

# State *Of the* State Survey

*Health Status and Health Risk  
Behaviors of Michigan Residents*

*by Larry Hembroff  
Arlene Sierra*

*Briefing Paper No. 1998-32*

# ***Health Status and Health Risk Behaviors of Michigan Residents***

*prepared by*

**Larry Hembroff**

Senior Survey Methodologist  
Institute for Public Policy and Social Research

**Arlene Sierra**

Director of Clinical Services  
Department of Radiology

MSU State of the State Survey  
Briefing Paper 98-32  
©IPPSR, MSU  
February 1998

**Please contact the following for further information:**

**About this report:** Larry Hembroff, Senior Survey Methodologist, IPPSR (Phone: 517/355-6672 x 122; Internet: Hembroff@pilot.msu.edu). **About SOSS:** Brian D. Silver, Department of Political Science and Director of SOSS (Phone: 517-355-2237; Internet: Bsilver@pilot.msu.edu); or visit the SOSS Web site (<http://www.ippsr.msu.edu/soss/>). **About the Institute for Public Policy and Social Research:** Philip R. Smith, Director, IPPSR (Phone: 517/353-9019; Internet: philip.smith@ssc.msu.edu). General contact for media and press: AnnMarie Schneider, Public Relations, IPPSR (Phone: 517/355-6672 x 143; Internet: wolf@pilot.msu.edu).

*The analyses and interpretations in SOSS Briefing Papers are those of the authors and do not necessarily represent the views of IPPSR or of Michigan State University.*

## THE SURVEY

A telephone survey of 952 adult residents of the state of Michigan was conducted by Michigan State University's Institute for Public Policy and Social Research between June 10, 1997 and July 30, 1997. This was the eleventh quarterly MSU State of the State Survey (SOSS). The survey was designed to provide information on health status; utilization of health care services; sources of health information; confidence in professionals, especially healthcare professionals; confusion regarding health recommendations; and childcare preferences. The overall sampling error is  $\pm 3.2\%$ . For questions discussed in this paper which were asked of only a portion of respondents, the sampling error is slightly larger; how much larger depends on the number of people who were asked a question and on how their answers are distributed.

The sample was designed to provide representative information for respondents from major regions of the state: Detroit City, Southeast Michigan (excluding Detroit), Southwest Michigan, Central Michigan (West and East), northern Lower Michigan, and the Upper Peninsula. (See attached information sheet for a list of the counties included in each region.) The data reported here are weighted to make the results representative of the adult population of Michigan.

## KEY FINDINGS

Lifestyle and health behaviors account for roughly half of the early mortality among adults in the nation. In SOSS-11, we asked people about their health risk behaviors and preventive behaviors which either reduce or increase some of the risks of morbidity and mortality. The interview included a core of health status and health risk behavior questions used by the U.S. Centers for Disease Control and Prevention and the Michigan Department of Community Health in the Behavioral Factor Risk Surveys to monitor the health of the state and the nation. By knowing what proportion of the population is at risk—particularly for cardiovascular problems—due to health-threatening behavior, we know more about how healthy the state is and which population groups are less healthy. Among the key findings are the following:

### Michiganians' Health Status

- As Table 1 shows, **17% of Michiganians describe their health as “excellent,” 35% describe it as “very good” and about 33% describe it as “good.”** Only 3% describe their health as “poor” and 12% describe it as “fair.” (Question 1—*exact wording is given below.*)
- **White residents, younger people, those with more education, and those with higher household incomes tend to rate their health as better than do their demographic counterparts.** (See Table 2.) Men and women rate their health similarly.
- **Residents say that their physical health (whether from illness or injury) was not good an average of 3.2 days in the previous 30 days. Their mental health was not good an average of 4.2 days in this same time period.** (Qs. 2-3)
  - For 61%, there were no days when their physical health was not good.
  - For 53%, there were no days when their mental health was not good.

