

Health Risk Behaviors Barry-Eaton District Health Department

Behavioral Risk Factor Survey 2006



Caring for the Community
Since the 1930s

Prepared for
Barry-Eaton District Health Department
www.barryeatonhealth.org

Prepared by
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Introduction

In 2006, the Barry-Eaton District Health Department, with the support of several community partners, contracted for a survey of the adult population in Barry and Eaton counties on various behaviors, medical conditions, and preventive health care practices, as well as some perceptions on land use. Findings from the survey are useful to the health department and community partners in identifying priority health issues and the populations at greatest risk for health problems. The data contribute to planning efforts and effective targeting of resources to support intervention programs, and can be used by all community members to gain a better understanding of the health concerns affecting our community.

A total of 842 adults in the district responded to the telephone survey, resulting in an overall margin of error of ± 3.4 percent. The findings presented in this report have been weighted and can be interpreted as estimates of the prevalence rates of various health risks among the general adult population of the Barry-Eaton district. For a complete description of the methodology used in this survey and report, refer to the Methodology section following Section 2.

This report is presented in two sections, one for Barry County and one for Eaton County. Data for the Barry-Eaton district as a whole and the general narrative describing the measures are repeated in each section so that the section can be excerpted from the report and distributed as a standalone document.

Section A

Barry County Behavioral Risk Factor Survey 2006

HEALTH STATUS

General health status may be influenced by many factors, including behaviors, environmental factors, and social and economic conditions. Self-rated assessment can be a reliable indicator of an individual's perceived health. State and national data have shown the prevalence of self-rated fair or poor health status to be higher within older age groups, females, and minorities, and fair or poor health status also has been associated with lower socioeconomic status.

People responding to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked to rate their general health status as excellent, very good, good, fair, or poor. In 2006, an estimated 14 percent of adults in the Barry-Eaton Health Department district (Barry and Eaton counties combined) perceived their general health to be either fair or poor.

In Barry County, an estimated 14.1 percent of adults reported fair or poor health.

Table 1.1
General Health Status Fair or Poor^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	14.0%	(± 3.4)	14.1%	(± 4.9)
Gender				
Male	15.6	(± 4.9)	14.7	(± 7.0)
Female	12.3	(± 4.7)	13.2	(± 6.9)
Age				
18–24	7.0	(± 17.3)	----- ^c	
25–34	2.9	(± 10.3)	7.9	(± 14.3)
35–44	8.7	(± 9.1)	7.7	(± 12.4)
45–54	18.0	(± 7.3)	12.0	(± 11.3)
55–64	17.7	(± 7.6)	20.4	(± 11.0)
65–74	29.8	(± 8.8)	-----	
75+	29.8	(± 8.9)	-----	
Education				
Less than high school	23.7	(± 12.9)	33.3	(± 17.3)
High school graduate	13.6	(± 5.7)	13.3	(± 7.7)
Some college	13.9	(± 6.1)	10.7	(± 8.8)
College graduate	5.8	(± 6.6)	3.5	(± 11.0)
Income				
< \$15,000	33.8	(± 11.7)	-----	
\$15,000–\$24,999	21.5	(± 12.1)	-----	
\$25,000–\$34,999	15.8	(± 10.2)	-----	
\$35,000–\$49,999	15.4	(± 8.7)	17.7	(± 12.8)
\$50,000–\$74,999	11.7	(± 7.9)	8.6	(± 11.3)
\$75,000–\$99,999	4.1	(± 11.0)	-----	
\$100,000+	5.1	(± 11.4)	-----	

^aAmong all respondents, the proportion who reported that their health, in general, was either fair or poor.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

HEALTH-RELATED QUALITY OF LIFE

Perceived physical and mental health affects the ability of individuals to engage in daily activities as well as their overall quality of life. In 2006, about 10.7 percent of adults in the Barry-Eaton district reported that they had experienced physical health that was not good on at least 14 days during the past month. Physical health includes physical illness and injury.

An estimated 11 percent of adults in Barry County experienced physical health that was not good on at least 14 days during the past month.

In the Barry-Eaton district, the average number of days per month an adult did not have good physical health was 3.8. In Barry County, the average number of days per month an adult did not have good physical health was also 3.8.

Table 1.2
Physical Health Status Not Good on at Least 14 Days in the Past Month^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	10.7%	(±3.4)	11.0%	(±4.9)
Gender				
Male	12.0	(±4.9)	11.3	(±7.0)
Female	9.6	(±4.7)	10.9	(±6.9)
Age				
18–24	4.6	(±17.3)	----- ^c	
25–34	4.5	(±10.3)	8.1	(±14.3)
35–44	7.1	(±9.1)	9.4	(±12.4)
45–54	17.3	(±7.3)	11.0	(±11.3)
55–64	17.0	(±7.6)	20.4	(±11.0)
65–74	14.5	(±8.8)	-----	
75+	15.0	(±8.9)	-----	
Education				
Less than high school	17.3	(±12.9)	25.9	(±17.3)
High school graduate	13.8	(±5.7)	10.8	(±7.7)
Some college	8.4	(±6.1)	6.8	(±8.8)
College graduate	5.8	(±6.6)	5.4	(±11.0)
Income				
< \$15,000	18.8	(±11.7)	-----	
\$15,000–\$24,999	25.4	(±12.1)	-----	
\$25,000–\$34,999	10.4	(±10.2)	-----	
\$35,000–\$49,999	10.9	(±8.7)	13.1	(±12.8)
\$50,000–\$74,999	8.0	(±7.9)	6.6	(±11.3)
\$75,000–\$99,999	5.6	(±11.0)	-----	
\$100,000+	3.9	(±11.4)	-----	

^aAmong all respondents, the proportion who reported 14 or more days during the past 30 days when their physical health was not good. Physical health includes physical illness and injury.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Mental health includes stress, depression, and problems with emotions. About 13.3 percent of adults in the Barry-Eaton district reported that their mental health was not good on at least 14 days of the past month.

An estimated 14.3 percent of adults in Barry County experienced mental health that was not good on at least 14 days during the past month.

In the Barry-Eaton district, the average number of days per month an adult did not have good mental health was 4.3 days. In Barry County, the average number of days per month an adult did not have good mental health was 4.1.

Table 1.3
Mental Health Status Not Good on at Least 14 Days in the Past Month^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	13.3%	(±3.4)	14.3%	(±4.9)
Gender				
Male	10.7	(±4.9)	9.5	(±7.0)
Female	16.1	(±4.7)	19.1	(±6.9)
Age				
18–24	20.9	(±17.3)	----- ^c	
25–34	17.9	(±10.3)	16.7	(±14.3)
35–44	11.1	(±9.1)	14.8	(±12.4)
45–54	11.4	(±7.3)	13.3	(±11.3)
55–64	11.7	(±7.6)	13.2	(±11.0)
65–74	8.5	(±8.8)	-----	
75+	7.8	(±8.9)	-----	
Education				
Less than high school	29.0	(±12.9)	29.3	(±17.3)
High school graduate	12.2	(±5.7)	14.8	(±7.7)
Some college	13.7	(±6.1)	12.5	(±8.8)
College graduate	3.9	(±6.6)	3.5	(±11.0)
Income				
< \$15,000	27.9	(±11.7)	-----	
\$15,000–\$24,999	18.5	(±12.1)	-----	
\$25,000–\$34,999	17.3	(±10.2)	-----	
\$35,000–\$49,999	10.3	(±8.7)	15.3	(±12.8)
\$50,000–\$74,999	11.3	(±7.9)	12.0	(±11.3)
\$75,000–\$99,999	4.1	(±11.0)	-----	
\$100,000+	9.0	(±11.4)	-----	

^aAmong all respondents, the proportion who reported 14 or more days when their mental health was not good during the past 30 days. Mental health includes stress, depression, and problems with emotions.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

In the Barry-Eaton district, the average number of days per month that poor physical or mental health prevented adults from doing their usual activities was 5.6. In Barry County, adults were prevented from doing their usual activities on an average of 4.5 days.

HYPERTENSION

High blood pressure, or hypertension, is known as the “silent killer” and is a major risk factor for coronary heart disease, stroke, and heart failure. Lifestyle interventions can help prevent high blood pressure. These interventions include increasing the level of aerobic physical activity, maintaining a healthy weight, limiting the consumption of alcohol to moderate levels for those who drink, reducing salt and sodium intake, and eating a reduced-fat diet high in fruits, vegetables, and low-fat dairy food.

While public awareness of the dangers of high blood pressure has increased, there are still many people with high blood pressure who are unaware that they have this disorder. In the Barry-Eaton district, an estimated 27.5 percent of adults report ever having been told they have high blood pressure. Of those, 77.1 percent (± 3.4) are taking medication prescribed for high blood pressure.

In Barry County, the percentage of adults who report ever having been told they have high blood pressure is about 29.9.

Table 1.4
Hypertension Awareness

	Ever told HBP ^a			
	Barry-Eaton District ($\pm 95\%$ CI) ^b		Barry County ($\pm 95\%$ CI)	
Total	27.5%	(± 3.4)	29.9%	(± 4.9)
Gender				
Male	29.4	(± 4.9)	32.0	(± 7.0)
Female	25.6	(± 4.7)	27.8	(± 6.9)
Age				
18–24	7.9	(± 17.3)	----- ^c	
25–34	12.4	(± 10.3)	16.9	(± 14.3)
35–44	12.3	(± 9.1)	14.6	(± 12.4)
45–54	30.4	(± 7.3)	37.3	(± 11.3)
55–64	42.7	(± 7.6)	44.4	(± 11.0)
65–74	58.1	(± 8.8)	-----	
75+	61.2	(± 8.9)	-----	
Education				
Less than high school	29.4	(± 12.9)	30.0	(± 17.3)
High school graduate	28.0	(± 5.7)	32.9	(± 7.7)
Some college	29.4	(± 6.1)	30.5	(± 8.8)
College graduate	20.5	(± 6.6)	21.1	(± 11.0)
Income				
< \$15,000	40.0	(± 11.7)	-----	
\$15,000–\$24,999	36.4	(± 12.1)	-----	
\$25,000–\$34,999	31.6	(± 10.2)	-----	
\$35,000–\$49,999	25.2	(± 8.7)	24.2	(± 12.8)
\$50,000–\$74,999	15.8	(± 7.9)	18.3	(± 11.3)
\$75,000–\$99,999	25.0	(± 11.0)	-----	
\$100,000+	17.7	(± 11.4)	-----	

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have high blood pressure (HBP). Women who had HBP only during pregnancy and adults who were borderline or pre-hypertensive were considered not to have been diagnosed.

^bThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

CHOLESTEROL

High blood cholesterol is a major risk factor for coronary heart disease. Experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every five years to help them take action to prevent or lower their risk of coronary heart disease. Lifestyle changes that prevent or lower high blood cholesterol include eating a diet low in saturated fat and cholesterol, increasing physical activity, and reducing excess weight.

In the Barry-Eaton district, 29.5 of adults report ever having been told by a doctor, nurse, or other health professional that their blood cholesterol is high.

In Barry County, 32.3 percent of adults report that they have been told their blood cholesterol is high.

Table 1.5
Cholesterol Awareness

	Ever told high cholesterol ^a	
	Barry-Eaton District (±95% CI) ^b	Barry County (±95% CI)
Total	29.5% (±3.4)	32.3% (±4.9)
Gender		
Male	29.4 (±4.9)	29.1 (±7.0)
Female	29.6 (±4.7)	35.5 (±6.9)
Age		
18–24	1.7 (±17.3)	----- ^c
25–34	8.1 (±10.3)	9.4 (±14.3)
35–44	18.0 (±9.1)	23.6 (±12.4)
45–54	45.3 (±7.3)	46.7 (±11.3)
55–64	51.5 (±7.6)	59.3 (±11.0)
65–74	56.8 (±8.8)	-----
75+	48.5 (±8.9)	-----
Education		
Less than high school	26.6 (±12.9)	25.4 (±17.3)
High school graduate	31.7 (±5.7)	29.9 (±7.7)
Some college	31.5 (±6.1)	37.9 (±8.8)
College graduate	23.9 (±6.6)	31.6 (±11.0)
Income		
< \$15,000	42.3 (±11.7)	-----
\$15,000–\$24,999	27.7 (±12.1)	-----
\$25,000–\$34,999	38.2 (±10.2)	-----
\$35,000–\$49,999	30.8 (±8.7)	30.2 (±12.8)
\$50,000–\$74,999	24.3 (±7.9)	26.1 (±11.3)
\$75,000–\$99,999	23.3 (±11.0)	-----
\$100,000+	21.8 (±11.4)	-----

^aAmong all respondents, the proportion who reported that they had ever been told by a doctor, nurse, or other health professional that their blood cholesterol is high.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

DIABETES

There are two major types of diabetes: type 1, occurring mainly in children and adolescents 18 years and younger, in which the body does not produce insulin and thus insulin administration is required to sustain life; and type 2, occurring usually in adults over 30 years of age, in which the body's tissues become unable to use its own limited amount of insulin effectively. Over the past decade, diabetes has remained the seventh leading cause of death in the United States, mainly from diabetes-associated cardiovascular disease. Diabetes is also the leading cause of non-traumatic amputations, blindness among working-aged adults, and end-stage renal disease. The occurrence of diabetes, especially type 2 diabetes, as well as associated complications, is increasing in the United States. Several factors account for this chronic disease epidemic, including behavioral elements (improper nutrition, decreased physical activity, and obesity) and demographic changes (an aging population and increased growth of at-risk populations).

