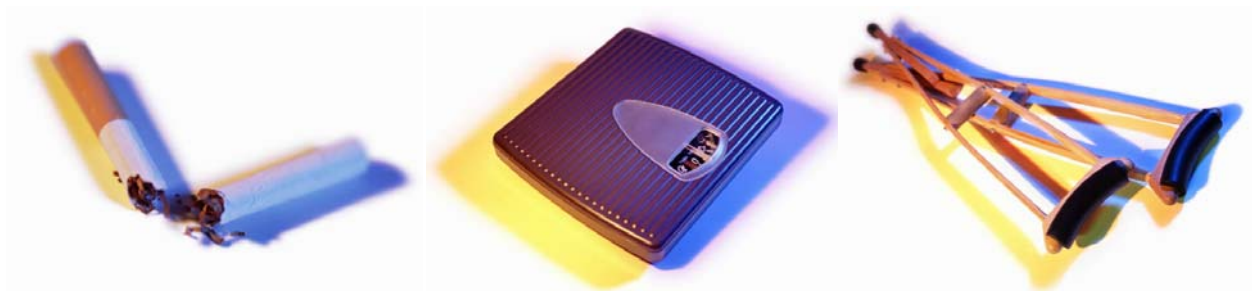


2001 Muskegon County Behavior Risk Factor Survey



“Behavioral factors have been recognized as prominent contributors to human health prospects throughout recorded history. Today, individual behavioral choices have been documented as the source of perhaps half of all premature deaths that occur in the United States, raising compelling economic and humanitarian challenges to society.”

*—J. Michael McGinnis, M.D.
National Academy of Sciences*



August 2003

Muskegon County Health Department

County of Muskegon

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Introduction

The Muskegon County Health Department conducted the Muskegon County Behavior Risk Factor Survey (BRFS) in 2001. The objectives of this survey were to collect county-specific data on preventive health practices and risk behaviors that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population.

The survey respondents were Muskegon County residents who were 18 years and older at the survey time. The core questions of this survey were adapted from the National and State BRFS questionnaires. Survey questions included alcohol and tobacco use, perception of physical and mental health, health care coverage, hypertension, cholesterol, arthritis, overweight and obesity, disability, asthma, diabetes, male and female specific health issues, and colorectal cancer screening. Besides these core questions, certain items addressing strictly local concerns were also added to the survey instrument. Included were dental insurance coverage, dental health, lead-based house paint, household tap water supply, environmental pollution, and other public health issues.

The BRFS was a telephone survey using a Computer Assisted-Telephone Interview program (CI3). The survey design complied with the Centers for Disease Control and Prevention (CDC) protocol using probability sampling in which each sampling unit (geographic area) of households with telephone service in Muskegon County has an equal chance of being included in the sample. The survey covered all townships, villages and cities in Muskegon County.

Data collection started on January 20, 2001 and was completed on December 14, 2001. The interviewers were well-trained professionals using standardized interview techniques when interviewing the potential respondents. Interviews took place during the day, evening, and weekend. In all, 14,116 attempts were made and 41,000 phone numbers were used. Results included a total of 1,244 completed telephone surveys of age 18 and older with over-sampling of African American residents. With all the attempts, 5.9 % of the calls were rejected; 10% failed to reach the eligible respondents; and 34% of the calls failed to reach the respondents due to a busy signal, disconnection, answering machines, deaf/language, or business/government phone numbers.

The refusal rates for the telephone interviews were lower than expected. The low refusal rates were probably due to the fact that most of these trained interviewers were public health nurses and public health educators. As such, respondents enjoyed a trusting relationship with public health staff that permitted asking sensitive medical questions appropriately.

The 2001 Muskegon County BRFS data were weighted to represent the Muskegon County 2000 Census by adjusting the number of people in sex, age, and race categories. Data analysis, prevalence estimates, and confidence interval limits were performed using SPSS software for Windows Version 11.5.

The term “estimate” was applied to the data interpretation in this report since it was survey data and so it was calculated at 95% confidence intervals.

Perceived Health & Mental Health Status

In the 2001 BRFS, Muskegon County residents were asked to rate their general health in five categories: excellent, very good, good, fair, and poor. As the result, 18.3% of the respondents described their general health as fair or poor. The proportion of general health rated as fair or poor was higher for African Americans, or individuals with lower income or lower education.

The respondents were asked what was the number of days, during the past 30 days, their physical health, which includes physical illness and injury, was not good. Overall, the average days of physical health not good in Muskegon County was 4.5, which was significantly higher than the State average (3.3). Individuals with lower education, less income, those who were older, who were African Americans, or those who were females had a greater number of days when their physical health was not good.

Perceived Health Status (% with 95% confidence intervals)						
Demographic Characteristic	% General Health Fair/Poor ¹		Physical health 'not good' ² (Mean # of days in past month)			
Muskegon County	18.3	±	2.2	4.5	±	0.5
Michigan (2001)	14.9	±	1.2	3.3	±	0.3
Gender						
Male	17.8	±	3.0	3.6	±	0.6
Female	18.9	±	3.0	5.3	±	0.7
Age (Years)						
18-24	8.9	±	4.6	1.8	±	0.5
25-34	12.5	±	4.4	3.4	±	0.9
35-44	11.5	±	3.8	3.9	±	0.9
45-54	20.6	±	5.4	4.7	±	1.2
55-64	22.4	±	6.8	5.7	±	1.7
65-74	35.0	±	8.9	5.9	±	1.9
75+	32.8	±	8.9	8.0	±	2.2
Race						
White	15.4	±	2.4	4.0	±	0.5
Black	28.1	±	5.4	6.0	±	1.2
Education						
Less than High School	36.7	±	7.6	8.1	±	1.8
High School Graduate	19.5	±	3.5	4.2	±	0.8
Some College	16.3	±	3.6	4.4	±	0.8
College Graduate	6.1	±	3.8	2.7	±	1.0
Household Income						
<\$20,000	35.6	±	5.6	7.3	±	1.3
\$20,000-\$34,999	20.2	±	5.1	4.8	±	1.1
\$35,000-\$49,999	8.4	±	4.5	2.9	±	1.0
\$50,000-\$74,999	8.9	±	4.3	2.5	±	0.9
≥\$75,000	4.5	±	3.6	1.8	±	0.9

¹Percent who said that their health, in general, was fair or poor.
²Mean # of days in the past month that physical health not good.

In the 2001 Muskegon County BRFS, respondents were asked about how many days during the past 30 days their mental health was not good. Overall, the average number of days in which mental health not good was 3.6, which was the same as the State average. Mental health not good in this survey included stress, depression, and problems with emotion.

The average number of days mental health not good was higher for women, African Americans, individuals with lower education, or individuals with lower income.

Mental Health ¹ (% with 95% confidence intervals)			
Demographic Characteristic	Mental Health 'not good' (Mean # of days in past month)		
Muskegon County	3.6	±	0.4
Michigan (2000)	3.6	±	0.7
Gender			
Male	2.6	±	0.5
Female	4.5	±	0.7
Age (Years)			
18-24	3.2	±	1.0
25-34	3.9	±	1.0
35-44	3.4	±	0.9
45-54	4.3	±	1.1
55-64	4.0	±	1.4
65-74	2.0	±	1.2
75+	3.1	±	1.5
Race			
White	3.1	±	0.5
Black	5.2	±	1.1
Education			
Less than High School	4.8	±	1.4
High School Graduate	3.4	±	0.7
Some College	4.0	±	0.8
College Graduate	2.6	±	0.9
Household Income			
<\$20,000	5.5	±	1.1
\$20,000-\$34,999	4.3	±	1.1
\$35,000-\$49,999	2.5	±	0.7
\$50,000-\$74,999	2.6	±	0.9
≥\$75,000	2.0	±	0.9

¹Mean number of days in the past month that mental health not good.

