighted to adjust for the probabilities of selection and a raking weighting factor is used to adjust for the distribution of the Michigan adult population based on eight demographic variables.

All analyses are performed using SAS-callable SUDAAN[®] to account for the complex sampling design.

Nine state-added questions on caregiving were included in the 2021 MiBRFS. The initial question was: “People may provide regular care or assistance to a friend or family member who has a health problem or disability. During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability?”

Those who were currently providing care were then asked eight follow-up questions, including the relationship to the person to whom they give care, length of time providing care and average hours per week, the health problem of the person, the person being cared for having Alzheimer’s disease, the areas the person needed the most help, and expected future caregiving. For this analysis, “caregivers” were defined as those responding positively to the initial question.

The prevalence of caregiver status among Michigan adults was assessed by age, gender, race/ethnicity, education, household income, insurance status, and disability status. In addition, the prevalence of health risk behavior and chronic disease among Michigan adults who are caregivers compared to non-caregivers.

Results

Prevalence of Caregiver Status

Based on 2021 MiBRFS data, an estimated one in five (21.4%) Michigan adults currently provided care to family members or friends. The prevalence of caregiver status was similar across gender, race/ethnicity, education, household income, health insurance, and disability status (Table 1). Michigan adults aged 45-54 years old (27.2%) and adults aged 55-64 years old (27.1%) were more likely to report being caregivers than adults aged 25-34 years old (15.2%).

Figure 1 displays the relationship between the caregiver and the care recipient. 32.5% of caregivers reported taking care of a parent or parent-in-law, which was the most often cited relationship between a caregiver and care recipient. The care of mothers was the most prevalent in that group at 20.2%, followed by fathers (8.1%). 17.1% reported the care recipient was a spouse or partner, 16.6% reported non-relative, 11.0% reported child or grandchild, 9.1% reported sibling, 6.9% reported grandparent, and 6.9% reported other relative.

Figure 1. Relationship of Care Recipient to Caregiver, Michigan, BRFSS 2021

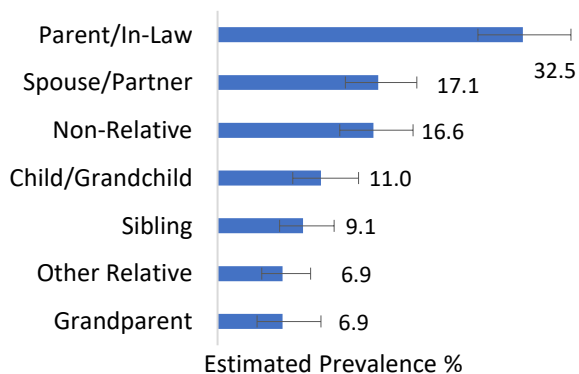


Table 1. Prevalence of Caregiver Status by Demographic Characteristics Among Michigan Adults, BRFSS 2021

	Weighted Frequency	%	95% CI
Statewide	1,439,270	21.4	(19.5-23.5)
Age			
18-24	139,206	16.7	(11.0-24.5)
25-34	164,991	15.2	(10.4-21.6)
35-44	229,554	24.4	(19.2-30.5)
45-54	247,097	27.2	(22.2-32.8)
55-64	319,589	27.1	(22.5-32.3)
65-74	220,838	22.7	(18.8-27.3)
75+	104,750	15.4	(11.7-20.1)
Gender			
Male	615,632	18.9	(16.1-22.0)
Female	823,638	23.8	(21.1-26.6)
Race/Ethnicity			
White non-Hispanic	1,044,512	20.5	(18.4-22.8)
Black non-Hispanic	193,653	24.0	(17.7-31.6)
Other non-Hispanic	89,732	25.8	(17.8-35.9)
Hispanic	72,835	23.8	(14.6-36.4)
Education			
Less than high school	139,130	23.4	(14.8-35.0)
High school graduate	379,569	19.8	(16.5-23.7)
Some college	517,482	22.9	(19.4-26.8)
College graduate	393,783	20.4	(17.9-23.3)
Household Income			
< \$20,000	154,983	30.3	(22.5-39.5)
\$20,000 - \$34,999	214,171	20.6	(15.9-26.4)
\$35,000 - \$49,999	166,302	20.1	(15.4-25.9)
\$50,000 - \$74,999	265,016	27.1	(21.6-33.5)
\$75,000 +	389,785	19.6	(16.3-23.4)
Health Insurance			
Insured	1,299,382	21.6	(19.5-23.8)
Uninsured	67,900	23.8	(14.0-37.5)
Disability Status			
No disabilities	958,792	19.8	(17.6-22.1)
With disabilities	467,588	25.7	(21.7-30.2)

