

Missouri Baptist Sullivan Hospital

2016 Community Health Needs Assessment and Implementation Plan



Our Mission is to improve the health of the people and communities we serve.



Table of Contents

I.	Executive Summary.....	3
II.	Community Description.....	4
III.	Previous CHNA Measurement and Outcomes Results.....	13
IV.	Conducting the 2016 CHNA.....	14
	A. Primary Data Collection.....	14
	B. Secondary Data Analyses.	17
	C. Internal Work Group Prioritization Meetings.....	60
V.	Appendices.....	66
	A. About Missouri Baptist Sullivan Hospital.....	66
	B. Focus Group Members.....	67
	C. Internal Work Group Member.....	68
	D. Focus Group Report	69
VI.	Implementation Plan.....	75
	A. Community Health Needs to be Addressed.....	78
	B. Community Health Needs that will not be Addressed.....	84

I. Executive Summary

Missouri Baptist Sullivan Hospital is located in Sullivan, Missouri, providing high quality health care services to the residents of Franklin, Crawford, and Washington Counties. The hospital has also established effective partnerships towards the goal of improving the health of the community. Missouri Baptist Sullivan Hospital is a member of BJC HealthCare, one of the largest, nonprofit health care organizations in the country. BJC HealthCare hospitals serve urban, suburban and rural communities through 15 hospitals and multiple community health locations primarily in the greater St. Louis, southern Illinois and mid-Missouri regions.

Like all nonprofit hospitals, Missouri Baptist Sullivan Hospital is required by the Patient Protection and Affordable Care Act (PPACA) to conduct a community health needs assessment (CHNA) and create an implementation plan every three years. The hospital completed its first CHNA and implementation plan on Dec. 31, 2013. The report was posted to the hospital's website to ensure easy access to the public.

Each hospital is required to define its community. Once the community is defined, input must be solicited from those who represent the broad interests of the community served by the hospital, as well as those who have special knowledge and expertise in the area of public health.

Missouri Baptist Sullivan Hospital conducted its 2016 assessment in two phases. The first phase consisted of a focus group discussion with key leaders and stakeholders representing the community. This group reviewed the primary data and community health need findings from 2013 and discussed changes that had occurred since 2013. Additionally, the focus group reviewed gaps in meeting needs, as well as identified potential community organizations for Missouri Baptist Sullivan Hospital to collaborate with in addressing needs.

During phase two, findings from the focus group meeting were reviewed and analyzed by a hospital internal work group of clinical and non-clinical staff. Using multiple sources, including Healthy Communities Institute and Truven Health Analytics, a secondary data analysis was conducted to further assess the identified needs. This data analysis identified some unique health disparities and trends evident in Crawford County when compared against data for the state and country.

At the conclusion of the comprehensive assessment process, Missouri Baptist Sullivan Hospital identified three health needs where focus is most needed to improve the health of the community it serves:

- Mental Health: Substance Abuse
- Mental/Behavioral Health
- Heart & Vascular: Heart Health

The analysis and conclusions were presented, reviewed and approved by the Missouri Baptist Sullivan Hospital board of directors.

II. Community Description

Missouri Baptist Sullivan Hospital is located along Interstate Highway 44 in the City of Sullivan, Missouri. The hospital also operates rural medical clinics in the Crawford County cities of Bourbon, Cuba and Steelville.

The hospital has defined the target community for its CHNA as Crawford County—the county in which it is physically located. Below is a map of Crawford County.



Located in Southeast Missouri, the land area of Crawford County includes 742.52 square miles with 33.30 persons per square mile (2010).

Table 1 further details the county's population as compared to the state.