No Health Care Coverage

No health care coverage: Proportion of respondents who reported they did not have any kind of health care coverage.

It was estimated 1 in 10 (9.7%) Muskegon County adults age 18 to 64 did not have any kind of health care insurance. The proportion of those uncovered was lower than the State average (11.7%).

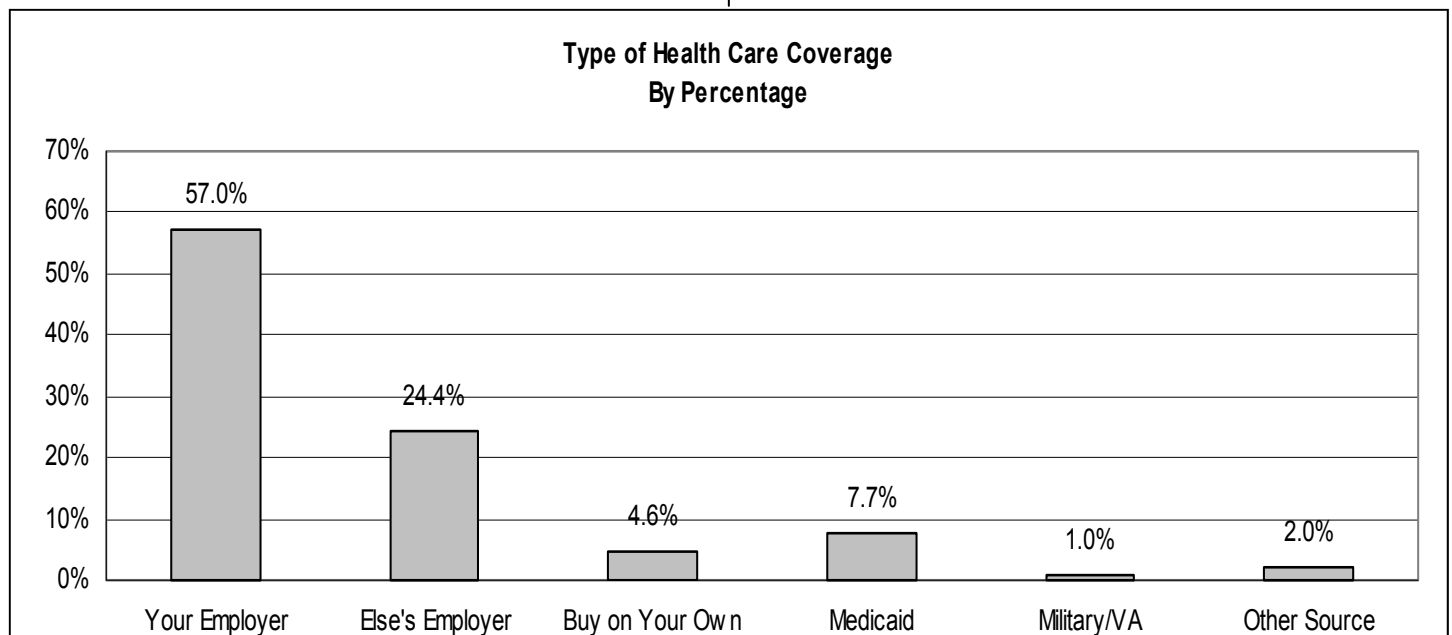
The estimates of no health care coverage were greater for individuals with lower education or lower income. The proportion of no health care coverage was also higher among African Americans than among Caucasians. Age was associated with access to health care. Younger individuals aged 25 to 34 were more likely to report no health insurance coverage.

Of individuals who had health care coverage, most reported that their health care insurance was provided by their employer or someone else's employer (presumably, spouse or parents).

**No Health Care Coverage
Among Those Aged 18-64**
(% with 95% confidence intervals)

Demographic Characteristic	% No Health Insurance Coverage ¹		
Muskegon County	9.7	±	1.8
Michigan (2001)	11.7	±	1.3
Gender			
Male	10.1	±	2.6
Female	9.3	±	2.5
Age (Years)			
18-24	11.4	±	5.2
25-34	15.1	±	4.7
35-44	8.9	±	3.4
45-54	4.3	±	2.7
55-64	9.3	±	4.7
Race			
White	8.3	±	2.0
Black	11.8	±	4.3
Education			
Less than High School	15.4	±	7.5
High School Graduate	9.9	±	2.9
Some College	10.1	±	3.1
College Graduate	4.6	±	3.6
Household Income			
<\$20,000	19.6	±	5.7
\$20,000-\$34,999	7.0	±	3.7
\$35,000-\$49,999	5.6	±	3.3
\$50,000-\$74,999	3.9	±	3.0
≥\$75,000	0.7	±	1.7

¹Proportion of respondents age 18-64 years who reported that they had no health care coverage.



Dental Insurance & Dental Health

No one can be truly healthy unless he or she is free from the burden of oral and craniofacial diseases and conditions.¹ In Muskegon County, many people do not receive essential dental care. For many residents, barriers to dental care mainly include cost or lack of insurance.

No Dental Insurance Coverage: It was estimated that more than one-third (35.9%) of Muskegon County adults did not have any kind of insurance coverage for some or all routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid. The proportion without dental insurance was higher for individuals 55 years and older. The estimates for no dental insurance coverage were greater for individuals with lower education or income.

Dental Appointment: According to the 2001 Muskegon County BRFSS, 71.2% of Muskegon County adults had visited a dentist or dental clinic for any reason within the past year. The survey also showed that 3.9% of them had never visited a dentist in their lifetime.

Dental Prophylaxis: Of individuals who had ever visited a dentist or dental clinic, 74% of them had their teeth cleaned by a dentist or hygienist within the past year. Overall, 2.5% had never had their teeth cleaned.

¹Healthy People 2010. Leading Health Indicators. Office of Disease Prevention, U.S. Department of Health and Human Services.

No Dental Insurance Coverage (% with 95% confidence intervals)

Demographic Characteristic	No Dental Insurance Coverage ¹		
Muskegon County	35.9	±	2.7
Gender			
Male	35.5	±	3.9
Female	36.2	±	3.7
Age (Years)			
18-24	33.9	±	7.8
25-34	25.7	±	5.8
35-44	24.9	±	5.1
45-54	28.9	±	6.0
55-64	44.1	±	8.1
65-74	55.5	±	9.4
75+	70.4	±	8.8
Race			
White	35.2	±	3.1
Black	36.2	±	5.9
Education			
Less than High School	50.3	±	8.1
High School Graduate	36.4	±	4.4
Some College	35.7	±	4.8
College Graduate	22.1	±	6.6
Household Income			
<\$20,000	55.5	±	5.9
\$20,000-\$34,999	36.2	±	6.3
\$35,000-\$49,999	25.3	±	6.0
\$50,000-\$74,999	14.5	±	5.3
≥\$75,000	21.5	±	7.2

¹Proportion of respondents who responded “yes” to the question: “Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?”

