



# MICHIGAN BRFS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH

## Health Status of Michigan Caregivers

**Background.** Nearly 66 million Americans provide unpaid care to family members or friends who have difficulty taking care of themselves.<sup>1</sup> It has been estimated that caregivers provide \$257-\$389 billion worth of unpaid care.<sup>2</sup> However, providing this care on a voluntary unpaid basis is not without risks to the health of such caregivers.<sup>3</sup> Recently, public health advocates have called for data collection on and surveillance of the characteristics and health status of these caregivers at the state level.<sup>4</sup> This brief presents a descriptive analysis of the health of adult caregivers in Michigan using data from the 2008 Michigan Behavioral Risk Factor Survey (MiBRFS).

**Methods.** Eleven state-added questions on caregiving were included on two splits of the 2008 MiBRFS (n=6,234). The initial question was, "People may provide regular care or assistance to someone who has a long-term illness or disability. During the past month, did you provide any such care or assistance to a family member or friend?" Those who were currently providing care were then asked ten follow-up questions about their role as caregiver, the effects of caregiving on themselves, and about the person to whom they were providing care. For this analysis, "caregivers" were defined as those responding positively to the initial question. Information on whether the caregiver was paid for the care provided was not available.

**Results.** We estimated that 17.8% (95% confidence interval: 16.5-19.2) of Michigan adults (approximately 1.36 million people) currently provided care to family members or friends. Demographic characteristics differed by caregiver status. A higher proportion of caregivers were middle-aged (45-64 years) compared with non-caregivers (44.2% vs. 32.0%). Caregivers were also more likely to be female (58.7% vs. 52.0%) and to have household incomes of < \$50,000 (54.2% vs. 48.8%), and were less likely to have graduated from college (27.3% vs. 33.1%). (Data not shown.)

The prevalence of fair-to-poor general health and poor physical health was similar by caregiving status (Table 1). However, caregivers were more likely to have had ≥14 or more days within the past 30 days on which their mental health was not good (13.8% vs. 8.9%) compared with non-caregivers. The lifetime prevalence of coronary heart disease and diabetes were similar by caregiver status, while the lifetime prevalence of asthma was higher among caregivers compared with non-caregivers (20.1% vs. 15.5%).

Two indicators of oral health showed poorer status among caregivers compared with non-caregivers: 16.1% of caregivers had six or more teeth missing due to tooth decay or gum disease and 28.5% had not visited a dentist in the past year (vs. 12.8% and 24.2%, respectively, of non-caregivers).

**Table 1. Prevalence of Selected Health Characteristics and Risk Factors Among Michigan Adults by Caregiver Status, 2008 MiBRFS**

	Provides Care	
	Yes	No
<b>Health Characteristics</b>		
Fair-poor general health	15.3	13.0
Poor physical health (≥14 days)	11.0	9.6
Poor mental health (≥14 days)	13.8*	8.9
Ever diagnosed with coronary heart disease	7.7	6.5
Ever diagnosed with diabetes	9.1	8.9
Ever diagnosed with asthma	20.1*	15.5
Missing ≥ 6 teeth due to tooth decay or gum disease	16.1*	12.8
<b>Risk Factors</b>		
Inadequate sleep or rest (≥14 days)	28.9	28.0
No dental visit in past year	28.5*	24.2
Current smoking	23.5*	18.7
Heavy drinking	5.9	5.3
Obesity	32.5	29.3
No leisure-time physical activity	22.2	24.6
No mammogram in past 2 years (women aged 40+)	19.8	21.2
No sigmoidoscopy/colonoscopy in past 5 years (aged 50+)	56.2	55.3
No flu vaccine in past year (aged 65+)	28.4	30.4
* p < .05.		

### MiBRFSS News

- The 2008 MiBRFS Annual Report is available online at [www.michigan.gov/brfs](http://www.michigan.gov/brfs). If you would like a hard copy of this report, please send your request to [MIBRFSS@michigan.gov](mailto:MIBRFSS@michigan.gov).

- Updated regional and race-specific MiBRFS estimates are now available on our website at [www.michigan.gov/brfs](http://www.michigan.gov/brfs).
- Did you miss an issue of *Michigan BRFS Surveillance Brief*? Back issues are also available on our website.

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Caregivers had a higher prevalence of current smoking than non-caregivers (23.5% vs. 18.7%), however, prevalence rates for heavy drinking, no leisure-time physical activity, obesity, inadequate sleep, and lack of cancer screening and flu vaccinations were similar across the two groups.

Three and a half percent of caregivers reported that they had sustained an injury while helping the person they cared for during the past year, which translates to over 47,000 caregivers being injured in 2008. (Data not shown.)