In the Barry-Eaton district, an estimated 9.9 percent of adults report ever having been told by a doctor, nurse, or other health professional that they have diabetes. Another 1 percent of adults report having been told they are borderline or pre-diabetes.

In Barry County, 9.1 percent of adults report that they have been told they have diabetes.

Table 1.6
Diabetes

	Ever told diabetes ^a	
	Barry-Eaton District (±95% CI) ^b	Barry County (±95% CI)
Total	9.9% (±3.4)	9.1% (±4.9)
Gender		
Male	10.3 (±4.9)	8.9 (±7.0)
Female	9.5 (±4.7)	9.6 (±6.9)
Age		
18–24	0 (±17.3)	----- ^c
25–34	5.9 (±10.3)	3.1 (±14.3)
35–44	2.3 (±9.1)	6.7 (±12.4)
45–54	11.8 (±7.3)	8.1 (±11.3)
55–64	17.5 (±7.6)	16.4 (±11.0)
65–74	24.3 (±8.8)	-----
75+	20.9 (±8.9)	-----
Education		
Less than high school	12.7 (±12.9)	11.7 (±17.3)
High school graduate	9.8 (±5.7)	11.1 (±7.7)
Some college	10.4 (±6.1)	7.9 (±8.8)
College graduate	7.1 (±6.6)	3.5 (±11.0)
Income		
< \$15,000	21.1 (±11.7)	-----
\$15,000–\$24,999	10.8 (±12.1)	-----
\$25,000–\$34,999	15.8 (±10.2)	-----
\$35,000–\$49,999	13.8 (±8.7)	9.5 (±12.8)
\$50,000–\$74,999	4.0 (±7.9)	4.3 (±11.3)
\$75,000–\$99,999	4.1 (±11.0)	-----
\$100,000+	6.3 (±11.4)	-----

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have diabetes. Adults who were told they had pre-diabetes or borderline diabetes were considered not to have been diagnosed with diabetes.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

ASTHMA

Asthma is a chronic inflammatory disorder of the lungs that can result in restricted activity, hospitalization, and even death. Allergies, a family history of asthma or allergy, low birth weight, and exposure to tobacco smoke are just a few potential risk factors that are associated with the development of asthma. Asthma attacks can be triggered by a variety of factors, such as exposure to allergens, air pollutants, and respiratory viral infections.

Most of the problems caused by asthma could be averted if persons with asthma and their health care providers managed the disease according to established guidelines—controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function, and educating asthma patients to become partners in their own care.

In the Barry-Eaton district, 15.6 percent of adults report ever having been told they have asthma by a doctor, nurse, or other health professional. About 11.8 percent of adults in Barry County report ever having been told they have asthma. Adults who had ever been told that they had asthma were asked if they *still* have asthma. Based on their responses, an estimated 8.5 percent of adults in Barry County currently have asthma.

Table 1.7
Asthma

	Ever told have asthma ^a		Currently have asthma ^b
	Barry-Eaton District (±95% CI) ^c	Barry County (±95% CI)	Barry County (±95% CI)
Total	15.6% (±3.4)	11.8% (±4.9)	8.5% (±4.9)
Gender			
Male	11.7 (±4.9)	7.4 (±7.0)	5.0 (±7.0)
Female	19.4 (±4.7)	16.2 (±6.9)	12.2 (±6.9)
Age			
18–24	25.2 (±17.3)	----- ^d	-----
25–34	23.4 (±10.3)	12.7 (±14.3)	8.2 (±14.3)
35–44	9.3 (±9.1)	12.4 (±12.4)	12.4 (±12.4)
45–54	8.7 (±7.3)	5.3 (±11.3)	4.1 (±11.3)
55–64	18.3 (±7.6)	16.7 (±11.0)	15.1 (±11.0)
65–74	17.3 (±8.8)	-----	-----
75+	11.9 (±8.9)	-----	-----
Education			
Less than high school	29.1 (±12.9)	25.0 (±17.3)	16.7 (±17.3)
High school graduate	11.7 (±5.7)	6.9 (±7.7)	5.6 (±7.7)
Some college	12.9 (±6.1)	10.0 (±8.8)	8.0 (±8.8)
College graduate	17.9 (±6.6)	15.8 (±11.0)	8.9 (±11.0)
Income			
< \$15,000	40.8 (±11.7)	-----	-----
\$15,000–\$24,999	10.8 (±12.1)	-----	-----
\$25,000–\$34,999	15.8 (±10.2)	-----	-----
\$35,000–\$49,999	10.8 (±8.7)	14.5 (±12.8)	10.2 (±12.8)
\$50,000–\$74,999	12.4 (±7.9)	6.5 (±11.3)	6.5 (±11.3)
\$75,000–\$99,999	12.5 (±11.0)	-----	-----
\$100,000+	14.1 (±11.4)	-----	-----

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have asthma.

^bAmong all respondents, the proportion who reported that they still have asthma.

^cThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^dA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

CIGARETTE USE

The harmful effects of tobacco smoke have been well documented, yet tobacco use remains the leading preventable cause of disease and death in the United States. Smoking contributes to the development of many kinds of chronic conditions, including cancers, respiratory diseases, and cardiovascular diseases.

An estimated 21.5 percent of adults in the Barry-Eaton district are current smokers who report ever having smoked 100 cigarettes in their life and smoke cigarettes now. About 18 percent report smoking every day, and about 4 percent report smoking some days.

An estimated 25.9 percent of adults in the Barry-Eaton district are former smokers, that is, they have smoked at least 100 cigarettes in their life, but they do not smoke at all now. An estimated 52.6 percent of adults aged 18 years and older have never smoked.

Of current smokers, 55.3 percent (± 7.2) say that their doctor or other health professional has advised about or referred them to a program or other resources to help them stop smoking.

The health risk from smoking affects not only smokers but also those around them. A smoke-free home is an important first step in protecting a person's family and friends from exposure. An estimated 17.8 percent of adults in the Barry-Eaton district report that someone smokes indoors at their house.

Table 1.8
Cigarette Use: Barry-Eaton District

	Current smokers ^a	Former smokers ^b	Never smoked	Smoking indoors ^c	($\pm 95\%$ CI ^d)
Total	21.5%	25.9%	52.6%	17.8%	(± 3.4)
Gender					
Male	23.9	30.1	45.9	17.9	(± 4.9)
Female	19.1	21.7	59.1	17.8	(± 4.7)
Age					
18–24	27.0	5.2	67.8	30.7	(± 17.3)
25–34	25.5	20.4	54.0	12.5	(± 10.3)
35–44	24.4	22.1	53.5	15.6	(± 9.1)
45–54	27.3	23.6	49.1	19.4	(± 7.3)
55–64	19.2	46.2	34.6	22.1	(± 7.6)
65–74	9.6	47.9	42.5	13.3	(± 8.8)
75+	3.0	36.4	60.6	7.5	(± 8.9)
Education					
Less than high school	27.0	30.6	42.3	22.7	(± 12.9)
High school graduate	31.7	22.6	45.7	26.8	(± 5.7)
Some college	17.5	30.5	51.9	13.9	(± 6.1)
College graduate	8.4	17.4	74.2	7.1	(± 6.6)
Income					
< \$15,000	23.9	26.8	49.3	18.3	(± 11.7)
\$15,000–\$24,999	35.9	25.0	39.1	32.3	(± 12.1)
\$25,000–\$34,999	32.9	22.4	44.7	28.0	(± 10.2)
\$35,000–\$49,999	26.9	30.8	42.3	16.2	(± 8.7)
\$50,000–\$74,999	19.7	30.3	50.0	10.7	(± 7.9)
\$75,000–\$99,999	15.3	18.1	66.7	19.4	(± 11.0)
\$100,000+	19.0	22.8	58.2	17.9	(± 11.4)

^aAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life and that they smoke cigarettes now, either every day or on some days.

^bAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life, but they do not smoke cigarettes now.

^cAmong all respondents, the proportion who reported that someone smokes indoors in their house.

^dThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

In Barry County, an estimated 23.5 percent of adults are current smokers who report ever having smoked 100 cigarettes in their life and smoke cigarettes now. About 19 percent report smoking every day, and about 5 percent report smoking some days.

An estimated 25.2 percent of adults in Barry County are former smokers, that is, they have smoked at least 100 cigarettes in their life, but they do not smoke at all now. An estimated 51.2 percent of adults aged 18 years and older have never smoked.

Of current smokers in Barry County, 57.9 percent say that their doctor or other health professional has advised about or referred them to a program or other resources to help them stop smoking.

An estimated 14.9 percent of adults in Barry County report that someone smokes indoors at their house.

Table 1.9
Cigarette Use: Barry County

	Current smokers ^a	Former smokers ^b	Never smoked	Smoking indoors ^c	(±95% CI ^d)
Total	23.5%	25.2%	51.2%	14.9%	(± 4.9)
Gender					
Male	26.0	27.5	46.6	12.8	(± 7.0)
Female	20.9	23.0	56.1	17.2	(± 6.9)
Age					
18–24	----- ^e	-----	-----	-----	
25–34	18.8	18.8	62.5	12.5	(± 14.3)
35–44	29.2	27.0	43.8	14.6	(± 12.4)
45–54	29.3	21.3	49.3	16.0	(± 11.3)
55–64	23.6	38.2	38.2	24.1	(± 11.0)
65–74	-----	-----	-----	-----	
75+	-----	-----	-----	-----	
Education					
Less than high school	33.9	27.1	39.0	20.0	(± 17.3)
High school graduate	28.9	27.5	43.7	20.8	(± 7.7)
Some college	18.4	24.8	56.7	12.1	(± 8.8)
College graduate	12.3	17.5	70.2	1.8	(± 11.0)
Income					
< \$15,000	-----	-----	-----	-----	
\$15,000–\$24,999	-----	-----	-----	-----	
\$25,000–\$34,999	-----	-----	-----	-----	
\$35,000–\$49,999	29.0	24.2	46.8	14.5	(± 12.8)
\$50,000–\$74,999	25.8	20.4	53.8	6.5	(± 11.3)
\$75,000–\$99,999	-----	-----	-----	-----	(± 18.9)
\$100,000+	-----	-----	-----	-----	(± 18.9)

^aAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life and that they smoke cigarettes now, either every day or on some days.

^bAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life, but they do not smoke cigarettes now.

^cAmong all respondents, the proportion who reported that someone smokes indoors in their house.

^dThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^eA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

ALCOHOL CONSUMPTION

Alcohol abuse is linked with serious health conditions such as cirrhosis of the liver, high blood pressure, stroke, and some types of cancer, as well as injuries and deaths from traffic crashes, falls, fires, and drowning. It is also a factor in homicide, suicide, domestic violence, and child abuse.

Binge Drinking

Binge drinking results in high blood alcohol levels, which can cause blackouts and even death. Binge drinking also increases the likelihood of other risky behaviors, such as unsafe sex, driving under the influence, and use of illicit drugs. Long-term heavy drinking increases risk for high blood pressure, heart rhythm irregularities, stroke, cirrhosis and other liver disorders, and certain forms of cancer.

In the Barry-Eaton district, 10.2 percent of adults reported binge drinking, that is, males who report having five or more drinks of alcohol on a single occasion on one or more of the past 30 days, and females who report having four or more drinks of alcohol on a single occasion on one or more of the past 30 days. An estimated 12.1 percent of adults in Barry County report binge drinking.

Table 1.10
Alcohol Consumption: Binge Drinking^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	10.2%	(± 3.4)	12.1%	(± 4.9)
Gender				
Male	13.6	(± 4.9)	15.2	(± 7.0)
Female	6.7	(± 4.7)	9.1	(± 6.9)
Age				
18–24	5.3	(± 17.3)	----- ^c	
25–34	15.4	(± 10.3)	18.8	(± 14.3)
35–44	20.4	(± 9.1)	19.8	(± 12.4)
45–54	7.0	(± 7.3)	10.8	(± 11.3)
55–64	5.9	(± 7.6)	5.7	(± 11.0)
65–74	5.6	(± 8.8)	-----	
75+	3.0	(± 8.9)	-----	
Education				
Less than high school	13.6	(± 12.9)	20.7	(± 17.3)
High school graduate	9.2	(± 5.7)	13.5	(± 7.7)
Some college	9.5	(± 6.1)	7.2	(± 8.8)
College graduate	11.2	(± 6.6)	10.5	(± 11.0)
Income				
< \$15,000	14.1	(± 11.7)	-----	
\$15,000–\$24,999	1.6	(± 12.1)	-----	
\$25,000–\$34,999	4.1	(± 10.2)	-----	
\$35,000–\$49,999	6.2	(± 8.7)	8.1	(± 12.8)
\$50,000–\$74,999	17.0	(± 7.9)	23.1	(± 11.3)
\$75,000–\$99,999	23.2	(± 11.0)	-----	
\$100,000+	7.9	(± 11.4)	-----	

^aAmong all respondents, the proportion of males who reported having five or more drinks of alcohol on a single occasion on one or more of the past 30 days, and females who reported having four or more drinks of alcohol on a single occasion on one or more of the past 30 days.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Heavy Drinking

An estimated 3.9 percent of adults in the Barry-Eaton district report heavy drinking, that is, on average consuming more than two alcoholic beverages per day for men and more than one alcoholic beverage per day for women. An estimated 3.7 percent of adults in Barry County report heavy drinking.