CI = confidence interval.

Figure 2 displays the length of time Michigan adults have spent in the caregiver role. The most often reported length of time as a caregiver was more than five years, reported by 33.2% of caregivers. A majority of caregivers in Michigan (70.6%) have provided care on a long-term basis (six months or more).

Figure 2. Length of Time Adults Have Spent as a Caregiver, Michigan, BRFSS 2021

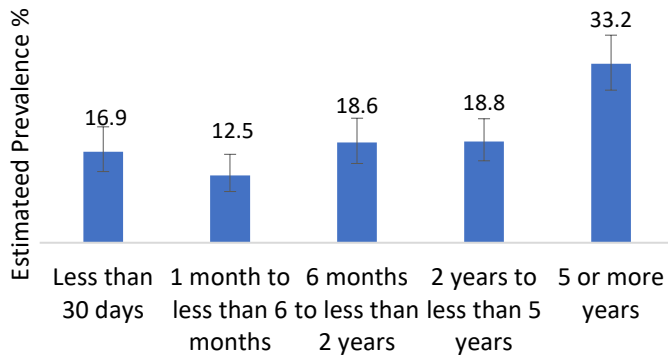
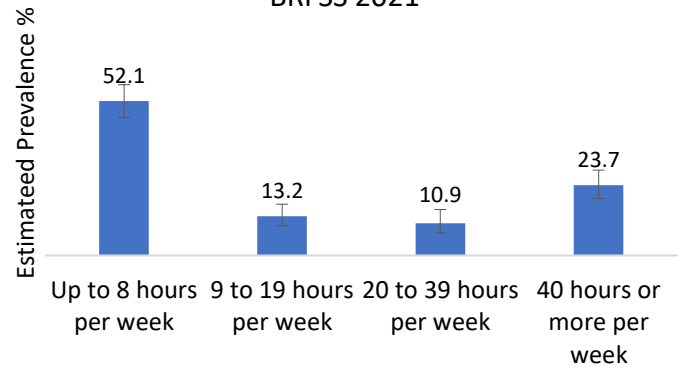


Figure 3 displays the average hours of care provided per week by the caregiver. Half of Michigan caregivers provide up to eight hours of care per week (52.1%). However, nearly one-in-four caregivers (23.4%) provide care 40 or more hours per week.

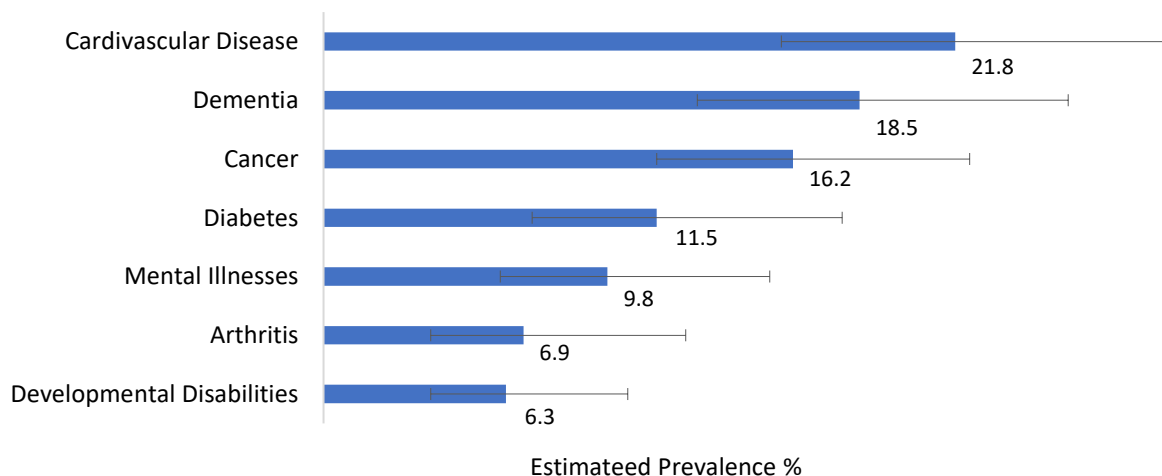
Figure 3. Average Hours of Caregiving Per Week Among Caregivers, Michigan, BRFSS 2021



