

# **STATE OF THE COMMUNITY'S HEALTH**

Polk County, Missouri

2011

Prepared by:

Stefanie Smith

University of Missouri-Columbia, Public Health Intern

&

Michelle Morris

Polk County Health Center- Administrator

## **Chapter 1**

### **Demographic Characteristics**

From 2000 to 2010 Polk County increased in population by 4,145. Between the years 2000 and 2010, the population rose from 26,992 to 31,137. Presently, the county seat has a population of 10,563. Within Polk County's population, many demographic changes have occurred. A knowledge and understanding of these demographic changes is important for health services development and delivery as it allows for planning and targeting services.

#### ***Polk County Population Trends***

The population of Polk County has experienced increased growth over the past several decades; Table 1.1 demonstrates the population of Polk County and Missouri from 1980 to 2010. Presently, the total population of Polk County is 31,137 and the total population for the state of Missouri is 6,011,741. Table 1.2 demonstrates the population percentage of change for both Polk County and Missouri. According to Table 1.2, Polk County's population has grown more rapidly than the state of Missouri's population. In fact, since 1990, Polk County has grown at double the rate of the state of Missouri.

Causes of the increase in Polk County population are due to natural increase and net migration. The net migration into the county, both from international areas and national areas, in 2008/2009 was 201 people. There were 414 births and 321 deaths, leading to a net natural increase of 93.

**Table 1.1**

<b>Population- Polk County and Missouri</b>				
<b>Year</b>	<b>2010</b>	<b>2000</b>	<b>1990</b>	<b>1980</b>
<b>Polk County</b>	31,137	26,992	21,826	18,882
<b>Bolivar</b>	10,563	9,143	6,845	5,919
<b>Missouri</b>	6,011,741	5,595,211	5,117,073	4,916,766

*Source : U.S. Census Bureau, Census 2010, Census 2000, Census 1990, Stats Indiana*

**Table 1.2**

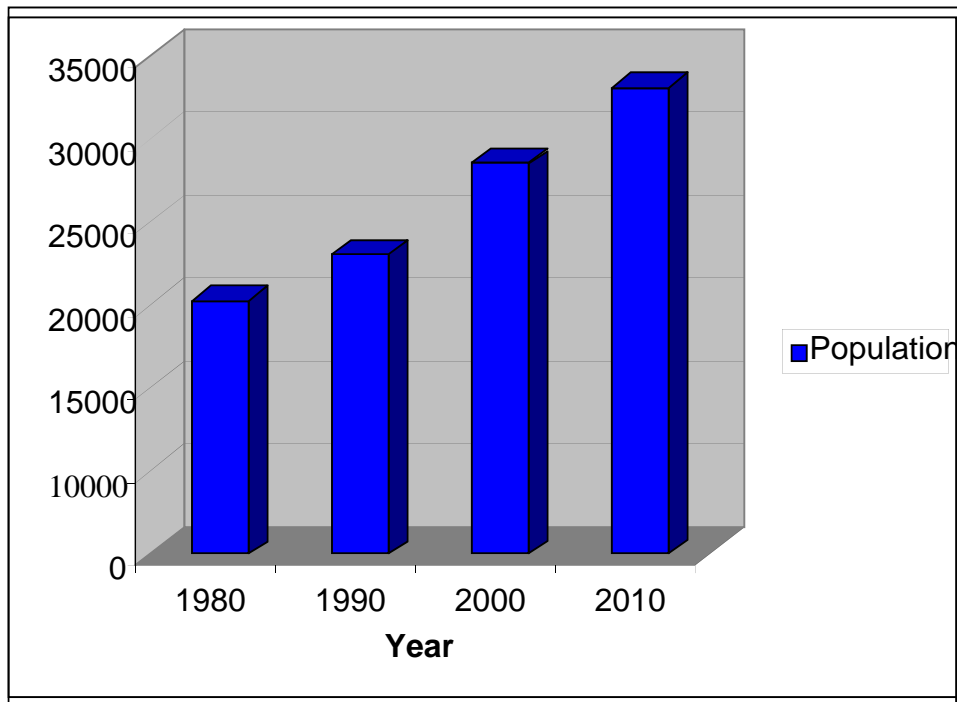
<b>Population- Percentage of Change</b>			
<b>Year</b>	<b>2000-2010</b>	<b>1990-2000</b>	<b>1980-1990</b>
<b>Polk County</b>	8.8%	19.1%	13.5%
<b>Missouri</b>	4.2%	8.5%	3.9%

*Source : U.S. Census Bureau, Census 2010, Census 2000, Census 1990, Stats Indiana*

Figure 1.1 allows for examination of the population growth of Polk County. The present population of Polk County is 31,137.

**Figure 1.1**

**Population Increase by Decade, Polk County 1980-2010**



*Source : U.S. Census Bureau, Census 2010, Census 2000, Census 1990, Stats Indiana*

Table 1.3 allows for examination of the urban and rural populations of Polk County. It seems apparent that nearly half the population lives in urban areas while the other half of the population lives in unincorporated areas (e.g., a region of land that is not a part of any municipality).

**Table 1.3**

<b>Place of Residence- Polk County 2010</b>	
<b>Urban (&gt;25,000)</b>	35.7%
<b>Urban (&lt;25,000)</b>	9.5%
<b>Unincorporated Areas</b>	54.8%

*Source : U.S. Census Bureau, Census 2010*

***Age Distribution***

Data indicating the age composition of Polk County and Missouri is shown in Table 1.4. Figure 1.2 represents the population percentages of each age group. Polk County residents 65 and older comprised 15.9% of the county's population compared to 13.3% statewide. The proportion of young people under 18 in the county (24.4%) was comparable to the state (24.2%). It is also important to note that in Polk County the 18-24 years age group is higher (11.1%) than state (9.9%). One reason for this difference may be the presence of a University (Southwest Baptist University) located within Polk County.

Population aging refers a rise in the median age of a particular population. It seems apparent that most areas in the United States are experiencing this rise. Polk County has a median age of 35.6. It will be important to be mindful of this age group over the next 3 decades as they will be 65 years old. Table 1.4 shows the number of individuals in age groups for the year 2009.

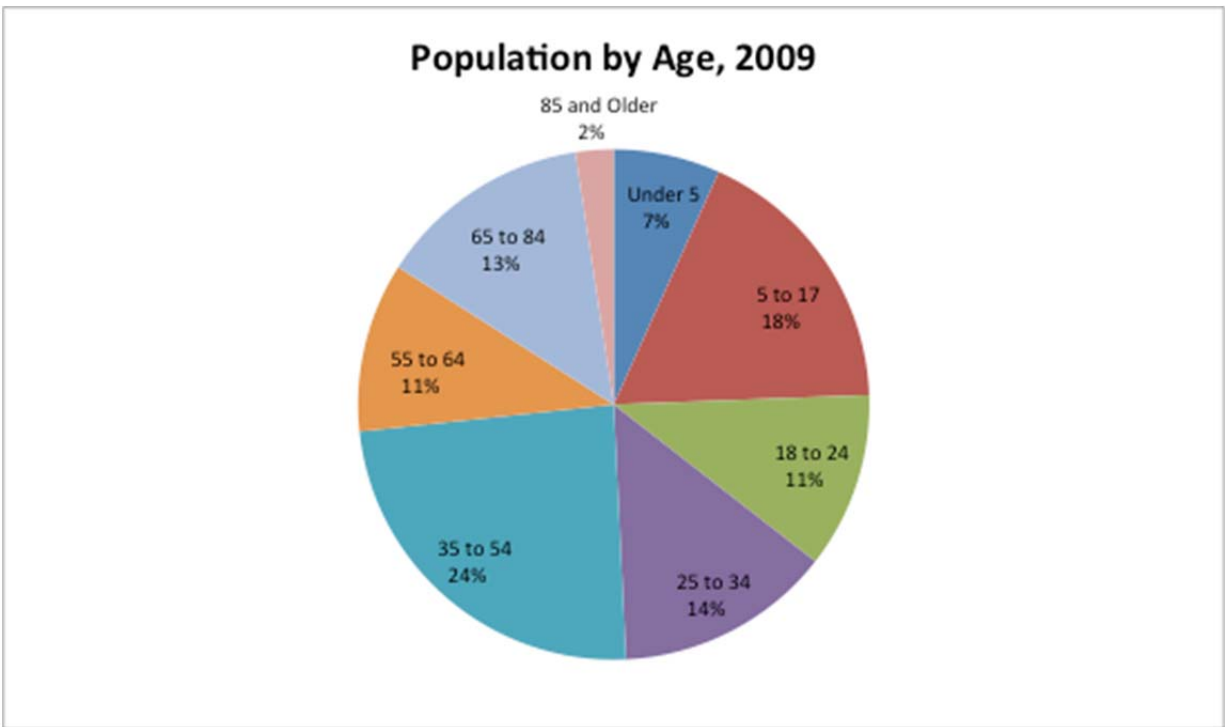
**Table 1.4**

<b>Age Composition of Population- Polk County and Missouri, 2009</b>							
	<b>Total Number</b>	<b>&lt;18</b>	<b>18-24</b>	<b>24-44</b>	<b>45-64</b>	<b>65 and Over</b>	<b>Median Age</b>
<b>Polk County</b>	30,626	7,493	3,392	7,669	7,190	4,882	35.6
<b>Missouri</b>	5,987,580	1,431,338	592,454	1,554,391	1,586,972	822,425	37.4

*Source: Missouri Census Data Center, Census 2010*

**Figure 1.2**

**Age Distribution of Population- Polk County and Missouri, 2009**



*Source: Missouri Census Data Center, Census 2010*

**Table 1.5****Age Distribution of Population- Polk County, 2009**

<b>Age Groups</b>	<b>Number</b>	<b>%</b>
<b>00-04</b>	2,067	<b>6.7</b>
<b>05-09</b>	2,053	<b>6.7</b>
<b>10-14</b>	2,143	<b>7</b>
<b>15-19</b>	2,345	<b>7.7</b>
<b>20-24</b>	2,277	<b>7.4</b>
<b>25-29</b>	2,216	<b>7.2</b>
<b>30-34</b>	1,977	<b>6.5</b>
<b>35-39</b>	1,745	<b>5.7</b>
<b>40-44</b>	1,731	<b>5.7</b>
<b>45-49</b>	2,066	<b>6.7</b>
<b>50-54</b>	1,833	<b>6</b>
<b>55-59</b>	1,740	<b>5.7</b>
<b>60-64</b>	1,551	<b>5.1</b>
<b>65-69</b>	1,348	<b>4.4</b>
<b>70-74</b>	1,078	<b>3.5</b>
<b>75-79</b>	986	<b>3.2</b>
<b>80-84</b>	735	<b>2.4</b>
<b>85+</b>	<b>735</b>	<b>2.4</b>

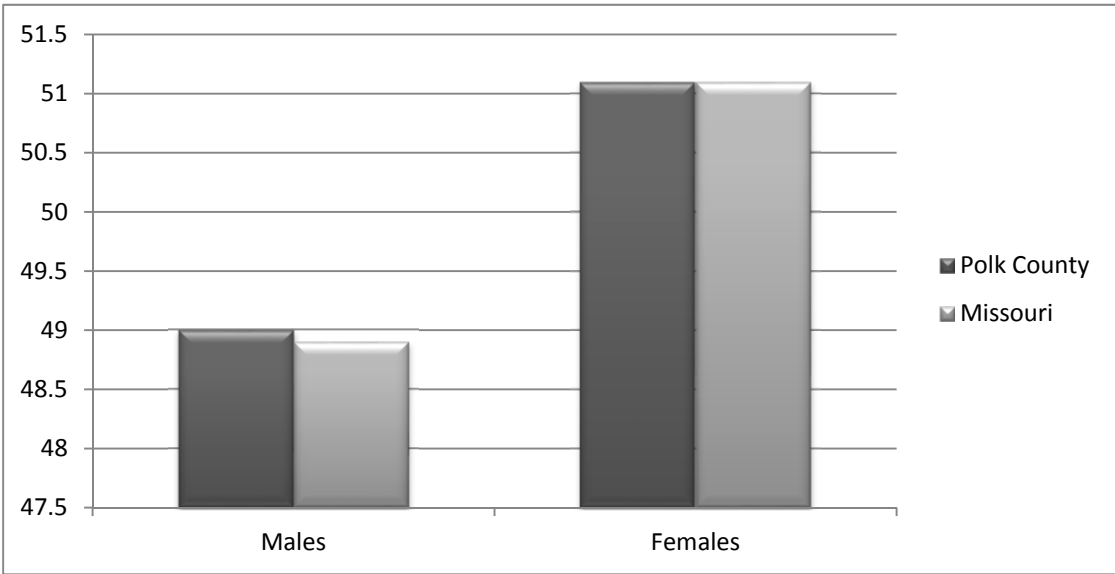
*Source: Missouri Census Data Center, Census 2010*

**Gender Distribution**

Female to Male proportion is comparable for both Polk County and Missouri. Females comprise 51.3 % of the total population in Polk County while males comprise of 48.7% of the population as the data in Figure 1.3 indicates.

**Figure 1.3**

**Percent of Total Population- Polk County and Missouri**



*Source: Missouri Census Data Center, Census 2010*

**Households and Family Characteristics**

In 2009, there were 11,003 households in Polk County, according to the US Census Bureau. Of these households, 34.3% are married couples and 23.8% were married couples with children, both higher than the state average. The number of single parent households was lower than the state of Missouri, at 7.8% compared to 9.5%, but has increased by 1% over the past 9 years. Both number of non-family households and the number of persons living alone are lower than the state average.



**Table 1.6**

**Housing Data by Household Type- Polk County and Missouri, 2009**

Subject	Polk County		Missouri	
	Number	Percentage	Number	Percentage
<b>Total Households</b>	<b>11,003</b>		<b>2,322,238</b>	
<b>Families</b>	<b>7,865</b>	<b>71.5</b>	<b>n/a</b>	<b>66</b>
<b>Married Couples</b>	<b>3774</b>	<b>34.3</b>	<b>n/a</b>	<b>29.6</b>
<b>Married Couples w/ own children &lt;18</b>	<b>2,623</b>	<b>23.8</b>	<b>n/a</b>	<b>20.3</b>
<b>Single Parent Families</b>	<b>858</b>	<b>7.8</b>	<b>n/a</b>	<b>9.5</b>
<b>Single Mothers</b>	<b>469</b>	<b>4.7</b>	<b>n/a</b>	<b>7.0</b>
<b>Other Families</b>	<b>610</b>	<b>5.5</b>	<b>n/a</b>	<b>6.5</b>
<b>Non-family Households</b>	<b>3,138</b>	<b>28.5</b>	<b>n/a</b>	<b>34</b>
<b>Persons Living Alone</b>	<b>2,676</b>	<b>24.3</b>	<b>n/a</b>	<b>28.3</b>

*Source : U.S. Census Bureau, Census 2010, Stats Indiana*

***Ethnic and Racial Characteristics***

The ethnic and racial composition of Polk County has changed little over time. Table 1.7 shows the number and percentages of ethnic and racial groups in Polk County and Missouri. Whites represent 97.5% of the population as compared to the state rate of 85.5%. Blacks, American Indian/Alaska Natives, and Asian/Pacific Islanders remain low (<1.1%). The Hispanic population is 1.8% in Polk County.

Polk County (0.8%) has significantly less Blacks than the state (12%). Polk County however remains comparable to the state in the numbers of other minorities.

**Table 1.7**

<b>Population by Race and Ethnicity- Polk County &amp; Missouri, 2009</b>			
	<b>Polk County</b>		<b>Missouri</b>
	<b>Number</b>	<b>Percentage</b>	<b>Percentage</b>
<b>White</b>	29,324	97.5	85.5
<b>Black</b>	333	1.1	12
<b>Am Indian and Alaska Native</b>	253	.8	0.6
<b>Asian and Pacific Islander</b>	156	.5	1.8
<b>Hispanic</b>	560	1.8	3.5

*Source: Missouri Census Data Center, Census 2010*

## ***Review of Demographic Indicators***

- In ten years, the population of Polk County has increased by 4,145 people (8.8% increase).
- In 2010, 15.9% of Polk County residents were 65 years or older and 24.4% were 18 years or younger.
- 97.5% of Polk County's population is White, 1.8% is Hispanic, 0.8% is American Indian, 0.5% is Asian, and 0.8% is Black.
- 54.8% of Polk County's population lives in un-incorporated areas.

***Resource List***

**U.S. Census Bureau**

**Website: <http://www.census.gov>**

**Missouri Census Data Center**

**Website: <http://mcdc.missouri.edu/>**

**Missouri Office of Social and Economic Data Analysis**

**Website: <http://www.oseda.missouri.edu>**

## Chapter 2

### **Socioeconomic Issues**

It is highly probable that factors such as low educational levels, illiteracy, and income levels contribute to increased health risks for some community members. In the following section, socioeconomic issues, income characteristics essential to identifying health needs, and planning health programs will be discussed. Specifically, the areas of income, poverty, education attainment, and employment will be discussed.

#### ***Income Characteristics***

Table 2.1 lists the median household income and per capita income for 2009 compared to 2005 for Polk County residents. According to the table Polk County is significantly lower than the state in all income characteristics.

**Table 2.1**

<b>Income Characteristics- Polk County and Missouri, 2005-2009</b>		
	<b>Polk County</b>	<b>Missouri</b>
<b>Median Household Income, 2005</b>	\$33,303	\$41,946
<b>Median Family Income, 2009</b>	\$35,652	\$45,149
<b>Per Capita Income, 2005</b>	\$21,896	\$31,231
<b>Per Capita Income, 2009</b>	\$17,596	\$24,423

*Source: Missouri Data Center, U.S. Census Bureau, 2010 Income Estimates*

Table 2.2 lists the percent population in income ranges for Polk County and Missouri. The majority of the population in Polk County reported income above \$20,000 (79.3%). However, 13.3% of the population in Polk County reported income below \$20,000. The mean family income in Polk County is \$41,767 and the mean family income in Missouri is \$58,046. According to Table 2.2, Missouri fairs higher family incomes than Polk County.

**Table 2.2**

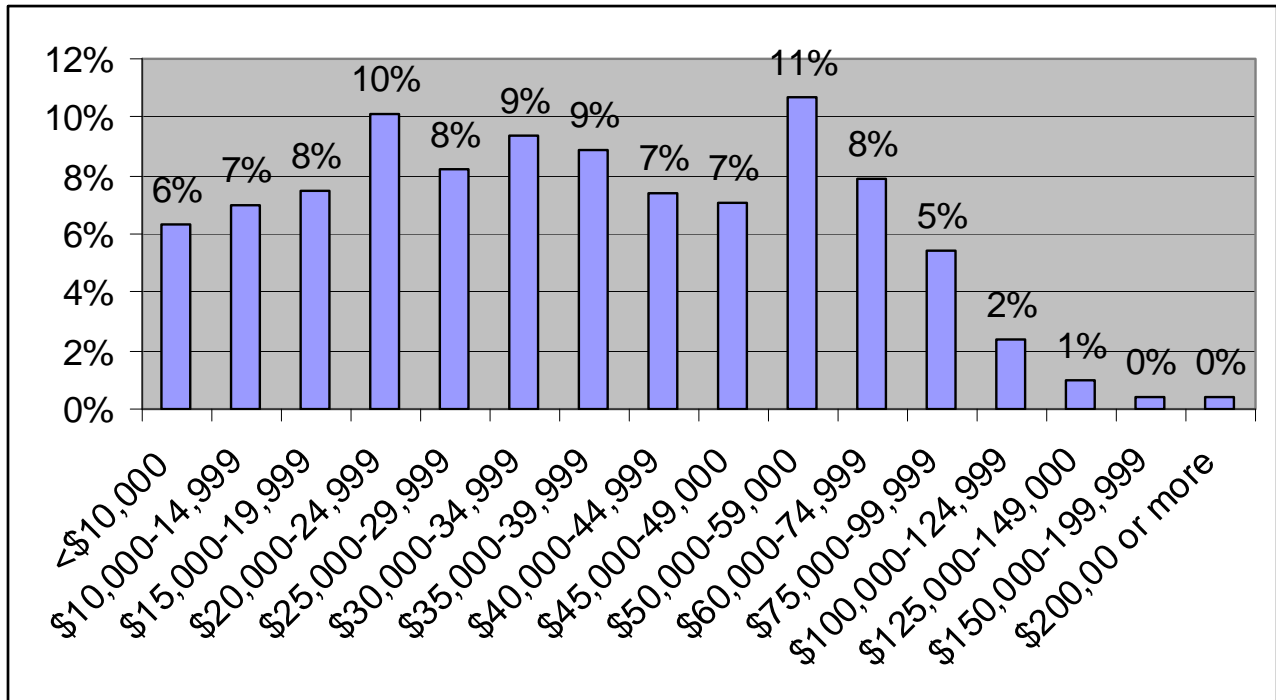
<b>Percent of Households in Income Ranges-Polk County and Missouri, 2000</b>					
	<b>&lt;\$10,000</b>	<b>\$10,000- 14,999</b>	<b>\$15,000- 19,000</b>	<b>\$20,000- 49,999</b>	<b>\$50,000 or More</b>
<b>Polk County</b>	6.3%	7.0%	7.5%	51.1%	28.2%
<b>Missouri</b>	5.5%	4.5%	5.5%	38.9%	45.6%

*Source: U.S. Census Bureau, Census 2000.*

Figure 2.1 illustrates the income distribution for households in Polk County. Household income represents the total income for members of a household regardless of relationship. This figure shows that 57% of households have incomes below \$40,000.

**Figure 2.1**

**Percent of Households in Income Ranges- Polk County, 2000**



Source : U.S. Census Bureau, Census, 2000.

**Poverty Characteristics**

The Federal Poverty Guidelines are used to define poverty for families based on family size. These guidelines are found in Table 2.3.

**Table 2.3**

<b>Federal Poverty Guidelines</b>		
	<b>Year 2000</b>	<b>Year 2010</b>
<b>1</b>	<b>\$8,350</b>	<b>\$10,830</b>
<b>2</b>	<b>\$11,250</b>	<b>\$14,570</b>
<b>3</b>	<b>\$14,150</b>	<b>\$18,310</b>
<b>4</b>	<b>\$17,050</b>	<b>\$22,050</b>
<b>5</b>	<b>\$19,950</b>	<b>\$25,790</b>
<b>6</b>	<b>\$22,850</b>	<b>\$29,530</b>
<b>7</b>	<b>\$25,750</b>	<b>\$33,270</b>
<b>8</b>	<b>\$28,650</b>	<b>\$37,010</b>
<b>Each Additional Person Add:</b>	<b>\$2,900</b>	<b>\$3,740</b>

*Source: Federal Register, 2010*

In 2009, 22.8% (6,982) of people in Polk County were living below poverty. This represents 6.5% increase since 2000. Table 2.4 shows the number of people living below poverty in both Polk County and Missouri. Both the county and state have increases in the number of individuals who are living in poverty.



