

MICHIGAN BRFSS SURVEILLANCE BRIEF



A newsletter from the Lifecourse Epidemiology & Genomics Division, MDHHS Vol. 12 No. 4 September 2021

Health Status of Michigan Caregivers

In 2017, one in every five Michigan adults provided regular care or assistance to a friend or family member. Using data from the 2017 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 awareness of cognitive diseases has grown, family members (and non-relatives) are being recognized for the linchpin role they play in the long-term care system. The major factor that keeps a person at home is the presence of an unpaid caregiver. The demographic of caregiving remains unchanged, despite the increase of persons reporting as caregivers over recent years. Caregiving occurs among all age groups, racial/ethnic groups, income, educational levels, family types, gender identities and sexual orientation (NAC/AARP 2020¹). In fact, caregiving is an expected role in the life cycle. Many caregivers take on this role without adequate knowledge, services or supports, despite an increasing complexity of skills and tasks needed.

Methods

The Michigan Behavioral Risk Factor Surveillance System (BRFSS) is a telephone-based health survey of adult Michigan residents that provides statewide 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.

Nine state-added questions on caregiving were included in the 2017 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?"

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.

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, types of assistance, 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 2017 MiBRFS data, an estimated one in five (21.6%) Michigan adults currently provided care to family members or friends. The prevalence of caregiver status was similar across age, gender, education, household income, and health insurance (Table 1). Black non-Hispanic adults were more likely to report being caregivers (30.1%) than whites non-Hispanic (20.0%). Adults reporting disability were more likely to be caregivers than those not reporting disability (26.2% vs. 19.7, respectively).

Figure 1 displays the relationship between the caregiver and the care recipient. 35.6% 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 22.4%, followed by fathers (6.9%). 14.9% reported the care recipient was a spouse or partner, 13.9% reported non-relative, 11.1% reported grandparent, 9.2% reported child or grandchild, 8.9% reported sibling, and 6.4% reported other relative.

Figure 1. Relationship of Care Recipient to Caregiver, Michigan, BRFS 2017

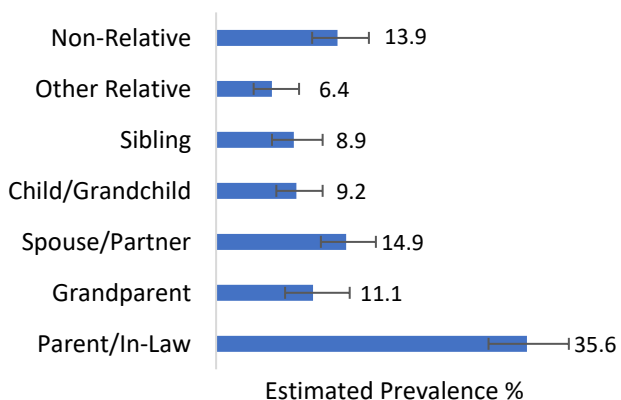


Table 1. Prevalence of Caregiver Status by Demographic Characteristics Among Michigan Adults, BRFS 2017

	Weighted Frequency	%	95% CI
Statewide	1,531,443	21.6	(19.8-23.5)
Age			
18-24	154,218	16.9	(11.9-23.3)
25-34	222,235	21.1	(16.2-27.1)
35-44	231,984	22.5	(17.2-28.9)
45-54	253,315	21.6	(17.8-26.0)
55-64	340,183	25.9	(22.0-30.3)
65-74	229,767	24.6	(21.0-28.7)
75+	89,343	14.1	(10.3-19.0)
Gender			
Male	698,857	20.3	(17.7-23.2)
Female	832,586	22.8	(20.4-25.4)
Race/Ethnicity			
White non-Hispanic	1,085,143	20.0	(18.1-22.0)
Black non-Hispanic	255,750	30.1	(23.7-37.4)
Other non-Hispanic	105,193	29.7	(21.3-39.7)
Hispanic		*	
Education			
Less than high school	183,821	25.3	(17.9-34.5)
High school graduate	443,264	21.9	(18.7-25.4)
Some college	541,347	21.5	(18.5-24.9)
College graduate	363,011	20.2	(17.7-22.9)
Household Income			
< \$20,000	229,572	22.5	(17.5-28.3)
\$20,000 - \$34,999	246,772	21.7	(17.2-26.9)
\$35,000 - \$49,999	167,488	20.2	(15.7-25.6)
\$50,000 - \$74,999	228,595	23.2	(18.6-28.5)
\$75,000 +	417,561	20.0	(17.0-23.4)
Health Insurance			
Insured	1,409,533	21.7	(19.9-23.7)
Uninsured	121,911	20.7	(13.7-30.0)
Disability Status			
No disabilities	977,481	19.7	(17.6-21.9)
With disabilities	547,663	26.2	(22.8-29.9)

CI = confidence interval.