In contrast, about 55.2 percent of adults in the Barry-Eaton district report that they did not have any drinks of beer, wine, wine coolers, or liquor in the past 30 days. About 58.9 percent of adults in Barry County report that they did not have any drinks of beer, wine, wine coolers, or liquor in the past 30 days.

Table 1.11
Alcohol Consumption: Heavy Drinking^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	3.9%	(± 3.4)	3.7%	(± 4.9)
Gender				
Male	4.6	(± 4.9)	4.5	(± 7.0)
Female	3.4	(± 4.7)	3.1	(± 6.9)
Age				
18–24	0	(± 17.3)	----- ^c	(± 23.1)
25–34	7.3	(± 10.3)	4.7	(± 14.3)
35–44	5.3	(± 9.1)	5.9	(± 12.4)
45–54	1.9	(± 7.3)	1.3	(± 11.3)
55–64	5.9	(± 7.6)	5.6	(± 11.0)
65–74	4.1	(± 8.8)	-----	(± 13.0)
75+	3.0	(± 8.9)	-----	(± 12.9)
Education				
Less than high school	6.5	(± 12.9)	7.1	(± 17.3)
High school graduate	4.6	(± 5.7)	4.3	(± 7.7)
Some college	2.9	(± 6.1)	1.4	(± 8.8)
College graduate	3.3	(± 6.6)	3.5	(± 11.0)
Income				
< \$15,000	12.5	(± 11.7)	-----	(± 17.1)
\$15,000–\$24,999	3.1	(± 12.1)	-----	(± 15.7)
\$25,000–\$34,999	2.7	(± 10.2)	-----	(± 14.0)
\$35,000–\$49,999	2.3	(± 8.7)	0.0	(± 12.8)
\$50,000–\$74,999	2.3	(± 7.9)	3.4	(± 11.3)
\$75,000–\$99,999	12.3	(± 11.0)	-----	(± 18.9)
\$100,000+	1.3	(± 11.4)	-----	(± 18.9)

^aAmong all respondents, the proportion who reported on average consuming more than two alcoholic beverages per day for men and more than one alcoholic beverage per day for women.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Drinking and Driving

Of those adults in the Barry-Eaton district who drink alcohol, about 3.6 percent report they have driven when they had too much to drink (once or more in the past 30 days). An estimated 1.8 percent of Barry County adults who drink report having driven at least once in the past 30 days when they perhaps had too much to drink.

HEALTH CARE AND ACCESS

People who do not have health care coverage are less likely to access health care services, including preventive care, primary care, and tertiary care, and are more likely to delay getting needed medical attention. Behavioral Risk Factor Survey data for Michigan show that people who do not have health care coverage are more likely to have other health risk factors, such as current cigarette smoking and lack of physical activity.

Medical Care

In 2006, an estimated 9.2 percent of adults in the Barry-Eaton district had no health care coverage. An estimated 9.4 percent of adults in Barry County had no health care coverage.

An estimated 15.1 percent of adults in the Barry-Eaton district as a whole said they did not have someone whom they think of as their personal doctor or health care provider. An estimated 14.2 percent of adults in Barry County did not have a personal doctor or health care provider.

About 11.4 percent of adults in the Barry-Eaton district report that there was a time in the past year when they needed to see a doctor, physician's assistant, or nurse but did not or could not. Among adults who did not or could not see a doctor, physician's assistant, or nurse, about 25 percent said they were not able to because they could not afford it or were uninsured, followed by 17 percent who said they did not have time or were too busy, and 15 percent who said they were not able to because they could not get an appointment.

An estimated 13.2 percent of adults in Barry County said there was a time in the past year when they needed to see a doctor or health care provider but did not or could not.

Table 1.12
Health Care Access

	Barry-Eaton District ($\pm 95\%$ CI ^a)				Barry County ($\pm 95\%$ CI)			
	No health coverage ^b		No personal provider ^c		No health coverage		No personal provider	
Total	9.2%	(± 3.4)	15.1%	(± 3.4)	9.4%	(± 4.9)	14.2%	(± 4.9)
Gender								
Male	12.4	(± 4.9)	21.5	(± 4.9)	12.3	(± 7.0)	20.7	(± 7.0)
Female	6.1	(± 4.7)	8.7	(± 4.7)	6.1	(± 6.9)	7.1	(± 6.9)
Age								
18–24	25.2	(± 17.3)	43.0	(± 17.3)	----- ^d		-----	
25–34	12.4	(± 10.3)	19.7	(± 10.3)	12.5	(± 14.3)	21.5	(± 14.3)
35–44	6.4	(± 9.1)	14.0	(± 9.1)	4.4	(± 12.4)	15.7	(± 12.4)
45–54	8.1	(± 7.3)	6.8	(± 7.3)	10.7	(± 11.3)	6.8	(± 11.3)
55–64	6.7	(± 7.6)	6.8	(± 7.6)	9.1	(± 11.0)	7.4	(± 11.0)
65–74	0	(± 8.8)	5.3	(± 8.8)	-----		-----	
75+	0	(± 8.9)	4.5	(± 8.9)	-----		-----	
Education								
Less than high school	19.3	(± 12.9)	34.9	(± 12.9)	18.3	(± 17.3)	23.3	(± 17.3)
High school graduate	9.8	(± 5.7)	14.7	(± 5.7)	7.6	(± 7.7)	9.8	(± 7.7)
Some college	7.8	(± 6.1)	11.6	(± 6.1)	7.9	(± 8.8)	17.1	(± 8.8)
College graduate	3.8	(± 6.6)	9.7	(± 6.6)	8.8	(± 11.0)	7.0	(± 11.0)
Income								
< \$15,000	18.3	(± 11.7)	31.0	(± 11.7)	-----		-----	
\$15,000–\$24,999	30.8	(± 12.1)	33.8	(± 12.1)	-----		-----	
\$25,000–\$34,999	11.8	(± 10.2)	10.5	(± 10.2)	-----		-----	
\$35,000–\$49,999	6.9	(± 8.7)	8.5	(± 8.7)	6.3	(± 12.8)	9.7	(± 12.8)
\$50,000–\$74,999	3.9	(± 7.9)	14.1	(± 7.9)	6.5	(± 11.3)	16.1	(± 11.3)
\$75,000–\$99,999	5.6	(± 11.0)	13.7	(± 11.0)	-----		-----	
\$100,000+	9.0	(± 11.4)	24.4	(± 11.4)	-----		-----	

^aThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

^bAmong all respondents, the proportion who reported that they did not have any kind of health care coverage.

^cAmong all respondents, the proportion who reported that they did not have one or more person whom they think of as their personal doctor or health care provider.

^dA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Dental Care

Poor oral health and untreated oral diseases and conditions can have a significant impact on health and quality of life (e.g., needless pain and suffering, decreased economic productivity, and loss of self esteem). Studies have shown a link between periodontal diseases and low birthweight and premature birth, as well as heart disease and stroke.

About 10.4 percent of adults in the Barry-Eaton district report that there was a time in the past year when they needed to see a dentist but could not. Among adults who could not see a dentist when needed, the reason given most often (52.2 percent) was that they could not afford it or were uninsured. About 10.6 percent indicated they did not go to the dentist because they did not have transportation, 3.3 percent said they did not have time or were too busy, and 3.2 percent said they did not go to the dentist because they could not get an appointment.

An estimated 12.7 percent of adults in Barry County said there was a time in the past year when they needed to see a dentist but could not.

Table 1.13
Access to Dental Care

	Could not see dentist when needed ^a	
	Barry-Eaton District (±95% CI) ^b	Barry County (±95% CI)
Total	10.4% (±3.4)	12.7% (±4.9)
Gender		
Male	8.1 (±4.9)	10.8 (±7.0)
Female	12.8 (±4.7)	14.6 (±6.9)
Age		
18–24	17.4 (±17.3)	----- ^c
25–34	14.6 (±10.3)	18.8 (±14.3)
35–44	7.6 (±9.1)	16.9 (±12.4)
45–54	11.3 (±7.3)	8.1 (±11.3)
55–64	8.7 (±7.6)	10.9 (±11.0)
65–74	6.7 (±8.8)	-----
75+	3.0 (±8.9)	-----
Education		
Less than high school	17.4 (±12.9)	15.0 (±17.3)
High school graduate	10.6 (±5.7)	11.8 (±7.7)
Some college	11.3 (±6.1)	12.9 (±8.8)
College graduate	3.8 (±6.6)	12.3 (±11.0)
Income		
< \$15,000	31.4 (±11.7)	-----
\$15,000–\$24,999	23.1 (±12.1)	-----
\$25,000–\$34,999	22.4 (±10.2)	-----
\$35,000–\$49,999	10.0 (±8.7)	12.7 (±12.8)
\$50,000–\$74,999	3.9 (±7.9)	8.6 (±11.3)
\$75,000–\$99,999	1.4 (±11.0)	-----
\$100,000+	1.3 (±8.9)	-----

^aAmong all respondents, the proportion who reported that there was a time in the past year when they needed to see a dentist but could not.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

WEIGHT STATUS

People who are overweight or obese are at increased risk for high blood pressure, diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. The health outcomes related to these diseases, however, often can be improved through weight loss or, at a minimum, no further weight gain.

Overweight is defined as having a body mass index (BMI) between 25.0 and 29.9. An obese weight status is a BMI greater than or equal to 30.0. The body mass index is defined as weight in kilograms divided by height in meters squared. This is calculated from the self-reported height and weight measurements of adults responding to the Behavioral Risk Factor Survey.

An estimated 28.4 percent of adults in the Barry-Eaton district were obese in 2006, and about 36.5 percent of adults in the Barry-Eaton district were overweight.

An estimated 27.5 percent of adults in Barry County were obese in 2006, and about 33.4 percent were overweight.

Table 1.14
Weight Status: Obese^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	28.4%	(±3.4)	27.5%	(±4.9)
Gender				
Male	27.9	(±4.9)	30.8	(±7.0)
Female	29.0	(±4.7)	23.9	(±6.9)
Age				
18–24	16.7	(±17.3)	----- ^c	
25–34	25.8	(±10.3)	25.0	(±14.3)
35–44	29.9	(±9.1)	28.0	(±12.4)
45–54	31.1	(±7.3)	34.3	(±11.3)
55–64	37.9	(±7.6)	38.0	(±11.0)
65–74	41.4	(±8.8)	-----	
75+	16.7	(±8.9)	-----	
Education				
Less than high school	33.0	(±12.9)	24.1	(±17.3)
High school graduate	26.1	(±5.7)	31.6	(±7.7)
Some college	30.3	(±6.1)	28.2	(±8.8)
College graduate	24.8	(±6.6)	19.2	(±11.0)
Income				
< \$15,000	54.2	(±11.7)	-----	
\$15,000–\$24,999	28.8	(±12.1)	-----	
\$25,000–\$34,999	35.6	(±10.2)	-----	
\$35,000–\$49,999	30.2	(±8.7)	25.4	(±12.8)
\$50,000–\$74,999	29.4	(±7.9)	22.0	(±11.3)
\$75,000–\$99,999	23.2	(±11.0)	-----	
\$100,000+	13.0	(±11.4)	-----	

^aAmong all respondents, the proportion whose body mass index (BMI) was greater than or equal to 30.0. BMI is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Table 1.15
Weight Status: Overweight^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	36.5%	(±3.4)	33.4%	(±4.9)
Gender				
Male	38.1	(±4.9)	34.9	(±7.0)
Female	34.7	(±4.7)	31.8	(±6.9)
Age				
18–24	40.4	(±17.3)	----- ^c	
25–34	37.9	(±10.3)	33.3	(±14.3)
35–44	31.1	(±9.1)	30.5	(±12.4)
45–54	39.1	(±7.3)	34.3	(±11.3)
55–64	33.7	(±7.6)	36.0	(±11.0)
65–74	37.1	(±8.8)	-----	
75+	39.4	(±8.9)	-----	
Education				
Less than high school	29.2	(±12.9)	25.9	(±17.3)
High school graduate	43.8	(±5.7)	35.3	(±7.7)
Some college	31.6	(±6.1)	32.8	(±8.8)
College graduate	39.3	(±6.6)	38.5	(±11.0)
Income				
< \$15,000	19.4	(±11.7)	-----	
\$15,000–\$24,999	30.3	(±12.1)	-----	
\$25,000–\$34,999	39.7	(±10.2)	-----	
\$35,000–\$49,999	33.3	(±8.7)	35.6	(±12.8)
\$50,000–\$74,999	34.1	(±7.9)	35.2	(±11.3)
\$75,000–\$99,999	34.8	(±11.0)	-----	
\$100,000+	48.1	(±11.4)	-----	

^aAmong all respondents, the proportion whose body mass index (BMI) was between 25.0 and 29.9. BMI is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

NO LEISURE-TIME PHYSICAL ACTIVITY

Regular physical activity reduces the risk of dying of coronary heart disease, the nation's leading cause of death, and also decreases the risk for stroke, colon cancer, diabetes, and high blood pressure. Keeping physically active helps control weight; contributes to healthy bones, muscles, and joints; reduces symptoms of anxiety and depression; and is associated with fewer hospitalizations, physician visits, and medications. The U.S. Centers for Disease Control and Prevention recommends that all adults engage in moderate-intensity physical activity, such as brisk walking, for at least 30 minutes on 5 or more days of the week, or vigorous-intensity physical activity on 3 or more days of the week for 20 or more minutes.