Table 1: Demographic of Crawford County vs. Missouri State		
GEOGRAPHY	Crawford County	Missouri
Land area in square miles, 2010	742.52	68,741.52
Persons per square mile, 2010	33.30	87.1
POPULATION		
Population, July 1, 2015 estimate	24,526	6,083,672
Population, 2014 estimate	24,650	6,063,589
Population, 2010 (April 1) estimates base	24,696	5,988,923
Population, percent change - April 1, 2010 to July 1, 2015	-0.7%	1.6%
Population, percent change - April 1, 2010 to July 1, 2014	-0.2%	1.2%
Population, 2010	24,650	5,988,927
RACE / ETHNICITY / Language Spoken		
White alone, percent, 2015 (a)	97.2%	83.5%
White alone, not Hispanic or Latino, percent, 2015	95.6%	79.8%
Hispanic or Latino, percent, 2014 (b)	1.9%	4.1%
Two or More Races, percent, 2015	1.3%	2.2%
African American alone, percent, 2015 (a)	0.5%	11.8%
American Indian and Alaska Native alone, percent, 2015 (a)	0.5%	0.5%
Asian alone, percent, 2015 (a)	0.3%	2.0%
Native Hawaiian and Other Pacific Islander alone, percent, 2015 (a)	0.1%	0.1%
LANGUAGE		
Language other than English spoken at home, percent 5+, 2010-2014	1.4%	6.1%
Foreign born persons, percent, 2010-2014	0.6%	3.9%
AGE		
Persons under 5 years, percent, 2015	6.4%	6.2%
Persons under 18 years, percent, 2015	23.6%	22.9%
Persons 65 years and over, percent, 2015	18.2%	15.7%
GENDER		
Female persons, percent, 2015	50.2%	51.0%
Male persons, percent, 2015	49.8%	49.0%

Source: Government Census

(a) Includes persons reporting only one race

(b) Hispanics may be of any race, so also are included in applicable race categories

(z) Value greater than zero but less than half unit of measure shown

Crawford County has a population of 24,526. Among Missouri's 114 counties plus the city of St. Louis, Crawford County ranks 47th in terms of population. Below, the county population is provided and compared to Missouri:

Crawford County 2015 Population	Missouri 2015 Total Population
24,526	6,083,672
50.2 percent Female (12,312)	50.9 percent Female (3,096,590)
49.8 percent Male (12,214)	49.1 percent Male (2,987,082)
97.2 percent White (23,839)	83.5 percent White (5,079,866)
0.5 percent African American (123)	11.8 percent African American (717,873)
1.9 percent Hispanic or Latino (466)	4.0 percent Hispanic or Latino (243,347)
0.3 percent Asian (74)	1.9 percent Asian (115,590)