- **Of those who report not feeling well physically *at least one day* in the previous month, the average number of days they felt unable to do their usual activities because of poor health was 4.0, with 56% reporting that there were *no days when they could not do their usual activities*.** (Q. 4)
- **Of those who report not feeling well mentally *at least one day* in the previous month, the average number of days they said they could not do their usual activities was 3.2, with 66% reporting there were *no such days*.** (Q. 4)
- All the above findings are very similar to those of a larger study, the 1994 Michigan Behavioral Risk Factor Survey (MBRFS), for which about 2,400 adult Michigianians were interviewed.

## Health Behaviors

- As Table 3 shows, **over a third (35%) of Michigan's adults are overweight.** (Qs. 5-6)
- **One in seven (14%) is physically inactive**, a rate that is appreciably lower than the 24% rate of physical inactivity found in the 1995 Michigan Behavioral Risk Factor Survey. This difference is probably accounted for by the differences in when the two surveys were administered. SOSS-11 was administered during June and July only, while MBRFS is conducted throughout the year, with about 200 interviews monthly. (Q. 7)
- **We would classify 3% of adults as heavy drinkers based on their self-reported drinking behaviors for the previous month** (4% if an adjustment is made to account for the typically smaller body mass of women in counting the number of drinks to regard as "heavy drinking"). (Qs. 8-10, 5)
- **Nearly nine out of ten women 40 years of age or older have had at least one mammogram, but less than two-thirds report having had one as recently as is recommended for their age.** (Qs. 11-12)
- **One-fourth of Michigan's adults are currently smokers, and roughly another quarter are former smokers.** (Qs. 13-14)
- Rates of heavy drinking, smoking, and having mammograms are similar to those found in the larger 1995 Michigan Behavioral Risk Factor Survey. See Table 3.

## DISCUSSION

Health Status. Two questions on physical and mental health status, and a question on number of days in the previous month when health was not good, provide measures of prevalence and frequency of health problems. While it is one thing to feel bad physically or mentally, it is quite another to be so impaired that one cannot function more or less normally. We asked people how many days of the previous month poor mental or physical health kept them from doing their usual activities such as self-care, work or recreation. This question provides a measure of severity. Among those who reported not feeling good physically at least one day in the previous month, the average number of days they said they were unable to do their usual activities because of poor health was 4.0 (standard deviation = 7.8), with 56% reporting no such days. Among those who reported their mental health was not good at least one day during the previous month, the average number of days they said they

could not do their usual activities was 3.2 (standard deviation = 7.1), with 66% reporting no such days. Thus, while experiences of bad mental health are somewhat more common in the population, they are also less often severe enough to be debilitating.

Table 2 compares findings from SOSS-11 with results of the 1994 Michigan Behavioral Risk Factor Survey (the most recent survey for which these rates have been published). Findings of the two surveys are remarkably similar, even among the smaller segments of the samples and even though the SOSS sample is less than half that of the MBRFS. The table also indicates that ill health tends to be greater among older residents, those less educated, and people with less household income. The table shows no significant differences between men and women and no differences in actual days of ill health between white and African American residents, but African Americans are much more likely to rate their health as only fair or poor than are whites.

Health Behaviors. A number of health behaviors increase individuals' risks of future ill health. Some of these actually promote ill health, e.g. smoking, while others help to identify early onset of illness so that treatment can be effected before problems become too severe, e.g., regular check-ups or getting mammograms. The SOSS 11 interview contained a series of questions taken from the standard Behavior Risk Factor Survey questionnaire used by the Centers for Disease Control and Prevention, to measure a number of these behavioral risk and prevention rates in the Michigan adult population.

Table 3 presents the percentages of Michigan adults estimated to be engaging in various risk behaviors according to SOSS-11 and the corresponding estimates based on MBRFS 1995, in addition to several rates that were not measured in SOSS-11. The table again shows remarkable similarity between the two surveys' findings where they both measured the behaviors, with the exception of physical inactivity. SOSS-11 14% rate of physical inactivity is appreciably lower than the 24% rate of inactivity found in MBRFS. We suspect that nearly all of the difference can be accounted for by the differences in when the two surveys were administered. SOSS-11 (a cross-sectional, point-in-time survey) was administered during June and July, the months of the year when individuals are probably most likely to be physically active if they are going to be at all, while MBRFS(a surveillance survey) is administered year around with roughly equal portions of the total sample being collected each month, including the winter months when individuals are probably least likely to be active.