Dental Health Issues (% with 95% confidence intervals)

In Muskegon County	%	95% CI
Never visited a dentist ¹	3.9	±1.1
Visited a dentist within the past year	71.2	±2.6
Visited a dentist within the past 2 years	7.6	±1.5
Visited a dentist within the past 5 years	7.2	±1.4
More than 5 years ago	10.2	±1.7
Never had teeth cleaned by a dentist/hygienist ²	2.5	±1.0
Had teeth cleaned by a dentist/hygienist within the last year	74.0	±2.5
Had teeth cleaned by a dentist/hygienist within the past 2 years	9.6	±1.7
Had teeth cleaned by a dentist/hygienist within the past 5 years	5.5	±1.3
Had teeth cleaned by a dentist/hygienist more than 5 years' ago	8.4	±1.6

¹Responded to the question: “How long has it been since you last visited a dentist or a dental clinic for any reason?”

²Responded to the question: “How long has it been since you had your teeth cleaned by a dentist or dental hygienist?”

Blood Pressure

Cholesterol

High Blood Pressure or hypertension is an important risk factor for heart disease and stroke. The 2001 Muskegon County BRFS estimated that more than one-third (35%) of Muskegon County adult residents had been told by a health professional that their blood pressure was high, which was significantly higher than the State average (27.1%). The prevalence of high blood pressure was slightly higher among women than among men. The proportion of high blood pressure increased with an increase of age. African Americans were more likely than Caucasians to report that their blood pressure was high. The prevalence of high blood pressure was higher among individuals with an education level less than high school. Finally, low household income was associated with a higher proportion of high blood pressure.

Cholesterol Check-up: According to the 2001 Muskegon County BRFS, 73.1% of Muskegon County adults had ever had their cholesterol checked, slightly lower than the State average (76.7%). The estimates of ever cholesterol check-up increased with age and was greater for Caucasians than African Americans. Individuals with a higher education or income were more likely to have ever had their cholesterol checked. The proportion of ever cholesterol check-up was slightly higher for women than men.

High Cholesterol: It was estimated that about one-third (33.5%) of Muskegon County residents had ever been told that their cholesterol was high. The local prevalence of high cholesterol was similar to the State average (32.9%). Men were slightly more likely than women to report their cholesterol was high. The estimates of high cholesterol increased with age, but dropped off at age 75. Individuals who were college graduates were less likely to report their cholesterol was high.

High Blood Pressure¹
(% with 95% confidence intervals)

Demographic Characteristic	High Blood Pressure		
Muskegon County	35.0	±	2.6
Michigan (2001)	27.1	±	1.5
Gender			
Male	33.0	±	3.8
Female	36.7	±	3.7
Age (Years)			
18-24	6.4	±	3.9
25-34	16.5	±	4.9
35-44	26.5	±	5.3
45-54	44.7	±	6.5
55-64	56.5	±	8.0
65-74	55.1	±	9.3
75+	62.3	±	9.2
Race			
White	33.1	±	3.0
Black	42.7	±	6.0
Education			
Less than High School	49.4	±	7.9
High School Graduate	32.6	±	4.2
Some College	31.6	±	4.6
College Graduate	34.5	±	7.6
Household Income			
<\$20,000	47.2	±	5.8
\$20,000-\$34,999	33.7	±	6.1
\$35,000-\$49,999	30.1	±	6.3
\$50,000-\$74,999	23.2	±	6.4
≥\$75,000	29.6	±	8.1

¹Responded that they had ever been told by a health professional that their blood pressure was high.

Cholesterol
(% with 95% confidence intervals)

Demographic Characteristic	Ever Cholesterol Check-up ¹		High Cholesterol ²			
Muskegon County	73.1	±	2.5	33.5	±	3.1
Michigan (1999)	76.7	±	n/a	32.9	±	4.7
Gender						
Male	71.8	±	3.7	35.3	±	4.6
Female	74.3	±	3.4	32.0	±	4.2
Age (Years)						
18-24	34.3	±	8.1	3.2	±	4.6
25-34	51.3	±	6.6	18.7	±	7.1
35-44	73.0	±	5.3	30.5	±	6.4
45-54	89.3	±	4.1	39.4	±	6.8
55-64	90.5	±	4.8	37.6	±	7.7
65-74	90.0	±	1.8	55.0	±	9.8
75+	90.3	±	5.7	36.1	±	9.6
Race						
White	74.7	±	2.8	33.8	±	3.5
Black	65.2	±	5.8	32.5	±	7.0
Education						
Less than High School	66.3	±	7.6	35.4	±	9.3
High School Graduate	70.0	±	4.2	35.6	±	5.2
Some College	73.6	±	4.4	34.1	±	5.4
College Graduate	79.3	±	6.4	27.6	±	8.0
Household Income						
<\$20,000	69.3	±	5.5	39.2	±	6.9
\$20,000-\$34,999	69.5	±	5.9	34.1	±	7.3
\$35,000-\$49,999	70.8	±	6.3	27.8	±	7.4
\$50,000-\$74,999	79.2	±	6.1	26.0	±	7.3
≥\$75,000	85.9	±	6.1	39.3	±	9.3

¹Responded "yes" to the question: "Have you ever had your blood cholesterol checked?"

²Responded "yes" to the question: "Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?"

Overweight & Obesity

Body mass index (BMI) is positively associated with morbidity and mortality from hypertension, cardiovascular disease, type II diabetes mellitus, and other chronic diseases. In an effort to quantify the obesity epidemic, questions related to BMI were added to the 2001 Muskegon County BRFS.

BMI was defined as weight in kilograms divided by height in meters squared (w/h²). BMI calculation for this report was solely based on self-reported height and weight.

Overweight was defined as having a BMI of ≥ 25 . It was estimated that 66.5% of Muskegon County residents were overweight, which was significantly higher than the State average (61.0%). The prevalence of being overweight was greater for men than for women. African Americans were more likely to have been overweight than Caucasians. The proportion of overweight increased with an increase of age but dropped off at age 75. The proportion of overweight decreased with an increase of education or income levels.

Obesity was defined as having a BMI of ≥ 30.0 . The estimated prevalence of obesity was 28.8% in Muskegon County, which was significantly higher than the State average (24.7%). Obesity was more prevalent among African Americans than among Caucasians. The proportion of obesity was higher among individuals with a lower education. Individuals with income less than \$20,000 were more obese than those whose income exceeded that figure. The proportion of obesity was higher in age group 45 to 74.

Trying to Lose Weight: Of those who were overweight, 46.4% reported that they had been trying to lose weight. More Caucasians than African Americans had been trying to lose weight. Women were more likely to report that they had been trying to lose weight. The proportion of trying to lose weight increased with an increase of income or education. Individuals in age group 45 to 64 were more likely to have been trying to lose weight, which pattern mirrored with the prevalence of overweight and obesity in the same age groups.