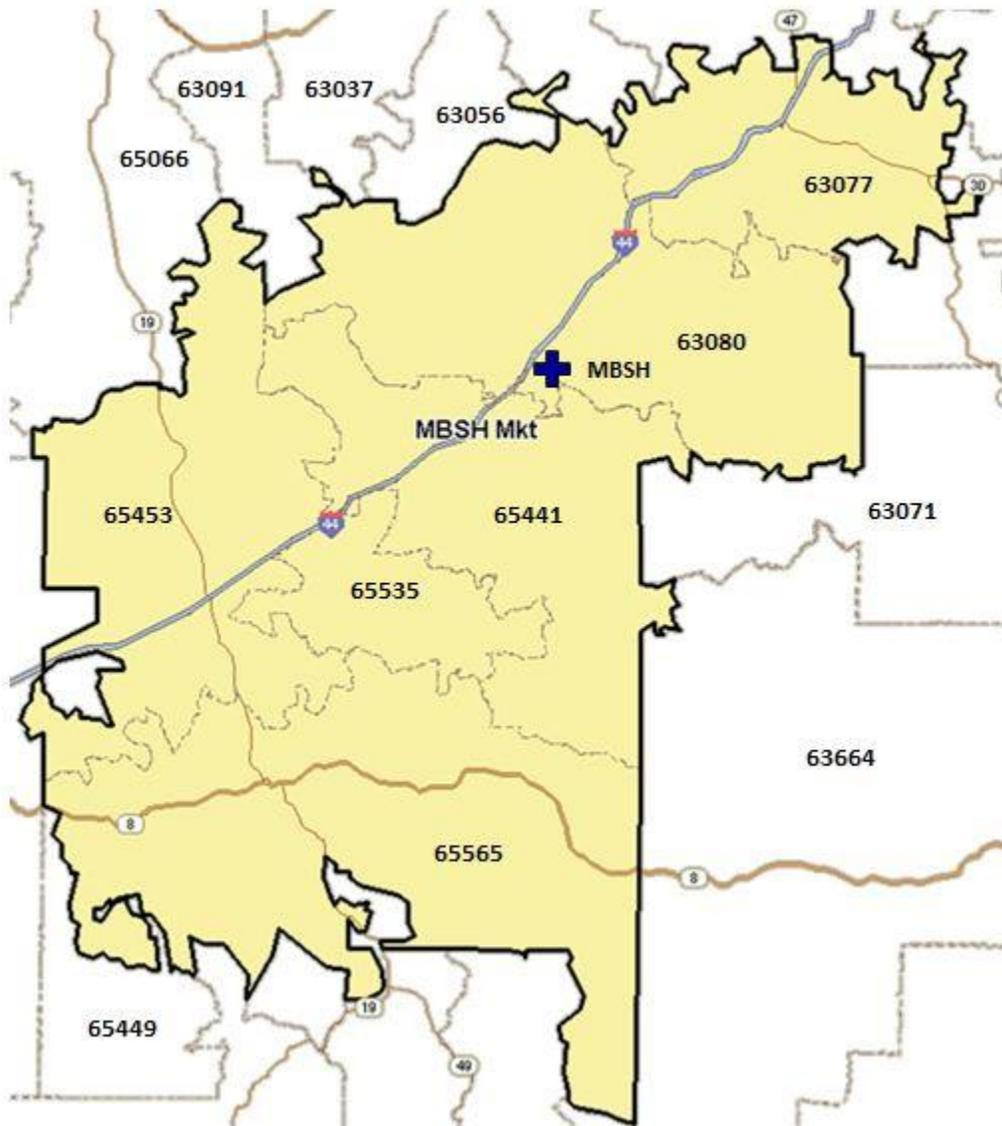
Based on the 2015 census tract, the county includes 0.4 percent of Missouri's total population. In 2010, Crawford County reported a total population of 24,696 compared to the state population of 5,988,923. From 2010-2015, the county population decreased -0.7 percent while the state experienced a 1.6 percent increase in its population.

Table 2: Crawford County Demographic Including Education, Income, Housing vs. Missouri		
	Crawford County	Missouri
EDUCATION		
High school graduate or higher, percent of persons age 25+, 2010-2014	78.2%	88.0%
Bachelor's Degree or higher, percent of persons age 25+, 2010-2014	13.6%	26.7%
INCOME		
Per capita money income in the past 12 months (2011 dollars), 2010-2014	\$19,099	\$26,006
Median household income (in 2014 dollars), 2010-2014	\$35,829	\$46,764
Persons below poverty level, percent, 2010-2014	20.7%	15.5%
HOUSING		
Housing units, 2014	11,918	2,746,599
Owner-occupied housing unit rate, 2010-2014	73.9%	67.9%
Housing units in multi-unit structures, percent, 2009-2013	7.3%	19.70%
Median value of owner-occupied housing units, 2010-2014	106,200	136,700
Households, 2010-2014	9,427	2,361,232
Persons per household, 2010-2014	2.58	2.48

Source: Government Census

For the purpose of the CHNA, the hospital identified Crawford County as its focus area with emphasis on its primary service areas located in the following zip codes: 63077, 63080, 65441, 65453, 65535 and 65565.