*Data suppressed due to fewer than 50 respondents or relative standard error $\geq 30.0\%$.

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 27.8% of caregivers. A majority of caregivers in Michigan (69.2%) 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 2017

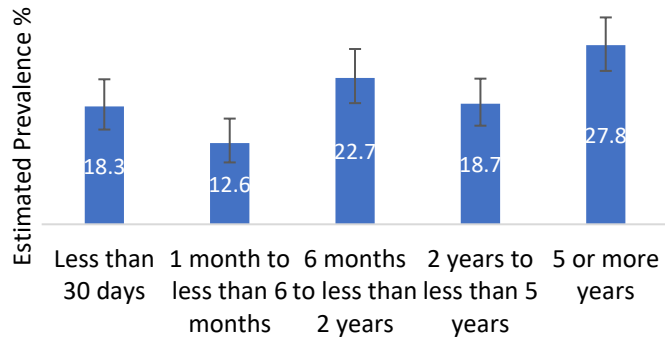
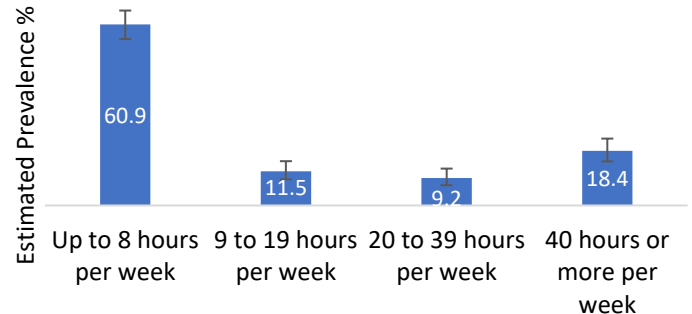


Figure 3 displays the average hours of care provided per week by the caregiver. Most Michigan caregivers provide up to eight hours of care per week (60.9%). However, nearly one-in-five caregivers (18.4%) provide care 40 or more hours per week.

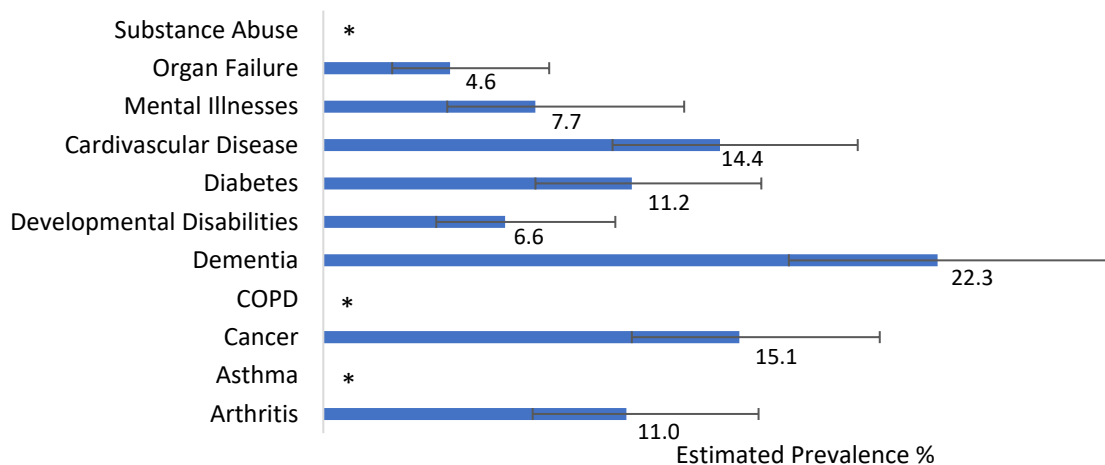
Figure 3. Average Hours of Caregiving Per Week Among Caregivers, Michigan, BRFSS 2017



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 (46.7%) and managed household tasks for the care recipient such as cleaning, managing money, or preparing meals (79.5%).

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, 22.3% of care recipients experienced dementia, 15.1% had cancer, 14.4% had cardiovascular disease, 11.2% had diabetes, and 11.0% 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 (7.7%), developmental disability (6.6%), and organ failure (4.6%).

Figure 4. Type of Illness Experienced by Care Recipient, Excluding "Other" Category, Michigan, BRFSS 2017

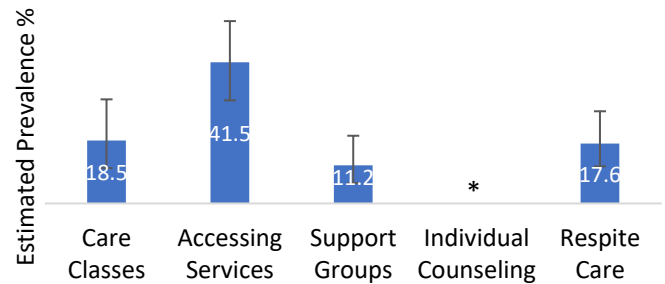


*Data suppressed due to fewer than 50 respondents or relative standard error $\geq 30.0\%$.
COPD=Chronic Obstructive Pulmonary Disease

A majority of caregivers in Michigan (82.9%) indicated that they needed no assistance or support while caregiving. Figure 5 displays the types of assistance or support services most needed by the caregiver among those responding that they needed assistance or support. Overall, the results indicate that nearly half of caregivers (41.5%) would like guidance on how to access services. Other types of assistance or support needed include care classes such as how to give medications (18.5%), respite care (17.6%), and support groups (11.2%).