**Table 2.4**

<b>Population below Poverty- Polk County and Missouri, 2000 &amp; 2009</b>			
	<b>Polk County</b>		<b>Missouri</b>
	<b>Number</b>	<b>Percent</b>	<b>Percent</b>
<b>2000</b>	<b>4,142</b>	<b>16.3%</b>	<b>11.7%</b>
<b>2009</b>	<b>6,982</b>	<b>22.8%</b>	<b>14.6%</b>

*Source: US Census Bureau, Census 2010*

Table 2.5 presents the number of children living below poverty in both Polk County and Missouri. Both the county and state have increased in the number of children who are living in poverty from 2000 to 2009. For example, 33.1% (2,480) of children in Polk County are living in poverty as compared to 20.3% for the state.

**Table 2.5**

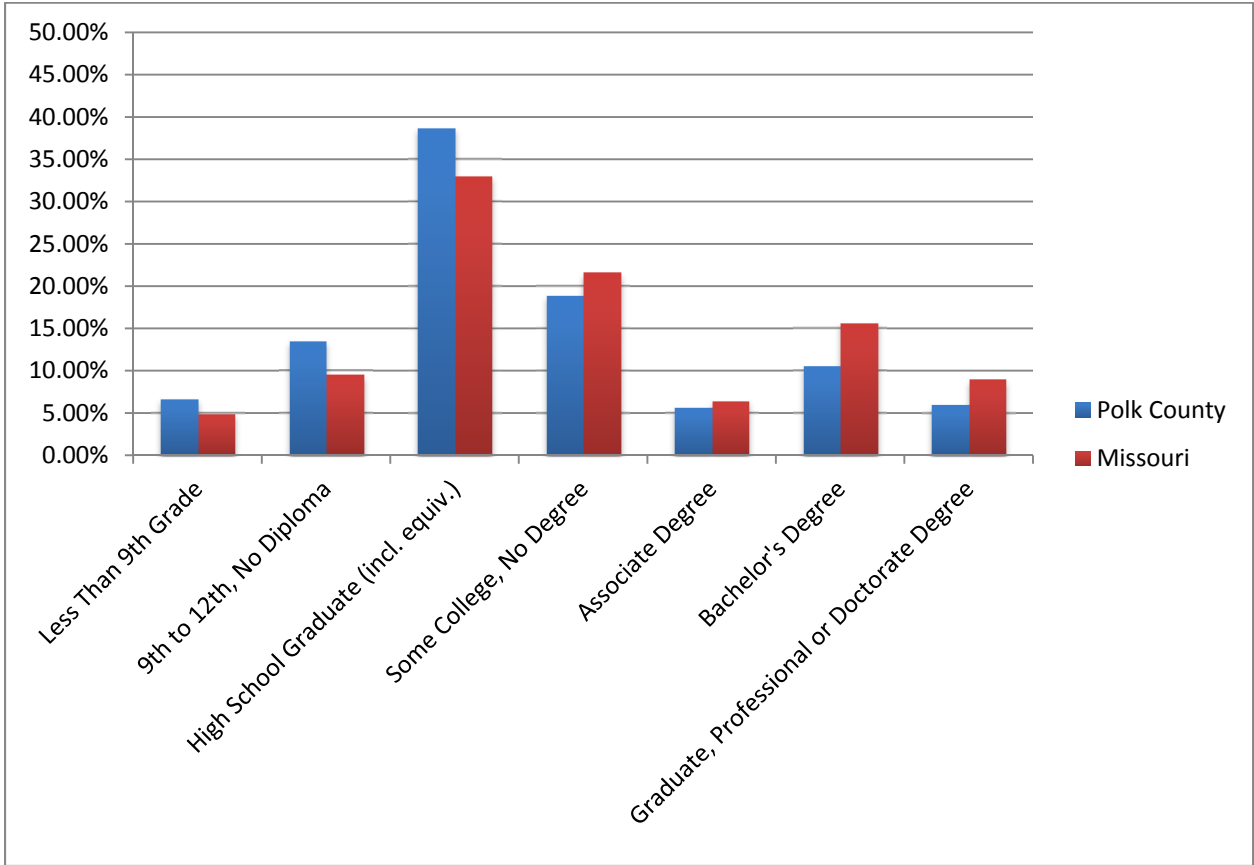
<b>Population (&lt;18 years old) below Poverty- Polk County and Missouri, 2000 &amp; 2009</b>			
	<b>Polk County</b>		<b>Missouri</b>
	<b>Number</b>	<b>Percent</b>	<b>Percent</b>
<b>2000</b>	<b>1,345</b>	<b>20.0%</b>	<b>15.3%</b>
<b>2009</b>	<b>2,480</b>	<b>33.1%</b>	<b>20.3%</b>

*Source: U.S. Census Bureau, Census 2010, Stats Indiana*

**Education Characteristics**

Figure 2.2 shows the highest achieved education levels of residents of Polk County and compares it to the state education levels. As you can see, Polk County had a higher number of high school graduates than the state. This is probably due to the high graduation rate of Polk County, which was 92.2% in 2009, as compared to the state rate of 85.2 in the same year. The number of people with a college degree or higher is lower than the state average, however.

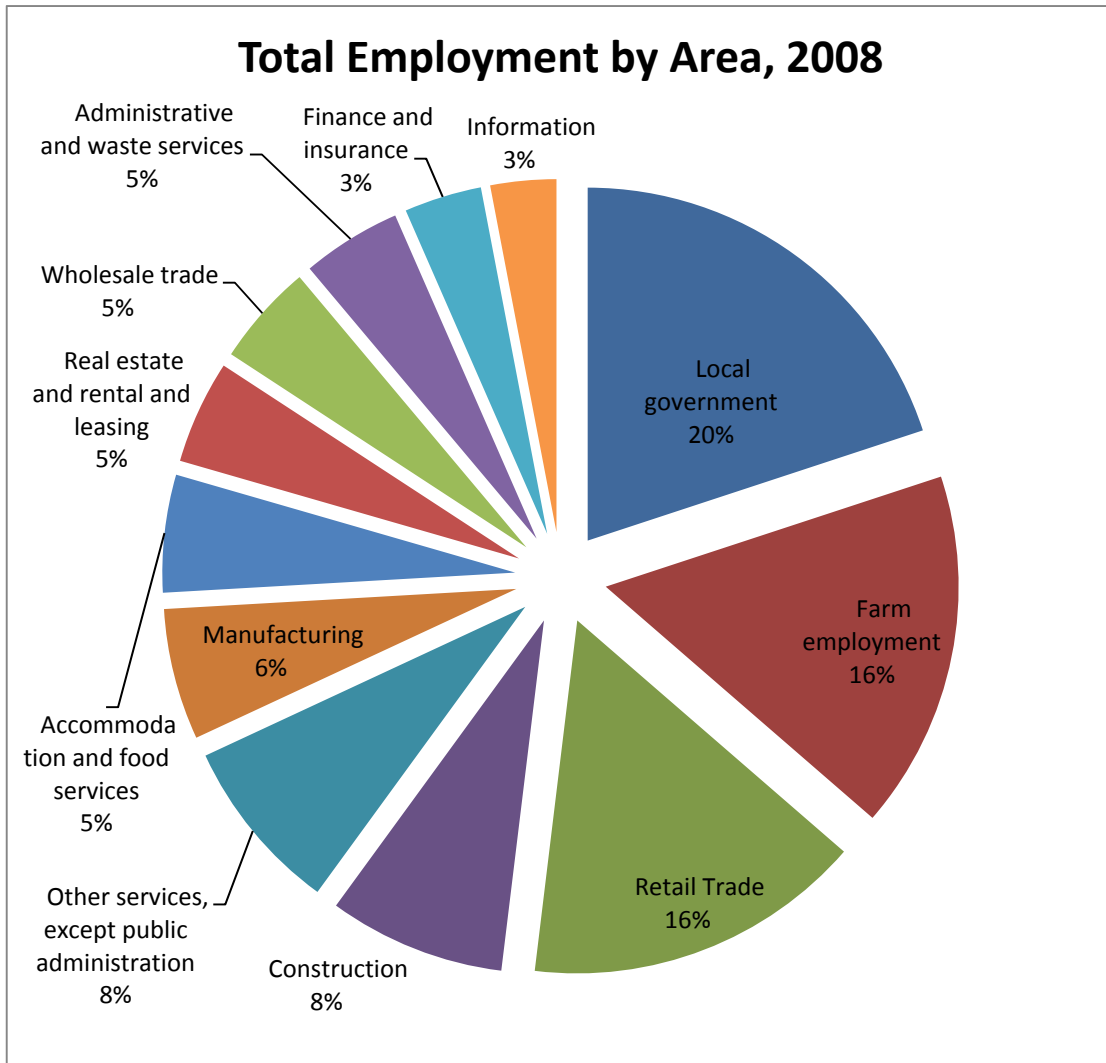
Figure 2.2



### ***Employment Characteristics***

Figure 2.3 depicts the areas of employment for both Polk County and Missouri. The largest employer in the area is the local government, with approximately 20% of the workforce in that area. Farm employment is also a major source of revenue for Polk County, as they are a rural area that is well suited to raising cattle and other livestock. Polk County ranks among the top 5 counties in Missouri for both beef and dairy production. Another major employer is the retail trade business sector. Information and finance and insurance are the lowest employment areas, with only 3% total employment in each, respectively.

Figure 2.3



The most common industries in Polk County are:

- Construction (12%)
- Agriculture, forestry, fishing and hunting (9%)
- Educational services (8%)
- Truck transportation (7%)
- Transportation equipment (5%)
- Health care (4%)
- Repair and maintenance (4%)

The unemployment rate for Polk County is 9.9% compared to the state rate of 9.6%.

Table 2.6 illustrates both county and state unemployment rates for 2005, 2009 and 2010.

**Table 2.6**

**Unemployment Rate- Polk County and Missouri, 1997-2010**

	<b>Polk County</b>	<b>Missouri</b>
<b>2005</b>	<b>4.8%</b>	<b>5.4%</b>
<b>2009</b>	<b>10.1%</b>	<b>9.3</b>
<b>2010</b>	<b>9.9%</b>	<b>9.6%</b>

*Source: Missouri Kids Count 2010*

### ***Summary of Socioeconomic Indicators***

- Unemployment for Polk County reached a high of 10.1% in 2009 and dropped to 9.9% in 2010. Both years above the state rate.
- High school graduation rate for Polk County for 2009 is 92.2% above the state rate of 89.9%.
- 20.8% of families are single parent families in Polk County.
- The median family income in Polk County is \$35,652 in 2010.
- The poverty rate for Polk County is 33.1%.

***Resource List***

**U.S. Census Bureau**

**Website: <http://www.census.gov>**

**Missouri Census Data Center**

**Website: <http://mcdc.missouri.edu/>**

**Missouri Office of Social and Economic Data Analysis**

**Website: <http://www.oseda.missouri.edu>**

**U.S. Department of Labor, Bureau Statistics**

**Website: <http://www.bls.gov>**

## **Chapter 3**

### **Maternal and Child Health**

The health of a nation is often judged by the health status of its mothers and infants. The effects of health extend from one generation to the next and this is particularly evident during pregnancy. Research has shown that poor health of a woman during her pregnancy can impair the health status of her child even after her child has become an adult.

The purpose of this section will be to provide an overview of key components of maternal, infant, and child health and the risk factors that contribute to ill health and poor outcomes. In addition to infant mortality rate, these indicators include important messages of increased risk of death and disability such as incidence of low birth weight and receipt of prenatal care. Early childhood mortality and abuse/neglect indicators will also be considered in this section.

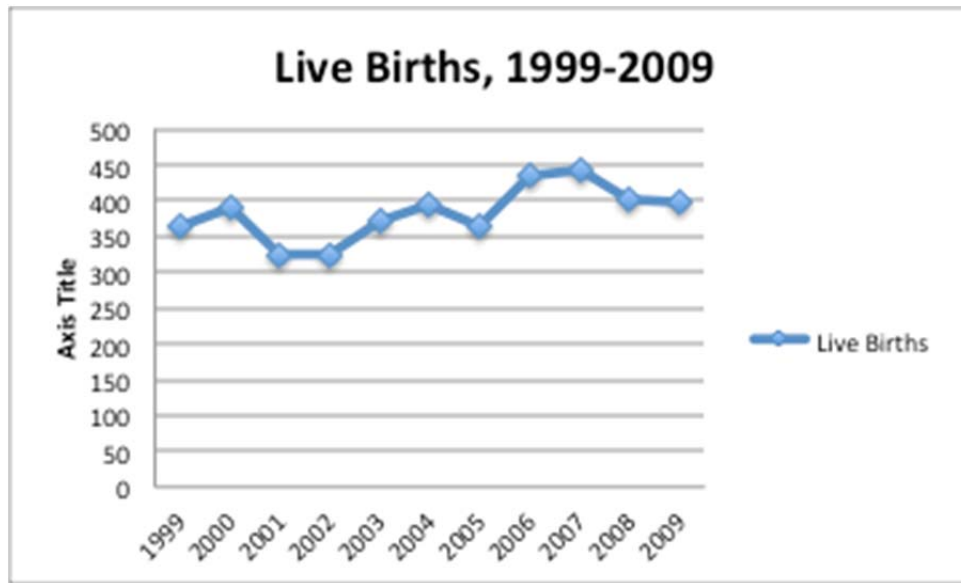
#### ***Birth Rates and Deaths***

Figure 3.1 displays the trend of live births from 1999 to 2009. The birth rate has remained relatively stable between 300 and 400 from 1999 to 2005. In 2006 and 2007 there was a slight increase in the number of live births, but has dropped back to about 400 per year for 2008 and 2009.



Figure 3.1

Number of Live Birth's- Polk County, 1997-2006



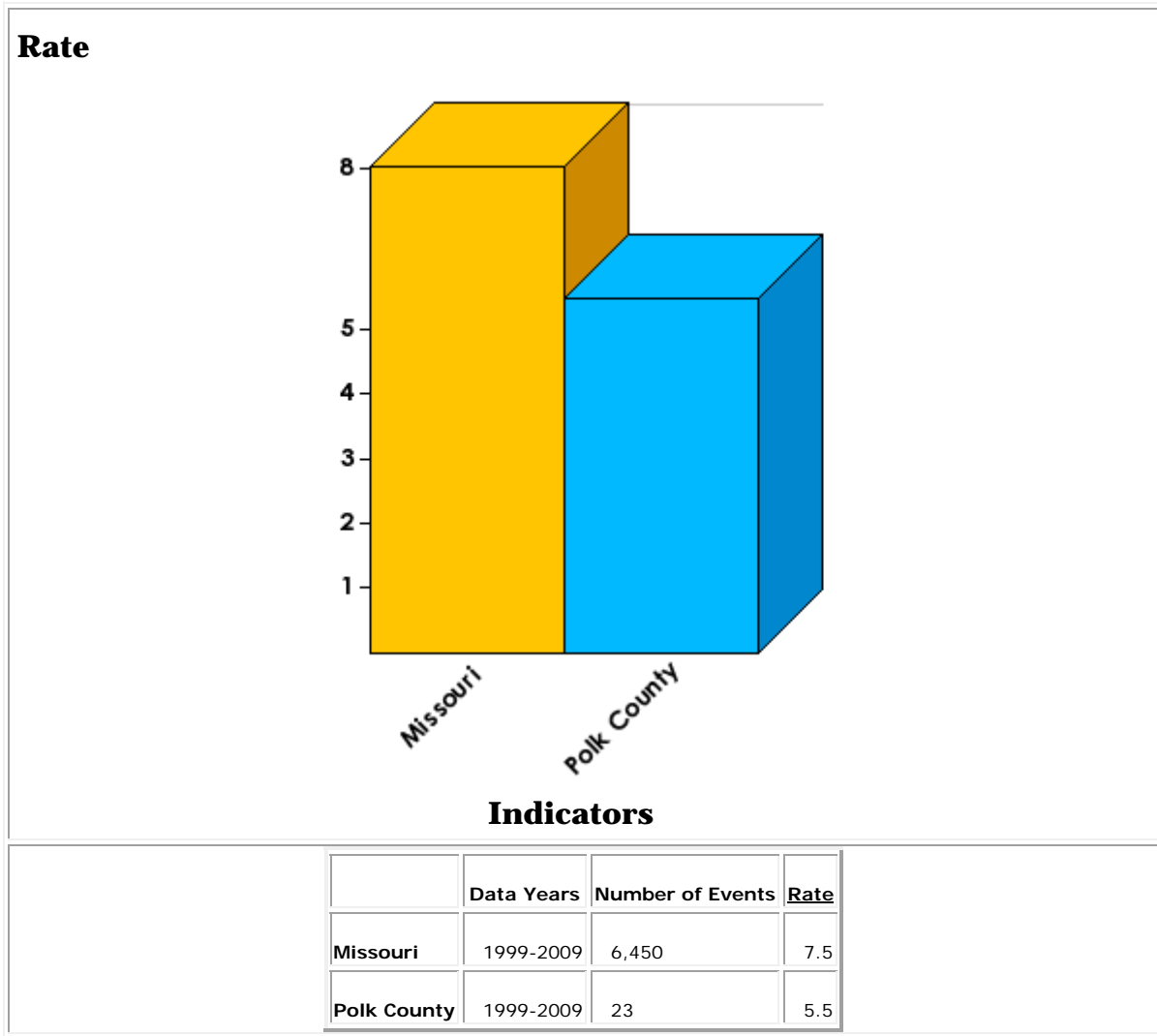
Source: Missouri Department of Health and Senior Services

One of the best indicators of a population's health is the Infant Mortality Rate (IMR). The Infant Mortality Rate describes the number of infant deaths under one year of age, expressed as a rate of 1,000 live births. The infant mortality rate was lower for Polk County (5.5%) than the state (7.5%) from 1999-2009. Table 3.1 illustrates this data.

**Table 3.1 - Infant Health Profile**

**Infant Deaths per 1,000**

**Missouri and Polk County**



***Characteristics of Births***

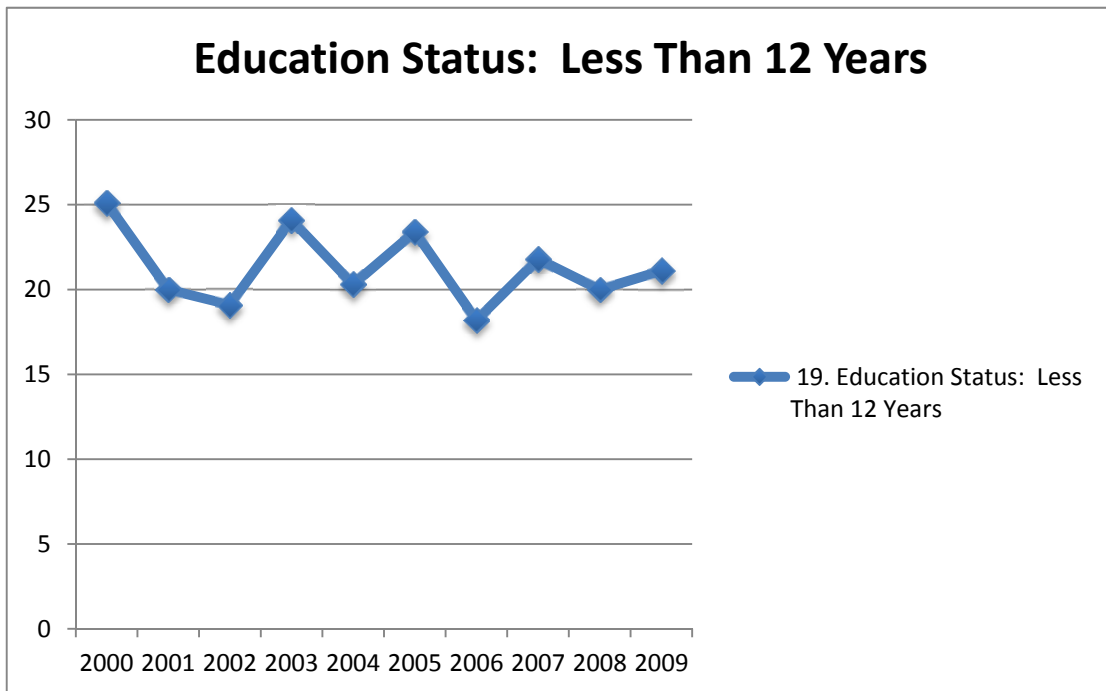
Polk County has a rate of 21.1% for births to women without a high school education compared to the state rate of 17.1% in 2009. Figure 3.2 displays the birth rate for the county over the past decade. The number of births to women without a high school

education has varied for Polk County between 19 and 25; however the average rate is 21. The average rate for Missouri is 18.9%. Polk County showed higher rates than Missouri every year from 2005-2009 except in 2006

**Figure 3.2**

**Births to Women with less than 12 years education-**

**Polk County – 2000-2009**

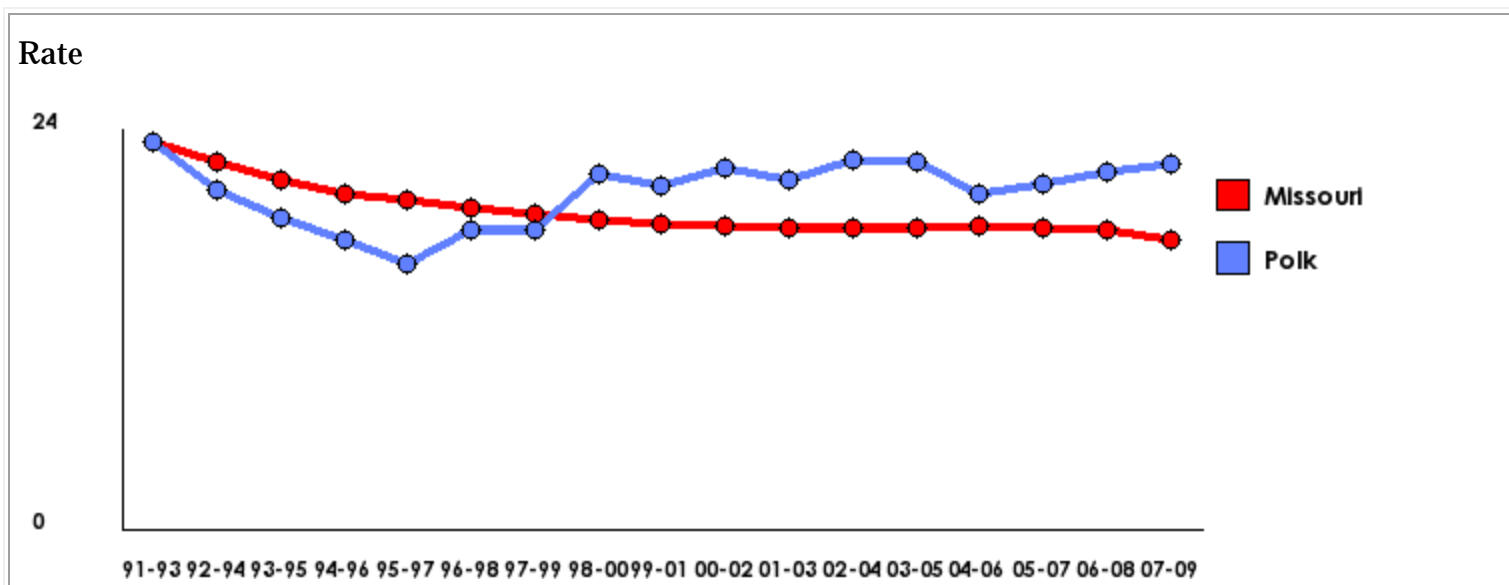


*Source: Missouri Department of Health and Senior Services*

The number of women in Polk County smoking during pregnancy has remained higher than the state rate since 1997. Currently the rate for pregnant smokers is 19.4% for Polk County and 16.8% for the State of Missouri. Figure 3.3 illustrates the rate of smoking during pregnancy for women in both Polk County and Missouri over the past decade.