In 2006, about 27.9 percent of adults in the Barry-Eaton district did not participate in any leisure-time physical activity (i.e., physical activities or exercises such as jogging, swimming, bicycling, or walking for exercise) in the past month. An estimated 24.8 percent of adults in Barry County did not participate in any leisure-time physical activity.

Table 1.16
No Leisure-Time Physical Activity^a

	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	27.9%	(±3.4)	24.8%	(±4.9)
Gender				
Male	27.2	(±4.9)	28.1	(±7.0)
Female	28.4	(±4.7)	21.3	(±6.9)
Age				
18–24	7.9	(±17.3)	----- ^c	
25–34	26.3	(±10.3)	14.1	(±14.3)
35–44	27.2	(±9.1)	27.0	(±12.4)
45–54	28.1	(±7.3)	24.3	(±11.3)
55–64	32.0	(±7.6)	33.3	(±11.0)
65–74	44.6	(±8.8)	-----	
75+	40.3	(±8.9)	-----	
Education				
Less than high school	39.1	(±12.9)	36.7	(±17.3)
High school graduate	32.1	(±5.7)	30.6	(±7.7)
Some college	23.6	(±6.1)	17.9	(±8.8)
College graduate	20.6	(±6.6)	15.8	(±11.0)
Income				
< \$15,000	38.0	(±11.7)	-----	
\$15,000–\$24,999	47.7	(±12.1)	-----	
\$25,000–\$34,999	38.7	(±10.2)	-----	
\$35,000–\$49,999	39.2	(±8.7)	29.0	(±12.8)
\$50,000–\$74,999	21.3	(±7.9)	15.1	(±11.3)
\$75,000–\$99,999	20.5	(±11.0)	-----	
\$100,000+	11.5	(±11.4)	-----	

^aAmong all respondents, the proportion who reported that during the past month they did not participate in any leisure-time physical activity or exercises such as jogging, swimming, bicycling, or walking.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

NUTRITION

A growing body of research shows that fruits and vegetables are critical to promoting good health. Healthy diets rich in fruits and vegetables may reduce the risk of cancer and other chronic diseases. To get the amount that is recommended, most people need to increase the amount of fruits and vegetables they currently eat every day. *Dietary Guidelines for Americans 2005*, issued jointly by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture, recommends that all people over the age of two years eat 2 cups of fruit *and* 2½ cups of vegetables per day for a 2,000-calorie intake, with higher or lower amounts depending on the daily calorie level.

On average, adults in the Barry-Eaton district eat only 2.9 servings of fruits and vegetables a day. For purposes of this survey, a serving was defined as “a half a cup to one cup—the amount of food you could hold in your cupped hand.” Thus, adults in the Barry-Eaton district report that they eat only 1½ to 3 cups of fruits and vegetables a day on average.

Adults in Barry County eat an average of 3.0 servings of fruits and vegetables a day.

In the Barry-Eaton district, an estimated 83.1 percent of adults eat less than five servings of fruits and vegetables a day. In Barry County, an estimated 81.3 percent of adults eat less than five servings of fruits and vegetables a day.

Table 1.17
Inadequate Fruit and Vegetable Consumption^a

	Barry-Eaton District (±95% CI ^b)		Barry County (±95% CI)	
Total	83.1%	(±3.4)	81.3%	(±4.9)
Gender				
Male	88.1	(±4.9)	84.3	(±7.0)
Female	78.1	(±4.7)	78.4	(±6.9)
Age				
18–24	85.0	(±17.3)	----- ^c	
25–34	84.7	(±10.3)	77.4	(±14.3)
35–44	86.5	(±9.1)	89.7	(±12.4)
45–54	80.5	(±7.3)	81.4	(±11.3)
55–64	79.2	(±7.6)	85.2	(±11.0)
65–74	82.4	(±8.8)	-----	
75+	85.2	(±8.9)	-----	
Education				
Less than high school	82.8	(±12.9)	75.5	(±17.3)
High school graduate	85.6	(±5.7)	84.3	(±7.7)
Some college	86.1	(±6.1)	83.9	(±8.8)
College graduate	72.8	(±6.6)	73.1	(±11.0)
Income				
< \$15,000	81.5	(±11.7)	-----	
\$15,000–\$24,999	85.2	(±12.1)	-----	
\$25,000–\$34,999	88.9	(±10.2)	-----	
\$35,000–\$49,999	86.6	(±8.7)	85.0	(±12.8)
\$50,000–\$74,999	81.4	(±7.9)	80.4	(±11.3)
\$75,000–\$99,999	78.9	(±11.0)	-----	
\$100,000+	80.3	(±11.4)	-----	

^aAmong all respondents, the proportion who reported eating less than five servings of fruits and vegetables per day.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

LAND USE

Research has confirmed both physical and mental health benefits of regular physical activity. The built environment, which includes land use patterns, the transportation system, and design features that provide opportunities for travel and physical activity, is one of many variables thought to affect physical activity levels. The availability of safe walkways, bike paths, or walking trails can create a positive environment where physical activity is accessible, safe, affordable, and fun.

People responding to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked how they or any member of their family feel about walking alone in their neighborhood—very safe, somewhat safe, or not safe at all. An estimated 71.9 percent of adults in the Barry-Eaton district said that they, or any member of their household, would feel very safe walking alone in their neighborhood.

An estimated 75.4 percent of adults in Barry County said that they, or any member of their household, would feel very safe walking alone in their neighborhood.

Table 1.18
Neighborhood Safety

	Feel very safe walking alone ^a			
	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	71.9%	(±3.4)	75.4%	(±4.9)
Gender				
Male	79.5	(±4.9)	84.7	(±7.0)
Female	64.5	(±4.7)	66.0	(±6.9)
Age				
18–24	64.3	(±17.3)	----- ^c	
25–34	79.4	(±10.3)	73.4	(±14.3)
35–44	83.7	(±9.1)	78.7	(±12.4)
45–54	71.4	(±7.3)	74.7	(±11.3)
55–64	66.0	(±7.6)	70.9	(±11.0)
65–74	68.9	(±8.8)	-----	
75+	60.3	(±8.9)	-----	
Education				
Less than high school	48.2	(±12.9)	76.3	(±17.3)
High school graduate	70.9	(±5.7)	72.0	(±7.7)
Some college	74.1	(±6.1)	73.6	(±8.8)
College graduate	86.5	(±6.6)	87.7	(±11.0)
Income				
< \$15,000	46.5	(±11.7)	-----	
\$15,000–\$24,999	47.7	(±12.1)	-----	
\$25,000–\$34,999	69.7	(±10.2)	-----	
\$35,000–\$49,999	76.3	(±8.7)	80.6	(±12.8)
\$50,000–\$74,999	79.7	(±7.9)	77.7	(±11.3)
\$75,000–\$99,999	82.2	(±11.0)	-----	
\$100,000+	81.0	(±11.4)	-----	

^aAmong all respondents, the proportion who report that they or any member of their household would feel “very safe” walking alone in their neighborhood.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Respondents to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked whether there are safe walkways, bike paths, or walking trails in their community, and whether there are “a lot” or “a little.” An estimated 40.3 percent of adults in the Barry-Eaton district report that there are “a lot” of safe walkways, bike paths, or walking trails in their community. An estimated 29.7 percent of adults report that there are *no* safe walkways, bike paths, or walking trails in their community.

An estimated 30.9 percent of adults in Barry County report that there are “a lot” of safe walkways, bike paths, or walking trails in their community.

Table 1.19
Availability of Safe Walkways, Bike Paths, or Walking Trails

	“A lot” of safe walkways, bike paths, or walking trails ^a			
	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	40.3%	(±3.4)	30.9%	(±4.9)
Gender				
Male	39.6	(±4.9)	31.4	(±7.0)
Female	41.1	(±4.7)	30.5	(±6.9)
Age				
18–24	48.2	(±17.3)	----- ^c	
25–34	43.1	(±10.3)	28.1	(±14.3)
35–44	55.5	(±9.1)	39.3	(±12.4)
45–54	36.4	(±7.3)	29.7	(±11.3)
55–64	29.8	(±7.6)	25.5	(±11.0)
65–74	35.1	(±8.8)	-----	
75+	16.2	(±8.9)	-----	
Education				
Less than high school	36.4	(±12.9)	36.7	(±17.3)
High school graduate	36.6	(±5.7)	32.9	(±7.7)
Some college	40.6	(±6.1)	24.3	(±8.8)
College graduate	49.4	(±6.6)	36.8	(±11.0)
Income				
< \$15,000	43.7	(±11.7)	-----	
\$15,000–\$24,999	18.2	(±12.1)	-----	
\$25,000–\$34,999	30.3	(±10.2)	-----	
\$35,000–\$49,999	41.9	(±8.7)	33.9	(±12.8)
\$50,000–\$74,999	44.4	(±7.9)	33.0	(±11.3)
\$75,000–\$99,999	43.1	(±11.0)	-----	
\$100,000+	51.9	(±11.4)	-----	

^aAmong all respondents, the proportion who report that there are “a lot” of safe walkways, bike paths, or walking trails in their community.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Every year, communities experience change from one form of land use to another. For example, a forested area may be converted into a new housing development or an abandoned lot is converted into a playground. Respondents were asked if they felt that overall land use changes have had a positive, negative, or neutral effect on their quality of life. An estimated 27.2 percent of adults in the Barry-Eaton district said that overall land use changes have had a positive effect. About 52.6 percent of adults said the effect has been neutral, and 13.5 percent said the effect has been negative.

An estimated 28.5 percent of adults in Barry County said that overall land use changes have had a positive effect.

Table 1.20
Land Use

	Positive effect of land use changes ^a			
	Barry-Eaton District (±95% CI) ^b		Barry County (±95% CI)	
Total	27.2%	(±3.4)	28.5%	(±4.9)
Gender				
Male	25.6	(±4.9)	28.4	(±7.0)
Female	28.8	(±4.7)	28.8	(±6.9)
Age				
18–24	35.7	(±17.3)	----- ^c	
25–34	33.6	(±10.3)	32.8	(±14.3)
35–44	23.8	(±9.1)	32.6	(±12.4)
45–54	23.0	(±7.3)	24.0	(±11.3)
55–64	25.2	(±7.6)	25.9	(±11.0)
65–74	27.0	(±8.8)	-----	
75+	28.4	(±8.9)	-----	
Education				
Less than high school	28.8	(±12.9)	33.9	(±17.3)
High school graduate	26.8	(±5.7)	27.8	(±7.7)
Some college	27.6	(±6.1)	27.1	(±8.8)
College graduate	25.8	(±6.6)	28.1	(±11.0)
Income				
< \$15,000	45.1	(±11.7)	-----	
\$15,000–\$24,999	23.1	(±12.1)	-----	
\$25,000–\$34,999	15.8	(±10.2)	-----	
\$35,000–\$49,999	33.1	(±8.7)	35.5	(±12.8)
\$50,000–\$74,999	25.4	(±7.9)	23.7	(±11.3)
\$75,000–\$99,999	25.4	(±11.0)	-----	
\$100,000+	36.7	(±11.4)	-----	

^aAmong all respondents, the proportion who feel that overall land use changes have had a positive effect on the quality of their life.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Section B

Eaton County Behavioral Risk Factor Survey 2006

HEALTH STATUS

General health status may be influenced by many factors, including behaviors, environmental factors, and social and economic conditions. Self-rated assessment can be a reliable indicator of an individual's perceived health. State and national data have shown the prevalence of self-rated fair or poor health status to be higher within older age groups, females, and minorities, and fair or poor health status also has been associated with lower socioeconomic status.

People responding to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked to rate their general health status as excellent, very good, good, fair, or poor. In 2006, an estimated 14 percent of adults in the Barry-Eaton Health Department district (Barry and Eaton counties combined) perceived their general health to be either fair or poor.

In Eaton County, an estimated 13.8 percent of adults reported fair or poor health.