Caregivers in Michigan provided a variety of assistance to care recipients. Caregivers managed personal care for the care recipient such as giving medications, feeding, dressing, or bathing (49.3%) and managed household tasks for the care recipient such as cleaning, managing money, or preparing meals (80.1%). About 15.7% of persons being cared for have dementia. Among those who are not currently caregivers, 13.5% of Michigan adults expect to provide care or assistance to a friend or family member who has a health problem or disability in the next two years.

Figure 4 displays the health problem among those reporting a specific health issue and excludes the other category. Among those reporting a specific health problem, 21.8% had cardiovascular disease, 18.5% of care recipients experienced dementia, 16.2% had cancer, 11.5% had diabetes, and 6.9% had arthritis. This indicates that the top five health problems affecting care recipients in Michigan are chronic disease. Other health problems affecting care recipients include mental illness (9.8%) and developmental disability (6.3%).

Figure 4. Type of Illness Experienced by Care Recipient, Excluding "Other" Category, Michigan, BRFSS 2021



Caregiver Status and Health Risk Behavior/Chronic Disease

Because caregivers may experience stress and other challenges while caring for others, an analysis was conducted to determine to what extent Michigan caregivers are affected by health risk behaviors and chronic diseases. Table 2 displays the prevalence of health risk behavior or chronic disease experienced by caregivers in Michigan as compared to adults who are not caregivers. Overall, these results indicate no difference between caregivers and those who are not caregivers for most health risk behaviors and chronic diseases. Caregivers had a significantly higher prevalence of poor mental health than non-caregivers (19.6% vs. 12.9%). The prevalence of activity limitation due to poor health was significantly higher among caregivers (14.3%) than among non-caregivers (7.0%). The prevalence of no health care access due to cost was significantly higher among caregivers (11.7%) compared with non-caregivers (6.7%).

Table 2 Prevalence of Health Risk Behavior or Chronic Disease Experienced by Caregivers Compared to Non-Caregivers, Michigan, BRFSS 2021