Among those who are not currently caregivers, 15.0% 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 5. Type of Assistance Needed Most by the Caregiver, Michigan, BRFSS 2017



*Data suppressed due to fewer than 50 respondents or relative standard error $\geq 30.0\%$.

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. The prevalence of no health care access due to cost was significantly higher among caregivers (16.0%) compared with non-caregivers (9.6%). Caregivers had a significantly higher prevalence of current smoking than non-caregivers (27.3% vs. 16.9%). The prevalence of arthritis was significantly higher among caregivers (38.7%) than among non-caregivers (29.0%).

Table 2 Prevalence of Health Risk Behavior or Chronic Disease Experienced by Caregivers Compared to Non-Caregivers, Michigan, BRFSS 2017

Health Risk Behavior/Chronic Disease	Caregivers			Non-Caregivers		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
Fair/poor health	290,550	19.1	(15.5-23.2)	915,240	16.5	(14.8-18.4)
Poor physical health	258,959	17.1	(13.6-21.3)	739,231	13.5	(11.9-15.3)
Poor mental health	240,023	16.0	(12.7-20.0)	648,913	11.8	(10.3-13.6)
Activity limitation due to poor health	158,666	10.5	(7.8-13.9)	533,011	9.7	(8.3-11.3)
No health care coverage	121,911	8.0	(5.2-12.0)	466,719	8.4	(6.9-10.2)
No personal health care provider	198,564	13.1	(9.6-17.5)	805,805	14.6	(12.7-16.6)
No health care access due to cost	244,342	16.0	(12.6-20.0)	531,002	9.6	(8.1-11.2)
No leisure time physical activity	392,843	25.7	(21.7-30.1)	1,510,538	27.2	(25.0-29.5)
Obesity	543,653	37.8	(33.1-42.8)	1,692,260	32.0	(29.6-34.4)
Current smoking	413,059	27.3	(22.8-32.3)	931,222	16.9	(15.0-18.9)
Heavy drinking	134,434	9.0	(6.4-12.6)	354,854	6.5	(5.3-7.8)
Binge drinking	268,087	18.0	(14.2-22.6)	1,059,029	19.2	(17.3-21.4)
Depressive disorders	425,088	28.0	(23.8-32.6)	1,231,407	22.2	(20.3-24.3)
Arthritis	589,724	38.7	(34.2-43.4)	1,602,412	29.0	(26.9-31.1)
Current asthma	188,569	12.5	(9.8-15.8)	569,689	10.3	(8.8-12.1)
Kidney disease	58,688	3.9	(2.5-6.0)	185,710	3.3	(2.7-4.2)
Cancer	208,078	13.7	(10.9-16.9)	639,331	11.5	(10.3-12.9)
Diabetes	159,842	10.4	(8.1-13.4)	625,614	11.3	(9.9-12.8)
High blood pressure	530,503	34.7	(30.3-39.3)	1,867,456	33.7	(31.5-36.0)
Cardiovascular disease	192,784	12.6	(9.7-16.2)	565,351	10.2	(8.9-11.7)
Chronic obstructive pulmonary disease	149,069	9.8	(7.2-13.2)	397,258	7.2	(6.1-8.5)

Discussion

Informal caregivers are an essential component in the care system. Whether providing post-hospital care to family members or managing the ongoing care needs of a person with chronic disease, the tasks are essential and often complex. Caregivers navigate systems and coordinating medical care, supports and services. The continued shift to home-based care increases the importance of the caregivers.

As noted in Table 2 above, there are few differences in chronic disease prevalence between caregivers and non-caregivers. Also, 82% of caregivers surveyed reported no need for assistance. However, caregivers seeking assistance may not be aware of available resources. 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 universality of caregiving was best captured by Rosalyn Carter at the opening of the Rosalyn Carter Caregiving Institute: "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. ²

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 in the U.S. 2020, AARP and National Alliance for Caregiving, May 2020. Found at: [Caregiving in the U.S. 2020 - AARP Research Report](#)
2. 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, McKane P. Health Status of Michigan Caregivers. Michigan BRFSS Surveillance Brief. Vol. 12, No. 4. Lansing, MI: Michigan Department of Health and Human Services, Lifecourse Epidemiology and Genomics Division, September 2021.