Table 2.1
General Health Status Fair or Poor^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	14.0%	(± 3.4)	13.8%	(± 4.7)
Gender				
Male	15.6	(± 4.9)	15.6	(± 6.8)
Female	12.3	(± 4.7)	11.6	(± 6.4)
Age				
18–24	7.0	(± 17.3)	6.3	(± 26.2)
25–34	2.9	(± 10.3)	0	(± 14.8)
35–44	8.7	(± 9.1)	8.1	(± 13.2)
45–54	18.0	(± 7.3)	20.9	(± 9.5)
55–64	17.7	(± 7.6)	17.3	(± 10.6)
65–74	29.8	(± 8.8)	----- ^c	
75+	29.8	(± 8.9)	-----	
Education				
Less than high school	23.7	(± 12.9)	16.7	(± 19.2)
High school graduate	13.6	(± 5.7)	14.1	(± 8.4)
Some college	13.9	(± 6.1)	15.6	(± 8.4)
College graduate	5.8	(± 6.6)	6.6	(± 8.3)
Income				
< \$15,000	33.8	(± 11.7)	-----	
\$15,000–\$24,999	21.5	(± 12.1)	-----	
\$25,000–\$34,999	15.8	(± 10.2)	-----	
\$35,000–\$49,999	15.4	(± 8.7)	14.5	(± 11.9)
\$50,000–\$74,999	11.7	(± 7.9)	13.6	(± 11.2)
\$75,000–\$99,999	4.1	(± 11.0)	-----	
\$100,000+	5.1	(± 11.4)	-----	

^aAmong all respondents, the proportion who reported that their health, in general, was either fair or poor.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

HEALTH-RELATED QUALITY OF LIFE

Perceived physical and mental health affects the ability of individuals to engage in daily activities as well as their overall quality of life. In 2006, about 10.7 percent of adults in the Barry-Eaton district reported that they had experienced physical health that was not good on at least 14 days during the past month. Physical health includes physical illness and injury.

An estimated 10.5 percent of adults in Eaton County experienced physical health that was not good on at least 14 days during the past month.

In the Barry-Eaton district, the average number of days per month an adult did not have good physical health was 3.8. In Eaton County, the average number of days per month an adult did not have good physical health was also 3.8.

Table 2.2
Physical Health Status Not Good on at Least 14 Days in the Past Month^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	10.7%	(±3.4)	10.5%	(±4.7)
Gender				
Male	12.0	(±4.9)	12.5	(±6.8)
Female	9.6	(±4.7)	8.8	(±6.4)
Age				
18–24	4.6	(±17.3)	6.7	(±26.2)
25–34	4.5	(±10.3)	2.8	(±14.8)
35–44	7.1	(±9.1)	4.7	(±13.2)
45–54	17.3	(±7.3)	20.5	(±9.5)
55–64	17.0	(±7.6)	16.0	(±10.6)
65–74	14.5	(±8.8)	----- ^c	
75+	15.0	(±8.9)	-----	
Education				
Less than high school	17.3	(±12.9)	-----	(±19.2)
High school graduate	13.8	(±5.7)	15.6	(±8.4)
Some college	8.4	(±6.1)	8.8	(±8.4)
College graduate	5.8	(±6.6)	6.6	(±8.3)
Income				
< \$15,000	18.8	(±11.7)	-----	
\$15,000–\$24,999	25.4	(±12.1)	-----	
\$25,000–\$34,999	10.4	(±10.2)	-----	
\$35,000–\$49,999	10.9	(±8.7)	10.3	(±11.9)
\$50,000–\$74,999	8.0	(±7.9)	9.1	(±11.2)
\$75,000–\$99,999	5.6	(±11.0)	-----	
\$100,000+	3.9	(±11.4)	-----	

^aAmong all respondents, the proportion who reported 14 or more days during the past 30 days when their physical health was not good. Physical health includes physical illness and injury.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Mental health includes stress, depression, and problems with emotions. About 13.3 percent of adults in the Barry-Eaton district reported that their mental health was not good on at least 14 days of the past month.

An estimated 12.8 percent of adults in Eaton County experienced mental health that was not good on at least 14 days during the past month.

In the Barry-Eaton district, the average number of days per month an adult did not have good mental health was 4.3 days. In Eaton County, the average number of days per month an adult did not have good mental health was 4.3.

Table 2.3
Mental Health Status Not Good on at Least 14 Days in the Past Month^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	13.3%	(±3.4)	12.8%	(±4.7)
Gender				
Male	10.7	(±4.9)	11.2	(±6.8)
Female	16.1	(±4.7)	14.5	(±6.4)
Age				
18–24	20.9	(±17.3)	17.2	(±26.2)
25–34	17.9	(±10.3)	18.1	(±14.8)
35–44	11.1	(±9.1)	9.3	(±13.2)
45–54	11.4	(±7.3)	10.8	(±9.5)
55–64	11.7	(±7.6)	9.8	(±10.6)
65–74	8.5	(±8.8)	----- ^c	
75+	7.8	(±8.9)	-----	
Education				
Less than high school	29.0	(±12.9)	29.4	(±19.2)
High school graduate	12.2	(±5.7)	10.2	(±8.4)
Some college	13.7	(±6.1)	14.5	(±8.4)
College graduate	3.9	(±6.6)	4.4	(±8.3)
Income				
< \$15,000	27.9	(±11.7)	-----	
\$15,000–\$24,999	18.5	(±12.1)	-----	
\$25,000–\$34,999	17.3	(±10.2)	-----	
\$35,000–\$49,999	10.3	(±8.7)	9.0	(±11.9)
\$50,000–\$74,999	11.3	(±7.9)	10.2	(±11.2)
\$75,000–\$99,999	4.1	(±11.0)	-----	
\$100,000+	9.0	(±11.4)	-----	

^aAmong all respondents, the proportion who reported 14 or more days when their mental health was not good during the past 30 days. Mental health includes stress, depression, and problems with emotions.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

In the Barry-Eaton district, the average number of days per month that poor physical or mental health prevented adults from doing their usual activities was 5.6. In Eaton County, adults were prevented from doing their usual activities on an average of 6.1 days.

HYPERTENSION

High blood pressure, or hypertension, is known as the “silent killer” and is a major risk factor for coronary heart disease, stroke, and heart failure. Lifestyle interventions can help prevent high blood pressure. These interventions include increasing the level of aerobic physical activity, maintaining a healthy weight, limiting the consumption of alcohol to moderate levels for those who drink, reducing salt and sodium intake, and eating a reduced-fat diet high in fruits, vegetables, and low-fat dairy food.

While public awareness of the dangers of high blood pressure has increased, there are still many people with high blood pressure who are unaware that they have this disorder. In the Barry-Eaton district, an estimated 27.5 percent of adults report ever having been told they have high blood pressure. Of those, 77.1 percent (± 3.4) are taking medication prescribed for high blood pressure.

In Eaton County an estimated 26.1 percent of adults report ever having been told they have high blood pressure.

Table 2.4
Hypertension Awareness

	Ever told HBP ^a	
	Barry-Eaton District ($\pm 95\%$ CI) ^b	Eaton County ($\pm 95\%$ CI)
Total	27.5% (± 3.4)	26.1% (± 4.7)
Gender		
Male	29.4 (± 4.9)	28.0 (± 6.8)
Female	25.6 (± 4.7)	24.6 (± 6.4)
Age		
18–24	7.9 (± 17.3)	7.7 (± 26.2)
25–34	12.4 (± 10.3)	11.0 (± 14.8)
35–44	12.3 (± 9.1)	11.6 (± 13.2)
45–54	30.4 (± 7.3)	27.1 (± 9.5)
55–64	42.7 (± 7.6)	41.2 (± 10.6)
65–74	58.1 (± 8.8)	----- ^c
75+	61.2 (± 8.9)	-----
Education		
Less than high school	29.4 (± 12.9)	27.8 (± 19.2)
High school graduate	28.0 (± 5.7)	24.8 (± 8.4)
Some college	29.4 (± 6.1)	28.9 (± 8.4)
College graduate	20.5 (± 6.6)	19.6 (± 8.3)
Income		
< \$15,000	40.0 (± 11.7)	-----
\$15,000–\$24,999	36.4 (± 12.1)	-----
\$25,000–\$34,999	31.6 (± 10.2)	-----
\$35,000–\$49,999	25.2 (± 8.7)	25.0 (± 11.9)
\$50,000–\$74,999	15.8 (± 7.9)	13.6 (± 11.2)
\$75,000–\$99,999	25.0 (± 11.0)	-----
\$100,000+	17.7 (± 11.4)	-----

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have high blood pressure (HBP). Women who had HBP only during pregnancy and adults who were borderline or pre-hypertensive were considered not to have been diagnosed.

^bThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

CHOLESTEROL

High blood cholesterol is a major risk factor for coronary heart disease. Experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every five years to help them take action to prevent or lower their risk of coronary heart disease. Lifestyle changes that prevent or lower high blood cholesterol include eating a diet low in saturated fat and cholesterol, increasing physical activity, and reducing excess weight.

In the Barry-Eaton district, 29.5 of adults report ever having been told by a doctor, nurse, or other health professional that their blood cholesterol is high.

An estimated 28 percent of adults in Eaton County report that they have been told their blood cholesterol is high.

Table 2.5
Cholesterol Awareness

	Ever told high cholesterol ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	29.5%	(±3.4)	28.0%	(±4.7)
Gender				
Male	29.4	(±4.9)	29.5	(±6.8)
Female	29.6	(±4.7)	26.3	(±6.4)
Age				
18–24	1.7	(±17.3)	0	(±26.2)
25–34	8.1	(±10.3)	8.2	(±14.8)
35–44	18.0	(±9.1)	14.9	(±13.2)
45–54	45.3	(±7.3)	44.2	(±9.5)
55–64	51.5	(±7.6)	47.1	(±10.6)
65–74	56.8	(±8.8)	----- ^c	
75+	48.5	(±8.9)	-----	
Education				
Less than high school	26.6	(±12.9)	27.8	(±19.2)
High school graduate	31.7	(±5.7)	32.6	(±8.4)
Some college	31.5	(±6.1)	28.3	(±8.4)
College graduate	23.9	(±6.6)	20.7	(±8.3)
Income				
< \$15,000	42.3	(±11.7)	-----	
\$15,000–\$24,999	27.7	(±12.1)	-----	
\$25,000–\$34,999	38.2	(±10.2)	-----	
\$35,000–\$49,999	30.8	(±8.7)	30.9	(±11.9)
\$50,000–\$74,999	24.3	(±7.9)	22.7	(±11.2)
\$75,000–\$99,999	23.3	(±11.0)	-----	
\$100,000+	21.8	(±11.4)	-----	

^aAmong all respondents, the proportion who reported that they had ever been told by a doctor, nurse, or other health professional that their blood cholesterol is high.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

DIABETES

There are two major types of diabetes: type 1, occurring mainly in children and adolescents 18 years and younger, in which the body does not produce insulin and thus insulin administration is required to sustain life; and type 2, occurring usually in adults over 30 years of age, in which the body's tissues become unable to use its own limited amount of insulin effectively. Over the past decade, diabetes has remained the seventh leading cause of death in the United States, mainly from diabetes-associated cardiovascular disease. Diabetes is also the leading cause of non-traumatic amputations, blindness among working-aged adults, and end-stage renal disease. The occurrence of diabetes, especially type 2 diabetes, as well as associated complications, is increasing in the United States. Several factors account for this chronic disease epidemic, including behavioral elements (improper nutrition, decreased physical activity, and obesity) and demographic changes (an aging population and increased growth of at-risk populations).

In the Barry-Eaton district, an estimated 9.9 percent of adults report ever having been told by a doctor, nurse, or other health professional that they have diabetes. Another 1 percent of adults report having been told they are borderline or pre-diabetes.

An estimated 10.3 percent of adults in Eaton County report that they have been told they have diabetes.

Table 2.6
Diabetes

	Ever told diabetes ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	9.9%	(±3.4)	10.3%	(±4.7)
Gender				
Male	10.3	(±4.9)	11.5	(±6.8)
Female	9.5	(±4.7)	9.4	(±6.4)
Age				
18–24	0	(±17.3)	0	(±26.2)
25–34	5.9	(±10.3)	8.2	(±14.8)
35–44	2.3	(±9.1)	0	(±13.2)
45–54	11.8	(±7.3)	14.0	(±9.5)
55–64	17.5	(±7.6)	17.6	(±10.6)
65–74	24.3	(±8.8)	----- ^c	
75+	20.9	(±8.9)	-----	
Education				
Less than high school	12.7	(±12.9)	13.2	(±19.2)
High school graduate	9.8	(±5.7)	8.6	(±8.4)
Some college	10.4	(±6.1)	11.4	(±8.4)
College graduate	7.1	(±6.6)	7.6	(±8.3)
Income				
< \$15,000	21.1	(±11.7)	-----	
\$15,000–\$24,999	10.8	(±12.1)	-----	
\$25,000–\$34,999	15.8	(±10.2)	-----	
\$35,000–\$49,999	13.8	(±8.7)	16.2	(±11.9)
\$50,000–\$74,999	4.0	(±7.9)	3.4	(±11.2)
\$75,000–\$99,999	4.1	(±11.0)	-----	
\$100,000+	6.3	(±11.4)	-----	

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have diabetes. Adults who were told they had pre-diabetes or borderline diabetes were considered not to have been diagnosed with diabetes.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

ASTHMA

Asthma is a chronic inflammatory disorder of the lungs that can result in restricted activity, hospitalization, and even death. Allergies, a family history of asthma or allergy, low birth weight, and exposure to tobacco smoke are just a few potential risk factors that are associated with the development of asthma. Asthma attacks can be triggered by a variety of factors, such as exposure to allergens, air pollutants, and respiratory viral infections.