Missouri Baptist Sullivan Hospital 6-Zip Market Map



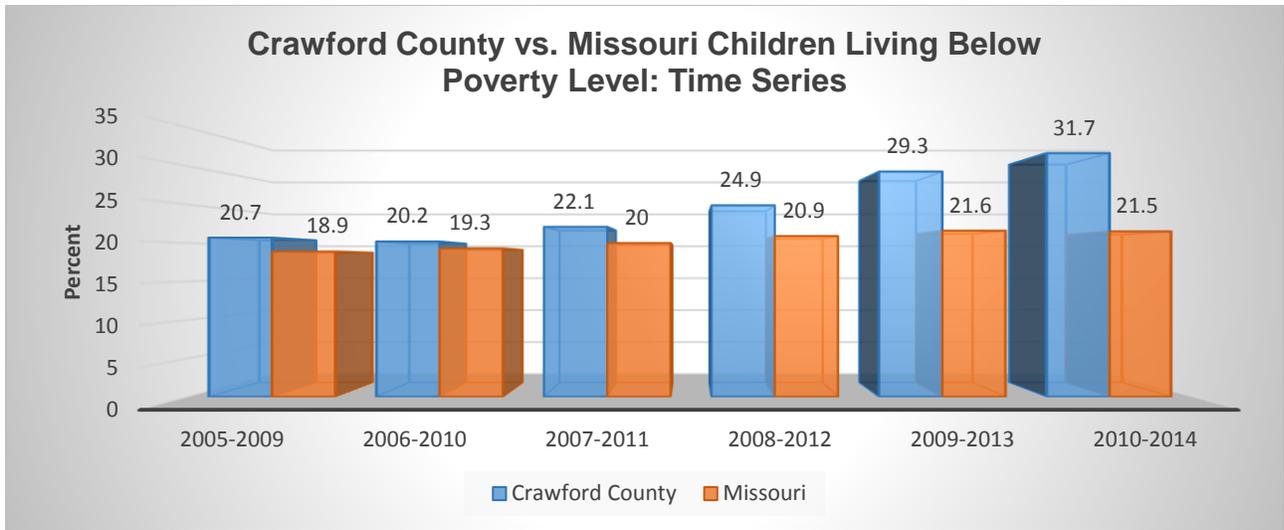
Poverty in Crawford County

Crawford County is a rural county whose demographics point to risk factors for several health issues. For example, when compared with the state of Missouri, Crawford County has a higher percentage of residents over the age of 65, a lower high school graduation rate, significantly lower median and per capita income, and a higher percentage of the population living below poverty level. The per capita money income reported (Table 2 on Page 6) compared the county income (\$19,099) and state income (\$26,006). Crawford County's median household income totaled \$35,829 (2010-2014) while the state median household income equaled \$46,764. Persons living below the poverty level in Crawford County totaled 20.7 percent compared to 15.5 percent in the state. Based on Healthy Communities Institute, Crawford County's unemployment rate in April 2016 was 5.1 percent. This was higher than the statewide unemployment rate of 4.2 percent.

Missouri Baptist Sullivan Hospital and the Crawford County Health Department are the primary facilities providing health care, screenings and education to the county. There are no other hospitals in Crawford County. The rural setting and limited access to health care facilities, coupled with the demographic risk factors listed above, create significant challenges in providing health care and health resources to county residents.