Figure 3.3

**Mother Smoked During Pregnancy**  
**Three-Year Moving Average Rates**



*Source: Missouri Department of Health and Senior Services*

Polk County is lower than the state in rates of teen pregnancy for ages 15-19. From 2005-2009, in Polk County the teen pregnancy rate was 46.6 per 1,000 births compared to the state at 52.8 per 1,000 births.

Every year Polk County has been below the state in terms of inadequate parental care. Table 3.2, shows the number and rate of women with inadequate prenatal care for both the county and state. According to the Table, more women are receiving adequate parental care in Polk County than the state average.

**Table 3.2**

<b>Inadequate Prenatal Care- Polk County &amp; Missouri, 2002-2006</b>			
	<b><i>Polk County</i></b>		<b><i>Missouri</i></b>
<b>Year</b>	<b>Number</b>	<b>Rate</b>	<b>Rate</b>
2005	32	8.8	10.2
2006	38	8.9	10.6
2007	44	10.1	11.9
2008	34	8.6	11.9
2009	35	9	11.5

*Source: Missouri Department of Health and Senior Services*

The term, “Low Birth Weight,” is used to describe babies born weighing less than 2,500 grams (5 lbs 8 oz). Low-Birth-Weight babies are at increased risk of serious health problems as newborns, lasting disabilities, and even death. The percentage of Low-Birth-Weight babies has remained lower in Polk County than the State. The average percentage of Low-Birth-Weight babies in 2009 was 8.0% for Polk County and 8.1% for the state of Missouri.

Child spacing less than 18 months decreases the likelihood of healthy infants and mothers. The percentage of births spaced less than 18 months apart has fluctuated in Polk County. In 2005 and 2008 Polk County had rates below the state average, otherwise the rate for Polk County has been 2-3% higher.

**Table 3.3**

**Birth Spacing – Polk County and Missouri 2005-2009**

	<b>Polk County</b>	<b>Missouri</b>
2005	11.6	11.7
2006	15.4	12.1
2007	16.2	12.8
2008	9.7	12.8
2009	13.5	11.9

*Source: Missouri Department of Health and Senior Services, 2011*

**Women Infants and Children (WIC) Program**

The Polk County Health center is a provider of the Women Infants and Children (WIC) program. The WIC program is a nutrition education, health promotion, and supplemental food program for women (pregnant, breastfeeding or postpartum), infants, and children (up to age five). Program participants must meet income guidelines to participate. The Polk County WIC Program serves over 10,000 clients annually. Table 3.4 shows data concerning clients of Polk County’s WIC center. It is important to note that Polk County has a higher rate of participants that initiate and continue breastfeeding through 12 months when compared to the State of Missouri.

**Table 3.4**

<b>WIC Population Characteristics- Polk County &amp; Missouri- 2010/2011</b>		
	<b><i>Polk County</i></b>	<b><i>Missouri</i></b>
Breastfeeding – Ever	<b>74%</b>	<b>58.5%</b>
Breastfeeding – 1 month	<b>46.4%</b>	<b>35.4%</b>
Breastfeeding – 3 months	<b>25.1%</b>	<b>19.3%</b>
Breastfeeding – 6 months	<b>13.8%</b>	<b>n/a</b>
Breastfeeding – 12 months	<b>5.3%</b>	<b>3.9%</b>

*Source: Missouri Department of Health and Senior Services, 2011*

### **Early Child Health and Social Programs**

Some governmental programs that provide family support are cited in Table 3.5.

According to this table, an increasing amount of children are receiving food stamps and cash assistance in Polk County. More children are receiving cash assistance in Polk County at 5.0%, when compared to the state at 4.7% in 2009. In Polk County 42.5% of children are receiving food stamps compared to the state at 35.5% in 2009.

A large percentage of students in Polk County are enrolled in the Free/Reduced Lunch Program. According to Table 3.3, 53.6% of Polk County students participate in the state sponsored program, compared to 43.6% statewide.

**Table 3.5**

<b>Family and Support Indicators- Polk County and Missouri, 2005/2009</b>				
	<b>Polk County</b>		<b>Missouri</b>	
	2005	2009	2005	2009
Parent's Paying Child Support in State System (%)	56.7	65.2	53.0	58.0
Children Receiving Subsidized Child care	158	123	43,953	43,765
Children Receiving Cash Assistance (%)	4.3	5.0	5.2	4.7
Children receiving food stamps (%)	37.3	42.5	30.7	35.5
Students Enrolled in Free/Reduced Lunch (%)	53.2	53.6	41.7	43.6

*Source: Missouri Kids Count, 2010*



A large percent of children in both Polk County (43.8%) and Missouri (35.0%) are enrolled in MC+/Medicaid. Additionally, a decreasing number of children are being immunized in public health clinics. Table 3.6, lists the percentage of children enrolled in MC+/Medicaid and the percentage of children immunized in public health clinics for both Polk County and the state.

**Table 3.6**

<b>Health and Mental Health Indicators- Polk County &amp; Missouri, 2005/2009</b>				
	<i>Polk County</i>		<i>Missouri</i>	
	2005	2009	2005	2009
Children Enrolled in MC+/Medicaid (%)	47.9	43.8	36.8	35.0
Public clinic immunization rate (%)	77.5		79.1	64.5

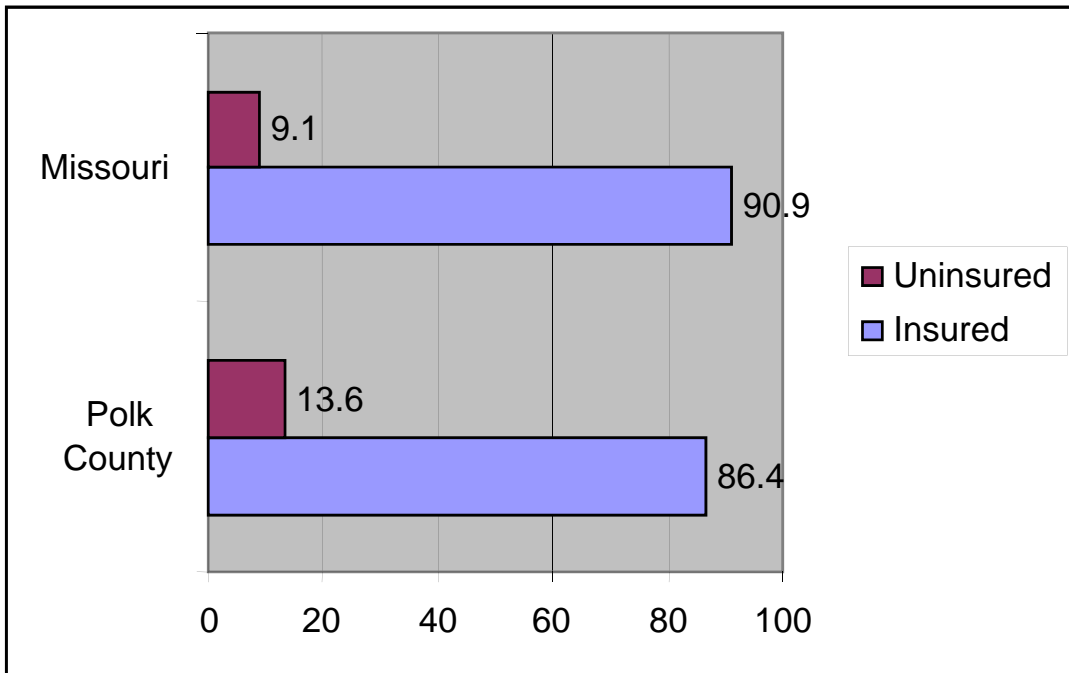
*Source: Missouri Kids Count, 2010*

***Health Insurance Coverage***

As employee working patterns evolve, health insurance is becoming less stable. The impacts of going uninsured are clear and severe. Many uninsured families postpone medical care which results in increased morbidity and mortality. Polk County has a higher rate of children uninsured (13.6%) than is evident statewide (9.1%). Polk County has a higher rate of children without insurance than the U.S. rate of 10.4% of children without health insurance.

**Figure 3.4**

**Health Insurance Coverage for Children- Polk County & Missouri, 2000**



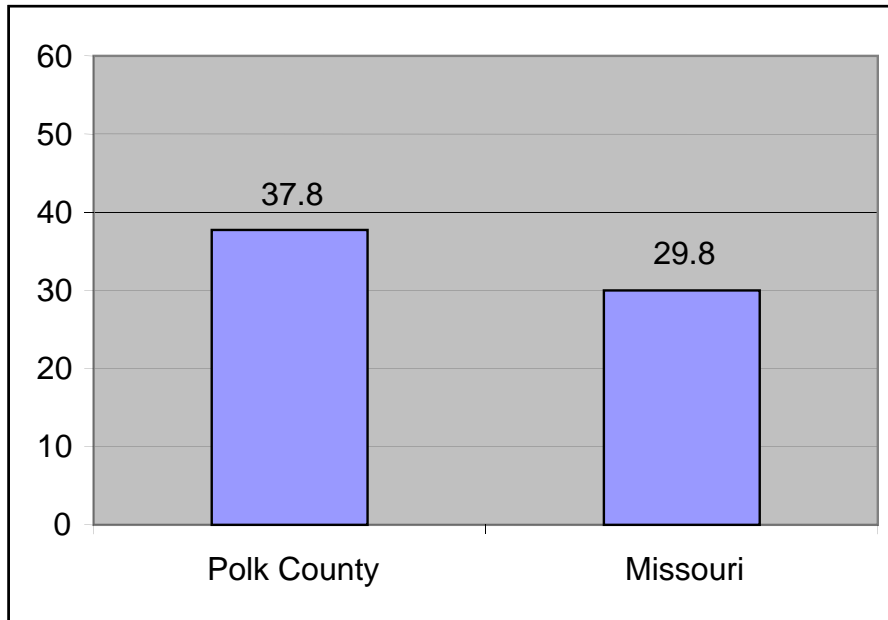
*Source: U.S. Census Bureau, 2010*

***Child Abuse & Neglect***

Child abuse is a physical, emotional, or sexual abuse to a child by a parent, guardian, or others. Most commonly child abuse happens in the child's home. Polk County has reported child abuse cases at a rate of 49.9 kids per 1,000 for 2005 compared to 39.1 kids per 1,000 statewide. In 2009, the rate for the county decreased to 37.8 per 1,000 kids and the state rate also dropped to 29.8 kids per 1,000.

**Figure 3.5**

**Rate of Child Abuse Cases- Polk County & Missouri, 2009**



*Source: Kids Count 2010*

### ***Child Health Issues***

An elevated blood lead level is >10mg/dl. Research has shown that blood lead at this level can lead to increased health problems. Information from the 2009 Annual Lead Report, shows that in Polk County 534 children (less than 6 years of age) were tested for lead, approximately 24% of the child population. The number of children with identified lead poisoning has was four. This resulted in a rate of 0.7% and the rate for the State of Missouri was 1.1% of children tested having an elevated lead level greater than 10mg.dL. Table 3.7, illustrates the percentage of population tested and the percent with elevated levels in Polk County and Missouri in 2009.

**Table 3.7**

**Lead Testing and Children Blood Lead Levels- Polk County & Missouri- 2009**

	Population Tested (Children less than 6 years of age)	Percentage with elevated levels
Polk County	24%	0.7%
Missouri	21%	1.1%

*Source: Missouri Department of Health and Senior Services, 2009*

The Child Death Rate, per 100,000 for children aged 1-14, is higher in Polk County at 79.8, than the state rate 66.7. Additionally, when compared to a county similar to Polk County in both size and demographic characteristics, Polk County retained the higher Child Death Rate. The Child Death Rate, per 100,000 for children aged 1-14 in Webster County was 59.6 in 2009. Table 3.8 illustrates the Child Death Rates in Polk County, Webster County, and Missouri from 1994 to 2004.

**Table 3.8**

**Child Death Rate (1-14 years old) per 100,000 children – Polk and Webster Counties and Missouri 2009**

	<b>2009</b>
<b>Polk County</b>	<b>79.8</b>
<b>Webster County</b>	<b>59.6</b>
<b>Missouri</b>	<b>66.7</b>

*Source: Missouri Department of Health and Senior Services, 2011*

The Child Death Rate for children aged 15-24 years is higher in Polk County in 2009 than the rate for Missouri and Webster County. Table 3.9 illustrates the child death rate for children aged 14-19 years for Polk and Webster Counties and in Missouri.

**Table 3.9**  
**Child Death Rate (14-19 years old) per 100,000 – Polk and Webster Counties and Missouri, 2009**

	<b>2009</b>
<b>Polk County</b>	<b>173.1*</b>
<b>Webster County</b>	<b>43.9*</b>
<b>Missouri</b>	<b>85.8</b>

*Source: Missouri Department of Health and Senior Services, 2011*

\*Rate is unstable; numerator less than 20

From 1998 to 2008, the death rate for unintentional injury was 35.4 for Polk County and 23.2 for the state of Missouri.

The leading cause of death was unintentional injuries (falls, poisonings, burns, recreational accidents) followed by motor vehicle accidents for children aged 1-14 and 15-19. Polk County children aged 15-19 had a lower rate of death than the state rate (78.5% and 83.9%, respectively) for 1998-2008.

**Table 3.10**

**Cause of Death (1-14 year olds) per 100,000 children - Polk County & Missouri,  
1998-2008**

	<b>Polk County</b>	<b>Missouri</b>
<b>Unintentional Injury</b>	<b>15.2*</b>	<b>9.1</b>
<b>Motor Vehicle Deaths</b>	<b>11.8*</b>	<b>4.6</b>
<b>Cancer</b>	<b>5.1*</b>	<b>2.3</b>
<b>Birth Defects</b>	<b>1.7*</b>	<b>1.8</b>
<b>Homicide</b>	<b>1.7*</b>	<b>1.9</b>
<b>Heart Disease</b>	<b>1.7*</b>	<b>.9</b>

*Source: Missouri Department of Health and Senior Services, 2011*

\*Rate is unstable; numerator less than 20.

**Table 3.11**

**Cause of Death (15-19 year olds) per 100,000 children - Polk County & Missouri,  
1998-2008**

	<b>Polk County</b>	<b>Missouri</b>
<b>Unintentional Injuries</b>	<b>78.5</b>	<b>83.9</b>
<b>Motor Vehicle Deaths</b>	<b>37.4*</b>	<b>37.9</b>
<b>Homicide</b>	<b>3.7*</b>	<b>12.2</b>
<b>Suicide</b>	<b>0.0*</b>	<b>12.2</b>
<b>Cancer</b>	<b>11.2*</b>	<b>3.6</b>
<b>Heart Disease</b>	<b>0.0*</b>	<b>2.1</b>

*Source: Missouri Department of Health and Senior Services, 2011*

\*Rate is unstable; numerator less than 20.

Polk County's population is primarily white (97%). Minority ethnic groups make up less than 1% each in Polk County's population, except for Hispanics at 1.9%. Because of the lack of racial and ethnic diversity in Polk County, data regarding racial and ethnic groups disproportionately affected by leading health problems could not be obtained.

### ***Summary of Maternal and Child Health Indicators***

- In Polk County, the number of Low-Birth-Weight Infants increased in 2009 to 8.0% from 6.5% in 2006. State average for 2009 was 8.1%.
- Births to teenage mothers were 46.6 per 1,000 girls in Polk County for 2005-2009.
- The child abuse and neglect rate in Polk County for 2009 was 37.8 per 1,000.
- The poverty rate for children in Polk County is 25.6% in 2008.
- The leading cause of death for children under the age of 18 in Polk County was unintentional injuries followed by motor vehicle accidents.



***Resource List***

**U.S. Census Bureau**

**Website:** <http://www.census.gov>

**Missouri Census Data Center**

**Website:** <http://mcdc.missouri.edu/>

**Missouri Department of Health and Senior Services, Missouri Information for  
Community Assessment**

**Website:** <http://www.dhss.mo.gov>

**Missouri Kids Count**

**Website:** <http://mcdc2.missouri.edu>

## **Chapter 4**

### **Chronic Disease and Injury**

Heart disease, cancer, and stroke are the leading causes of death and disability in the United States. Although chronic diseases are devastating diseases they are usually preventable. Chronic disease indicators illustrate the prevalence of risk factors controllable by individuals that can play an important role in the prevention and management of disease. Preventative behaviors like eating nutritious foods, being physically active and avoiding use of tobacco are just healthy behaviors which help to prevent chronic diseases.

In the present section the prevalence of chronic diseases will be analyzed as well as those behavioral risk factors such as tobacco use, physical inactivity, and obesity that contribute to chronic disease rates. Additionally, the indicators related to unintended injury will also be discussed. Specifically, the major types of injuries in Polk County and their causes will be reviewed.

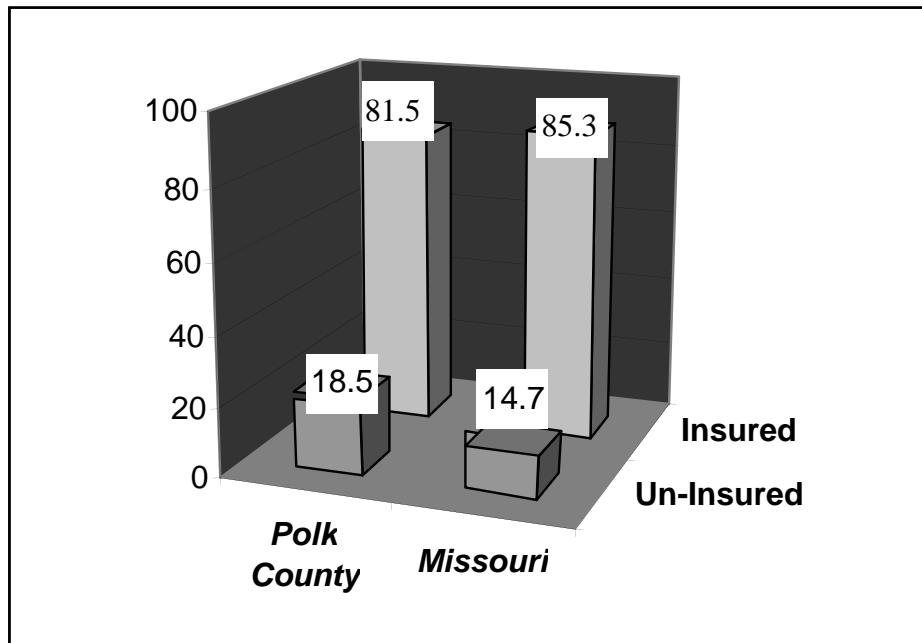
#### ***Health Status Indicators***

In 2007, 17% of Polk County residents reported their health was “fair” or “poor,” versus 16.8% statewide. This is an improvement from 2003, when 22.8% of residents reported their health as “fair” or “poor”. Additionally, 18.5% of Polk County residents reported they had no health care coverage compared to 14.7% statewide. This rate also increased when compared to 2003, when 21.7% of residents reported that they had no health insurance coverage. Below, Figure 4.1 illustrates the number of Polk County

residents (above the age of 18 years old) without health insurance compared to statewide numbers.

**Figure 4.1**

**Percentage of Insured & Uninsured Adults- Polk County and Missouri, 2007**

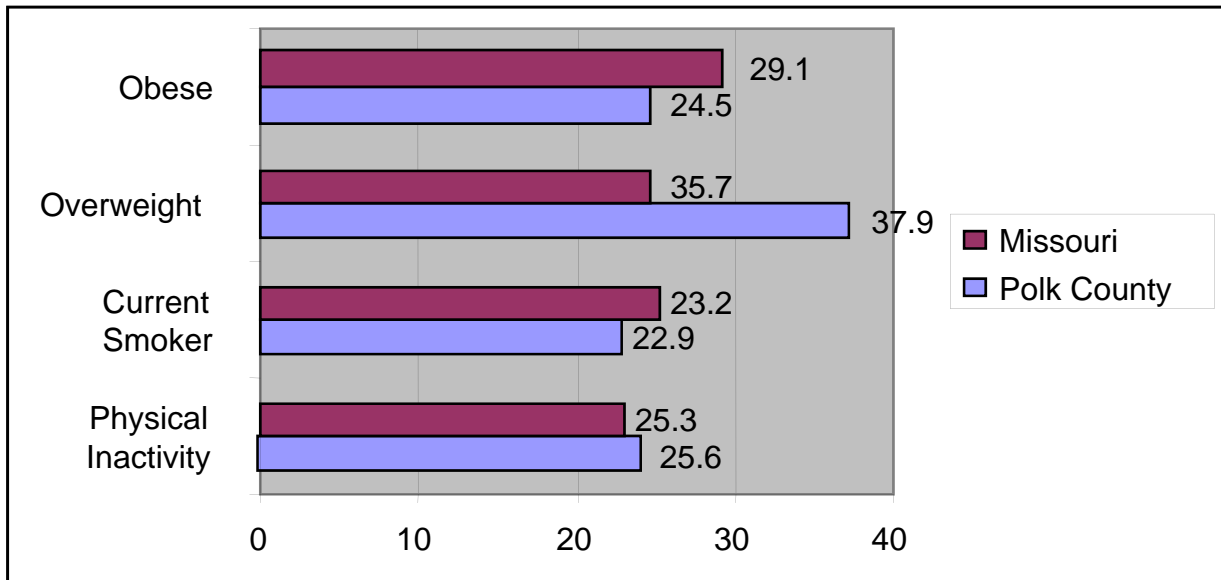


*Source: Missouri Department of Health and Senior Services, 2007 County Level Study*

In 2007, the Missouri Department of Health and Senior Services compared Behavior Risk Factors for Polk County and Missouri. Behavioral Risk Factors included: physical inactivity, current smoker, overweight (BMI 25-29.9), and obese (BMI  $\geq$  30). According to Figure 4.2, a higher rate of people in Polk County are overweight and fail to engage in regular physical activity than for than people statewide. However, Polk County is lower than the state rate when comparing rates of obesity.