Overweight & Obesity
(% with 95% confidence intervals)

Demographic Characteristic	% Obesity (BMI ≥ 30.0) ¹		% Overweight* (BMI ≥ 25.0)			% Trying to Lose Weight ²			
	%	±	%	%	±	%	%	±	
Muskegon County	28.8	±	2.7	66.5	±	2.8	46.4	±	
Michigan (2001)	24.7	±	1.5	61.0	±	4.4	n/a	n/a	
Gender									
Male	28.5	±	3.7	71.3	±	3.7	38.0	±	3.9
Female	29.2	±	3.8	61.7	±	4.1	54.2	±	3.9
Age (Years)									
18-24	8.9	±	5.0	35.9	±	8.3	36.7	±	7.9
25-34	30.1	±	6.4	62.9	±	6.7	43.5	±	6.6
35-44	28.1	±	5.7	68.9	±	5.8	47.8	±	5.9
45-54	33.8	±	6.5	74.7	±	5.9	58.2	±	6.5
55-64	41.5	±	8.4	77.9	±	7.0	55.8	±	8.0
65-74	35.9	±	9.5	74.6	±	8.6	45.4	±	9.3
75+	20.3	±	7.8	67.0	±	9.0	27.3	±	8.4
Race									
White	25.7	±	3.0	63.6	±	3.3	48.7	±	3.3
Black	38.8	±	6.2	75.8	±	5.4	41.4	±	6.0
Education									
Less than High School	32.2	±	7.8	69.0	±	7.7	36.7	±	7.6
High School Graduate	28.1	±	4.2	62.9	±	4.5	40.2	±	4.4
Some College	27.6	±	4.7	68.3	±	5.0	54.8	±	4.9
College Graduate	26.4	±	7.5	66.5	±	8.0	50.1	±	8.0
Household Income									
<\$20,000	32.0	±	5.6	69.3	±	5.6	43.5	±	5.9
\$20,000-\$34,999	29.4	±	6.2	67.2	±	6.3	48.0	±	6.5
\$35,000-\$49,999	26.9	±	5.5	66.4	±	6.9	45.2	±	6.9
\$50,000-\$74,999	27.2	±	6.9	59.5	±	7.6	47.5	±	7.5
\geq \$75,000	28.4	±	8.4	72.4	±	8.2	55.5	±	8.8

¹BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/ (height in meters)²]. Weight and height are self-reported. Pregnant women were excluded from this analysis.

²Responded "yes" to the question: "Are you now trying to lose weight?"

*2000 Michigan BRFS

Smoking Cigarettes

Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires combined.¹ In measuring this leading health issue, the 2001 Muskegon County BRFS included two indicators for measuring smoking prevalence.

Ever Smoked Cigarettes: It was estimated that more than one-half (53.6%) of adults in Muskegon County had ever smoked at least 100 cigarettes in their lifetime. More men than women had ever smoked cigarettes. The proportion of ever smoking was significantly higher for Caucasians than for African Americans. The prevalence of ever smoking was greater for individuals with education less than high school and the prevalence was less for those who had college degree. Ever smoking was more prevalent among individuals in age group 35 to 64.

Current Cigarette Smoking: It was estimated that 27.2% of Muskegon County adults had ever smoked at least 100 cigarettes in their lifetime and that they currently smoked cigarettes. The proportion of current smokers was about 1 percentage point higher than the State average (26.1%). The prevalence of current smokers was significantly higher among men than among women. More African Americans than Caucasians reported that they currently smoked cigarettes, which contradicted with ever smoking prevalence by race (Caucasians: 55.5% and African Americans: 47.7%). The prevalence of current smoking cigarettes were more concentrated in the age group 25-54. Individuals with lower education or lower income were more likely to have been current smokers.

¹Healthy People 2010. Office of Disease Prevention, U.S. Department of Health and Human Services.

Ever Smoked Cigarettes & Current Smoking (% with 95% confidence intervals)

Demographic Characteristic	Ever Smoked Cigarettes ¹	Current Smoking ²
Muskegon County Michigan (2001)	53.6 ± 2.8	27.2 ± 2.5
Michigan (2001)	n/a ± n/a	26.1 ± 1.6
Gender		
Male	62.7 ± 3.9	30.9 ± 3.7
Female	45.2 ± 3.9	23.9 ± 3.3
Age (Years)		
18-24	37.8 ± 7.9	26.1 ± 7.1
25-34	56.9 ± 6.5	33.9 ± 6.2
35-44	58.8 ± 5.9	35.4 ± 5.7
45-54	60.8 ± 6.4	30.4 ± 6.1
55-64	60.3 ± 7.9	24.2 ± 6.9
65-74	52.3 ± 9.4	15.4 ± 6.8
75+	33.3 ± 8.8	5.1 ± 4.2
Race		
White	55.5 ± 3.2	26.1 ± 2.8
Black	47.7 ± 6.1	30.7 ± 5.6
Education		
Less than High School	60.9 ± 7.7	32.0 ± 7.4
High School Graduate	53.9 ± 4.5	30.2 ± 4.1
Some College	56.2 ± 4.9	28.2 ± 4.4
College Graduate	41.3 ± 7.8	16.4 ± 5.9
Household Income		
<\$20,000	58.9 ± 5.8	34.2 ± 5.6
\$20,000-\$34,999	54.8 ± 6.4	27.7 ± 5.8
\$35,000-\$49,999	56.5 ± 6.8	31.8 ± 6.4
\$50,000-\$74,999	51.4 ± 7.5	25.7 ± 6.5
≥\$75,000	56.0 ± 8.7	18.1 ± 6.8

¹Respondents who have ever smoked 100 cigarettes in their lifetime

²Respondents who reported that they had ever smoked at least 100 cigarettes in their life and that they smoke cigarettes now.

Alcohol Consumption

Alcohol is the most frequently abused drug reported. Alcohol abuse is correlated with motor vehicle crashes, homicides, suicides, and drowning¹. The 2001 Muskegon County BRFS, included 3 alcohol use indicators: current drinks, binge drinks, and drinking and driving.

Current Drinks were defined as having had at least one alcoholic drink in the past month. It was estimated that 48% of adult residents in Muskegon County were current alcohol users. The prevalence of current drinkers was greater for men than for women. From age 25, the proportion of current alcohol drinkers declined with an increase of age. More Caucasians than African Americans reported that they currently drank alcohol. The prevalence of current drinkers increased with an increase of education or income.

Binge Drinks were defined as having consumed five or more drinks on one occasion in the past month. Estimates from the 2001 Muskegon County BRFS indicated that approximately 15.7% of adults were binge drinkers, which was lower than the State average (18.2%). Binge drinking was more prevalent among men than among women (24.4% vs. 7.7%). From age 25, binge drinking prevalence declined dramatically with an increase of age. More Caucasians than African Americans were found to be binge drinkers. The prevalence of binge drinking increased with an increase of income. Individuals who were high school graduates were more likely to have had binge drinks.

Drinking and Driving was defined as driving after having too much to drink, one or more times in the past month. Drinking and driving prevalence was 2.7% among the adult population in Muskegon County. The prevalence of drinking and driving was found to be much more common among men than among women (4.8% vs. 0.7%). It was more concentrated among younger adults. Also, the proportion of drinking and driving was slightly greater for African Americans than Caucasians.

¹Healthy People 2010. Office of Disease Prevention, U.S. Department of Health and Human Services.