Further information is available from the authors upon request.

**TABLE 1.** Perceived Current Health Status of Michigan Residents, by Demographic Background

Characteristics	% Who Say Their Health Is . . .					$\chi^2$
	Very Excellent	Good	Good	Fair	Poor	
Overall	16.6	35.3	33.2	12.0	3.0	
Sex						
Man	15.6	35.9	33.9	10.8	3.9	4.04
Woman	17.5	34.8	32.7	12.8	2.1	
Race						
White	17.5	37.3	31.4	10.6	3.2	29.4**
African American	10.3	22.2	46.2	20.5	0.9	
Age						
18-24	18.7	35.3	36.0	7.9	2.2	80.07**
25-34	14.6	47.2	25.8	12.4	0.0	
35-44	19.1	34.1	35.8	8.7	2.3	
45-54	11.4	36.4	37.1	11.4	3.8	
55-64	25.0	28.4	33.6	11.2	1.7	
65-74	13.4	18.6	37.1	19.6	11.3	
75 +	10.3	29.3	34.5	20.7	5.2	
Education						
Less than H.S.	11.6	26.1	31.9	21.7	8.7	68.12**
High School Grad.	9.0	35.6	40.2	11.7	3.5	
Some College	17.9	39.5	25.8	14.8	2.1	
College Grad. +	27.0	32.7	32.7	6.0	1.6	
Household Income						
< \$10,000	11.5	23.1	30.8	19.2	15.4	88.06**
\$10,000 - 19,999	10.5	21.1	46.1	14.5	7.9	
\$20,000 - 35,000	11.4	27.4	33.1	24.6	3.4	
\$35,001 - 50,000	19.0	38.5	29.1	10.1	3.4	
> \$50,000	17.2	43.9	32.9	5.6	0.3	

---

\*\*p<.01

**Table 2.** Health Status Indicators: Comparisons Between SOSS 11 (1997) and the Michigan Behavioral Risk Factor Survey (1994)

Demographic Characteristic	Perceived Poor Health <sup>1</sup>		Phys. Health Not Good <sup>2</sup>		Mental Health Not Good <sup>3</sup>		Limited Activities <sup>4</sup>	
	(Percent)		(Mean Days)		(Mean Days)		(Mean Days)	
	SOSS	MBRFS	SOSS	MBRFS	SOSS	MBRFS	SOSS	MBRFS
<b>Overall</b>	<b>14.3</b>	<b>13.5</b>	<b>3.2</b>	<b>3.1</b>	<b>4.2</b>	<b>3.6</b>	<b>2.0</b>	<b>1.9</b>
Sex								
Man	12.0	11.4	3.2	2.6	4.1	2.8	2.3	1.8
Woman	16.6	15.3	3.2	3.5	4.3	4.2	1.7	2.0
Race								
White	13.1**	11.8	3.0	2.9	4.1	3.3	1.9	1.7
African Amer.	23.7	25.2	4.6	3.4	5.2	5.2	3.3	3.0
Age								
18 - 24 yrs. old	11.3**	9.6	1.8**	2.0	7.2**	5.3	1.2**	1.6
25 - 34 yrs. old	12.4	6.9	1.7	2.2	4.4	3.8	1.4	1.7
35 - 44 yrs. old	12.2	9.0	2.6	2.2	5.0	3.9	2.0	1.7
45 - 54 yrs. old	7.3	12.6	3.1	3.6	3.2	3.2	1.7	2.4
55 - 64 yrs. old	19.8	18.5	3.1	3.8	2.5	2.7	1.9	1.7
65 - 74 yrs. old	23.7	26.7	7.8	4.3	2.8	1.8	5.1	1.9
75 + yrs. old	23.3	32.0	7.5	6.9	2.0	4.1	2.5	3.4
Education								
Less than H.S.	34.7**	30.5	5.2	5.3	4.1*	4.4	4.3**	3.4
H.S. Grad.	13.4	16.7	3.1	3.2	5.1	3.9	1.7	2.0
Some College	11.4	10.1	3.4	2.8	4.1	3.8	1.8	1.8
College Grad.	5.1	3.9	2.6	2.0	4.2	2.4	2.1	1.0
Household Income								
< \$10,000	33.4**	29.8	6.2**	6.0	6.6**	6.1	4.4**	5.7
\$10,000 - 19,999	33.4	24.6	4.8	4.5	4.7	4.4	3.9	2.6
\$20,000 - 34,999	9.1	14.0	3.8	3.0	6.2	3.5	2.0	1.7
\$35,000 - 49,999	7.9	5.0	3.1	1.7	3.4	3.2	1.5	0.9
\$50,000 or more	6.9	3.9	2.0	1.6	3.6	2.4	1.4	0.7