**Figure 4.2**

**Percent of Population with Behavioral Risk Factors- Polk County & Missouri, 2003**



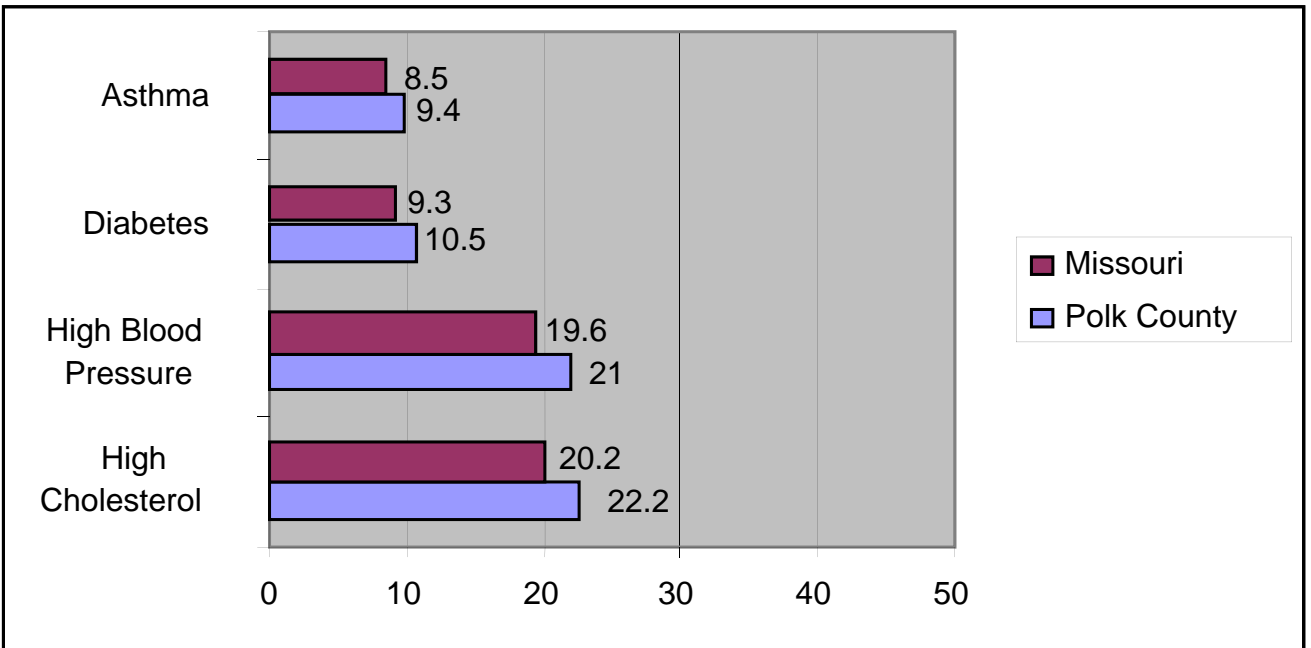
*Source: Missouri Department of Health and Senior Services, 2007*

High Cholesterol and High Blood Pressure are believed to be a couple of the most prevalent health problems affecting Polk County Residents. Both High Cholesterol and High Blood Pressure are prevalent health problems affecting Missouri statewide.

Figure 4.3 illustrates the percent of Polk County and Missouri residents affected by common health problems (High Cholesterol, High Blood Pressure, Diabetes, Asthma, and Activity Limitations). When comparing rates of Polk County and Missouri, it appears evident that Polk County represents a higher number of individuals with High Cholesterol (>35 years), High Blood Pressure, Diabetes, and Asthma.

**Figure 4.3**

**Percent of Population with Health Problems- Polk County & Missouri, 2007**



*Source: Missouri Department of Health and Senior Services, 2007*

A review of Cancer Screening rates among Polk County residents found that Polk County's prevalence rate for cancer screening tests, such as Mammograms, Pap Smears, and Blood Stool tests do not appear to be significantly above or below the state rate for Missouri. 14.5% of women in Polk County have never had a Mammogram and 6.6% of women (aged 18-69) have never had a Pap smear. However, a higher prevalence of Polk County residents has failed to have a Sigmoidoscopy or Colonoscopy, 37.3%, compared to the state rate of 36.6%.

### ***Hospitalizations***

In 2008, the highest rates of preventable hospitalization related to chronic disease were heart disease and stroke. Additionally, the second highest rate was related to pneumonia, chronic obstructive pulmonary disease and asthma.. These are consistent with the behavioral risk factors of tobacco use, physical inactivity, and obesity that contribute to chronic disease rates.

### ***Causes of Death in Polk County (1999-2009)***

1. Heart Disease
2. Cancer
3. Cerebrovascular Disease (Stroke)
4. Chronic Lower Respiratory Disease (bronchitis, emphysema, asthma, and chronic airway obstruction)
5. Total Unintentional Injuries (including Motor Vehicle Accidents)

### ***Causes of Death in Missouri (1999-2009)***

1. Heart Disease
2. Cancer
3. Cerebrovascular Disease (Stroke)
4. Chronic Lower Respiratory Disease
5. Total Unintentional Injuries

### ***Causes of Death in United States (2009)***

1. Heart Disease
2. Cancer
3. Cerebrovascular Disease
4. Chronic Lower Respiratory Disease
5. Accidents

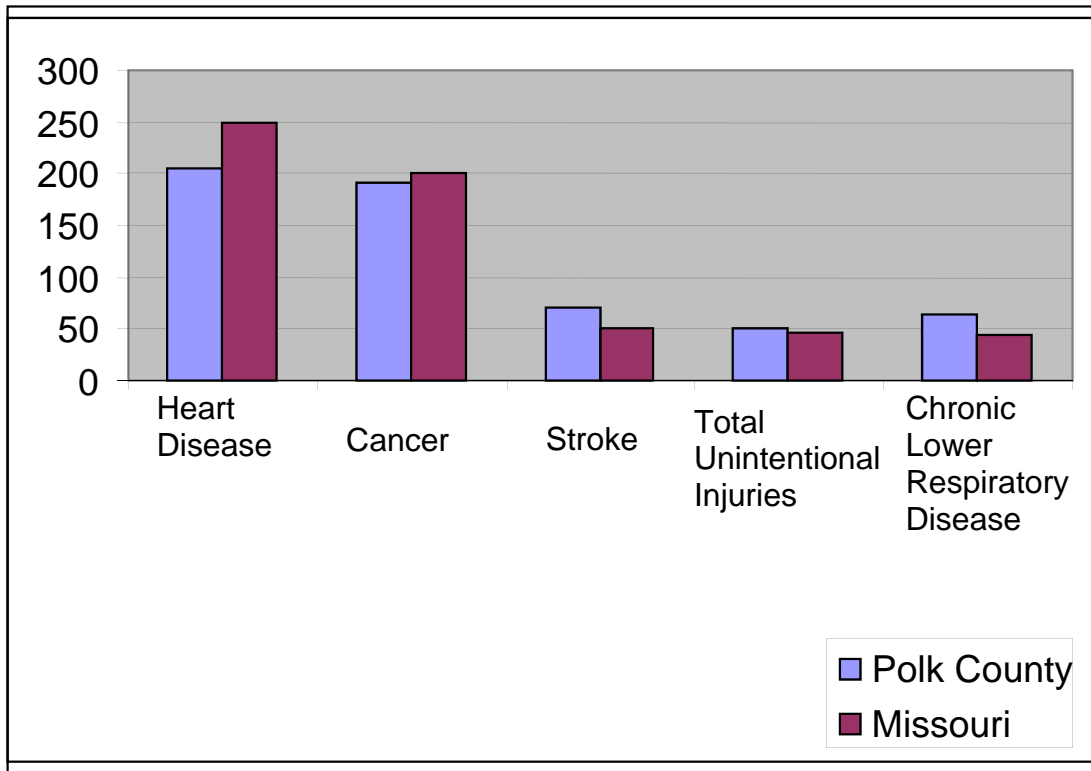
The top age-adjusted mortality rates (per 100,000) for Polk County are Heart Disease, Cancer and Stroke. These are the leading causes for Polk County but at a lower rate than the State of Missouri. When Compared to the State, Polk County ranks higher for unintentional injury, pneumonia/influenza and diabetes. The death rate for Polk County is higher for these three conditions when compared to the State of Missouri. The figures below show the comparison of these rates.

With the exception of Motor Vehicle Accidents, the leading causes of death for Polk County residents (Heart Disease, Cancer, Stroke, and Lower Respiratory Disease) are consistent with the behavioral risk factors of tobacco use, physical inactivity, and obesity that contribute to chronic disease rates.

Figure 4.4 compares the age-adjusted rates of death for Polk County and Missouri over the past ten years.

**Figure 4.4**

**Causes of Death- Polk County and Missouri, 1999-2009**



*Source: Missouri Department of Health and Senior Services, 2011*

\*Age Adjusted Rate (per 100,000) used to compare causes of death

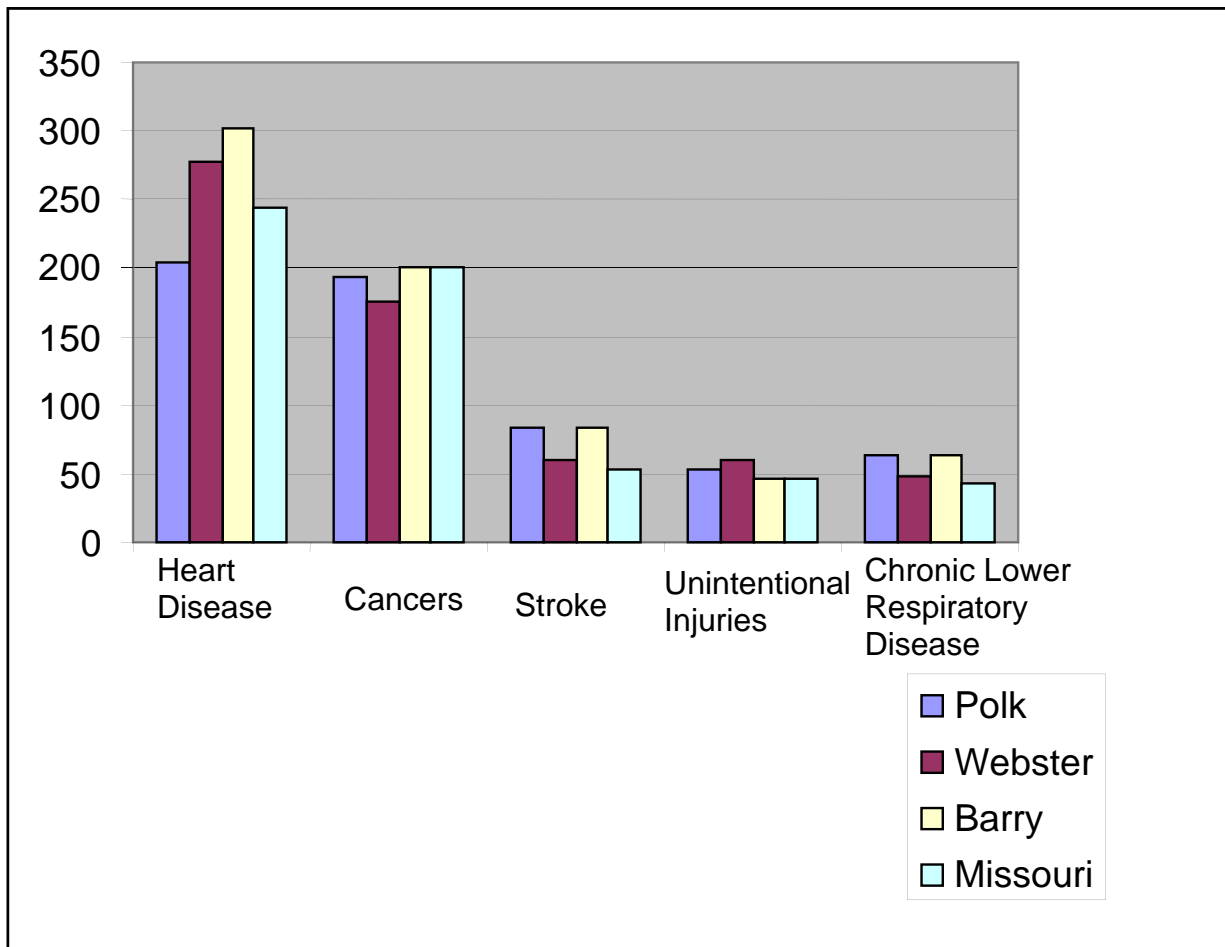
Both Barry County and Webster County are similar to Polk County in terms of their geographic location (all located in Southwest Missouri), size, and demographic characteristics. Figure 4.5 compares the leading causes of death in the three counties.



According to Figure 4.5, Webster, Barry, and Polk counties all share the same five leading cause of death: heart disease, cancer, stroke, chronic lower respiratory disease, and unintentional injuries. Polk County has a lower rate per 100,000 (206.7) in Heart Disease than Webster and Barry counties.

**Figure 4.5**

**Causes of Death- Selected Counties and Missouri, 1999-2009**



*Source: Missouri Department of Health and Senior Services, 2011*

\*Age Adjusted Rate (per 100,000) used to compare causes of death

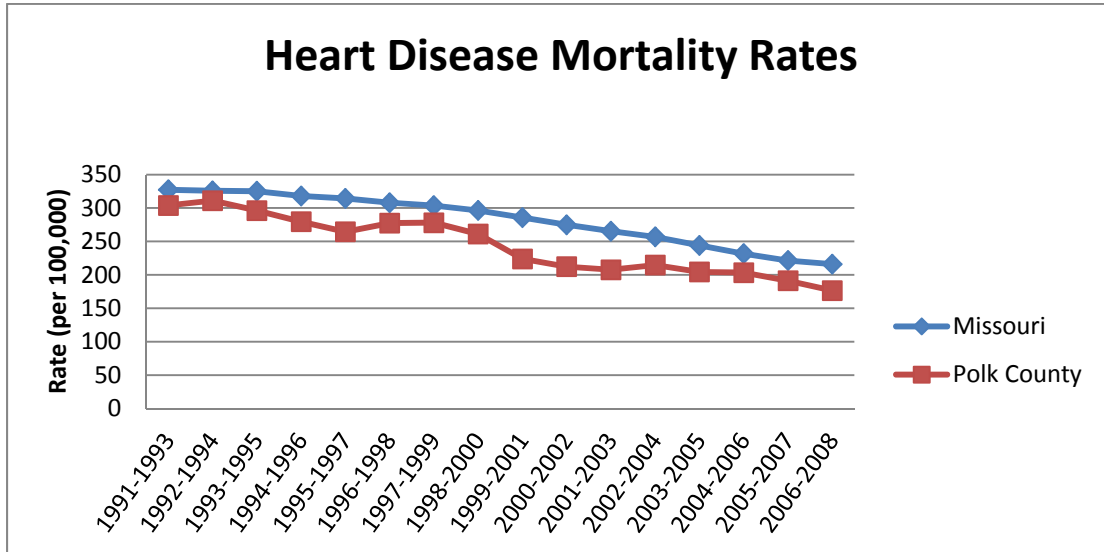
Polk County's population is primarily white (97%). Minority ethnic groups make up less than 1% each in Polk County's population, except for Hispanics at 1.9%. Because of the lack of racial and ethnic diversity in Polk County, data regarding racial and ethnic groups disproportionately affected by leading health problems could not be obtained. Additionally, in order to protect the confidentiality of residents of Polk County, data regarding the age groups affected by death causes could also not be obtained.

### ***Cardiovascular Disease***

Cardiovascular disease was the most prevalent cause of death for both Polk County, Missouri, and the United States. Figure 4.6 illustrates the heart disease mortality rate comparison between Polk County and Missouri over the past ten years. Overall the rate is declining for Polk County and is slightly lower than the state's. However, it is still the leading cause of death for Polk County.

Figure 4.6

Mortality Rate of Heart Disease- Polk County and Missouri, 1999-2009



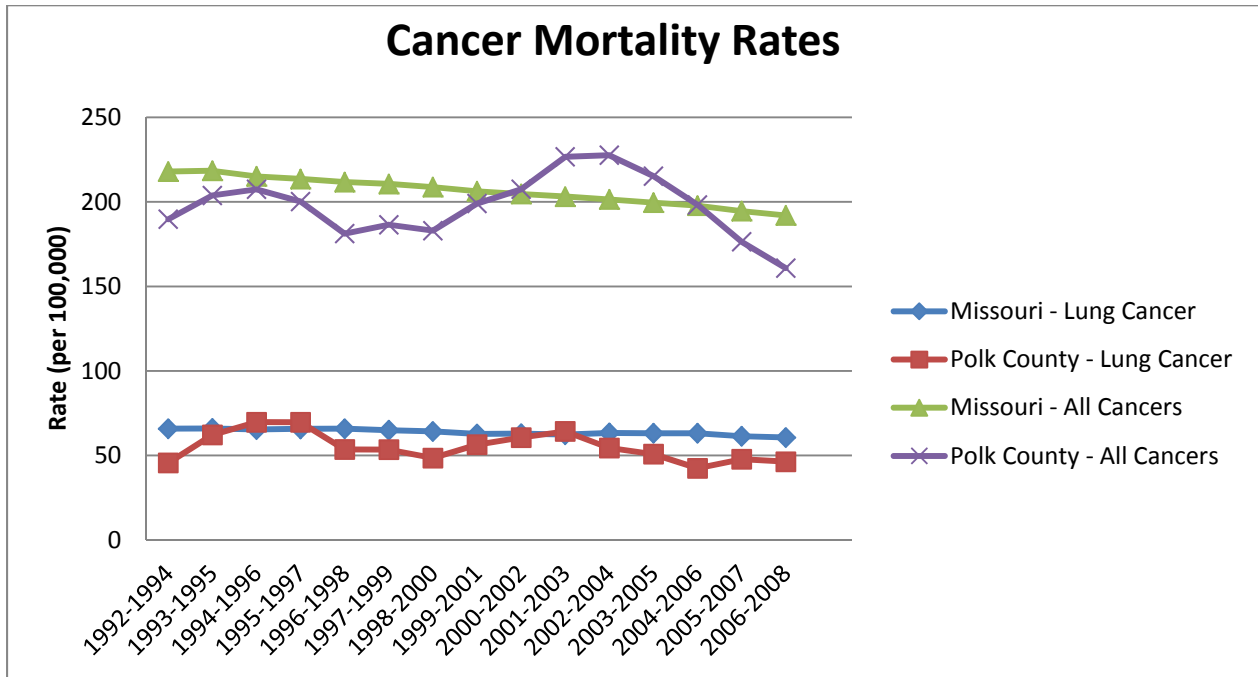
Source: Missouri Department of Health and Senior Services, 2011

### Cancers

Cancers were the second leading cause of death in both Polk County, Missouri, and the United States. Figure 4.7 illustrates the cancer mortality rate comparison between Polk County and Missouri over the past ten years. While the state rate for cancer deaths has decreased, the county rate has not shown a trend.

Figure 4.7

Cancer Mortality Rate- Polk County and Missouri, 1999-2009



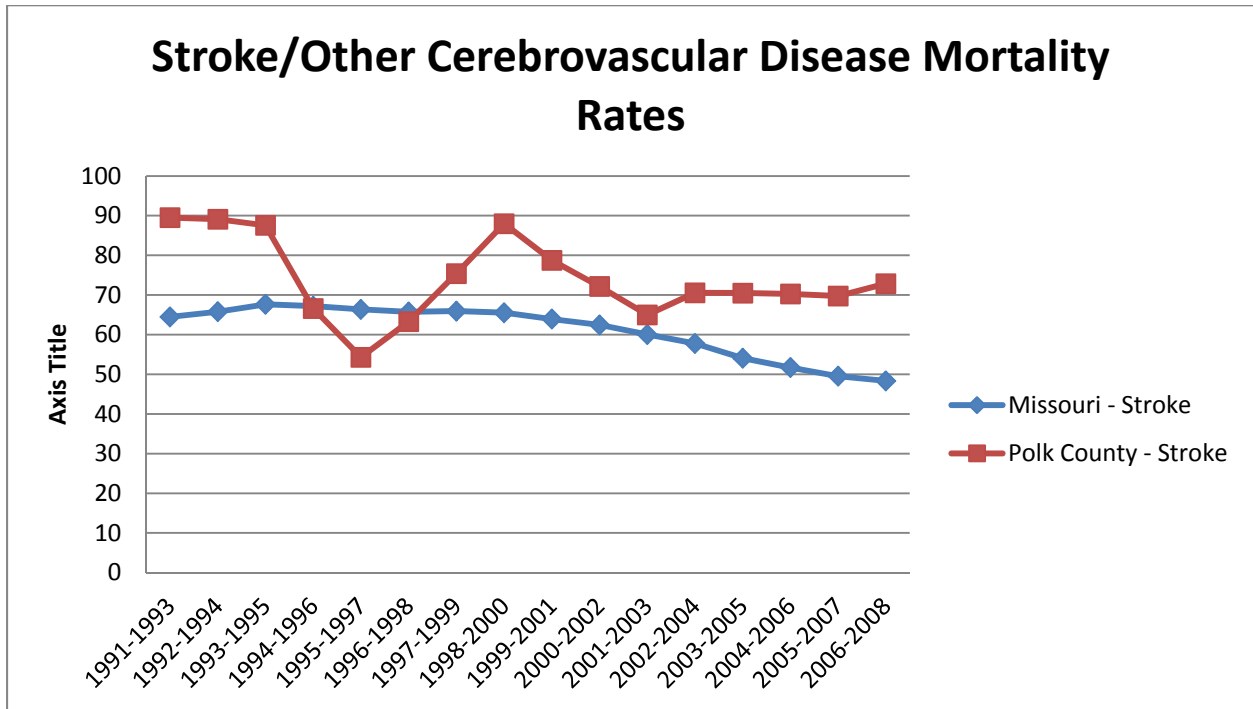
Source: Missouri Department of Health and Senior Services, 2011

### Cerebrovascular Disease

Strokes and other cerebrovascular disease were the third leading cause of death in Polk County, Missouri, and the United States. Figure 4.8 illustrates the cerebrovascular mortality rate comparison between Polk County and Missouri over the past ten years. While the state rate for cerebrovascular deaths has decreased, the county rate has not shown a trend.

Figure 4.8

Cerebrovascular Mortality Rate- Polk County and Missouri, 1999-2009

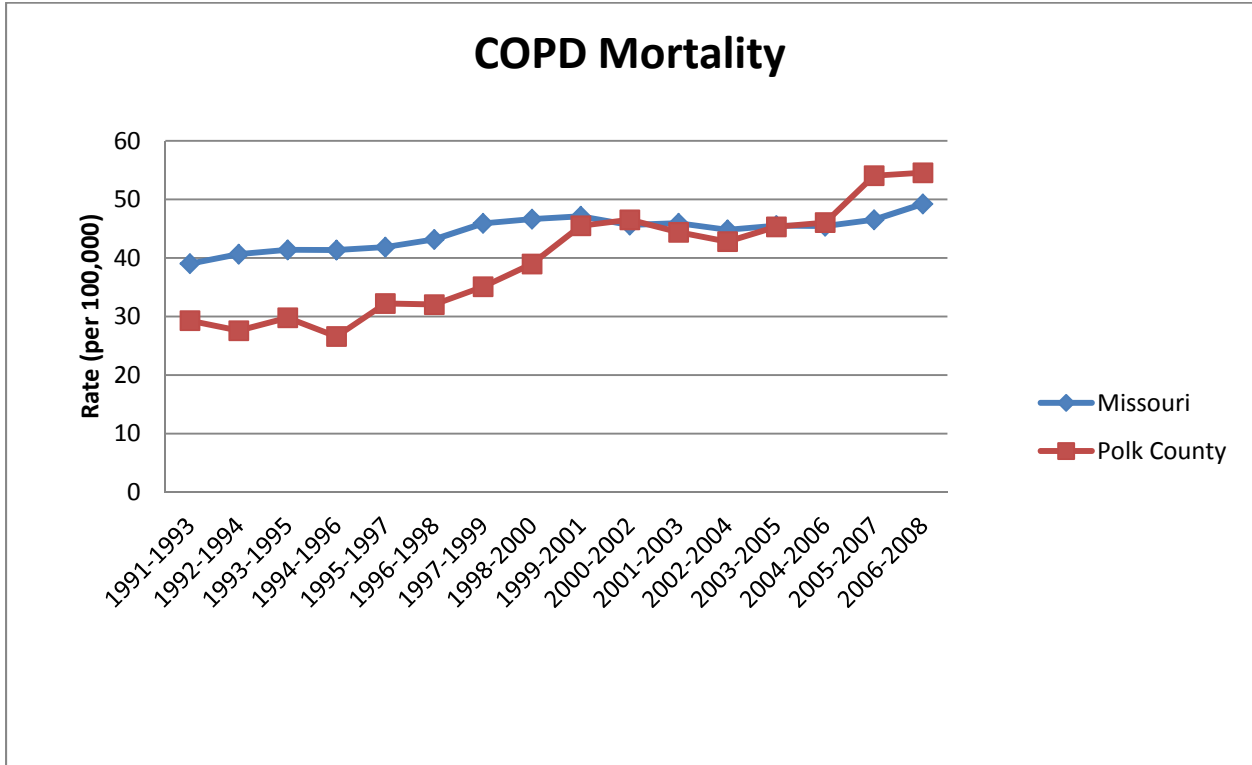


Source: Missouri Department of Health and Senior Services, 2011

### **Chronic Lower Respiratory Disease**

Chronic Lower Respiratory Disease represents the fifth leading cause of death in Polk County and the fourth leading cause of death in Missouri and the United States. Figure 4.9 illustrates the chronic lower respiratory mortality rate comparison between Polk County and Missouri over the past ten years. Overall, both Polk County and the state have experienced increases in the number of deaths due to chronic lower respiratory disease.