Alcohol Use Indicators
(% with 95% confidence intervals)

Demographic Characteristic	% Consumed Any in Past Month ¹		% Binge Drinks ²			% Drinking & Driving ³			
Muskegon County Michigan (2001)	48.0	±	2.8	15.7	±	2.0	2.7	±	0.9
	n/a		n/a	18.2	±	1.5	n/a	±	n/a
Gender									
Male	59.0	±	4.0	24.4	±	3.4	4.8	±	1.7
Female	37.7	±	3.8	7.7	±	2.1	0.7	±	0.7
Age (Years)									
18-24	51.3	±	8.2	23.7	±	7.0	5.3	±	3.6
25-34	64.0	±	6.3	26.7	±	5.8	5.0	±	2.9
35-44	53.1	±	6.0	19.9	±	4.7	2.0	±	1.7
45-54	49.8	±	6.6	11.0	±	4.1	2.5	±	2.1
55-64	39.5	±	8.0	8.7	±	4.5	1.4	±	1.9
65-74	32.2	±	8.8	4.4	±	3.9	0.8	±	1.7
75+	22.0	±	7.8	2.8	±	3.1	---	±	---
Race									
White	51.8	±	3.2	17.6	±	2.5	2.6	±	1.0
Black	34.4	±	5.8	10.3	±	3.7	3.3	±	2.2
Education									
Less than High School	29.4	±	7.3	10.4	±	4.8	1.1	±	1.6
High School Graduate	46.0	±	4.5	20.3	±	3.6	3.5	±	1.7
Some College	54.2	±	4.9	14.8	±	3.5	2.0	±	1.3
College Graduate	53.4	±	7.9	11.7	±	5.2	4.4	±	3.2
Household Income									
<\$20,000	38.5	±	5.7	12.9	±	3.9	2.3	±	1.8
\$20,000-\$34,999	46.7	±	6.4	14.8	±	4.6	2.4	±	1.9
\$35,000-\$49,999	56.5	±	6.8	18.4	±	5.4	1.9	±	1.9
\$50,000-\$74,999	63.6	±	7.3	19.8	±	5.9	4.7	±	3.2
≥\$75,000	62.8	±	8.5	19.6	±	7.0	1.8	±	2.3

¹ Respondents who reported having had at least one alcoholic drink in the past month.

² Respondents who reported consuming five or more drinks on one occasion in the past month.

³ Driving after having too much to drink, one or more times in the past month.

Asthma

Asthma is a serious and growing health problem.¹ In Michigan, asthma accounts for the fourth most common cause of preventable hospitalizations. In the 2001 Muskegon County BRFS, respondents were classified as having asthma if they answered “yes” to the question: “Have you ever been told by a doctor, nurse, or other health professional that you had asthma?” It was estimated that 10.6% of Muskegon County adults had asthma during their lifetime. Asthma prevalence was greater for women than men. Asthma prevalence was 12.2% for African Americans compared with 10.5% for Caucasians. It was estimated that 7.8% of those who had ever been diagnosed with asthma still had asthma, which was slightly below the State average (8.8%). The proportion of respondents who reported they still had asthma was greater for women than men (10.3% vs. 5.0%).

¹EPI Insight, Bureau of Epidemiologist, Summer 1999.

Asthma
(% with 95% confidence intervals)

Demographic Characteristic	% Ever Told Asthma ¹			% Still Have Asthma ²		
	%	±	CI	%	±	CI
Muskegon County	10.6	±	1.7	7.8	±	1.5
Michigan (2001)	12.4	±	1.2	8.8	±	1.0
Gender						
Male	7.2	±	2.1	5.0	±	1.8
Female	13.7	±	2.6	10.3	±	2.3
Age (Years)						
18-24	11.3	±	5.1	7.3	±	4.2
25-34	13.8	±	4.5	8.8	±	3.7
35-44	6.3	±	2.9	5.1	±	2.6
45-54	13.6	±	4.5	9.3	±	3.8
55-64	7.1	±	4.1	6.6	±	3.9
65-74	13.0	±	6.2	11.3	±	5.9
75+	9.7	±	5.5	8.0	±	4.9
Race						
White	10.5	±	1.9	8.0	±	1.9
Black	12.2	±	3.4	8.1	±	3.3
Education						
Less than High School	11.1	±	4.9	8.0	±	4.3
High School Graduate	9.3	±	2.6	6.6	±	2.2
Some College	13.1	±	3.3	10.8	±	3.0
College Graduate	8.0	±	4.3	4.9	±	3.4
Household Income						
<\$20,000	10.2	±	3.5	7.5	±	3.1
\$20,000-\$34,999	12.6	±	4.2	11.1	±	4.0
\$35,000-\$49,999	7.9	±	3.7	5.4	±	3.1
\$50,000-\$74,999	9.6	±	4.3	4.9	±	3.3
≥\$75,000	8.9	±	4.9	6.4	±	4.3

¹Respondents who reported that they had ever been told by a doctor that they had asthma.

²Respondents who reported that they still had asthma.

Arthritis

Arthritis and other rheumatic conditions are the leading causes of disability, affecting 20% of the adult population in the United States.¹ To estimate the burden of arthritis among Muskegon residents, questions related to arthritis were added to the 2001 Muskegon County BRFS. Respondents were classified as having arthritis if they answered “yes” to the question: “Have you ever been told by a doctor that you have arthritis?” According to the survey, 30% of Muskegon County adults had arthritis, which was below the State average (38.4%). Arthritis was more prevalent for women than for men. More African Americans than Caucasians reported that they had arthritis. The prevalence of arthritis increased with an increase of age. This chronic condition mostly affected individuals with lower education or lower income.

¹Healthy People 2010. Office of Disease Prevention, U.S. Department of Health and Human Services.

Having Arthritis
(% with 95% confidence intervals)

Demographic Characteristic	% Arthritis ¹		
	%	±	CI
Muskegon County	30.0	±	2.6
Michigan (2001)	38.4	±	1.7
Gender			
Male	23.9	±	3.4
Female	35.7	±	3.7
Age (Years)			
18-24	3.8	±	3.1
25-34	10.1	±	4.0
35-44	21.4	±	4.9
45-54	37.3	±	6.3
55-64	52.1	±	8.1
65-74	52.1	±	9.4
75+	59.7	±	9.3
Race			
White	28.2	±	2.9
Black	35.1	±	5.8
Education			
Less than High School	44.3	±	7.9
High School Graduate	30.2	±	4.1
Some College	28.1	±	4.5
College Graduate	20.9	±	6.5
Household Income			
<\$20,000	41.1	±	5.7
\$20,000-\$34,999	28.7	±	5.9
\$35,000-\$49,999	21.6	±	5.7
\$50,000-\$74,999	21.5	±	6.2
≥\$75,000	22.1	±	7.3

¹Responded “yes” to the question: “Have you ever been told by a doctor that you have arthritis?”

Diabetes

Disability

Diabetes is a major public health challenge in the United States. It was estimated that 17 million people, or 6.2% of the population had diabetes while about one-third (5.9 million) were estimated to have the disease but are undiagnosed.¹ In Muskegon County, diabetes was the seventh leading cause of death. According to the 2001 Muskegon County BRFs, 9.4% of Muskegon County adults had ever been told by a doctor that they had diabetes. Diabetes prevalence was significantly higher in Muskegon County than the State average (7.2%). The proportion of diabetes was greater for African Americans than for Caucasians. Diabetes prevalence increased with an increase of age. Diabetes was more prevalent among individuals with lower education or lower income.

¹Healthy People 2010. Office of Disease Prevention, U.S. Department of Health and Human Services.