Most of the problems caused by asthma could be averted if persons with asthma and their health care providers managed the disease according to established guidelines—controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function, and educating asthma patients to become partners in their own care.

In the Barry-Eaton district, 15.6 percent of adults report ever having been told they have asthma by a doctor, nurse, or other health professional. About 17.7 percent of adults in Eaton County report ever having been told they have asthma. Adults who had ever been told that they had asthma were asked if they *still* have asthma. Based on their responses, an estimated 14.9 percent of adults in Eaton County currently have asthma.

Table 2.7
Asthma

	Ever told have asthma ^a				Currently have asthma ^b	
	Barry-Eaton District (±95% CI) ^c		Eaton County (±95% CI)		Eaton County (±95% CI)	
Total	15.6%	(±3.4)	17.7%	(±4.7)	14.9%	(±4.7)
Gender						
Male	11.7	(±4.9)	14.2	(±6.8)	11.3	(±6.8)
Female	19.4	(±4.7)	21.1	(±6.4)	18.4	(±6.4)
Age						
18–24	25.2	(±17.3)	31.3	(±26.2)	31.3	(±26.2)
25–34	23.4	(±10.3)	28.8	(±14.8)	20.0	(±14.8)
35–44	9.3	(±9.1)	7.0	(±13.2)	5.9	(±13.2)
45–54	8.7	(±7.3)	10.5	(±9.5)	8.3	(±9.5)
55–64	18.3	(±7.6)	19.6	(±10.6)	-----	
65–74	17.3	(±8.8)	----- ^d		-----	
75+	11.9	(±8.9)	-----		-----	
Education						
Less than high school	29.1	(±12.9)	32.1	(±19.2)	32.1	(±19.2)
High school graduate	11.7	(±5.7)	15.5	(±8.4)	12.0	(±8.4)
Some college	12.9	(±6.1)	14.4	(±8.4)	12.3	(±8.4)
College graduate	17.9	(±6.6)	18.5	(±8.3)	12.8	(±8.3)
Income						
< \$15,000	40.8	(±11.7)	-----		-----	
\$15,000–\$24,999	10.8	(±12.1)	-----		-----	
\$25,000–\$34,999	15.8	(±10.2)	-----		-----	
\$35,000–\$49,999	10.8	(±8.7)	8.8	(±11.9)	8.8	(±11.9)
\$50,000–\$74,999	12.4	(±7.9)	15.7	(±11.2)	9.6	(±11.2)
\$75,000–\$99,999	12.5	(±11.0)	-----		-----	
\$100,000+	14.1	(±11.4)	-----		-----	

^aAmong all respondents, the proportion who reported that they were ever told by a doctor, nurse, or other health professional that they have asthma.

^bAmong all respondents, the proportion who reported that they still have asthma.

^cThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^dA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

CIGARETTE USE

The harmful effects of tobacco smoke have been well documented, yet tobacco use remains the leading preventable cause of disease and death in the United States. Smoking contributes to the development of many kinds of chronic conditions, including cancers, respiratory diseases, and cardiovascular diseases.

An estimated 21.5 percent of adults in the Barry-Eaton district are current smokers who report ever having smoked 100 cigarettes in their life and smoke cigarettes now. About 18 percent report smoking every day, and about 4 percent report smoking some days.

An estimated 25.9 percent of adults in the Barry-Eaton district are former smokers, that is, they have smoked at least 100 cigarettes in their life, but they do not smoke at all now. An estimated 52.6 percent of adults aged 18 years and older have never smoked.

Of current smokers, 55.3 percent (± 7.2) say that their doctor or other health professional has advised about or referred them to a program or other resources to help them stop smoking.

The health risk from smoking affects not only smokers but also those around them. A smoke-free home is an important first step in protecting a person's family and friends from exposure. An estimated 17.8 percent of adults in the Barry-Eaton district report that someone smokes indoors at their house.

Table 2.8
Cigarette Use: Barry-Eaton District

	Current smokers ^a	Former smokers ^b	Never smoked	Smoking indoors ^c	($\pm 95\%$ CI ^d)
Total	21.5%	25.9%	52.6%	17.8%	(± 3.4)
Gender					
Male	23.9	30.1	45.9	17.9	(± 4.9)
Female	19.1	21.7	59.1	17.8	(± 4.7)
Age					
18–24	27.0	5.2	67.8	30.7	(± 17.3)
25–34	25.5	20.4	54.0	12.5	(± 10.3)
35–44	24.4	22.1	53.5	15.6	(± 9.1)
45–54	27.3	23.6	49.1	19.4	(± 7.3)
55–64	19.2	46.2	34.6	22.1	(± 7.6)
65–74	9.6	47.9	42.5	13.3	(± 8.8)
75+	3.0	36.4	60.6	7.5	(± 8.9)
Education					
Less than high school	27.0	30.6	42.3	22.7	(± 12.9)
High school graduate	31.7	22.6	45.7	26.8	(± 5.7)
Some college	17.5	30.5	51.9	13.9	(± 6.1)
College graduate	8.4	17.4	74.2	7.1	(± 6.6)
Income					
< \$15,000	23.9	26.8	49.3	18.3	(± 11.7)
\$15,000–\$24,999	35.9	25.0	39.1	32.3	(± 12.1)
\$25,000–\$34,999	32.9	22.4	44.7	28.0	(± 10.2)
\$35,000–\$49,999	26.9	30.8	42.3	16.2	(± 8.7)
\$50,000–\$74,999	19.7	30.3	50.0	10.7	(± 7.9)
\$75,000–\$99,999	15.3	18.1	66.7	19.4	(± 11.0)
\$100,000+	19.0	22.8	58.2	17.9	(± 11.4)

^aAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life and that they smoke cigarettes now, either every day or on some days.

^bAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life, but they do not smoke cigarettes now.

^cAmong all respondents, the proportion who reported that someone smokes indoors in their house.

^dThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

In Eaton County, an estimated 20.4 percent of adults are current smokers who report ever having smoked 100 cigarettes in their life and smoke cigarettes now. About 17 percent report smoking every day, and about 4 percent report smoking some days.

An estimated 26.3 percent of adults in Eaton County are former smokers, that is, they have smoked at least 100 cigarettes in their life, but they do not smoke at all now. An estimated 53.4 percent of adults aged 18 years and older have never smoked.

Of current smokers in Eaton County, 53.7 percent say that their doctor or other health professional has advised about or referred them to a program or other resources to help them stop smoking.

An estimated 19.4 percent of adults in Eaton County report that someone smokes indoors at their house.

Table 2.9
Cigarette Use: Eaton County

	Current smokers ^a	Former smokers ^b	Never smoked	Smoking indoors ^c	(±95% CI ^d)
Total	20.4%	26.3%	53.4%	19.4%	(±4.7)
Gender					
Male	22.6	31.8	45.6	20.6	(±6.8)
Female	17.9	21.1	61.0	18.3	(±6.4)
Age					
18–24	25.0	7.8	67.2	42.2	(±26.2)
25–34	29.2	20.8	50.0	12.5	(±14.8)
35–44	22.1	18.6	59.3	15.1	(±13.2)
45–54	25.9	24.7	49.4	21.2	(±9.5)
55–64	15.7	51.0	33.3	19.6	(±10.6)
65–74	----- ^e	-----	-----	-----	
75+	-----	-----	-----	-----	
Education					
Less than high school	22.6	32.1	45.3	24.5	(±19.2)
High school graduate	33.3	19.4	47.3	30.5	(±8.4)
Some college	16.9	33.7	49.4	14.5	(±8.4)
College graduate	6.6	17.6	75.8	9.8	(±8.3)
Income					
< \$15,000	-----	-----	-----	-----	
\$15,000–\$24,999	-----	-----	-----	-----	
\$25,000–\$34,999	-----	-----	-----	-----	
\$35,000–\$49,999	26.5	33.8	39.7	16.2	(±11.9)
\$50,000–\$74,999	15.9	36.4	47.7	13.6	(±11.2)
\$75,000–\$99,999	-----	-----	-----	-----	
\$100,000+	-----	-----	-----	-----	

^aAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life and that they smoke cigarettes now, either every day or on some days.

^bAmong all respondents, the proportion who reported that they had ever smoked at least 100 cigarettes in their life, but they do not smoke cigarettes now.

^cAmong all respondents, the proportion who reported that someone smokes indoors in their house.

^dThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^eA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

ALCOHOL CONSUMPTION

Alcohol abuse is linked with serious health conditions such as cirrhosis of the liver, high blood pressure, stroke, and some types of cancer, as well as injuries and deaths from traffic crashes, falls, fires, and drowning. It is also a factor in homicide, suicide, domestic violence, and child abuse.

Binge Drinking

Binge drinking results in high blood alcohol levels, which can cause blackouts and even death. Binge drinking also increases the likelihood of other risky behaviors, such as unsafe sex, driving under the influence, and use of illicit drugs. Long-term heavy drinking increases risk for high blood pressure, heart rhythm irregularities, stroke, cirrhosis and other liver disorders, and certain forms of cancer.

In the Barry-Eaton district, 10.2 percent of adults reported binge drinking, that is, males who report having five or more drinks of alcohol on a single occasion on one or more of the past 30 days, and females who report having four or more drinks of alcohol on a single occasion on one or more of the past 30 days. An estimated 9.2 percent of adults in Eaton County report binge drinking.

Table 2.10
Alcohol Consumption: Binge Drinking^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	10.2%	(±3.4)	9.2%	(±4.7)
Gender				
Male	13.6	(±4.9)	13.0	(±6.8)
Female	6.7	(±4.7)	5.5	(±6.4)
Age				
18–24	5.3	(±17.3)	3.1	(±26.2)
25–34	15.4	(±10.3)	13.9	(±14.8)
35–44	20.4	(±9.1)	20.5	(±13.2)
45–54	7.0	(±7.3)	4.8	(±9.5)
55–64	5.9	(±7.6)	6.0	(±10.6)
65–74	5.6	(±8.8)	----- ^c	
75+	3.0	(±8.9)	-----	
Education				
Less than high school	13.6	(±12.9)	7.5	(±19.2)
High school graduate	9.2	(±5.7)	6.3	(±8.4)
Some college	9.5	(±6.1)	11.0	(±8.4)
College graduate	11.2	(±6.6)	11.4	(±8.3)
Income				
< \$15,000	14.1	(±11.7)	-----	
\$15,000–\$24,999	1.6	(±12.1)	-----	
\$25,000–\$34,999	4.1	(±10.2)	-----	
\$35,000–\$49,999	6.2	(±8.7)	5.9	(±11.9)
\$50,000–\$74,999	17.0	(±7.9)	13.6	(±11.2)
\$75,000–\$99,999	23.2	(±11.0)	-----	
\$100,000+	7.9	(±11.4)	-----	

^aAmong all respondents, the proportion of males who reported having five or more drinks of alcohol on a single occasion on one or more of the past 30 days, and females who reported having four or more drinks of alcohol on a single occasion on one or more of the past 30 days.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Heavy Drinking

An estimated 3.9 percent of adults in the Barry-Eaton district report heavy drinking, that is, on average consuming more than two alcoholic beverages per day for men and more than one alcoholic beverage per day for women. An estimated 4.1 percent of adults in Eaton County report heavy drinking.

In contrast, about 55.2 percent of adults in the Barry-Eaton district report that they did not have any drinks of beer, wine, wine coolers, or liquor in the past 30 days. About 53.2 percent of adults in Eaton County report that they did not have any drinks of beer, wine, wine coolers, or liquor in the past 30 days.

Table 2.11
Alcohol Consumption: Heavy Drinking^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	3.9%	(±3.4)	4.1%	(±4.7)
Gender				
Male	4.6	(±4.9)	4.6	(±6.8)
Female	3.4	(±4.7)	3.6	(±6.4)
Age				
18–24	0	(±17.3)	0	(±26.2)
25–34	7.3	(±10.3)	8.3	(±14.8)
35–44	5.3	(±9.1)	4.7	(±13.2)
45–54	1.9	(±7.3)	2.3	(±9.5)
55–64	5.9	(±7.6)	6.0	(±10.6)
65–74	4.1	(±8.8)	----- ^c	
75+	3.0	(±8.9)	-----	
Education				
Less than high school	6.5	(±12.9)	5.7	(±19.2)
High school graduate	4.6	(±5.7)	4.7	(±8.4)
Some college	2.9	(±6.1)	3.6	(±8.4)
College graduate	3.3	(±6.6)	3.3	(±8.3)
Income				
< \$15,000	12.5	(±11.7)	-----	
\$15,000–\$24,999	3.1	(±12.1)	-----	
\$25,000–\$34,999	2.7	(±10.2)	-----	
\$35,000–\$49,999	2.3	(±8.7)	2.9	(±11.9)
\$50,000–\$74,999	2.3	(±7.9)	1.1	(±11.2)
\$75,000–\$99,999	12.3	(±11.0)	-----	
\$100,000+	1.3	(±11.4)	-----	

^aAmong all respondents, the proportion who reported on average consuming more than two alcoholic beverages per day for men and more than one alcoholic beverage per day for women.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Drinking and Driving

Of those adults in the Barry-Eaton district who drink alcohol, about 3.6 report they have driven when they had too much to drink (once or more in the past 30 days). An estimated 4.3 percent of Eaton County adults who drink report having driven at least once in the past 30 days when they perhaps had too much to drink.