Figure 4.9



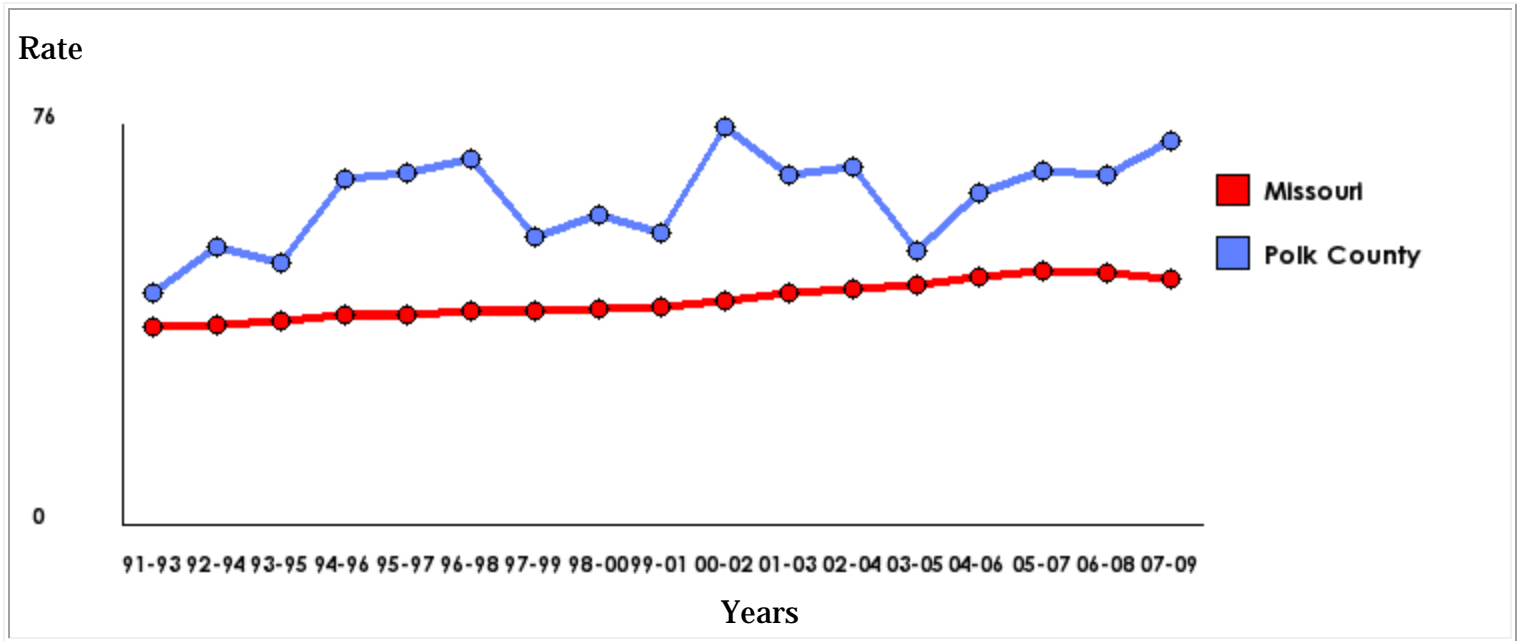
Source: Missouri Department of Health and Senior Services, 2011

### **Total Unintentional Injuries**

Total Unintentional Injuries (including motor vehicle accidents) are the fourth leading cause of death in Polk County and the fourth leading cause of death in Missouri and the United States. Figure 4.10 illustrates the unintentional injury mortality rate comparison between Polk County and Missouri over the past ten years. While the state has experienced an increase in the number of deaths due to unintentional injuries the county has experienced no trend.

Figure 4.10

Unintentional Injury Mortality Rate- Polk County and Missouri, 1999-2009



Source: Missouri Department of Health and Senior Services, 2011

### ***Injuries***

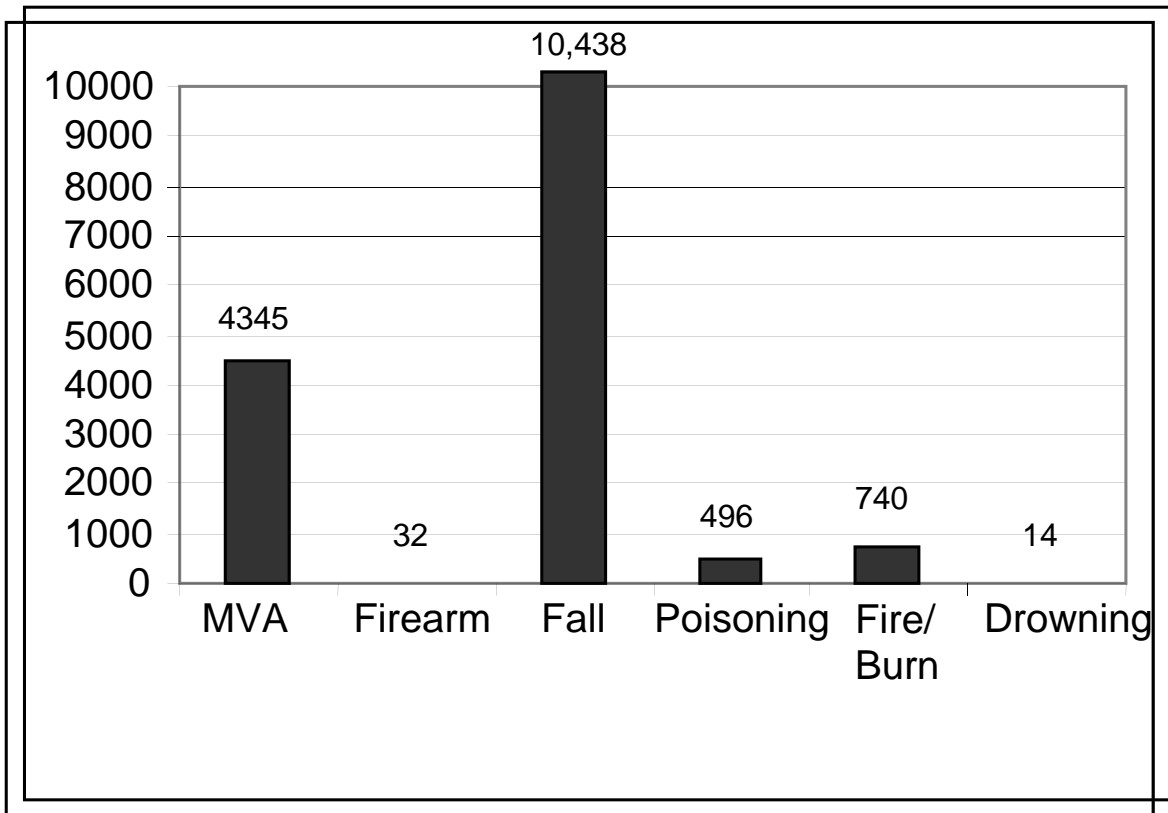
Most injuries in Polk County are caused by falling (10,438 incidents, combined ER discharges and hospitalizations) for 1998-2008. The second highest cause of injury is Motor vehicle accidents (4,345 incidents, combined ER discharges and hospitalizations) for the same time period. The third leading cause of injury is Burns (740 incidents, combined ER discharges and hospitalizations.) Figure 4.11 indicates the number of unintentional injuries by cause in Polk County for emergency room visits and inpatient hospitalizations.

For falling the population most adversely affected is children under the age of 15. For motor vehicle accidents the population most adversely affected is 25-44 year olds.



Figure 4.11

Unintentional Injuries, Hospitalizations & ER Discharges- Polk County, 1998-2008

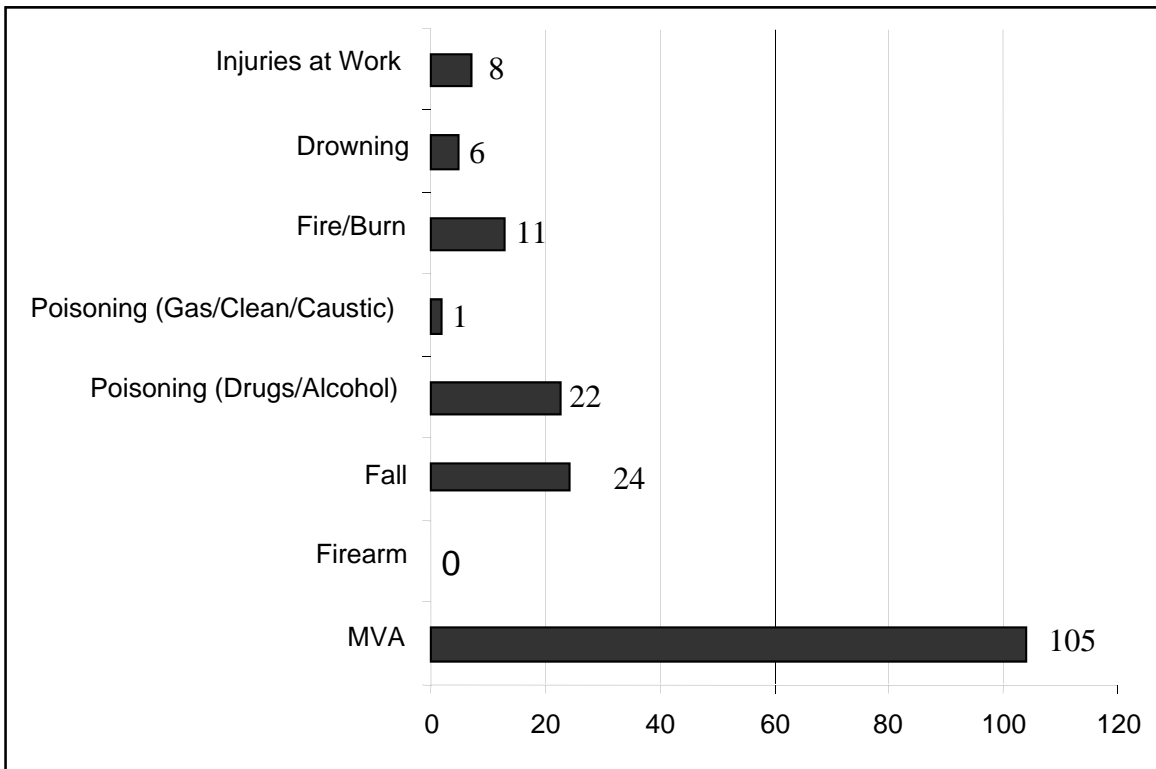


Missouri Department of Health and Senior Services, 2011

Figure 4.12 illustrates the number of deaths by type as a result of unintentional injuries, in Polk County. According to the Figure, the largest number of deaths due to unintentional injuries was motor vehicle accidents (105). Polk County also had 22 poisonings (drugs/alcohol), which is a slight increase from 1995-2005 with 13 incidents.

**Figure 4.12**

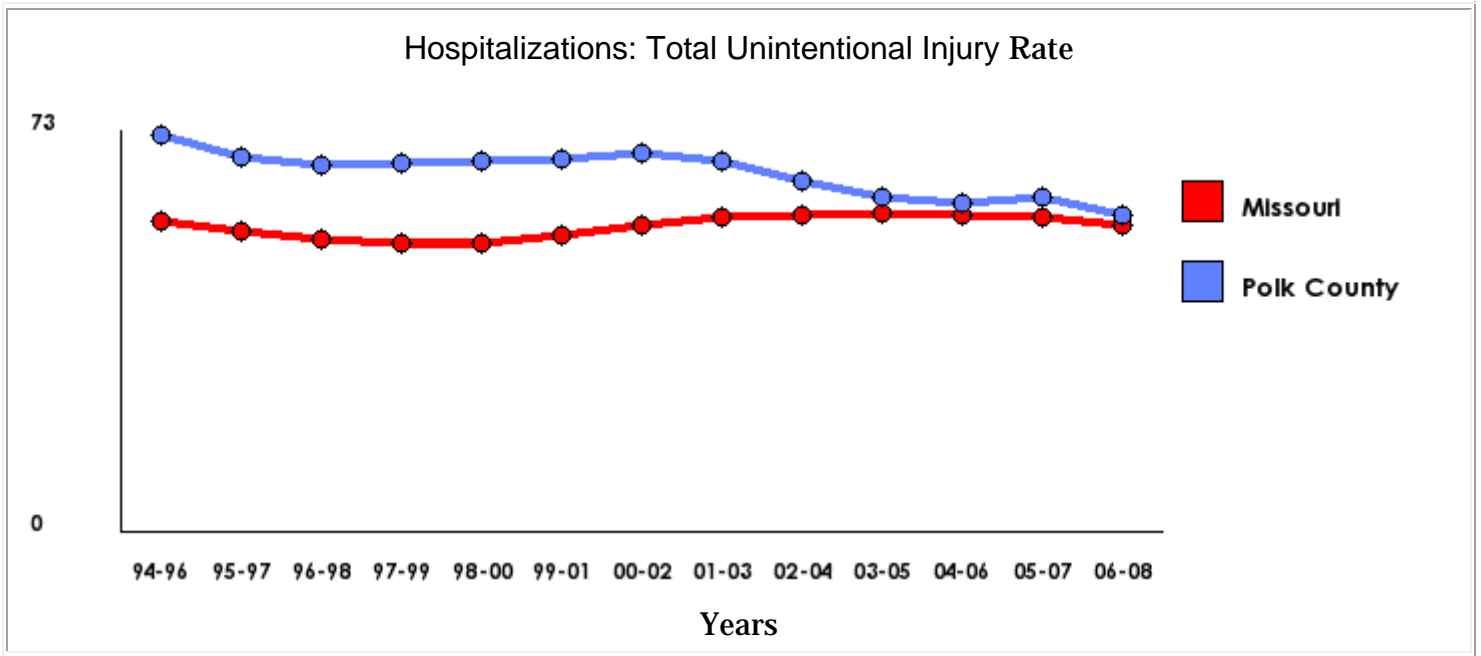
**Unintentional Injury Type Resulting in Death- Polk County, 1998-2008**



*Missouri Department of Health and Senior Services, 2011*

The Polk County trend rate (per 100,000) shows a statistically significant decrease over the past years. Table 4.13 illustrates the Polk County trend rate.

**Table 4.13**



**Trend Analysis:**

- Polk County rate trend shows a statistically significant decrease.

*Missouri Department of Health and Senior Services, 2011*

**Traffic Safety**

The second highest cause of injury is Motor vehicle accidents (4,345 incidents, combined ER discharges and hospitalizations). In 2006, Polk County rated the 60<sup>th</sup> worst county in the state of Missouri for seatbelt usage with a usage rate of 88.63%.

The age group most likely to be involved in traffic accidents was the 15-24 years population with a rate per 2,733 per 100,000 (139 accidents) in 2005. However, it is

important to note that this age group has experienced a decrease in rate of traffic accidents (3,714.8 in 2003).

In 2004, there were 35 alcohol related crashes which is an increase from 33 in 2003. In 2004 there were 4 drug related crashes which is also an increase from 3 in 2003.

### ***Summary of Chronic Disease and Injury Indicators***

- In 2007, over 17% of Polk County residents reported their health was “fair or poor.”
- 18.5% of Polk County residents have no health insurance coverage.
- The top two prevalence indicators for the county were No Exercise and Obesity.
- The top age-adjusted mortality rates for Polk County are Heart Disease, Cancer, Stroke, Chronic Lower Respiratory Disease and Unintentional Injury..

***Resource List***

**U.S. Census Bureau**

**Website:** <http://www.census.gov>

**Missouri Census Data Center**

**Website:** <http://mcdc.missouri.edu/>

**Missouri Department of Health and Senior Services, Missouri Information for  
Community Assessment**

**Website:** <http://www.dhss.mo.gov>

**Missouri State Highway Patrol, 2006 Missouri Traffic Safety Compendium**

**Website:** <http://www.msHP.dps.missouri.gov/>

**Missouri Department of Health and Senior Services, Behavioral Risk Factors and  
Surveillance System**

**Website:** <http://www.dhss.mo.gov/brfss>

**Missouri Department of Health and Senior Services,  
Health and Preventative Practices Report, 2003**

**Website:** <http://www.dhss.mo.gov>

## Chapter 5

### **Infectious Disease**

This section provides an overview of communicable diseases. Communicable diseases are those diseases transmitted from one person to another, or animal to person, and involve microorganisms like bacteria, viruses, fungi, or parasites. Specific modes of transmission are required for each pathogen to spread. Preventing the continued spread of these diseases involves breaking the chain of transmission.

Disease surveillance is imperative to prevent and lessen the spread of infectious diseases. Those diseases considered a “common threat” will be discussed in this section.

Table 5.1 indicates the number and rate of reportable infectious diseases as estimated by the Polk County Health Center for 2010. According to Figure 5.1, the most commonly occurring infectious diseases are: Hepatitis B with 11 cases (rate of 35.32 per 100,000), Campylobacteriosis with 10 cases (rate of 32.11 per 100,000), and Rocky Mountain Spotted Fever also with 10 cases (rate of 32.11).

**Table 5.1****Infectious Diseases- Polk County, 2010**

<b>Infectious Disease</b>	<b>Number</b>	<b>Rate (per 100,000)</b>
Animal Rabies	0	-
Campylobacteriosis	10	32.11
Cryptosporidiosis	4	12.84
E.coli 0157:H7	2	6.42
E.coli shiga toxin positive, non-0157	0	-
Ehrlichiosis	2	6.42
Giardiasis	3	9.63
Haemophilus Infulenzae, Invasive	0	-
Hepatitis A, Acute	6	19.26
Hepatitis B	11	35.33
Hepatitis C	8	25.69
Legionellosis	0	-
Listeriosis	0	-
Lyme	1	3.21
Meningococcal Disease	0	-
Mumps	1	3.21
Pertussis	2	6.42
Q Fever	0	-
Rocky Mountain Spotted Fever	10	32.11



Salmonellosis	5	16.06
Shigella	5	16.06
Strep Disease, Group A Invasive	2	6.42
Strep Pneumoniae, Drug-Resistant	0	-
Tularemia	2	6.42
Varicella	3	9.63
West Nile Fever	1	3.21
West Nile Viral Encephalitis/Meningitis	0	-
Yersiniosis	0	-

*Source: Polk County Health Center CD Log, 2010.*

### ***Sexually Transmitted Diseases***

Chlamydia, Gonorrhea and HIV/AIDS are three reportable sexually transmitted diseases. In 2010, there were 68 diagnosed cases of Chlamydia, a number that has been steadily increasing. Also there were 3 diagnosed cases of Gonorrhea, a number that has been decreasing for the past five years. In 2009 there was 1 new case of HIV/AIDS cases. Table 5.2 illustrates the number of Chlamydia and Gonorrhea cases for the past five years in Polk County.

**Table 5.2**

**Chlamydia and Gonorrhea Cases- Polk County, 2007-2009**

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Chlamydia</b>	32	63	49	55	68
<b>Gonorrhea</b>	8	19	5	4	3

*Source: Missouri Department of Health and Senior Services, 2011*

***Resource List***

**Missouri Department of Health and Senior Services**

**Website: <http://www.health.mo.gov>**

**Missouri Department of Mental Health**

**Website: <http://www.dmd.mo.gov>**

**Missouri Health Surveillance Information Systems**

**Website: <http://www.health.mo.gov>**

## **Chapter 6**

### **Environmental Health**

Conditions in the environment may pose health risks to members of a community. Industry, hazardous waste sites, failing sewage disposal or treatment systems, and indoor air quality are potentially environmental health trends.

This section provides an overview of data relating lead, hazardous wastes and hazardous substances.

#### ***Lead Poisoning***

According to the Missouri Department of Health, Lead poisoning is one of the most common and preventable environmental health problems today. Lead poisoning is defined as a blood lead level  $\geq 10$  micrograms per deciliter. Children are at the greatest risk for lead poisoning. Health problems commonly associated with lead poisoning include brain and nerve damage, hearing loss, anemia, slowed growth, behavior problems, and lowered IQ. Lead poisoning occurs because of ingestion or inhalation of lead containing objects or paint (made before 1978).

In 2008, 19.33% of Polk County children received lead testing (490 children). This was an increase in the number of children tested from 2006 at 323. Of those children, 4 were found to have elevated blood levels  $>10$  mg/dl (1.24%), (Missouri Department of Health and Senior Services, *Child Health Profile, 2011*).

As mentioned earlier, lead poisoning commonly occurs secondary to ingestion or inhalation of lead containing objects or paint (made before 1978). 22.3% of homes (2,711) in Polk County were built before 1950 (U.S. Census, 2010). Based on compliant data and new septic permit data, most of these older homes are in outlying areas that fall outside the boundaries of building codes/planning and zoning regulations. There are also many older homes located in the small communities that also have no building, planning or zoning regulations.

The Health Center is not aware of any currently lead abatement projects underway in the community. There was one home undergoing lead abatement in 2005, which has been completed. There was also a daycare facility identified in 2006, which has been repaired as well.

### ***Water Supply***

Approximately 63% of the population in Polk County has private water and sewage disposal, while 37% of the population utilizes public water and sewage. There is one landfill located in the southern part of Polk County.

The city of Bolivar (county seat) has fluoridated water, however there are ten other public water supplies located in Polk County which do not have fluoridated water.

In 2004, the Center for Social Sciences and Public Policy Research (CSSPPR) measured the opinions and attitudes of 500 adult residents of Polk County. According to the local water quality, half of the respondents said the local lake water was at least

somewhat clean. Although 79% of those who tested their wells found the water to be “very safe,” half of those with wells either rarely or never tested their well water or did not know the results of well water tests. Two percent of those testing their wells found their well water to be unsafe to drink. Table 6.1 shows the number and frequency of well water tests for Polk County. Table 6.2 shows the results of those survey participants who had their well water tested once every few years.