Health Risk Behavior/Chronic Disease	Caregivers			Non-Caregivers		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
Fair/poor health	233,965	16.3	(12.5-20.9)	774,847	14.7	(12.9-16.7)
Poor physical health	207,516	14.8	(11.3-19.2)	557,401	10.8	(9.1-12.7)
Poor mental health	279,083	19.6	(15.6-24.5)	668,107	12.9	(11.0-15.0)
Activity limitation due to poor health	201,676	14.3	(10.8-18.6)	367,565	7.0	(5.8-8.6)
No health care coverage	67,900	5.0	(2.9-8.4)	217,129	4.4	(3.1-6.1)
No personal health care provider	120,326	8.4	(5.7-12.2)	527,520	10.1	(8.3-12.1)
No health care access due to cost	167,787	11.7	(8.6-15.7)	351,428	6.7	(5.3-8.4)
No leisure time physical activity	354,150	24.6	(20.1-29.7)	1,169,055	22.2	(19.9-24.6)
Obesity	510,223	39.7	(34.4-45.3)	1,659,893	33.6	(30.9-36.5)
Current smoking	278,032	19.4	(15.4-24.2)	733,512	14.0	(11.9-16.3)
Heavy drinking	121,675	8.6	(5.7-12.7)	336,339	6.5	(5.2-8.0)
Binge drinking	227,051	16.1	(12.3-20.8)	845,265	16.2	(14.0-18.8)
Depressive disorders	408,743	28.4	(23.7-33.7)	1,178,734	22.4	(19.9-25.1)
Arthritis	502,196	35.6	(30.9-40.5)	1,494,638	28.4	(26.0-31.0)
Current asthma	213,430	14.9	(11.2-19.6)	621,147	11.8	(9.9-14.1)
Kidney disease	19,938	1.4	(0.8-2.3)	179,126	3.4	(2.6-4.4)
Cancer	227,228	15.9	(12.5-20.0)	682,722	13.0	(11.5-14.6)
Diabetes	177,324	12.3	(9.3-16.2)	592,802	11.2	(9.7-12.9)
High blood pressure	562,754	39.1	(34.0-44.4)	1,878,892	35.7	(33.1-38.4)
Cardiovascular disease	149,859	10.4	(7.6-14.1)	518,711	9.9	(8.4-11.6)
Chronic obstructive pulmonary	126,671	8.8	(6.4-12.0)	324,393	6.2	(5.1-7.4)

Discussion

Many individuals take on these responsibilities without adequate knowledge, services or supports. They often face multiple demands that require new skills. Whether providing post-treatment care to a family member or managing the ongoing care for a person with chronic disease, the tasks are essential and often complex. Caregivers must navigate health systems, coordinate medical care, and provide or obtain supports and services. As the continued expansion of home-based care intensifies, the importance of informal caregivers also increases and requires attention. As noted in Table 2 above, one of the differences between caregivers and non-caregivers is that caregivers had a significantly higher prevalence of poor mental health than non-caregivers (19.6% vs. 12.9%).

The Administration for Community Living (ACL) provides Michigan's area agencies on aging (AAAs) with funds to provide an array of supports and services to support older adults and their families. These range from information and assistance programs to nutrition programs, respite care and care management. Under the ACL's National Family Caregiver Support Program, AAAs provide adult day services, caregiver education, training, and other supports needed by informal

caregivers. The State Plan on Aging seeks to strengthen supports and coordination for older adults and their caregivers. AAAs are coordinating new and existing services into Caregiver Resource Centers, to better serve older adults and their caregivers.

“There are only four kinds of people in the world: those who have been caregivers, those who are currently caregivers, those who will be caregivers, and those who will need caregivers.” - Rosalynn Carter ³

One limitation of this brief is that the Michigan BRFSS provides cross-sectional data, and a temporal relationship cannot be established. We can only examine the association between caregiver status and health risk behavior/chronic disease and cannot assess the causation relationship from the Michigan BRFSS data.

Reference

1. Caregiving Out-of-Pocket Costs Study 2021. Skufca L and Rainville C. Washington, DC: AARP Research, June 2021. https://www.aarp.org/content/dam/aarp/research/surveys_statistics/lrc/2021/family-caregivers-cost-survey-2021.doi.10.26419-2Fres.00473.001.pdf
2. Caregiving in the U.S. 2020, AARP and National Alliance for Caregiving, May 2020. Found at: [Caregiving in the U.S. 2020 - AARP Research Report](#)
3. Written Testimony of Former First Lady Rosalynn Carter Before the Senate Special Committee on Aging, The Carter Center website, May 26, 2011. Found at https://www.cartercenter.org/news/editorials_speeches/rosalynn-carter-committee-on-aging-testimony.html

Suggested citation: Tian Y, Steiner S, Hines S, Leonardi K, and Kleyn M. Health Status of Michigan Caregivers. Michigan BRFSS Surveillance Brief. Vol. 14, No. 2. Lansing, MI: Michigan Department of Health and Human Services, Lifecourse Epidemiology and Genomics Division, August 2023.