<sup>1</sup> Based on the percentage describing their health as fair or poor.

<sup>2</sup> Mean number of days in past 30 when physical health was not good.

<sup>3</sup> Mean number of days in past 30 when mental health was not good.

<sup>4</sup> Mean number of days in past 30 when poor mental health or physical health kept respondent from doing usual activities.

\*p<.05, \*\*p<.01

**Table 3.** Risk Factor Prevalence Rates and Screening Rates for Michigan Based on SOSS 11 (1997) and Michigan Behavioral Risk Factor Survey (1995)

RISK FACTORS	% SOSS 1886	% MBRFS 1995
Overweight	35.3%	31.0%
Smoking	24.7	25.9
Physical Inactivity	14.4	23.7
Heavy Drinking	2.9	2.8
Binge Drinking	NA	17.1
Drinking and Driving	NA	3.3
Seatbelt Nonuse	NA	13.3
Diabetes	NA	5.4
Ever Had Mammogram	87.7	88.0
Appropriate Mammogram Screening	61.7	66.3
Appropriate Breast Screening	NA	53.9
Ever Had Pap Test	NA	94.5 (1993)
Blood Pressure Checked (in last two years)	NA	94.8
Blood Cholesterol Ever Checked	NA	75.3

## SURVEY QUESTIONS

**NOTE:** The full wording of questions for items discussed in this briefing paper is given here. The order in this list conforms with the order of bulleted items in the “Key Findings” section above, not with the order of questions in the survey instrument. The actual question number for the instrument is presented in brackets after the question, for example [Ut1]. Overall, the interviews lasted an average of 22 minutes. The questions reported here about health status and health risk behaviors consumed about five minutes of that time.

- Q. 1. The next few questions are about your own health and health practices. Would you say that in general your health is excellent, very good, good, fair or poor? [Q1]
- Q. 2. Now thinking about your physical health, which includes physical illness and injury, for how many **days** during the past 30 days was your physical health not good? [Q2]
- Q. 3. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? [Q3]
- Q. 4. *[Asked only if the response was at least one day for Q2 or Q3]* During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation? [Q4]
- Q. 5. Next, I will ask you about your current height and weight. About how much do you weigh without shoes? [BR9]
- Q. 6. About how tall are you without shoes? [BR10]
- Q. 7. Now I'd like to ask you a few questions about your own health practices. During the past month, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise other than your regular job duties? [BR1]
- Q. 8. During the past month, have you had at least one drink of any alcoholic beverages such as beer, wine, wine coolers, or liquor? [BR5]
- Q. 9. *[Asked only if the response to previous question was yes, drank alcohol in past month]* During the past month, how many days per week or per month did you drink any alcoholic beverages, on the average? [BR6]
- Q. 10. A drink is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days when you drank, about how many drinks did you drink on the average? [BR8]
- Q. 11. *[Asked only of women]* Now I have some questions about other health services you may have received. A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram? [BR12]
- Q. 12. *[Asked only of women who ever had a mammogram]* How long has it been since you had your last mammogram? (Was it within the past year, within the past 2 years, within the past 3 years, within the past 5 years, or more than 5 years ago)? [BR13]
- Q. 13. Now I have few questions about tobacco and alcohol use. Have you smoked at least 100 cigarettes in your entire life? [BR3]
- Q. 14. Do you now smoke cigarettes everyday, some days, or not at all? [BR4]
- Q. 15. Was your last mammogram done as part of a routine checkup, because of a breast problem other than cancer, or because you've already had breast cancer? [BR14]