**Table 6.1**  
**Frequency of Well Water Testing- Polk County, 2004**

	<b>Frequency</b>	<b>Percent</b>
<b>Several Times a Year</b>	26	5.2
<b>Once a Year</b>	57	11.4
<b>Once every few Years</b>	67	13.5
<b>Rarely or Never</b>	139	27.9
<b>Don't Know</b>	23	4.6
<b>Total</b>	312	62.7

*Center for Social Sciences and Public Policy Research, 2004*

**Table 6.2**  
**Results of Water Testing- Polk County, 2004**

	<b>Frequency</b>	<b>Percent</b>
<b>Very Safe to Drink</b>	119	23.9
<b>Marginally Safe to Drink</b>	13	2.6
<b>Unsafe to Drink</b>	3	.6
<b>Don't Know</b>	15	3.0
<b>Total</b>	150	30.1

*Center for Social Sciences and Public Policy Research, 2004*

***Town Branch Watershed***

The Town Branch watershed is predominately located within the city limits of Bolivar Missouri. Encompassing over 3,800 acres, this waterbody drains into the Piper Creek watershed of the larger Pomme de Terre River watershed. Positioned as the seat of Polk County, Bolivar is the economic, educational and cultural center of this county and nearby region. In 2010, Bolivar's population of 10,325 increased at a 12.93% rate over the past ten years. New development and industry is increasing due to the high quality of life this region offers.

Due to its urbanized location, water quality degradation is an issue that could potentially impact this waterbody as well as downstream water resources. Based on past and current water quality studies, the condition of the Town Branch watershed is eutrophic, exhibiting high levels of nutrients; namely phosphorus and nitrogen. These pollutants in conjunction with other urban pollutants such as heavy metals and volatile organic

compounds can greatly impair water quality conditions. Impacts such as the proliferation of algal production, decreased aquatic life diversity and increased pollutant loads can potentially affect environmental health and recreational water use.

A portion of Town Branch and Piper Creek is designated as being an impaired waterbody by the Missouri Department of Natural Resources. Because of this, certain measures are being taken to abate the degradation of water quality conditions. One such measure is the publication of a watershed management plan-this report. The purpose of the watershed management plan is to provide a guide for local decision makers and the community on ways to protect the Town Branch watershed.

Table 6.3 lists the current board of directors that were involved in the watershed project and Table 6.4 shows the monitoring results collected by the group. Data collected covers 2006-2010.



**Table 6.3**

**2010-2011 BCWIG Board of Directors and Members**

Kim Jarrell	Chairman
Susan Anderson	Vice-Chairman
Sarena Simpson	Treasurer
Sam Kirby	Secretary
Delbert Simpson	Past Chairman
Larry Ferguson	Member at Large
John Lower	Member at Large
Jim Davis	Member at Large
Arleen Ferguson	Member at Large
Shirley Harris	Member at Large
Billy Dryer	Member at Large

**Table 6.4**  
**Water Quality Results**  
 Results of Data  
 Individual Test Sit Averages  
 2006-2010

*BCWIG/Polk County Health Department (quarterly monitoring 2006-2010, n=8)*  
*City of Bolivar (quarterly monitoring 2008-2010, n=8)*

Site #	1	2	3	4	5	6	7	8	9	10
Temperature (F)	65.8	71.6	61.7	64.9	62.6	62.6	63.1	67.6	66.2	66.0
pH	7.8	8	8	8.1	8.2	8.3	8.3	8.2	7.6	8.4
DO (mg/)	8.75	12	11.25	9.25	11	14.6	13.6	10	10	12.5
Conductivity	411	540	526	425	596	396	500	371	614	475
Turbidity (NTU)	10	15	10	13	13	10	10	13	12	10
Phosphate (mg/L)	.63	.31	.23	.40	.81	.25	.81	.18	3.2	n/a
									1.124	.137
Nitrate (mg/L)	1.28	.82	4.00	1.00	.5	.29	4.00	.32	7.00	1.6
Flow Rate (CFS)	2.63	n/a	1.83	1.39	.44	9.13	22.98	4.81	5.7	7/09

### ***Industrial and Agricultural Operations***

Polk County has a fertilizer producing plant that contributes to air pollution by way of odors. Polk County has a high number of farm employments at 14.6% when compared to the state rate of 3.3%. This large number is a direct reflection of the number of farms in the community, which could increase the potential for environmental health risks, including runoff or fertilizer and animal waste into streams and waterways.

### ***Air Quality***

According to a study (Center for Social Sciences and Public Policy Research), the most commonly cited factors negatively affecting air quality in Polk County were vehicle emissions, second-hand tobacco smoke, and mold. Table 6.5 shows the factors negatively affecting air quality as perceived by Polk County residents.

**Table 6.5**

**Factors Negatively Affecting Air Quality- Polk County, 2004**

Factors	Frequency	Percent
<b>Vehicle Emissions</b>	187	37.6
<b>Industrial Emissions</b>	48	9.6
<b>Mold</b>	154	30.9
<b>Agricultural Dust/Burning</b>	102	20.5
<b>Second Hand smoke</b>	170	24.1

*Center for Social Sciences and Public Policy Research, 2004*

## **Housing**

Many Polk County residents are concerned with a least one factor related to housing quality in Polk County (40% of respondents in a *Center for Social Sciences and Policy Research* study). The most commonly cited sources of concern for housing were electrical and fire hazards, structural hazards, poor construction, and mold. Table 6.6 shows the factors concerning housing as perceived by Polk County residents.

**Table 6.6**

### **Factors Negatively Affecting Housing- Polk County, 2004**

<b>Factors</b>	<b>Frequency</b>	<b>Percent</b>
<b>Improper Plumbing</b>	<b>63</b>	<b>12.7</b>
<b>Electrical or Fire Hazards</b>	<b>102</b>	<b>20.5</b>
<b>Structural Hazards</b>	<b>94</b>	<b>18.9</b>
<b>Poor Construction</b>	<b>90</b>	<b>18.1</b>
<b>Lead</b>	<b>27</b>	<b>5.4</b>
<b>Mold</b>	<b>79</b>	<b>15.9</b>
<b>Asbestos</b>	<b>43</b>	<b>8.6</b>
<b>Flooding</b>	<b>27</b>	<b>5.4</b>

*Center for Social Sciences and Public Policy Research, 2004*

The majority of Polk County residents in the *Center for Social Sciences and Public Policy Research* study, (2/3) favored building codes in Polk County, while just over 1/3 opposed building codes.

## ***Summary of Environmental Indicators***

- 19.3% of children in Polk County received lead tests in 2008 (4 were found to have elevated blood lead levels >10mg/dl).
- 63% of Polk County residents have private water and sewage.
- The county seat of has fluoridated water but 10 other public water suppliers do not.
- Half of Polk County residents with wells rarely or never get their well water tested.
- Commonly cited problems affecting air quality in Polk County include: vehicle emissions, second hand smoke, and mold.
- The majority of Polk County residents (2/3) favor the addition of building codes to local statutes.

## ***Resource List***

**Missouri Department of Health and Senior Services, Childhood Lead Program**

**Website: <http://www.dhss.mo.gov/Childhoodlead/reports.html>**

**Center for Social Sciences and Public Policy Research**

**Polk County Residents' Opinions on Key Issues, 11/2004**

**Polk County Health Center**

**Polk County Health Center**

**Website: <http://www.polkcountyhealth.net>**

**Town Branch Watershed Management Plan**

**Bolivar Community Watershed Improvement Group**

**Missouri Department of Natural Resources, 2011**

**Chapter 7**  
**Social Issues**

This section examines indicators of risks to the safety of residents and visitors to the county.

***Assault***

From 1998-2008, 15 deaths occurred in Polk County due to assaults and 1,076 assault injuries were reported from 1998-2008 to hospitalizations or emergency room visits. Fighting and Beatings were reported to be the causes in 61% of the assault injuries reported in emergency room patients. These numbers have remained stable over time since data last collected in 2008. (Table 7.1)

**Table 7.1**

**Emergency Room Patients by Type of Assault- Polk County, 1998-2008**

Firearms	3
Fighting/Beating	648
Spouse/Partner Abuse	54
Adult Abuse	22
Child Abuse	18
Blunt Object	72
Other	188
Total	1,005

*Source: Missouri Department of Health and Senior Services, 2011*

Table 7.2 shows the occurrence of various crimes in Polk County over the past five years. In 2007, there were 114 violent crimes and 695 property crimes.

**Table 7.2**  
**Crime Types- Polk County, 2006-2010**

<b>Crime Types</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<i>Homicide</i>	0	2	0	1	0
<i>Rape</i>	7	6	9	1	0
<i>Attempted Rape</i>	3	2	1	0	0
<i>Robbery</i>	5	4	3	9	4
<i>Aggravated Assault</i>	86	100	133	133	100
<i>Burglary</i>	207	237	214	216	212
<i>Larceny Theft</i>	505	418	444	432	495
<i>Motor Vehicle Theft</i>	26	29	24	27	44
<i>Arson</i>	8	7	2	9	3
<i>Violent Crimes*</i>	101	114	146	144	104
<i>Property Crimes**</i>	751	695	687	693	758
<i>Total Crime Index</i>	847	805	830	828	858

\* Violent Crimes- murder, rape, robbery, aggravated assault.

\*\*Property Crimes- burglary, larceny-theft, motor vehicle theft, robbery, arson.

*Source: Uniform Crime Report, Missouri Highway Patrol- 2011*



Violent crimes include murders, rapes, robberies, and aggravated assault. Polk County has a lower incidence of violent crimes than the state. However has increased overall since 2006 with a spike during 2008 and 2009. The State of Missouri has seen an overall decrease since 2006, but also saw a spike during 2008 and 2009. Table 7.3 illustrates the violent crime incidents for both Polk County and Missouri.

**Table 7.3**

**Violent Crime Rate - Polk County & Missouri- 2006-2010**

Year	Polk County	Missouri
2006	101	31,942
2007	114	32,742
2008	146	29,706
2009	144	29,573
2010	104	27,385

*Source: Uniform Crime Report, Missouri Highway Patrol- 2011*

Table 7.4 illustrates the rate of property crimes for both Missouri and Polk County.

According to Table 7.4, the number of property crimes has remained consistent with a slight increase since 2006. The state has seen a consistent decrease in the number of property crimes since 2006.

**Table 7.4**

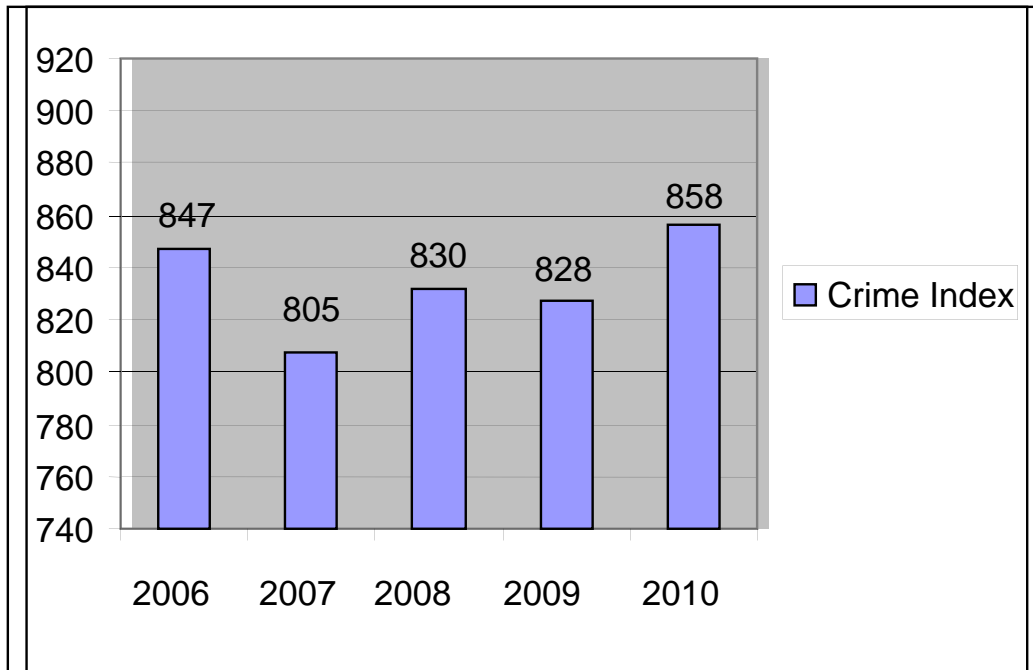
**Property Crime - Polk County & Missouri - 2006-2010**

<b>Year</b>	<b>Polk County</b>	<b>Missouri</b>
<b>2006</b>	<b>751</b>	<b>233,458</b>
<b>2007</b>	<b>695</b>	<b>234,260</b>
<b>2008</b>	<b>687</b>	<b>225,742</b>
<b>2009</b>	<b>693</b>	<b>211,239</b>
<b>2010</b>	<b>758</b>	<b>207,750</b>

*Source: Uniform Crime Report, Missouri Highway Patrol- 2011*

The total crime index represents the number of crimes. According to Figure 7.1, the overall crime index for Polk County has increased since 2007. In 2010, 858 crimes were un-lawfully committed.

**Figure 7.1**  
**Total Crime Index- Polk County 2006-2010**



*Source: Uniform Crime Report, Missouri Highway Patrol- 2007*

### ***Domestic Violence***

Domestic violence incidents are reported by Polk County in Table 7.5. Law enforcement agencies reported 234 incidents in Polk County in 2010. Domestic violence has remained between 176 and 243 incidents over the past five years. There has been an increase of 58 reports from 2008 to 2009, but only an increase of 9 from 2009 to 2010. Additionally, the Missouri Department of Health and Senior Services reports from 1998-2008 the rate of emergency room visits for spouse-partner abuse is high when compared to the State of Missouri.

**Table 7.5**

**Domestic Violence Reports- Polk County, 2003-2007**

<b>Year</b>	<b>Polk County</b>
<b>2006</b>	<b>186</b>
<b>2007</b>	<b>182</b>
<b>2008</b>	<b>176</b>
<b>2009</b>	<b>234</b>
<b>2010</b>	<b>243</b>

*Source: Uniform Crime Report, Missouri Highway Patrol- 2011*

### ***Registered Sex Offenders***

Seventy-six registered sex offenders live in Polk County. Some offenses committed by those registered included: rape, statutory rape, sodomy, child molestation, sexual assault, and sexual abuse.

## ***Alcohol and Drugs***

According to the Missouri State Highway Patrol, the number of Methamphetamine Lab Incidents is down. In 2006, only one Methamphetamine Lab incident was reported down from 9 in 2005 and 21 in 2004.

Polk County established a Methamphetamine Task force in January 2005 to deal with an increase in illegal Methamphetamine use and production. Also in 2005 the local court system established a Drug Court for adults facing criminal charges related to drug use or abuse. Information provided by the Drug Court indicates that most of the participants have experienced relapse, however, no one that has completed the program has had any new charges brought against them. Each year the Court works with approximately 20-25 individuals and is certainly a more cost effective approach than jail time. The program is seen as a success by the community at this time (Polk County Drug Court, 2010).

The Pseudoephedrine Control Law (SB-10) also became effective in 2005 which has decreased the number of methamphetamine lab incidents markedly.

Table 7.6 lists those arrests related to alcohol and drugs. According to the Table, DWI/DUI arrests have decreased from 190 (2007) to 89 (2009). However, drug arrests have increased from 117 (2007) to 125 (2008).

**Table 7.6**

**Drug and Alcohol Related Arrests-Polk County, 2007-2009**

	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>DWI/DUI Arrests</b>	190	123	89
<b>Drug Arrests</b>	117	73	125
<b>Alcohol Involved Crashes</b>	26	29	28
<b>Drug Involved Crashes</b>	3	1	8

*Missouri Department of Mental Health, Division of Alcohol and Drugs, 2011*

According to Juvenile Court Referrals (Missouri Department of Mental Health), Juvenile Crime has decreased from 2007 to 2009. Table 7.7 lists those law violation offenses for juveniles.

**Table 7.7**

**Juvenile Court Referrals- Polk County, 2002-2004**

	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Law Violation Offenses- Total</b>	217	218	201
<b>Violent Offenses</b>	50	46	60
<b>Alcohol Offenses</b>	12	10	8
<b>Drug Offenses</b>	16	17	13

*Missouri Department of Mental Health, Division of Alcohol and Drugs, 2011*

## Abuse/Neglect

The total number of abuse and neglect cases is down from 139 in 2007 to 115 in 2009.

Table 7.8 lists the number of abuse, neglect, and custody disputes for Polk County.

The number of Out-Of-Home placements has increased from 19 in 2007 to 26 in 2009.

Table 7.9 lists the number of Out-Of-Home placements by type for Polk County.

**Table 7.8**

### Abuse/Neglect/Custody- Polk County, 2007-2009

	2007	2008	2009
<b>Abuse/Neglect/Custody-Total</b>	139	169	115
<b>Abuse</b>	62	74	44
<b>Neglect</b>	77	95	69
<b>Custody Disputes</b>	0	0	2

*Missouri Department of Mental Health, Division of Alcohol and Drugs, 2011*

**Table 7.9**

### Out-Of-Home Placements- Polk County, 2007-2009

	2007	2008	2009
<b>Out-Of-Home Placements-Total</b>	19	19	26
<b>Parental Alcohol Use Related</b>	0	0	0
<b>Parental Drug Use Related</b>	1	3	2
<b>Parental Alcohol &amp; Drug Use</b>	0	0	3
<b>Child Removed for Other Reasons</b>	15	16	24

*Missouri Department of Mental Health, Division of Alcohol and Drugs, 2011*

## ***Summary of Social Issues Indicators***

- From 1995 to 2005, there were 939 assault injuries reported in Polk County.
- There is a lower rate of violent crimes in Polk County than Missouri, however the number of violent crimes has continued to increase since 2006 in Polk County.
- 243 domestic violence incidents were reported in Polk County in 2010.
- Violent offenses account for most of the juvenile court referrals in Polk County and has increased since 2008.

***Resource List***

**Missouri Department of Health and Senior Services, Missouri Information for  
Community Assessment**

**Website: <http://www.dhss.mo.gov>**

**Missouri Department of Mental Health, Division of Alcohol and Drug Abuse**

**Website: <http://www.dmh.mo.gov>**

**Missouri State Highway Patrol, Uniform Crime Reporting Statistical Analysis**

**Website: <http://www.mshp.dps.missouri.gov>**

**Polk County Drug Court, 2011**



## **Chapter 8**

### **Health Care Services**

The purpose of the Health Care Services section of the assessment is to attempt to quantify the availability and use of basic health services and barriers to health care access. Hospital capacity, skilled nursing, and physician characteristics will be examined to develop a profile of the resources available in Greene County.

#### ***Physicians***

The ratio of physicians to population in Polk County is 1:711 and the ratio of registered nurses to the population is 1:107. The rate of physicians to Polk County residents is higher than the national average (934:100,000 and 283:100,000, respectively).

There are approximately 34 primary care physicians in the county, which is an increase from 25 in 2008. These physicians provide a wide variety of services. Additionally, the majority of physicians in Polk County accept Medicaid for payment.

#### ***Barriers to Health Care***

Because Polk County is a rural community it is limited in public transportation.

Transportation may be provided through a community bus that runs four hours per day by appointment. Additionally, the local hospital provides transportation to and from doctor's appointments for Medicare and Medicaid patients.

Another barrier to health care is the lack of health insurance coverage. Polk County is below the state average for health insurance coverage; with approximately 19% of Polk County residents reported they had no health care coverage, higher than the state rate at 17% and the national benchmark of 13%.

### ***Hospitals***

There is one hospital in Polk County named Citizens Memorial Hospital. Citizens Memorial Hospital is a 76-bed acute care hospital that offers an extensive list of patient services. They uphold one basic principle: all patients, regardless of their physical or mental condition, will be treated with dignity and respect. This underlying philosophy requires a committed and caring staff. The Citizens Memorial Healthcare system also includes 22 physician clinics, five long term care facilities, one residential care facility and several independent living units. CMH has 59 active staff physicians and 65 visiting physicians. CMH serves more than 100,000 people in southwest Missouri in eight counties. The hospital has no access to critical care. The closest critical care provider would be in Springfield, Missouri (approximately 30 minutes by ambulance). Currently, in Springfield there are two large critical care hospital providers- St. John's Hospital and Cox South Hospital.

In Polk County, there are also 4 skilled nursing care facilities (totaling 367 beds) and 6 residential care facilities.

### ***Dental Services***

Unfortunately, there is not an adequate supply of providers of dental health coverage for children with Medicaid insurance. Currently, no Dentists in Polk County provide dental services to Children covered by Medicaid insurance. Citizens Memorial Hospital sponsors the Miles for Smiles program. The Miles for Smiles program provides dental healthcare for children in seven Missouri counties, including Polk.

The community has also identified a need for dental healthcare for adults in Polk County.

### ***Mental Health Services***

There are a few private practice psychiatrists in the area, an inpatient psychiatric unit for geriatric patients (10 beds)-located at Citizens Memorial Hospital, and a Crisis Hotline provided by Burrell Behavioral Health of Greene County. In 2010 the community created a Mental Health Resource Guide. This Guide identified seven locations in the community for services as well as six facilities in the region for individuals to receive care. However, there is not enough providers available for all residents and Polk County is still identified as a service shortage area for mental health services.

### ***Summary of Health Services Indicators***

- The ratio of physicians to population in Polk County is 1:711.
- Polk County is below the state average for health insurance coverage (19% of Polk County residents reported they had no health care coverage).
- The closest critical care hospital is approximately 30 miles away.
- No Dentists in Polk County provide dental services to children or adults covered by Medicaid insurance.