Diabetes (% with 95% confidence intervals)			
Demographic Characteristic	% Diabetes ¹		
Muskegon County	9.4	±	1.6
Michigan (2001)	7.2	±	0.9
Gender			
Male	9.2	±	2.3
Female	9.6	±	2.3
Age (Years)			
18-24	0.0	±	0.0
25-34	5.6	±	3.1
35-44	3.9	±	2.3
45-54	10.4	±	4.1
55-64	15.5	±	5.9
65-74	22.7	±	7.8
75+	18.7	±	7.3
Race			
White	8.7	±	1.8
Black	10.6	±	3.8
Education			
Less than High School	18.6	±	6.2
High School Graduate	8.5	±	2.1
Some College	8.1	±	2.7
College Graduate	7.1	±	4.1
Household Income			
<\$20,000	17.2	±	4.4
\$20,000-\$34,999	8.5	±	3.6
\$35,000-\$49,999	7.1	±	3.6
\$50,000-\$74,999	4.7	±	3.2
≥\$75,000	5.1	±	3.8

¹Respondents who reported that they had ever been told by a doctor that they had diabetes (gestational diabetes excluded).

Disability was defined as a limitation in activities and the need for special equipment because of physical or mental problems. According to the 2001 Muskegon County BRFs, nearly a quarter of Muskegon County adults (23.7%) were currently limited in any way in any activities. The prevalence of limitation on activities in Muskegon County was higher than the State average (18.2%). The proportion of limitations on activities was higher for older individuals, women, African Americans, or for individuals with lower education or lower income. Overall, it was estimated that 7.6% of the adults in Muskegon County had a health problem which required the use of special equipment, such as a cane, a wheelchair, a special bed, or special telephone. The estimates of using special equipment was greater for women, African Americans, older individuals, and for those who had a lower education or lower income.

Disability (% with 95% confidence intervals)						
Demographic Characteristic	% Limited Activities ¹			% Special Equipment ²		
Muskegon County	23.7	±	2.3	7.6	±	1.5
Michigan (2001)	18.2	±	1.3	6.1	±	0.8
Gender						
Male	20.3	±	3.3	6.1	±	1.9
Female	26.7	±	3.5	9.1	±	2.2
Age (Years)						
18-24	11.4	±	5.2	0.0	±	*
25-34	13.0	±	4.4	2.9	±	2.3
35-44	16.1	±	4.4	3.9	±	2.4
45-54	31.5	±	6.2	5.2	±	3.0
55-64	31.1	±	7.5	11.2	±	5.2
65-74	34.4	±	9.0	16.2	±	6.9
75+	43.8	±	9.4	27.5	±	8.4
Race						
White	21.4	±	2.6	6.4	±	1.6
Black	30.1	±	5.6	11.3	±	3.9
Education						
Less than High School	30.8	±	7.3	18.8	±	6.2
High School Graduate	23.8	±	3.8	7.6	±	2.4
Some College	24.9	±	4.3	4.9	±	2.1
College Graduate	15.5	±	5.7	4.1	±	3.2
Household Income						
<\$20,000	40.4	±	5.8	15.8	±	4.3
\$20,000-\$34,999	22.6	±	5.4	5.2	±	2.8
\$35,000-\$49,999	11.7	±	4.4	3.1	±	2.4
\$50,000-\$74,999	16.0	±	5.6	2.1	±	2.1
≥\$75,000	9.1	±	5.0	1.6	±	2.2

¹Responded they were limited in any way in any activities because of physical or mental health problems.

²Responded "yes" to the question "Do you now have any health problem that requires you to use special equipment, such as a cane, wheelchair, special bed, or special telephone?"

*95% confidence interval is unavailable.

Mammogram & Clinical Breast Exam

Breast cancer is the most common cancer among women in the United States. Research has proven that mammography is the most effective method for detecting early malignancies. The American Cancer Society and the National Cancer Institute recommend that women have an annual mammogram and clinical breast exam beginning at age 40.¹

Mammogram: It was estimated that 92.3% of Muskegon County women who were 40 years and older had ever had a mammogram. The proportion of mammogram increased with an increase of age, but dropped off at age 75. The estimates of ever having a mammogram was slightly higher for Caucasians than for African Americans. The proportion of mammograms increased with an increase of education or income.

Clinical Breast Exam: According to the 2001 Muskegon County BRFS, 88.5% of Muskegon County women age 40 or older had ever had a clinical breast exam. The proportion of clinical breast exam was highest for women in age group 45 to 74. The proportion of clinical breast exam increased with an increase of education or income.

¹The Center for Disease Control and Prevention: Preventing Unnecessary Deaths Among Women, The National Breast and Cervical Cancer Early Detection Program, August 12, 1999

**Mammogram & Clinical Breast Exam
(Women Age 40+)**
(% with 95% confidence intervals)

Demographic Characteristic	Ever Had Mammogram ¹		Ever Had Clinical Breast Exam ²	
	%	95% CI	%	95% CI
Muskegon County	92.3	± 2.7	88.5	± 3.2
Michigan	n/a	± n/a	n/a	± n/a
Age (Years)				
40-44	84.6	± 8.7	78.5	± 9.9
45-54	92.9	± 4.8	92.9	± 4.8
55-64	95.9	± 4.1	93.8	± 5.6
65-74	97.4	± 3.6	91.4	± 7.1
75+	90.8	± 6.8	83.6	± 8.6
Race				
White	93.3	± 2.9	89.6	± 3.5
Black	89.5	± 6.7	84.9	± 7.8
Education				
Less than High School	88.4	± 7.9	80.9	± 9.7
High School Graduate	93.2	± 4.0	88.3	± 5.0
Some College	90.3	± 5.5	89.3	± 5.7
College Graduate	100.0	± *	97.2	± 3.6
Household Income				
<\$20,000	90.7	± 5.3	85.3	± 6.5
\$20,000-\$34,999	89.9	± 6.9	84.0	± 8.5
\$35,000-\$49,999	94.1	± 5.9	91.1	± 7.9
\$50,000-\$74,999	96.0	± 4.0	96.0	± 7.0
≥\$75,000	100.0	± *	98.2	± 4.8

¹Responded “yes” to the question: “A mammogram is an X-ray of each breast to look for breast cancer. Have you ever had a mammogram?”

*95% confidence interval is unavailable.

²Responded “yes” to the question: “A clinical breast exam is when a doctor, nurse, or other health professional feels the breast for lumps. Have you ever had a clinical breast exam?”

Prostate Cancer Screening

Prostate cancer is the most commonly diagnosed cancer and is the second leading cause of cancer death among American men. With screening, prostate cancer may be detected early and treated before it has spread. Digital rectal examination (DRE) and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer.

Ever had DRE: It was estimated that 85.5% of men 50 years and older in Muskegon County had ever had a digital rectal exam, comparing with 87% of the State average. The estimate of a DRE test was greater for African Americans than for Caucasians. The proportion of ever DRE was higher for men aged 75 and older than for the rest of the age groups.

DRE in the past year: Of those who had ever had a DRE, 61.9% of men had a DRE test done within the past year. The proportion of had DRE in the past year increased with an increase of age. It was estimated that 62.5% of African Americans and 62.3% of Caucasians had a DRE in the past year. Individuals with a high school degree or less were more likely to have had a DRE in the past year. Individuals with lower income were less likely to have had a DRE in the past year.