HEALTH CARE AND ACCESS

People who do not have health care coverage are less likely to access health care services, including preventive care, primary care, and tertiary care, and are more likely to delay getting needed medical attention. Behavioral Risk Factor Survey data for Michigan show that people who do not have health care coverage are more likely to have other health risk factors, such as current cigarette smoking and lack of physical activity.

Medical Care

In 2006, an estimated 9.2 percent of adults in the Barry-Eaton district had no health care coverage. An estimated 9.1 percent of adults in Eaton County had no health care coverage.

An estimated 15.1 percent of adults in the Barry-Eaton district as a whole said they did not have someone whom they think of as their personal doctor or health care provider. An estimated 15.6 percent of adults in Eaton County did not have a personal doctor or health care provider.

About 11.4 percent of adults in the Barry-Eaton district report that there was a time in the past year when they needed to see a doctor, physician's assistant, or nurse but did not or could not. Among adults who did not or could not see a doctor, physician's assistant, or nurse, about 25 percent said they were not able to because they could not afford it or were uninsured, followed by 17 percent who said they did not have time or were too busy, and 15 percent who said they were not able to because they could not get an appointment.

An estimated 10.5 percent of adults in Eaton County said there was a time in the past year when they needed to see a doctor or health care provider but did not or could not.

Table 2.12
Health Care Access

	Barry-Eaton District ($\pm 95\%$ CI ^a)		Eaton County ($\pm 95\%$ CI)	
	No health coverage ^b	No personal provider ^c	No health coverage	No personal provider
Total	9.2% (± 3.4)	15.1% (± 3.4)	9.1% (± 4.7)	15.6% (± 4.7)
Gender				
Male	12.4 (± 4.9)	21.5 (± 4.9)	12.4 (± 6.8)	22.0 (± 6.8)
Female	6.1 (± 4.7)	8.7 (± 4.7)	5.8 (± 6.4)	9.4 (± 6.4)
Age				
18–24	25.2 (± 17.3)	43.0 (± 17.3)	25.0 (± 26.2)	50.0 (± 26.2)
25–34	12.4 (± 10.3)	19.7 (± 10.3)	12.3 (± 14.8)	19.2 (± 14.8)
35–44	6.4 (± 9.1)	14.0 (± 9.1)	8.0 (± 13.2)	12.6 (± 13.2)
45–54	8.1 (± 7.3)	6.8 (± 7.3)	7.1 (± 9.5)	7.1 (± 9.5)
55–64	6.7 (± 7.6)	6.8 (± 7.6)	5.9 (± 10.6)	5.9 (± 10.6)
65–74	0 (± 8.8)	5.3 (± 8.8)	----- ^d	-----
75+	0 (± 8.9)	4.5 (± 8.9)	-----	-----
Education				
Less than high school	19.3 (± 12.9)	34.9 (± 12.9)	20.8 (± 19.2)	41.5 (± 19.2)
High school graduate	9.8 (± 5.7)	14.7 (± 5.7)	11.6 (± 8.4)	17.8 (± 8.4)
Some college	7.8 (± 6.1)	11.6 (± 6.1)	7.8 (± 8.4)	8.4 (± 8.4)
College graduate	3.8 (± 6.6)	9.7 (± 6.6)	2.2 (± 8.3)	10.9 (± 8.3)
Income				
< \$15,000	18.3 (± 11.7)	31.0 (± 11.7)	-----	-----
\$15,000–\$24,999	30.8 (± 12.1)	33.8 (± 12.1)	-----	-----
\$25,000–\$34,999	11.8 (± 10.2)	10.5 (± 10.2)	-----	-----
\$35,000–\$49,999	6.9 (± 8.7)	8.5 (± 8.7)	7.4 (± 11.9)	7.4 (± 11.9)
\$50,000–\$74,999	3.9 (± 7.9)	14.1 (± 7.9)	2.3 (± 11.2)	12.5 (± 11.2)
\$75,000–\$99,999	5.6 (± 11.0)	13.7 (± 11.0)	-----	-----
\$100,000+	9.0 (± 11.4)	24.4 (± 11.4)	-----	-----

^aThe margin of error is calculated based on unweighted response data and presented as \pm half of the width of a symmetric 95 percent confidence interval (CI).

^bAmong all respondents, the proportion who reported that they did not have any kind of health care coverage.

^cAmong all respondents, the proportion who reported that they did not have one or more person whom they think of as their personal doctor or health care provider.

^dA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Dental Care

Poor oral health and untreated oral diseases and conditions can have a significant impact on health and quality of life (e.g., needless pain and suffering, decreased economic productivity, and loss of self esteem). Studies have shown a link between periodontal diseases and low birthweight and premature birth, as well as heart disease and stroke.

About 10.4 percent of adults in the Barry-Eaton district report that there was a time in the past year when they needed to see a dentist but could not. Among adults who could not see a dentist when needed, the reason given most often (52.2 percent) was that they could not afford it or were uninsured. About 10.6 percent indicated they did not go to the dentist because they did not have transportation, 3.3 percent said they did not have time or were too busy, and 3.2 percent said they did not go to the dentist because they could not get an appointment.

An estimated 9.2 percent of adults in Eaton County said there was a time in the past year when they needed to see a dentist but could not.

Table 2.13
Access to Dental Care

	Could not see dentist when needed ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	10.4%	(±3.4)	9.2%	(±4.7)
Gender				
Male	8.1	(±4.9)	6.5	(±6.8)
Female	12.8	(±4.7)	11.6	(±6.4)
Age				
18–24	17.4	(±17.3)	18.8	(±26.2)
25–34	14.6	(±10.3)	12.5	(±14.8)
35–44	7.6	(±9.1)	2.3	(±13.2)
45–54	11.3	(±7.3)	12.9	(±9.5)
55–64	8.7	(±7.6)	7.8	(±10.6)
65–74	6.7	(±8.8)	----- ^c	
75+	3.0	(±8.9)	-----	
Education				
Less than high school	17.4	(±12.9)	18.9	(±19.2)
High school graduate	10.6	(±5.7)	9.3	(±8.4)
Some college	11.3	(±6.1)	10.2	(±8.4)
College graduate	3.8	(±6.6)	1.1	(±8.3)
Income				
< \$15,000	31.4	(±11.7)	-----	
\$15,000–\$24,999	23.1	(±12.1)	-----	
\$25,000–\$34,999	22.4	(±10.2)	-----	
\$35,000–\$49,999	10.0	(±8.7)	8.8	(±11.9)
\$50,000–\$74,999	3.9	(±7.9)	1.1	(±11.2)
\$75,000–\$99,999	1.4	(±11.0)	-----	
\$100,000+	1.3	(±11.4)	-----	

^aAmong all respondents, the proportion who reported that there was a time in the past year when they needed to see a dentist but could not.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

WEIGHT STATUS

People who are overweight or obese are at increased risk for high blood pressure, diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. The health outcomes related to these diseases, however, often can be improved through weight loss or, at a minimum, no further weight gain.

Overweight is defined as having a body mass index (BMI) between 25.0 and 29.9. An obese weight status is a BMI greater than or equal to 30.0. The body mass index is defined as weight in kilograms divided by height in meters squared. This is calculated from the self-reported height and weight measurements of adults responding to the Behavioral Risk Factor Survey.

An estimated 28.4 percent of adults in the Barry-Eaton district were obese in 2006, and about 36.5 percent of adults in the Barry-Eaton district were overweight.

An estimated 28.9 percent of adults in Eaton County were obese in 2006, and about 38.1 percent were overweight.

Table 2.14
Weight Status: Obese^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	28.4%	(±3.4)	28.9%	(±4.7)
Gender				
Male	27.9	(±4.9)	26.0	(±6.8)
Female	29.0	(±4.7)	31.4	(±6.4)
Age				
18–24	16.7	(±17.3)	21.9	(±26.2)
25–34	25.8	(±10.3)	26.8	(±14.8)
35–44	29.9	(±9.1)	31.0	(±13.2)
45–54	31.1	(±7.3)	30.0	(±9.5)
55–64	37.9	(±7.6)	----- ^c	(±10.6)
65–74	41.4	(±8.8)	-----	
75+	16.7	(±8.9)	-----	
Education				
Less than high school	33.0	(±12.9)	39.2	(±19.2)
High school graduate	26.1	(±5.7)	22.1	(±8.4)
Some college	30.3	(±6.1)	31.3	(±8.4)
College graduate	24.8	(±6.6)	26.7	(±8.3)
Income				
< \$15,000	54.2	(±11.7)	-----	
\$15,000–\$24,999	28.8	(±12.1)	-----	
\$25,000–\$34,999	35.6	(±10.2)	-----	
\$35,000–\$49,999	30.2	(±8.7)	31.8	(±11.9)
\$50,000–\$74,999	29.4	(±7.9)	34.5	(±11.2)
\$75,000–\$99,999	23.2	(±11.0)	-----	
\$100,000+	13.0	(±11.4)	-----	

^aAmong all respondents, the proportion whose body mass index (BMI) was greater than or equal to 30.0. BMI is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Table 2.15
Weight Status: Overweight^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	36.5%	(±3.4)	38.1%	(±4.7)
Gender				
Male	38.1	(±4.9)	40.0	(±6.8)
Female	34.7	(±4.7)	36.2	(±6.4)
Age				
18–24	40.4	(±17.3)	42.2	(±26.2)
25–34	37.9	(±10.3)	40.8	(±14.8)
35–44	31.1	(±9.1)	32.1	(±13.2)
45–54	39.1	(±7.3)	41.3	(±9.5)
55–64	33.7	(±7.6)	----- ^c	(±10.6)
65–74	37.1	(±8.8)	-----	
75+	39.4	(±8.9)	-----	
Education				
Less than high school	29.2	(±12.9)	31.4	(±19.2)
High school graduate	43.8	(±5.7)	50.0	(±8.4)
Some college	31.6	(±6.1)	31.3	(±8.4)
College graduate	39.3	(±6.6)	39.5	(±8.3)
Income				
< \$15,000	19.4	(±11.7)	-----	
\$15,000–\$24,999	30.3	(±12.1)	-----	
\$25,000–\$34,999	39.7	(±10.2)	-----	
\$35,000–\$49,999	33.3	(±8.7)	33.3	(±11.9)
\$50,000–\$74,999	34.1	(±7.9)	33.3	(±11.2)
\$75,000–\$99,999	34.8	(±11.0)	-----	
\$100,000+	48.1	(±11.4)	-----	

^aAmong all respondents, the proportion whose body mass index (BMI) was between 25.0 and 29.9. BMI is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

NO LEISURE-TIME PHYSICAL ACTIVITY

Regular physical activity reduces the risk of dying of coronary heart disease, the nation's leading cause of death, and also decreases the risk for stroke, colon cancer, diabetes, and high blood pressure. Keeping physically active helps control weight; contributes to healthy bones, muscles, and joints; reduces symptoms of anxiety and depression; and is associated with fewer hospitalizations, physician visits, and medications. The U.S. Centers for Disease Control and Prevention recommends that all adults engage in moderate-intensity physical activity, such as brisk walking, for at least 30 minutes on 5 or more days of the week, or vigorous-intensity physical activity on 3 or more days of the week for 20 or more minutes.

In 2006, about 27.9 percent of adults in the Barry-Eaton district did not participate in any leisure-time physical activity (i.e., physical activities or exercises such as jogging, swimming, bicycling, or walking for exercise) in the past month. An estimated 29.5 percent of adults in Eaton County did not participate in any leisure-time physical activity.

Table 2.16
No Leisure-Time Physical Activity^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	27.9%	(±3.4)	29.5%	(±4.7)
Gender				
Male	27.2	(±4.9)	26.6	(±6.8)
Female	28.4	(±4.7)	32.1	(±6.4)
Age				
18–24	7.9	(±17.3)	12.5	(±26.2)
25–34	26.3	(±10.3)	31.9	(±14.8)
35–44	27.2	(±9.1)	26.7	(±13.2)
45–54	28.1	(±7.3)	30.2	(±9.5)
55–64	32.0	(±7.6)	30.8	(±10.6)
65–74	44.6	(±8.8)	----- ^c	
75+	40.3	(±8.9)	-----	
Education				
Less than high school	39.1	(±12.9)	41.5	(±19.2)
High school graduate	32.1	(±5.7)	32.8	(±8.4)
Some college	23.6	(±6.1)	26.5	(±8.4)
College graduate	20.6	(±6.6)	22.0	(±8.3)
Income				
< \$15,000	38.0	(±11.7)	-----	
\$15,000–\$24,999	47.7	(±12.1)	-----	
\$25,000–\$34,999	38.7	(±10.2)	-----	
\$35,000–\$49,999	39.2	(±8.7)	44.1	(±11.9)
\$50,000–\$74,999	21.3	(±7.9)	25.0	(±11.2)
\$75,000–\$99,999	20.5	(±11.0)	-----	
\$100,000+	11.5	(±11.4)	-----	

^aAmong all respondents, the proportion who reported that during the past month they did not participate in any leisure-time physical activity or exercises such as jogging, swimming, bicycling, or walking.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

NUTRITION

A growing body of research shows that fruits and vegetables are critical to promoting good health. Healthy diets rich in fruits and vegetables may reduce the risk of cancer and other chronic diseases. To get the amount that is recommended, most people need to increase the amount of fruits and vegetables they currently eat every day. *Dietary Guidelines for Americans 2005*, issued jointly by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture, recommends that all people over the age of two years eat 2 cups of fruit *and* 2½ cups of vegetables per day for a 2,000-calorie intake, with higher or lower amounts depending on the daily calorie level.