***Resource List***

**U.S. Census Bureau**

**Website: <http://www.census.gov>**

**Missouri Department of Health and Senior Services, Missouri Information for  
Community Assessment**

**Website: <http://www.dhss.mo.gov>**

**Missouri Department of Health and Senior Services, Hospital Profile- Polk County**

**Website: <http://www.dhss.mo.gov>**

## **Chapter 9**

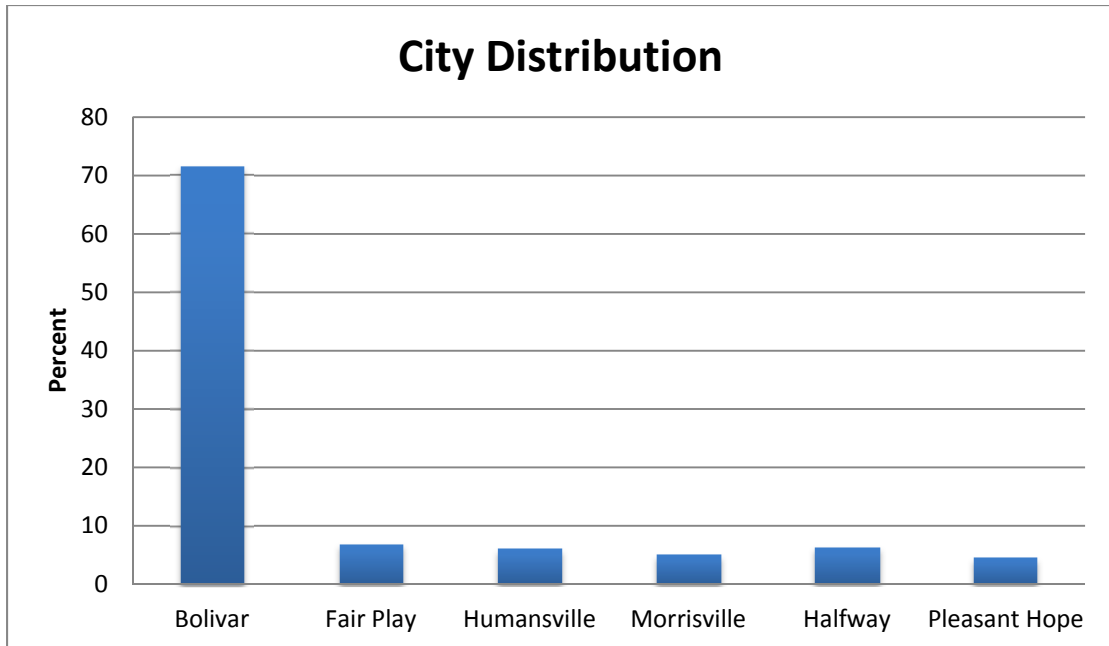
### **Polk County Healthy Lifestyles Survey**

In August 2011, the community distributed a healthy lifestyles survey to determine what people's attitudes are towards diet and exercise, and also to determine the current state of the people's health. The survey was done online using SurveyMonkey and a paper copy was also available to those without internet access. The survey method was a convenience/snowball sample, with the link being emailed out to a listserv. The people on the listserv then emailed it to people they knew, who also passed the link along. This survey was adapted from the Boone County Healthy Lifestyles Initiative, which was done in conjunction with the University of Missouri extension office. Included in the report of the community's health are the results of this survey.

## Demographics

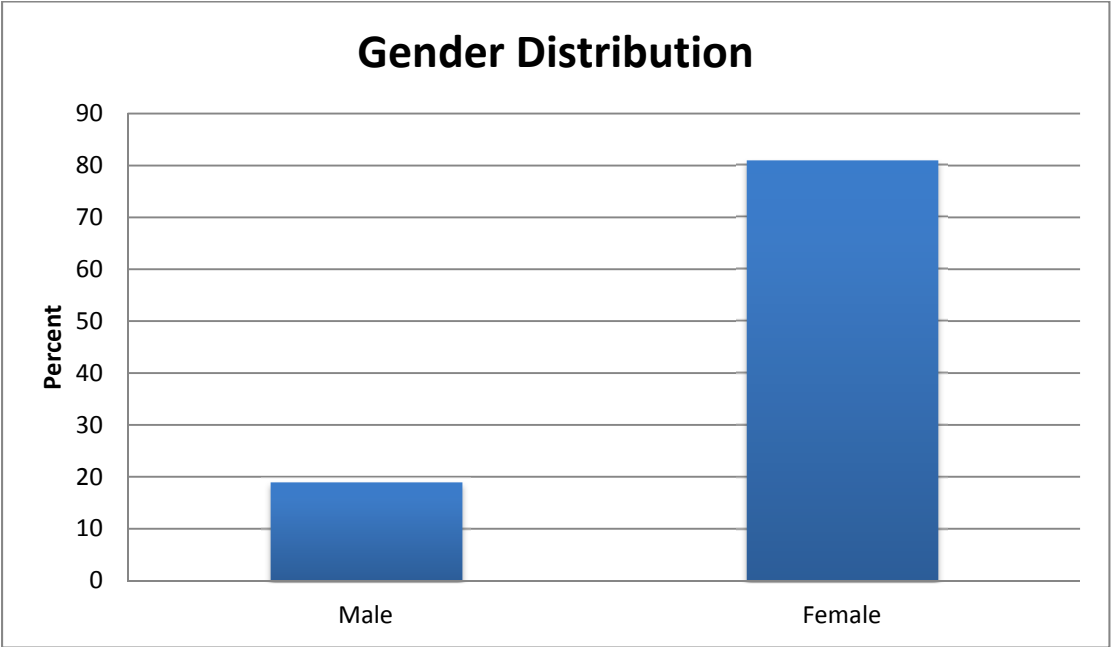
The majority of the respondents live in Bolivar, Missouri, the county seat and largest city in Polk County.

Figure 9.1



80.9% of the respondents were female and 19.1% were male. This makes the results skewed towards a female demographic.

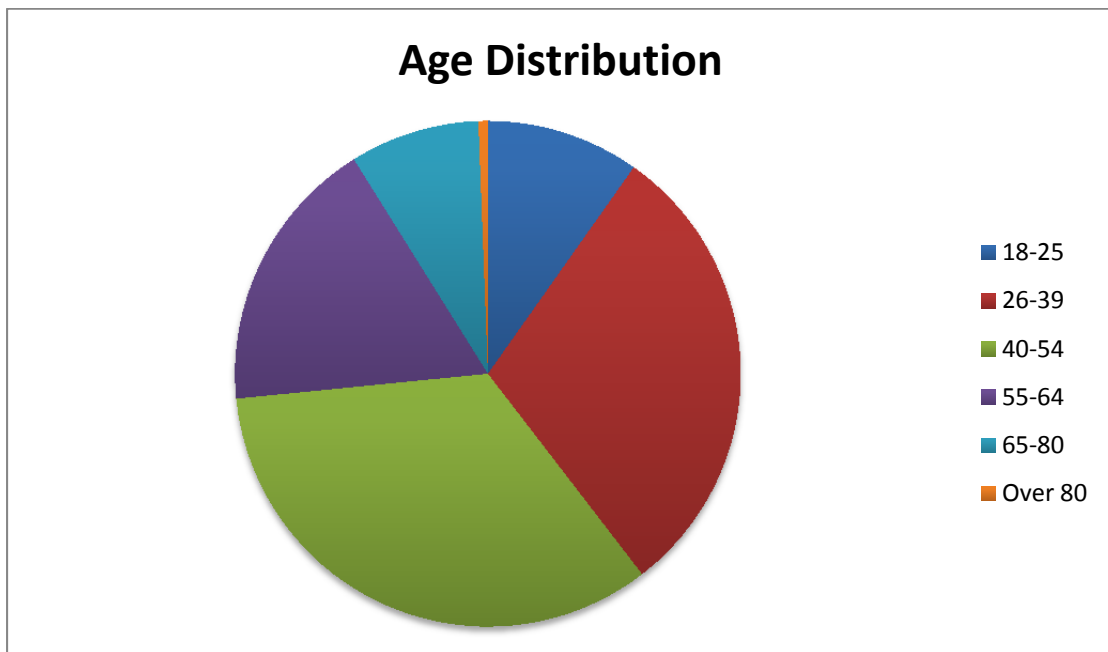
**Figure 9.2**





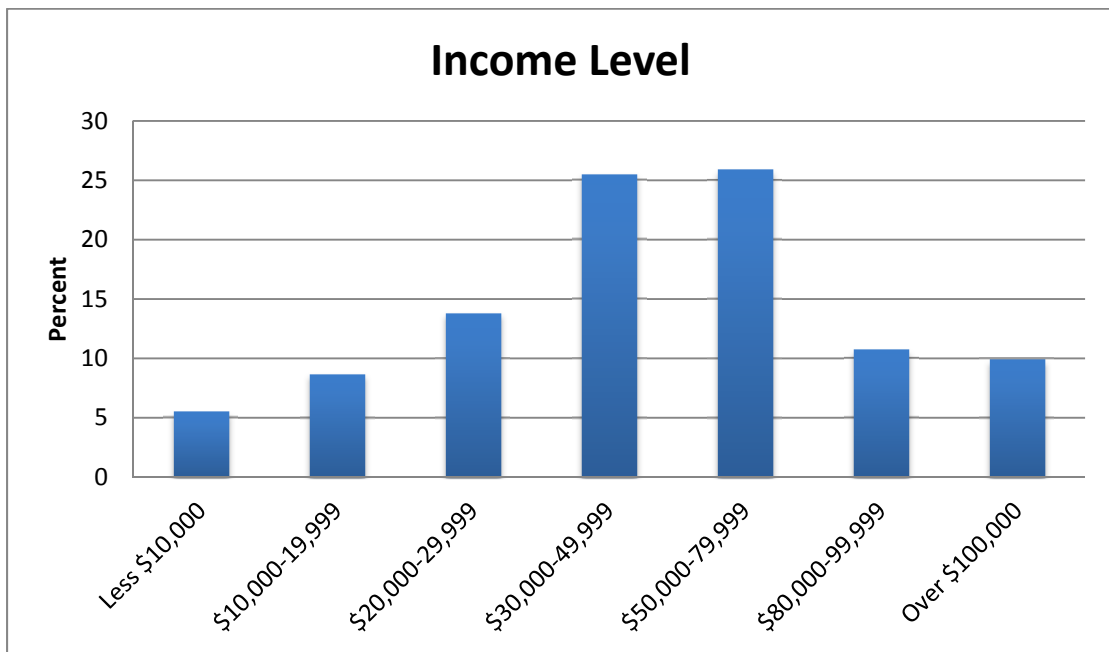
The majority of the respondents were between the ages of 40-54, with 33.9% of the respondents falling into this category. There were also a high number of those aged 26-39, with 29.8% of the sample in this category. 17.1% of the sample was made of those aged 55-64. Overall, the age distribution was very good.

**Figure 9.3**



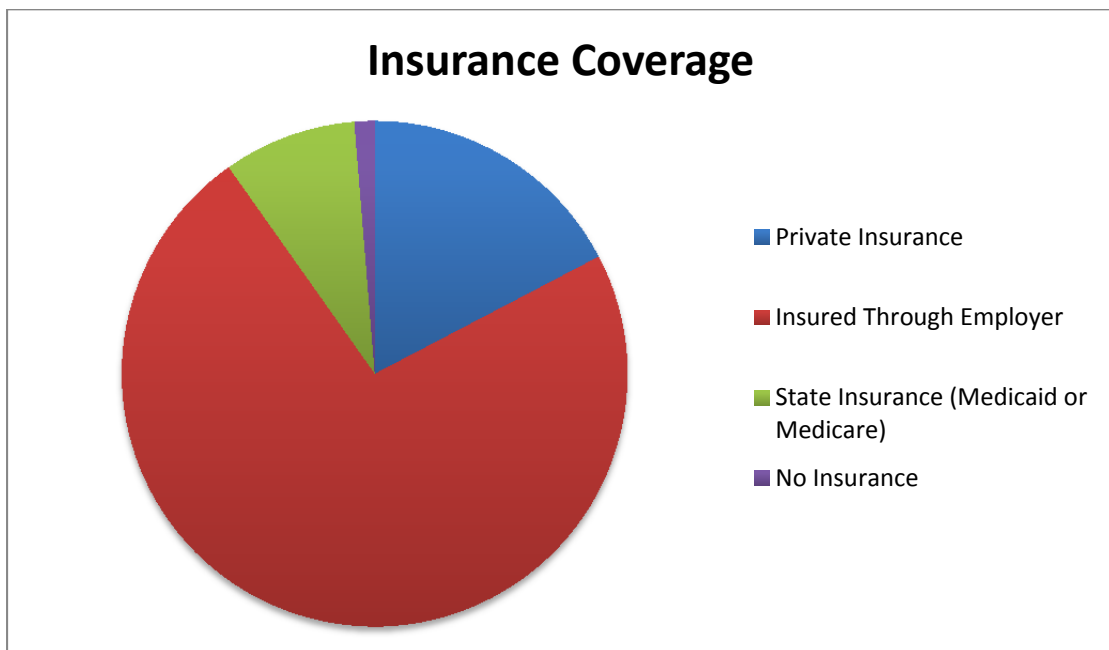
The income level of those surveyed is skewed slightly, as the majority of respondents identified that their income level was between \$50,000-\$79,999. However, there were also a high number of respondents indicating an income level between \$30,000-\$49,999, which reflects the average median household income of about \$35,000.

**Figure 9.4**



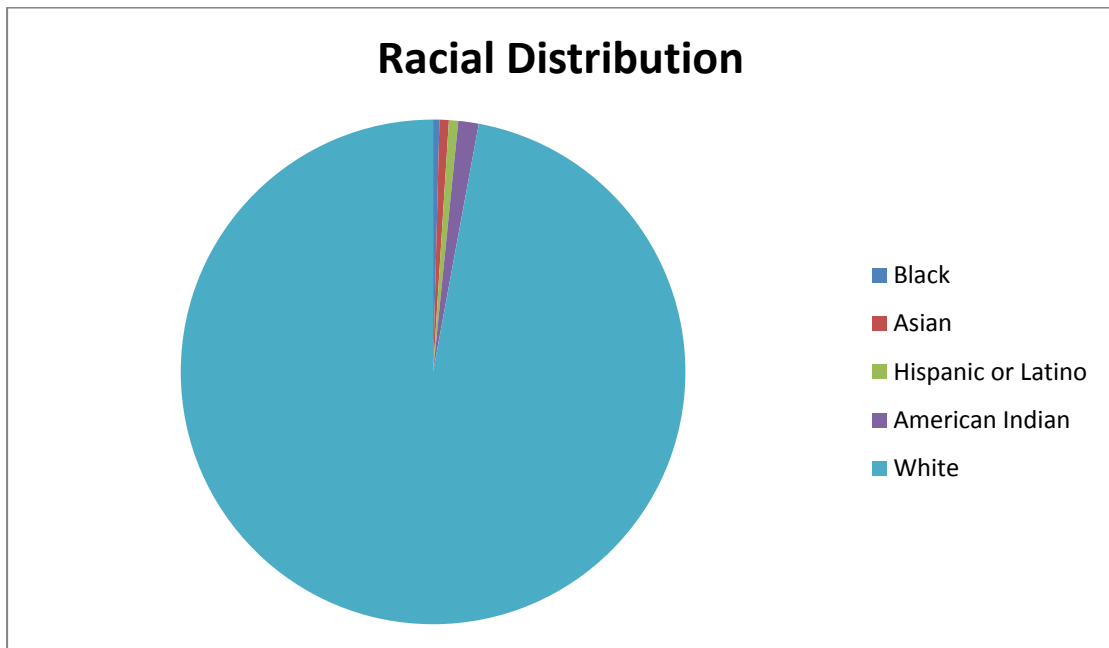
In our survey, the majority of respondents (67.7%) had insurance coverage provided to them through their employer. 16.1% of the respondents had private insurance, and 7.9% were covered by state insurance programs, either Medicaid or Medicare. Of the surveyed population, 8.3% were without insurance coverage. This is lower than the federal estimate, which is 19.1%. One reason for this is likely because of the way the survey was done, it may not have reached the uninsured population as well as it needed to. When asked why they did not have insurance coverage, the number one response was that they can't afford it. Other reasons included no health insurance coverage through their employer, not qualifying medically for insurance coverage, and not qualifying financially for state programs.

**Figure 9.5**



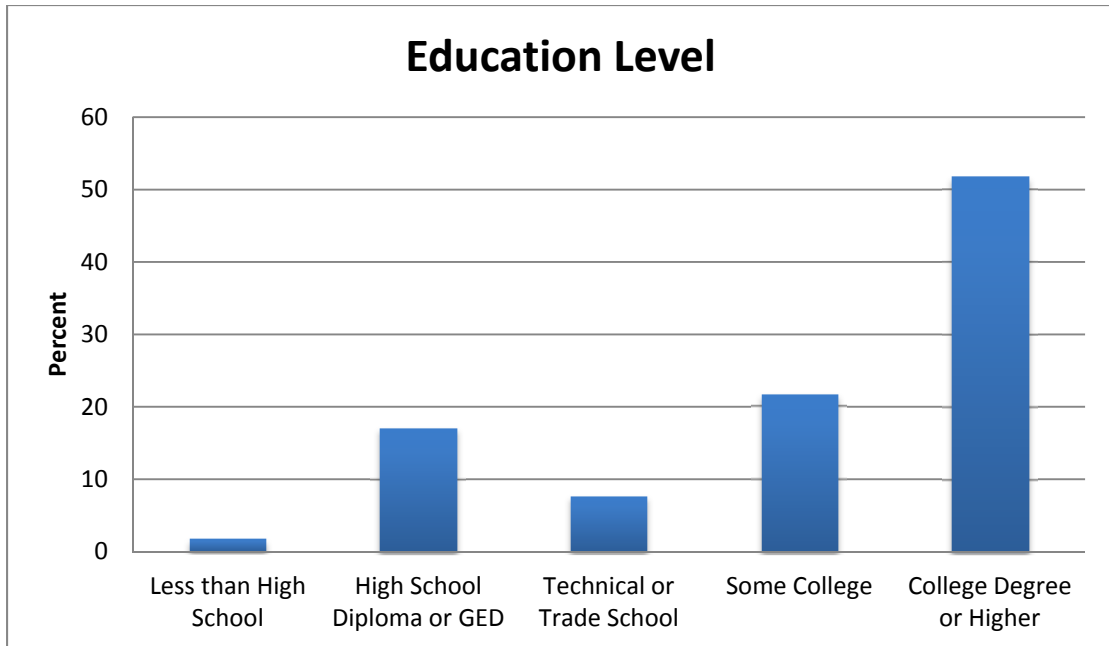
The racial distribution of or sample population matches the demographics of the county fairly well. 97.1% indicated that they were white, with the next highest group of individuals being American Indian. 0.4% of the sample population identified as black, 0.6% as Asian, and 06% as Hispanic or Latino origin.

**Figure 9.6**



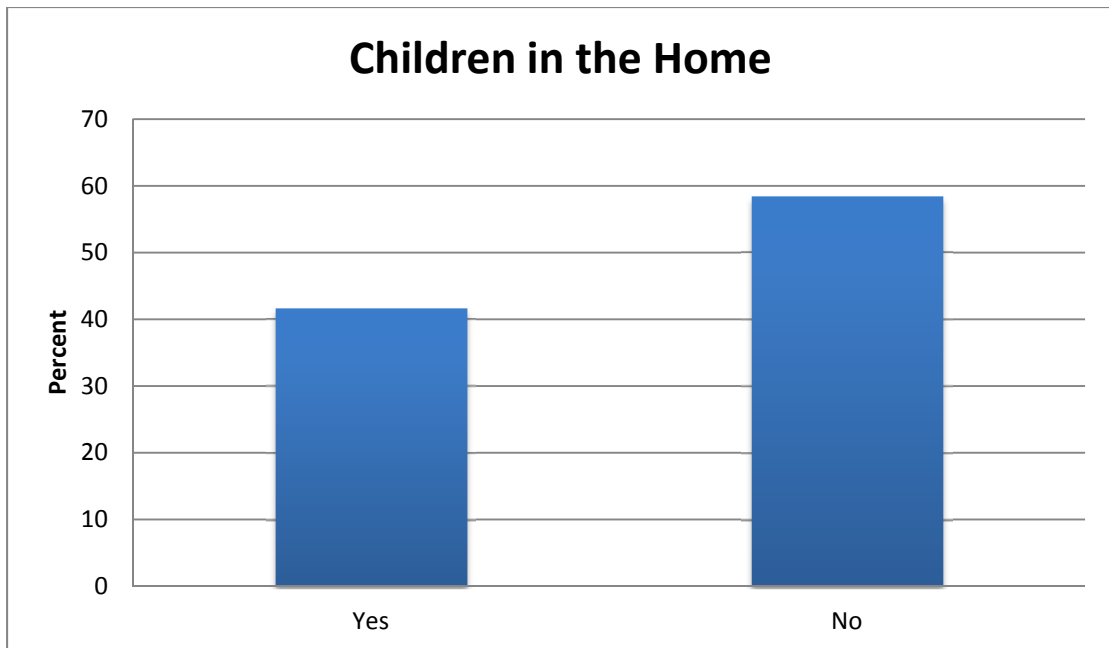
The majority of the population in our sample had a college degree or higher, with 51.8% of the population falling into the category. This is more educated than the general population of the county, as the majority of county residents have a high school diploma or GED.

**Figure 9.7**



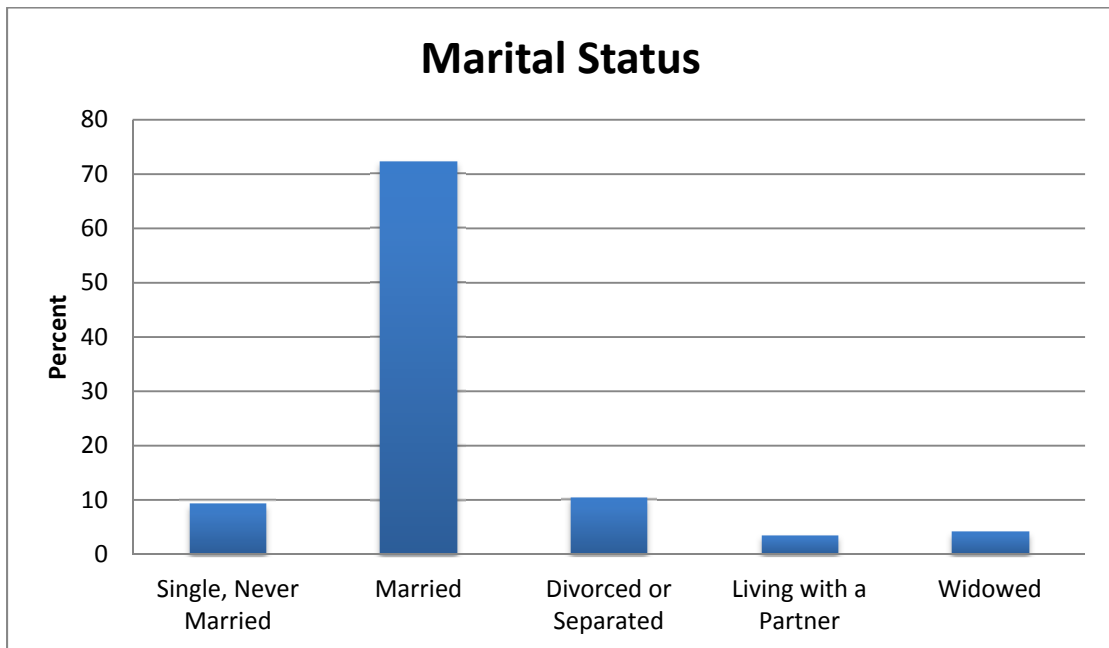
Of the respondents surveyed, 58.4% said that they do not have school-aged children living in the home. This may be because of the older ages of the sample, who may have children that are no longer in school or living at home.

**Figure 9.8**



The majority of the respondents were married. This closely mirrors the household demographics of the county, as the majority of households are made up of those families that are married couples or married couples with children. 10.4% of the population surveyed were divorced or separated, and 9.4% were single and had never been married.