Ever had PSA test: Overall, 81.4% of men 50 years and older had ever had a PSA test in their lifetime. The State average was 78.1%. The proportion with a PSA test increased with an increase of age, but dropped off at age 75. More African Americans than Caucasians reported that they had ever had a PSA test. Individuals with a college degree were more likely to have ever had a PSA test.

PSA in the past year: Of men who had ever had a PSA, 71.7% of them had the test in the past year prior to this survey, which was higher than the state average (60.2%). The proportion of a PSA test was slightly higher for African American men than for Caucasian men. The survey result indicated that individuals with income less than \$20,000 were the least likely to have had a PSA test in the past year.

**Prostate Cancer Screening
(Men 50 Years and Older¹)**
(% with 95% confidence intervals)

Demographic Characteristic	% Ever had DRE ²		% Had DRE in past year		% Ever had PSA test ³		% Had PSA in past year	
Muskegon County Michigan (2001)	85.5	± 4.8	61.9	± 6.6	81.4	± 5.5	71.7	± 7.1
	87.0	± 3.0	59.2	± 4.4	78.1	± 3.7	60.2	± 4.4
Age (Years)								
50-54	86.0	± 8.9	58.0	± 12.7	68.9	± 12.6	42.0	± 12.7
55-64	82.6	± 9.0	60.9	± 11.6	83.6	± 8.9	59.4	± 11.7
65-74	86.3	± 10.4	62.7	± 14.7	91.8	± 8.1	62.7	± 14.7
75+	90.5	± 11.5	71.4	± 17.9	85.0	± 14.5	59.5	± 19.4
Race								
White	83.8	± 5.7	62.5	± 7.4	80.0	± 12.5	55.3	± 7.6
Black	90.8	± 10.2	62.3	± 18.2	90.1	± 22.6	59.4	± 18.5
Education								
Less than High School	84.9	± 13.3	60.3	± 18.1	83.9	± 13.6	63.8	± 17.8
High School Graduate	85.9	± 8.2	67.4	± 11.2	80.3	± 9.9	48.4	± 11.9
Some College	88.8	± 8.5	58.9	± 13.4	73.7	± 12.6	52.4	± 13.5
College Graduate	81.0	± 15.6	50.6	± 19.9	91.8	± 10.2	62.3	± 19.3
Household Income								
<\$20,000	79.7	± 11.7	47.6	± 14.5	80.4	± 12.0	49.3	± 14.5
\$20,000-\$34,999	83.2	± 12.3	56.9	± 16.2	72.6	± 14.6	55.2	± 16.4
\$35,000-\$49,999	87.8	± 12.1	79.1	± 15.0	92.7	± 9.3	68.4	± 17.2
\$50,000-\$74,999	95.9	± 8.1	68.4	± 19.4	77.3	± 18.5	47.9	± 20.8
≥\$75,000	87.3	± 13.7	70.0	± 18.3	86.5	± 12.5	56.5	± 19.8

¹Men who had been diagnosed with prostate cancer (7.3%) were excluded.

²Responded "yes" to the question, "A digital rectal exam (DRE) is an exam in which a doctor, nurse or other health professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland. Have you ever had a digital rectal exam?"

³Responded "yes" to the question, "A prostate-specific antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you ever had a PSA test?"

Colorectal Cancer Screening

Early detection can reduce deaths due to colorectal cancer. The American Cancer Society recommended that individuals 50 years and older perform a yearly fecal occult blood test (FOBT) and/or undergo a sigmoidoscopy procedure every five years.

Ever taking a blood stool test: It was estimated that 60.8% of Muskegon County residents 50 years and older had ever used a FOBT kit at home to determine if the stool contained blood. The proportion of a FOBT increased with an increase of education or income. The estimates of the blood stool test was greater for Caucasians than for African Americans. The proportion of ever using a FOBT was slightly higher for women than for men.

Blood stool test in the past two years: Of those who ever performed the blood stool test, 73.1% of them indicated that the tests were conducted with the past 2 years. The proportion of the blood stool test within 2 years increased with an increase of age. African Americans were more likely than Caucasians to have blood stool tested within 2 years. All together, 62.6% of women and 58.6% of men had a blood stool test within 2 years.

Sigmoidoscopy is when a tube is inserted in the rectum to view the bowel for signs of cancer or other health problems. According to the 2001 Muskegon County BRFS, 52% of Muskegon County residents 50 years or older had ever had a sigmoidoscopy. The reported proportion of sigmoidoscopy was slightly higher for women than for men. All together, the proportion of sigmoidoscopy was higher for Caucasians than for African Americans.

**Colorectal Cancer Screening
(Adults 50 Years and Older)**
(% with 95% confidence intervals)

Demographic Characteristic	% Ever Blood Stool Test ¹		% Blood Stool Test in 2 year		% Ever Had a Sigmoid-or Colonoscopy ²	
Muskegon County	60.8	± 4.4	73.1	± 5.1	52.0	± 4.5
Age (Years)						
50-54	47.1	± 9.1	68.8	± 12.4	42.9	± 8.9
55-64	65.0	± 7.8	72.2	± 9.2	49.9	± 8.2
65-74	71.4	± 8.6	74.6	± 10.0	60.3	± 9.4
75+	60.0	± 9.4	76.1	± 10.8	57.8	± 9.4
Race						
White	62.7	± 4.9	71.3	± 5.8	53.3	± 5.0
Black	54.1	± 10.6	80.7	± 11.8	48.0	± 10.4
Education						
Less than High School	52.8	± 10.5	78.0	± 12.2	47.3	± 10.4
High School Graduate	58.8	± 7.1	73.8	± 8.5	50.0	± 7.2
Some College	62.6	± 8.5	75.1	± 9.7	55.8	± 8.7
College Graduate	65.0	± 13.1	68.4	± 16.2	51.4	± 14.0
Household Income						
<\$20,000	54.4	± 11.1	72.5	± 10.1	51.0	± 8.1
\$20,000-\$34,999	60.8	± 10.1	63.8	± 13.0	50.9	± 10.4
\$35,000-\$49,999	63.1	± 13.0	80.5	± 13.7	56.0	± 13.4
\$50,000-\$74,999	68.5	± 14.6	68.7	± 18.0	59.2	± 15.4
≥\$75,000	74.0	± 13.3	65.7	± 16.9	49.1	± 15.3
Gender						
Male	58.6	± 6.6	72.3	± 7.9	54.4	± 6.6
Female	62.6	± 5.9	73.7	± 6.9	50.1	± 6.0

¹Responded “yes” to the question, “A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?”

²Responded “yes” to the question, “Sigmoidoscopy is when a tube is inserted in the rectum to view the bowel for signs of cancer and other health problems. Have you ever had this exam?”

Environmental Health

Environment factors play a central role in human development, health, and disease. To address the broad range of human health issues affected by the environment, several indicators were included in the BRFS covering lead-based paint, water quality, indoor/outdoor air quality, and other environmental pollution issues.

Environment health: Overall, almost one-third (28.6%) of the respondents surveyed rated the environmental health of Muskegon County as fair or poor. The top 5 environmental concerns in Muskegon County were contaminated fish (58%), smoking environment (54.4%), outdoor air pollution (47.8%), contaminated dump site (47.6%), and lead-based paints (41.7%).