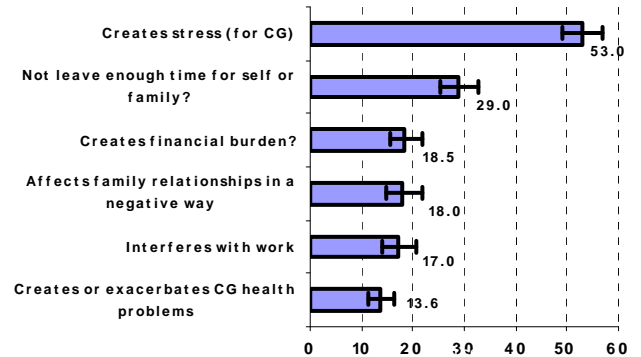
We estimated that the majority (53%) of caregivers experienced stress created by their caregiving duties, and 29% said that caregiving did not leave enough time for themselves or their families. Nearly 14% reported that caregiving created or exacerbated their health problems. (Figure 1). The proportion of caregivers for whom caregiving created or worsened their own health problems increased consistently with the number of hours of caregiving per week, from 7.5% among those who provided care 1-8 hours/week to 28.9% who provided 40 hours or more (Figure 2). A similar relationship was seen between stress and hours per week of caregiving, with those providing 9 hour or more of care per week experiencing significantly more stress (Figure 3).

**Conclusion** Compared with adult non-caregivers, adult caregivers showed significantly higher prevalence of frequent poor mental health days, ever having asthma, losing six or more teeth due to decay or gum disease, not seeing a dentist in the past year, and current smoking. Stress was the most frequently reported difficulty caused by caregiving. The proportion of caregivers who reported that caregiving created or worsened health problems and the proportion who reported that caregiving created stress increased with the average number of hours per week that care was provided.

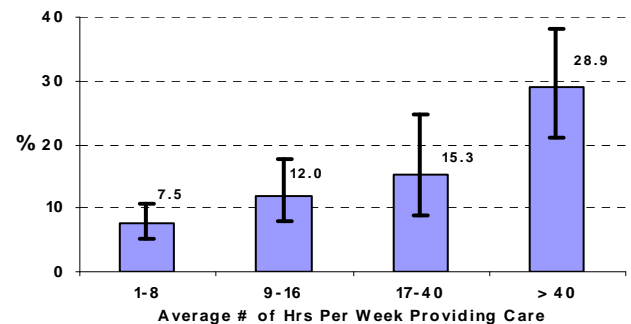
### References

- <sup>1</sup> National Alliance for Caregiving and AARP. Caregiving in the U.S. 2009. November 2009. Last accessed at: [http://www.aarp.org/research/surveys/care/ltc/hc/articles/caregiving\\_09.html](http://www.aarp.org/research/surveys/care/ltc/hc/articles/caregiving_09.html)
- <sup>2</sup> Arno PS, Levine C, Memmott MM. The economic value of informal caregiving. *Health Affairs*. 1999;18:182-8.
- <sup>3</sup> Schulz R and Beach, SR. Caregiving as a risk factor for mortality: the Caregiver Health Effects Study. *JAMA*. 1999;282:2215-2219.
- <sup>4</sup> Talley RC and Crews JE. Framing the public health of caregiving. *Am J Public Health*. 2007;97:224-8.

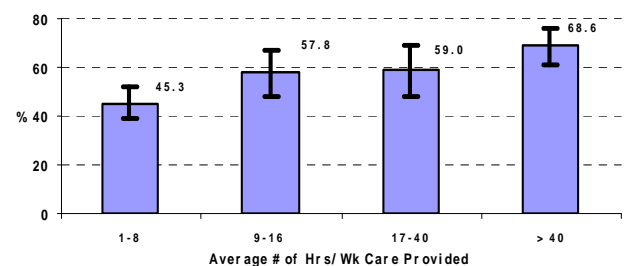
**Figure 1. Proportion of Adult Caregivers Reporting Difficulties Caused by Their Caregiving**



**Figure 2. Proportion of Adult Caregivers for Whom Caregiving Creates or Worsens Health Problems by Hours per Week**



**Figure 3. Proportion of Adult Caregivers for Whom Caregiving Creates Stress by Hours per Week**



## 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 annual Michigan Behavioral Risk Factor Surveys (MiBRFS) follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a poststratification weighting factor that adjusts for the sex, age, and race distribution of the adult Michigan population. All analyses are performed using SAS-callable SUDAAN<sup>®</sup> to account for the complex sampling design.

**Suggested citation:** DeGuire P, Fussman C, Rafferty AP, Lee C. Health Status and Characteristics of Caregivers in Michigan. *Michigan BRFSS Surveillance Brief*. Vol. 4, No. 2. Lansing, MI: Michigan Department of Community Health, Chronic Disease Epidemiology Section, March 2010.