## REGIONAL CATEGORIES

**NOTE:** These regions are the ones used by the Michigan State University Extension Service, except that we treat Detroit City as a separate region.

**Detroit:** City of Detroit

**Southeast:** Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, Wayne (excluding Detroit)

**Southwest:** Berrien, Branch, Calhoun, Cass, Eaton, Hillsdale, Ingham, Jackson, Kalamazoo, St. Joseph, Van Buren

**West Central:** Allegan, Barry, Ionia, Kent, Lake, Manistee, Mason, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, Osceola, Ottawa

**East Central:** Arenac, Bay, Clare, Clinton, Gladwin, Gratiot, Huron, Isabella, Midland, Saginaw, Sanilac, Shiawassee, Tuscola

**Northern L.P.:** Alcona, Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Iosco, Kalkaska, Leelanau, Missaukee, Montmorency, Ogemaw, Otsego, Oscoda, Presque Isle, Roscommon, Wexford

**U.P.:** Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, Schoolcraft

## ***Background Information***

# **Michigan State University State of the State Survey [MSU SOSS]**

### **What Is MSU SOSS?**

The MSU State of the State Survey is a quarterly statewide survey of a random sample of the residents of Michigan. Although dozens of surveys are conducted in Michigan every year, no other one is designed to provide a regular systematic monitoring of the public mood in major regions of the state. Through SOSS, MSU aims to fill this information gap. SOSS has five main purposes: (1) to provide timely information about citizen opinions on critical issues; (2) to provide data for scientific and policy research by MSU faculty; (3) to provide information for programs and offices at MSU; (4) to develop survey research methodology; and (5) to provide opportunities for student training and research.

Each quarterly round or “wave” of SOSS has a different main theme. The general plan for the themes is: (a) Winter–quality of life, governmental reform, higher education; (b) Spring–family, women, and children; (c) Summer–ethnic and racial groups, Michigan communities; (d) Fall (even numbered years)–politics, the election, and political issues; (odd-numbered years)–health and the environment. This wave of SOSS departed from this pattern and focused predominantly on health care related issues.

### **Who Is Conducting SOSS?**

The State of the State Survey is administered by the Survey Research Division (SRD) of the Institute for Public Policy and Social Research (IPPSR), using its computer-assisted telephone interviewing (CATI) technology.

The design and overall planning of SOSS is the responsibility of a 17-person Steering Committee chaired by Dr. Brian D. Silver. The Steering Committee consists of representatives from sponsoring units, which are primarily colleges and other administrative offices within MSU.

Subject to final approval by the Steering Committee, the questionnaire for each wave of SOSS is developed by a Working Group, most of whom also serve as principal investigators or analysts for that wave. The people listed below (all from Michigan State University) comprised the Working Group for the Spring 1997 survey (Wave 11):

**Clifford Broman**, Associate Professor, Department of Sociology  
**Robert Griffore**, Professor, Department of Family and Child Ecology  
**Larry Hembroff**, Senior Survey Methodologist, Institute for Public Policy and Social Research  
**John Herrick**, Professor and Associate Director, School of Social Work  
**E. James Potchen**, Professor and Chairperson, Department of Radiology  
**Arlene Sierra**, Director of Clinical Services, Department of Radiology  
**Brian Silver**, Professor, Department of Political Science; Director, State of the State Survey  
**Rosemary Walker**, Professor, Department of Family and Child Ecology  
**Alice Whiren**, Professor, Department of Family and Child Ecology