Lead-based Paint: It was estimated that about 41.7% of residential houses in Muskegon County were built before 1950. Of the residential houses built before 1950, 76.6% of them had not been tested for lead content.

Home water supply: In Muskegon County, city-water supply as residential home water supply was 69% and on-site water well (private well) was 31%. Of households with an on-site water well, about one-quarter (25.1%) of the well water had been tested for bacteria and/or Nitrates in the past year. It was estimated that 9.9% households with private well water had never been tested for bacteria and/or Nitrates.

Air Quality: About 12% (11.8%) of respondents rated the quality of the air they breathed in their home as fair or poor. Overall, 14% of respondents rated the quality of the air they breathed when they were outdoors in the neighborhood as fair or poor.

Water Quality: Generally, almost 2 in 10 (18.7%) of the respondents rated the quality of the water that came from their tap at home for purposes such as drinking and cooking as fair or poor. Of individuals whose home had city water supply, 19.1% of them indicated that the quality of water was fair or poor. Among those homes with a private well, 17.2% of the respondents rated their well water as fair or poor.

Quality of water at Muskegon County swimming beaches: Overall, 36.4% of the respondents rated the quality of water at Muskegon County swimming beaches as fair or poor.

Environmental Health (% with 95% confidence intervals)			
In Muskegon County	%		
Home built before 1950 (Lead-based Paint) ¹	41.7	±	2.9
Home not tested for lead content (for houses built before 1950) ²	76.6	±	3.9
Home water from a city water supply ³	69.0	±	2.6
Home water from on-site water well (private well)	31.0	±	2.6
Home well water tested in the past year ⁴	25.1	±	4.7
Home well water tested in the last 2 years	18.7	±	4.1
Home well water tested in the last 5 years	19.3	±	4.2
Home well water tested in more than 5 years	27.0	±	4.7
Home well water never tested	9.9	±	3.2

¹Responded “yes” to the question: “The next questions are about testing for lead-based paint in home. Was your home built before 1950?”
²Responded “yes” to the question: “Have paints from your home (built before 1950) ever been analyzed for lead content?”
³Responded to the question: “Does the water that comes into your home come from a city water supply or from a ‘private’ well?”
⁴Responded to the question: “How long has it been since you had your home well water tested for bacteria and/or Nitrates?”

Environmental Health

Concerning Environmental Health (% with 95% confidence intervals)			
	%		
Environmental health poor ¹	28.6	±	2.6
Quality of indoor air at home poor ²	11.8	±	1.8
Quality of outdoor air poor ³	14.0	±	2.0
Quality of home tap water poor (in general) ⁴	18.7	±	4.4
Quality of home city water supply poor	19.1	±	2.7
Quality of home on-site well water poor	17.2	±	3.8
Quality of swimming beaches poor ⁵	36.4	±	3.1
<i>The following environmental problems cause the greater risk to human health in Muskegon County —</i>			
Indoor air quality	20.2	±	2.2
Smoking environment (e.g. second-hand smoke)	54.4	±	2.8
Outdoor air pollution	47.8	±	2.8
Drinking water quality	30.5	±	2.6
Lake Michigan pollution	46.9	±	2.8
Noise (e.g. boom boxes, traffic noise)	33.2	±	2.6
Pesticides in food products	36.2	±	2.7
Pesticide or herbicide on land	36.8	±	2.7
Contaminated dump site	47.6	±	2.8
Contaminated fish	58.0	±	2.7
Lead-based paints	41.7	±	2.8
¹ Responded to the question: "Overall, how would you rate the environmental health of Muskegon County? Would you say it is excellent, very good, good, fair, or poor?" Answers included "fair" or "poor." ² Responded to the question: "How would you describe the quality of the air you breathe in your home? Is it excellent, very good, good, fair, or poor?" Answers included "fair" or "poor." ³ Responded to the question: "How would you describe the quality of the air you breathe when you are out of doors in your neighborhood? Is the air you breathe excellent, very good, good, fair, or poor?" Answers included "fair" or "poor." ⁴ Responded to the question: "How would you describe the quality of the water that comes from your tap at home for purposes such as drinking and cooking? Is it excellent, very good, good, fair, or poor?" Answers included "fair" or "poor." ⁵ Responded to the question: "Thinking about body contact during recreational use of surface water, how would you describe the quality of water at Muskegon County swimming beaches? Is it excellent, very good, good, fair, or poor?"			

Executive Summary of Findings

Selected Factors	Muskegon County	Michigan
Perceived general health fair or poor	18.3%	14.9%
Perceived mental health not good (mean days in the last month)	3.6	3.6
No health insurance coverage	9.7%	11.7%
Hypertension	35.0%	27.1%
High blood cholesterol	33.5%	32.9%
Ever had cholesterol check-up	73.1%	76.7%
No dental insurance coverage	35.9%	N/A
Overweight (BMI \geq 25.0)	66.5%	61.0%
Obesity (BMI \geq 30.0)	28.8%	24.7%
Currently smoking cigarettes	27.2%	26.1%
Currently drinking alcohol	48.0%	N/A
Binge drinks (5 \pm drinks on one occasion in last month)	15.7%	18.2%
Drinking and driving	2.7%	N/A
Ever had asthma	10.6%	12.4%
Still have asthma	7.8%	8.8%
Arthritis	30.0%	38.4%
Diabetes	9.4%	7.2%
Disability (limitation on activities)	23.7%	18.2%
Disability (needed special equipment)	7.6%	6.1%
Ever had mammogram	92.3%	N/A
Ever had clinical breast exam	88.5%	N/A
Ever had a digital rectal exam (DRE)	85.5%	87.0%
Had DRE in the last year	61.9%	59.2%
Ever had a prostate-specific antigen test (PSA)	81.4%	78.1%
Had PSA in the last year	71.7%	60.2%
Ever had blood stool test for colorectal cancer screening	60.8%	N/A
Had blood stool test within the 2 years	73.1%	N/A
Ever had sigmoidoscopy	52.0%	N/A
Environmental Issues: Home built before 1950	41.7%	N/A
Home not tested for lead (for houses built before 1950)	76.6%	N/A
Home water from a city water supply	69.0%	N/A
Home water from on-site water well (private well)	31.0%	N/A

Comparison with Michigan BRFs

The 2001 Muskegon County BRFs was the only source for the county-specific estimates on preventive health practices, risk behaviors, and medical conditions among Muskegon County residents. This section compares the two survey results between 2001 Muskegon County and Michigan BRFs.

Muskegon County was significantly better than the State in the following areas:

- % Health insurance coverage
- % Binge drinks (5+drinks on one occasion in the last month)
- % Ever having had asthma
- % Arthritis

Muskegon County was significantly worse than the State in the following areas:

- % High blood pressure
- % Overweight
- % Obesity
- % Diabetes
- % Disability
- % Perceived general health fair or poor
- % Having ever had cholesterol check-up

We were similar to the State in the following areas:

- Mental health 'not good' (Mean number of days in the past month)
- % High blood cholesterol
- % Current smoking cigarettes
- % Still had asthma (of those who had ever been told by a doctor that they had asthma)

For More Information

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**This report is available on our web site located at
www.muskegonhealth.net under the publications section.**

For more information regarding the health status of Muskegon County:

Visit our web site www.muskegonhealth.net or the Michigan Department of
Community Health web site at www.michigan.gov/mdch.