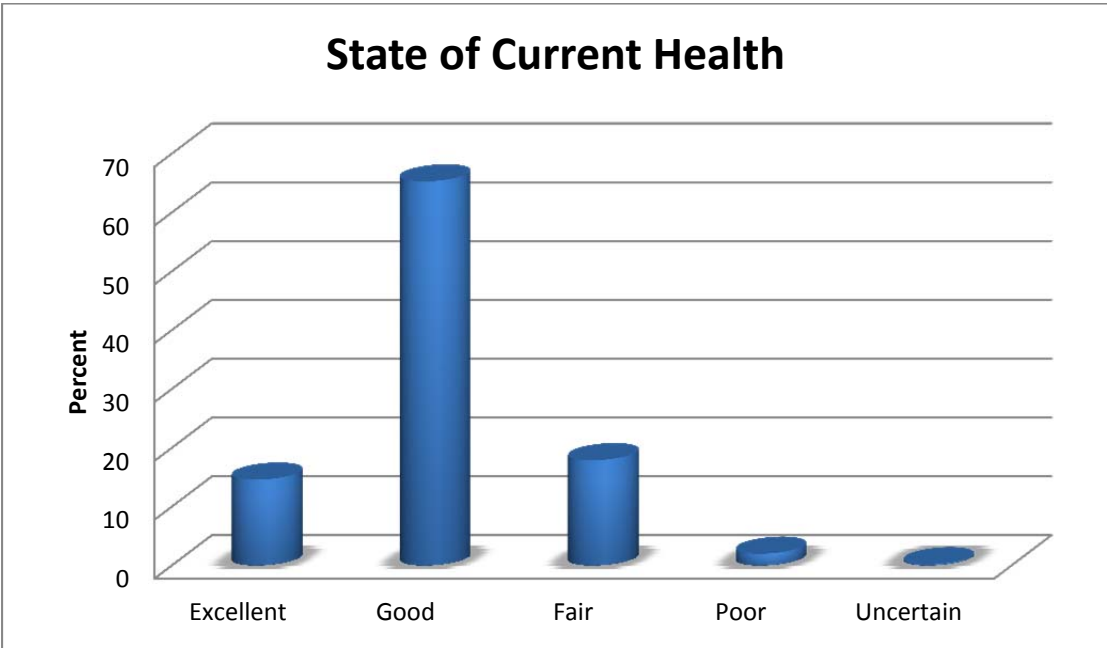
**Figure 9.9**



**State of Health**

In our sample, the majority of people believe that they are in good health. Very few people believe that their health was poor. This contradicts other evidence that high levels of other chronic diseases, such as heart disease and diabetes.

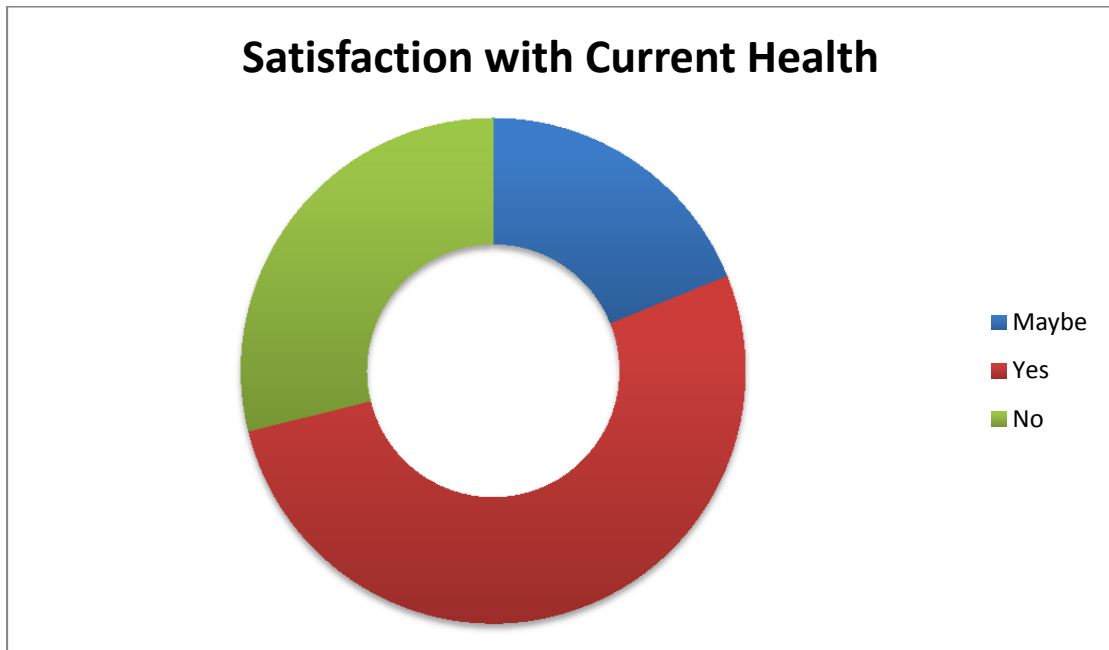
**Figure 9.10**





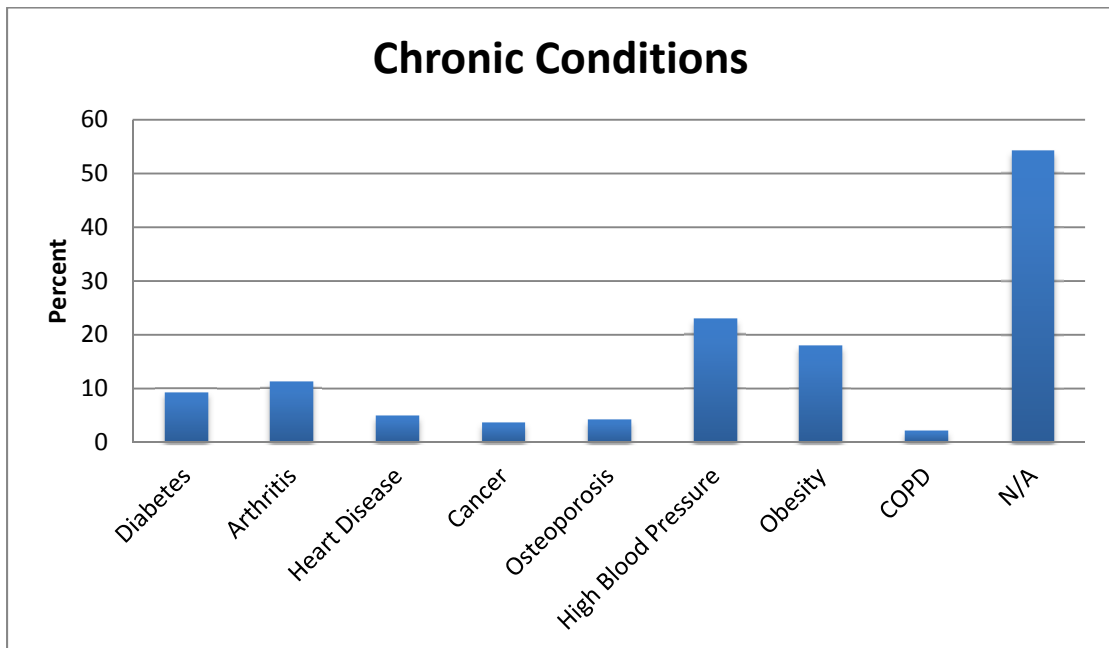
The majority of respondents were satisfied with their current health status, with 52.3% of the sample population falling into this category. 28.9% of the sample population indicated that they are not satisfied with their current level of health.

**Figure 9.11**



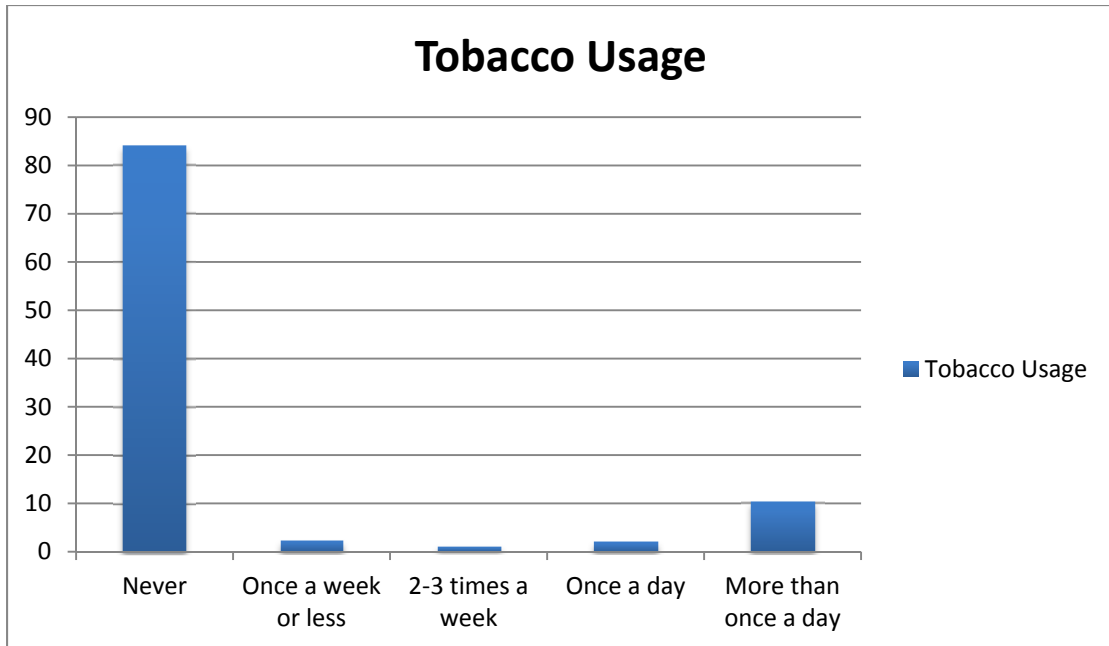
Of those surveyed, the most common chronic condition was high blood pressure. This is a major risk factor for strokes and other cerebrovascular diseases, one of the top causes of death in the county. Other chronic conditions that were at high levels include obesity and arthritis. Obesity is a risk factor for many other chronic conditions, including diabetes, heart disease, and stroke.

**Figure 9.12**



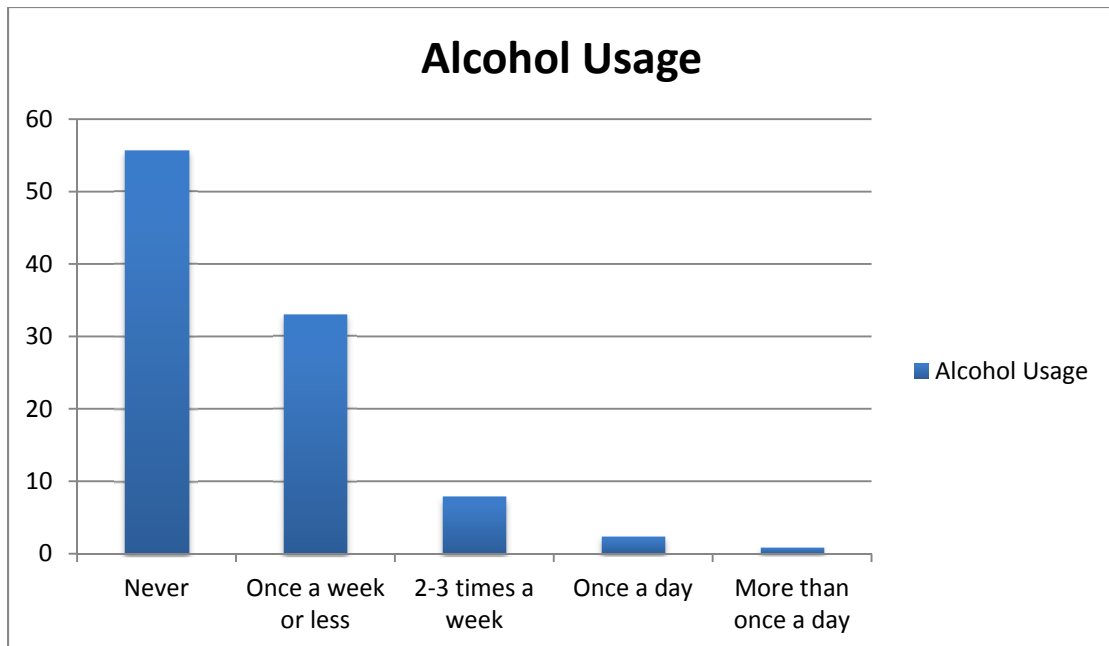
The majority of respondents answered that they never use tobacco, with only 10.3% the sample answering that they were regular tobacco users. This indicates that there may be other reasons why chronic obstructive pulmonary disease (COPD) is a leading cause of mortality in the county.

**Figure 9.13**



The majority of respondents also said that they did not use alcohol, with 55.7% of the sample population falling into this category. 33% of those surveyed use alcohol once a week or less, and 7.9% use alcohol 2-3 times a week. Very few respondents used alcohol once a day or more.

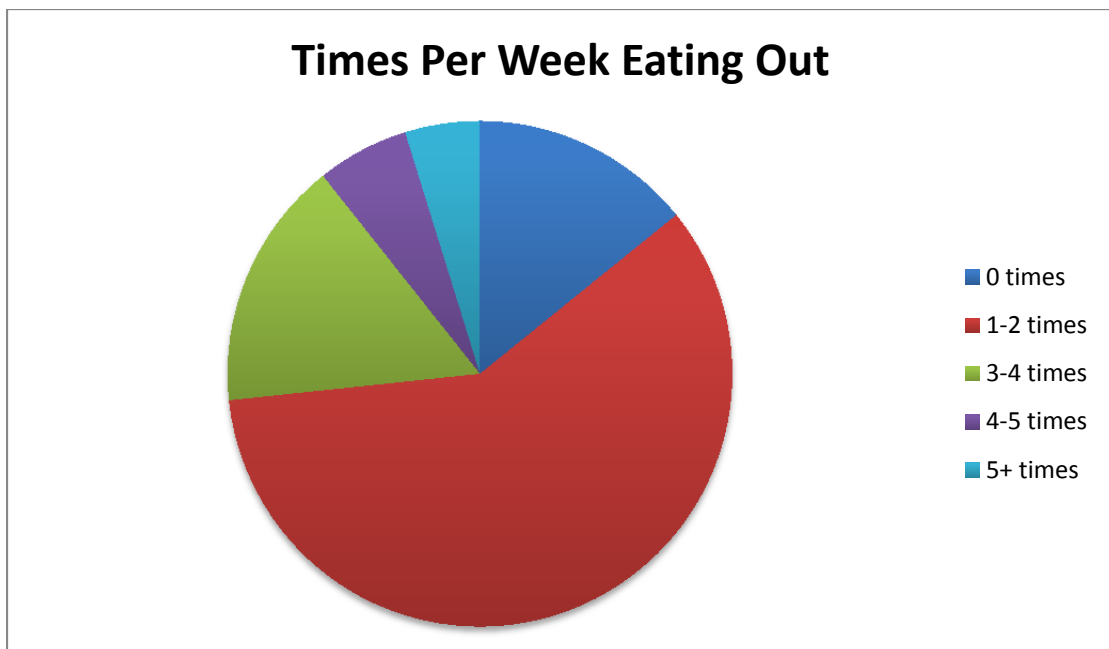
**Figure 9.14**



### ***Food Attitudes***

The survey results indicated that the majority of the population eat out about 1-2 times a week, with 59.2% of people going out once or twice a week. 16% of the sample population went out to eat 3-4 times week, and 14.2% never went out to eat.

**Figure 9.15**



While the majority of people think that they are in good health, they are still making changes to their eating habits. 69.3% of the sample population are currently making changes to their eating habits, and 10.8% of the sample population are planning on making changes to their eating habits within in the next 6 months.

**Figure 9.16**

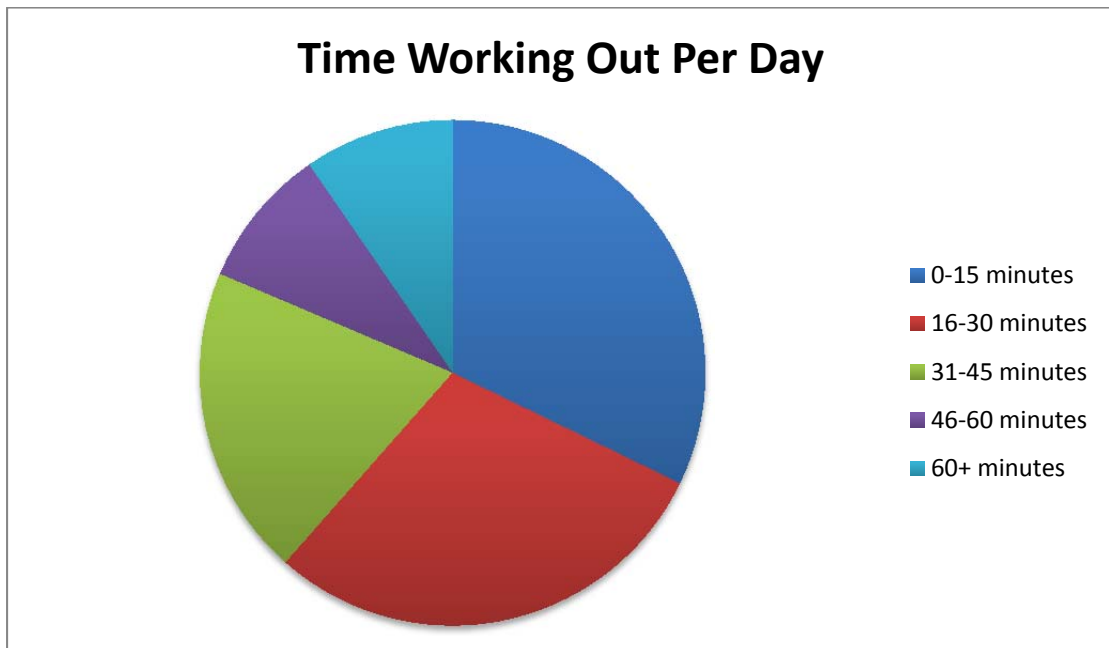


There are many factors that affect the choices people make about food. In these times of economic crises, many people hold more than one job at a time, so it is not surprising that when surveyed, the number one reason that people gave for eating the foods they choose is because it is easy to prepare. Other top reasons for food choices also indicate that the main reason for food choices is out convenience and that is it reasonable. There were a high number of people that also said they chose the food because it is healthy and it tastes good. Healthier meals are harder to prepare because they often take more time than precooked meals that are available in the grocery stores. When asked about what factors would help the sample increase the amount of fruits and vegetables that they eat, the majority of respondents indicated that more reasonably priced fruits and vegetables and a greater selection at local grocery stores would improve the intake of fruits and vegetables in their diet.

### ***Physical Activity Levels***

The majority of the sample in our survey worked out 0-15 minutes a day, with the rest of the people in the sample working out more than 15 minutes a day. This includes activities such as walking, running, biking, working out a gym, and other activities that increase cardiac output and help increase health.

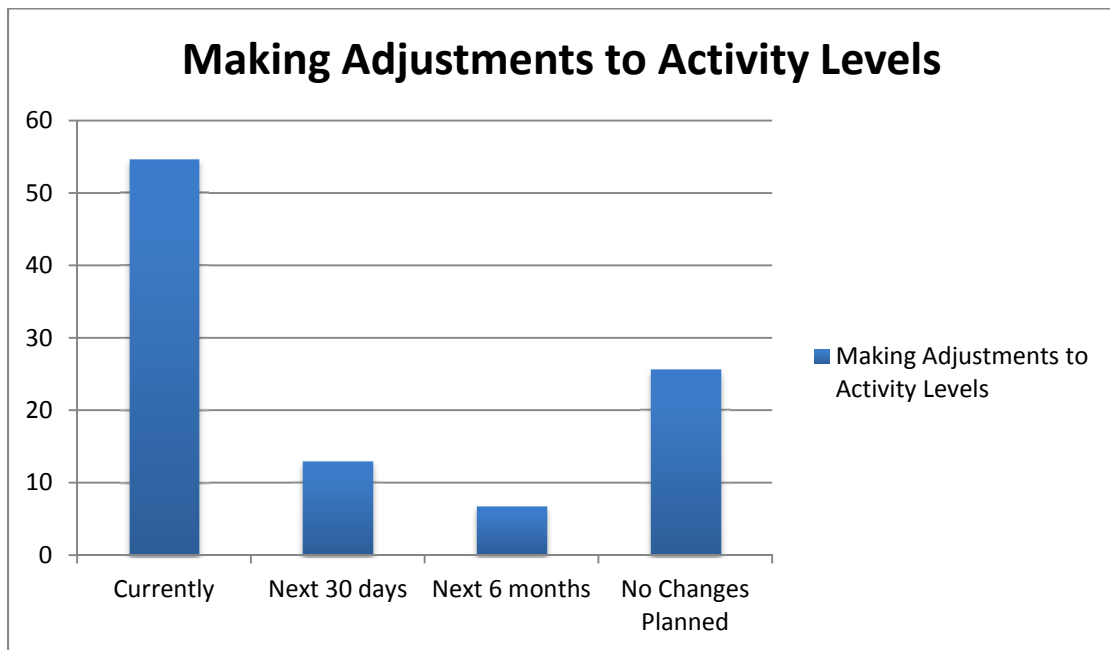
**Figure 9.17**





74.4% of the sample population is currently making changes to their activity levels, or are planning to make changes in the next 6 months. Only 25.6% of the sample population are not planning on making changes to their exercise habits.

**Figure 9.18**



There are many reasons to be physically active, but when surveyed the majority of people said that they were physically active because it made them look and feel better. Other primary reasons for being physically active included to maintain or improve health, to lose weight, and doing everyday activities that require being physically active, such as having a job that requires you to be physically active. The number one reason for not being physically active was the lack of time. Other factors for not being physically active included lack of motivation or self-discipline and lack of energy. Some people also said that not having good weather and not having a partner to exercise with impacted their decisions. When asked what would help them be more physically active, the number one response was to have someone else to exercise with. Having safe, clean parks with lighted trails for after dark use, adequate neighborhood sidewalks, indoor swimming pools, and community recreation center would also increase the level of physical activity in the community.

## **Resource List**

### **Polk County Healthy Lifestyles Survey - 2011**

## Summary of Findings

The purpose of the present Community Health Assessment was to review community health status indicators, including primary and secondary data, in order to identify existing and possible future health problems.

Before health problems are discussed, it is important to first discuss the changing demographic climate of Polk County. Polk County has grown at double the rate of the state of Missouri. Presently, the total population of Polk County is 31,137 (2010). The ethnic and racial composition of Polk County has changed little over time. Whites represent 97.5% of the population as compared to the state rate of 85.5%. Blacks, American Indian/Alaska Natives, and Asian/Pacific Islanders remain low (<1.0%). The Hispanic population is 1.8% in Polk County.

For adults the primary health concerns include:

- Lack of insurance.
- Drug, alcohol, and tobacco use.
- Motor vehicle deaths and unintentional injuries.
- Domestic violence abuse among women.

For children the primary health concerns include:

- Dental health.
- Motor vehicle deaths and unintentional injuries.
- Child abuse.

A review of Behavioral Risk Factors Surveillance System County Level (BRFSS)

indicates the following problems:

- Physical inactivity.
- Obesity.
- Lack of Early Detection/Screenings at age appropriate levels.

The most significant problems affecting the health status of populations within the jurisdiction of the local public health agency are:

1. High Blood Pressure
2. Lack of physical activity/obesity
3. Unintentional Injury and Prevention

Further research should be aimed at increasing data on housing characteristics and environmental health.