On average, adults in the Barry-Eaton district eat only 2.9 servings of fruits and vegetables a day. For purposes of this survey, a serving was defined as “a half a cup to one cup—the amount of food you could hold in your cupped hand.” Thus, adults in the Barry-Eaton district report that they eat only 1½ to 3 cups of fruits and vegetables a day on average.

Adults in Eaton County eat an average of 2.9 servings of fruits and vegetables a day.

In the Barry-Eaton district, an estimated 83.1 percent of adults eat less than five servings of fruits and vegetables a day. In Eaton County, about 84 percent of adults eat less than five servings of fruits and vegetables a day.

Table 2.17
Inadequate Fruit and Vegetable Consumption^a

	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	83.1%	(±3.4)	84.0%	(±4.7)
Gender				
Male	88.1	(±4.9)	90.5	(±6.8)
Female	78.1	(±4.7)	77.8	(±6.4)
Age				
18–24	85.0	(±17.3)	89.3	(±26.2)
25–34	84.7	(±10.3)	88.4	(±14.8)
35–44	86.5	(±9.1)	83.7	(±13.2)
45–54	80.5	(±7.3)	79.5	(±9.5)
55–64	79.2	(±7.6)	74.0	(±10.6)
65–74	82.4	(±8.8)	----- ^c	
75+	85.2	(±8.9)	-----	
Education				
Less than high school	82.8	(±12.9)	-----	(±19.2)
High school graduate	85.6	(±5.7)	86.2	(±8.4)
Some college	86.1	(±6.1)	87.2	(±8.4)
College graduate	72.8	(±6.6)	73.3	(±8.3)
Income				
< \$15,000	81.5	(±11.7)	-----	
\$15,000–\$24,999	85.2	(±12.1)	-----	
\$25,000–\$34,999	88.9	(±10.2)	-----	
\$35,000–\$49,999	86.6	(±8.7)	87.9	(±11.9)
\$50,000–\$74,999	81.4	(±7.9)	81.8	(±11.2)
\$75,000–\$99,999	78.9	(±11.0)	-----	
\$100,000+	80.3	(±11.4)	-----	

^aAmong all respondents, the proportion who reported eating less than five servings of fruits and vegetables per day.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

LAND USE

Research has confirmed both physical and mental health benefits of regular physical activity. The built environment, which includes land use patterns, the transportation system, and design features that provide opportunities for travel and physical activity, is one of many variables thought to affect physical activity levels. The availability of safe walkways, bike paths, or walking trails can create a positive environment where physical activity is accessible, safe, affordable, and fun.

People responding to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked how they or any member of their family feel about walking alone in their neighborhood—very safe, somewhat safe, or not safe at all. An estimated 71.9 percent of adults in the Barry-Eaton district said that they, or any member of their household, would feel very safe walking alone in their neighborhood.

An estimated 70 percent of adults in Eaton County said that they, or any member of their household, would feel very safe walking alone in their neighborhood.

Table 2.18
Neighborhood Safety

	Feel very safe walking alone ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	71.9%	(±3.4)	70.0%	(±4.7)
Gender				
Male	79.5	(±4.9)	76.5	(±6.8)
Female	64.5	(±4.7)	63.8	(±6.4)
Age				
18–24	64.3	(±17.3)	57.8	(±26.2)
25–34	79.4	(±10.3)	82.2	(±14.8)
35–44	83.7	(±9.1)	87.2	(±13.2)
45–54	71.4	(±7.3)	69.8	(±9.5)
55–64	66.0	(±7.6)	61.5	(±10.6)
65–74	68.9	(±8.8)	----- ^c	
75+	60.3	(±8.9)	-----	
Education				
Less than high school	48.2	(±12.9)	30.2	(±19.2)
High school graduate	70.9	(±5.7)	70.3	(±8.4)
Some college	74.1	(±6.1)	74.3	(±8.4)
College graduate	86.5	(±6.6)	85.7	(±8.3)
Income				
< \$15,000	46.5	(±11.7)	-----	
\$15,000–\$24,999	47.7	(±12.1)	-----	
\$25,000–\$34,999	69.7	(±10.2)	-----	
\$35,000–\$49,999	76.3	(±8.7)	75.0	(±11.9)
\$50,000–\$74,999	79.7	(±7.9)	80.7	(±11.2)
\$75,000–\$99,999	82.2	(±11.0)	-----	
\$100,000+	81.0	(±11.4)	-----	

^aAmong all respondents, the proportion who report that they or any member of their household would feel “very safe” walking alone in their neighborhood.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Respondents to the Barry-Eaton District Health Department Behavioral Risk Factor Survey were asked whether there are safe walkways, bike paths, or walking trails in their community, and whether there are “a lot” or “a little.” An estimated 40.3 percent of adults in the Barry-Eaton district report that there are “a lot” of safe walkways, bike paths, or walking trails in their community. An estimated 29.7 percent of adults report that there are *no* safe walkways, bike paths, or walking trails in their community.

An estimated 45.5 percent of adults in Eaton County report that there are “a lot” of safe walkways, bike paths, or walking trails in their community.

Table 2.19
Availability of Safe Walkways, Bike Paths, and Walking Trails

	“A lot” of safe walkways, bike paths, or walking trails ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	40.3%	(±3.4)	45.5%	(±4.7)
Gender				
Male	39.6	(±4.9)	44.0	(±6.8)
Female	41.1	(±4.7)	46.9	(±6.4)
Age				
18–24	48.2	(±17.3)	53.1	(±26.2)
25–34	43.1	(±10.3)	51.4	(±14.8)
35–44	55.5	(±9.1)	66.3	(±13.2)
45–54	36.4	(±7.3)	40.0	(±9.5)
55–64	29.8	(±7.6)	32.7	(±10.6)
65–74	35.1	(±8.8)	----- ^c	
75+	16.2	(±8.9)	-----	
Education				
Less than high school	36.4	(±12.9)	36.5	(±19.2)
High school graduate	36.6	(±5.7)	39.8	(±8.4)
Some college	40.6	(±6.1)	48.8	(±8.4)
College graduate	49.4	(±6.6)	54.3	(±8.3)
Income				
< \$15,000	43.7	(±11.7)	-----	
\$15,000–\$24,999	18.2	(±12.1)	-----	
\$25,000–\$34,999	30.3	(±10.2)	-----	
\$35,000–\$49,999	41.9	(±8.7)	45.6	(±11.9)
\$50,000–\$74,999	44.4	(±7.9)	52.3	(±11.2)
\$75,000–\$99,999	43.1	(±11.0)	-----	
\$100,000+	51.9	(±11.4)	-----	

^aAmong all respondents, the proportion who report that there are “a lot” of safe walkways, bike paths, or walking trails in their community.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Every year, communities experience change from one form of land use to another. For example, a forested area may be converted into a new housing development or an abandoned lot is converted into a playground. Respondents were asked if they felt that overall land use changes have had a positive, negative, or neutral effect on their quality of life. An estimated 27.2 percent of adults in the Barry-Eaton district said that overall land use changes have had a positive effect. About 52.6 percent of adults said the effect has been neutral, and 13.5 percent said the effect has been negative.

An estimated 26.5 percent of adults in Eaton County said that overall land use changes have had a positive effect.

Table 2.20
Land Use

	Positive effect of land use changes ^a			
	Barry-Eaton District (±95% CI) ^b		Eaton County (±95% CI)	
Total	27.2%	(±3.4)	26.5%	(±4.7)
Gender				
Male	25.6	(±4.9)	24.2	(±6.8)
Female	28.8	(±4.7)	28.9	(±6.4)
Age				
18–24	35.7	(±17.3)	38.5	(±26.2)
25–34	33.6	(±10.3)	34.7	(±14.8)
35–44	23.8	(±9.1)	17.4	(±13.2)
45–54	23.0	(±7.3)	22.4	(±9.5)
55–64	25.2	(±7.6)	24.0	(±10.6)
65–74	27.0	(±8.8)	----- ^c	
75+	28.4	(±8.9)	-----	
Education				
Less than high school	28.8	(±12.9)	26.4	(±19.2)
High school graduate	26.8	(±5.7)	26.4	(±8.4)
Some college	27.6	(±6.1)	27.5	(±8.4)
College graduate	25.8	(±6.6)	25.0	(±8.3)
Income				
< \$15,000	45.1	(±11.7)	-----	
\$15,000–\$24,999	23.1	(±12.1)	-----	
\$25,000–\$34,999	15.8	(±10.2)	-----	
\$35,000–\$49,999	33.1	(±8.7)	30.4	(±11.9)
\$50,000–\$74,999	25.4	(±7.9)	27.3	(±11.2)
\$75,000–\$99,999	25.4	(±11.0)	-----	
\$100,000+	36.7	(±11.4)	-----	

^aAmong all respondents, the proportion who feel that overall land use changes have had a positive effect on the quality of their life.

^bThe margin of error is calculated based on unweighted response data and presented as ± half of the width of a symmetric 95 percent confidence interval (CI).

^cA prevalence estimate is not available; the denominator in the weighted response for this subgroup was less than 50.

Methodology

In 2006 the Barry-Eaton District Health Department, with the support of several community partners, contracted for a survey of the adult population in Barry and Eaton counties on various behaviors, medical conditions, and preventive health care practices, as well as some perceptions on land use. The survey was conducted using the behavioral risk factor portion of the Capital Area Behavioral Risk Factor and Social Capital survey instrument, which uses questions from the Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System questionnaire, as well as questions developed by the Ingham County Health Department to collect information of interest to the local community.

DATA COLLECTION

A disproportionate stratified sample was utilized in the 2006 Behavioral Risk Factor Survey (BRFS). This approach was used to ensure a sufficient sample size (at least N=400) in each county. Households were contacted through random-digit-dialed methodology (RDD) to ensure that all possible telephone numbers in a working block with at least one directory-listed number has an equal probability of selection. Telephone numbers where no contact was made were called up to 10 times before being taken out of the calling rotation. When this occurred, it was replaced by a replicate telephone number (i.e., one within the same working block as the one that was removed) to ensure parity.

The cooperation rate for this study was 62 percent. This rate is computed using the American Association for Public Opinion Research (AAPOR) definitions, which compute the number of completed interviews as a proportion of the total number of eligible households contacted.

DATA PROCESSING

Margin of Error and Confidence Interval

A total of 842 adults in the district responded to the telephone survey, resulting in an overall margin of error of ± 3.4 percent. Margins of error for subgroups analyzed in this report will be higher and vary depending on sample size. For the purposes of this report, margins of error for subgroup analysis were calculated using the total number of respondents in each of the subgroups of interest rather than the total number of that subgroup who answered the question. For analyzing subgroup comparisons and interpreting the 95 percent confidence interval, the following method was used: if two intervals do not overlap then they are probably statistically different from one another; if they overlap, then we cannot interpret the observed difference in the estimates as statistically different. Chi-square was used to confirm whether observed differences in estimates are statistically significant. These tests were used to guide the presentation of results, but they are not included in this report.

When comparing the Barry-Eaton district to either of its member counties, the margins of error (and thus any conclusions about observed differences) must be used cautiously since the two data sets represent overlapping geographies and, as such, are not statistically independent.

Weighting

Because random sampling assumes an equal probability of selection into the final sample, it is important to adjust sample estimates when this assumption is not met, or when over-sampling of specific groups are sought to allow for subgroup analysis. No matter how carefully a population is sampled, bias can be introduced into a sample due to non-response and non-coverage of particular subgroups (i.e., age and education). Therefore, weighting is employed to adjust for the known differences between fixed characteristics of the sample and the population. Cases in the 2006

BRFS data set are weighted using Census 2000 data. While more current data are available through the American Community Survey (ACS), data are not available for all counties included in the BRFS since the most recent ACS collects and reports data only for places with populations of 100,000 or greater. Therefore, Census data were used for consistency.

For analysis of the overall district, a county weight was created to adjust for the disproportionate stratified sample of counties; this was combined with a post-stratification weight for age and education for each county to create the final weight for district level, aggregate frequencies, and cross-tabulations. For analysis of Barry and Eaton counties, a county-level weight was created that provides an adjustment for each county by age and education.

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