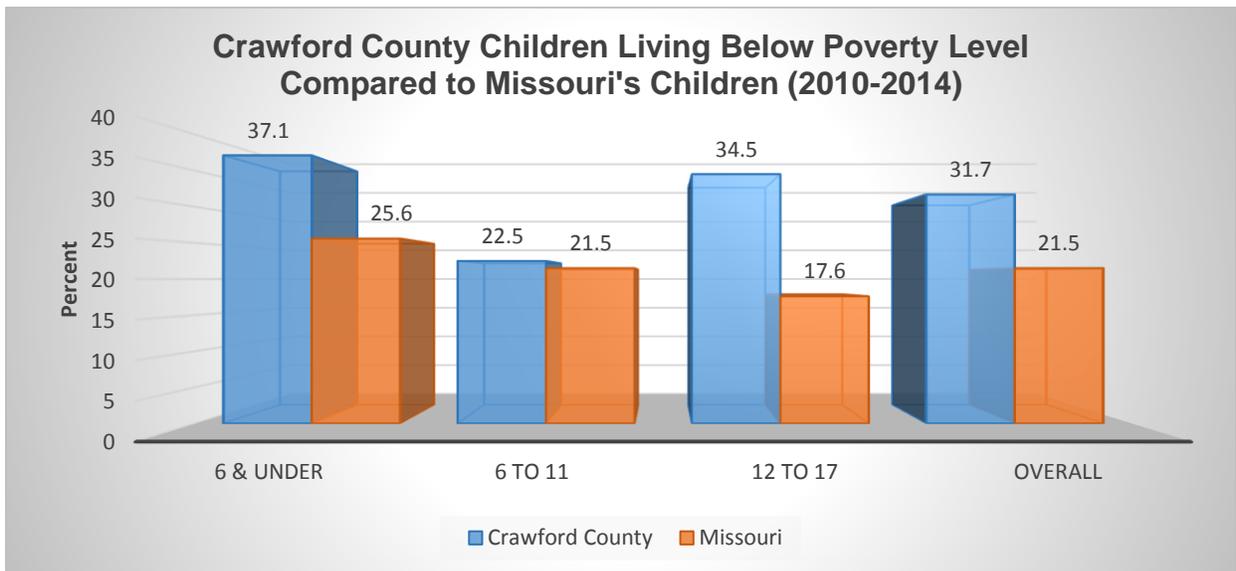
Federal poverty thresholds are set every year by the Census Bureau and vary by size of the family and ages of the family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower-quality schools and decreased business survival. (Healthy Communities Institute).

Information below and on the following pages reveal additional statistics about the poverty in Crawford County, affecting children, individuals, seniors and families.



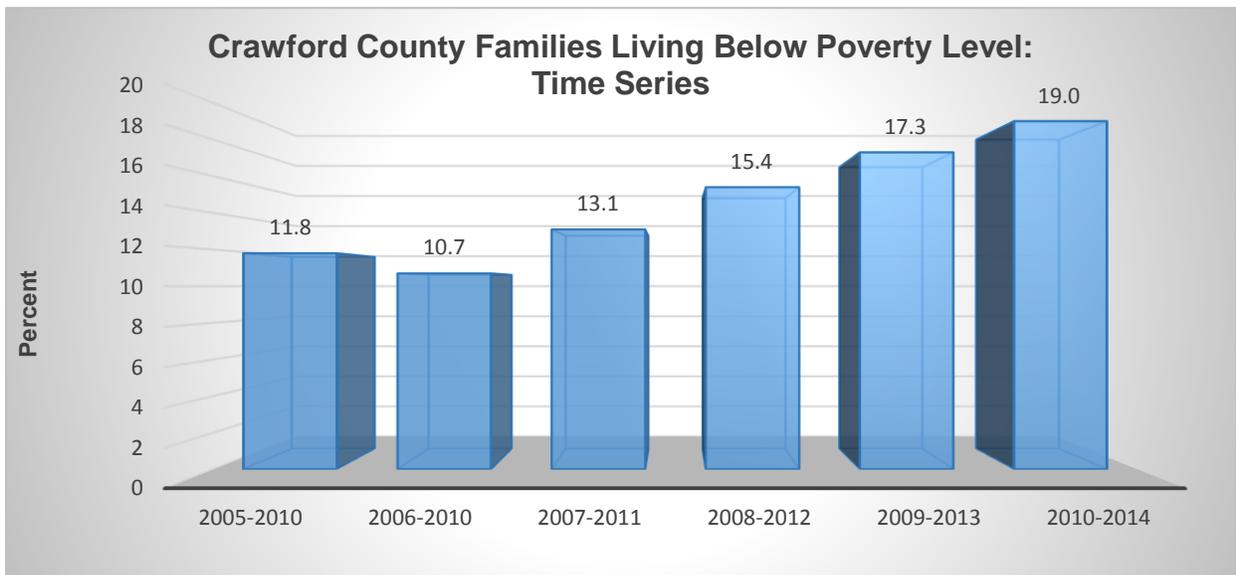
Source: Healthy Communities Institute

From the period ending 2009, the poverty rate of children living in Crawford County was 20.7 percent, which increased 11 percentage points for the period ending 2014. The state experienced a slight increase over the five-year-period at 2.6 percentage points.



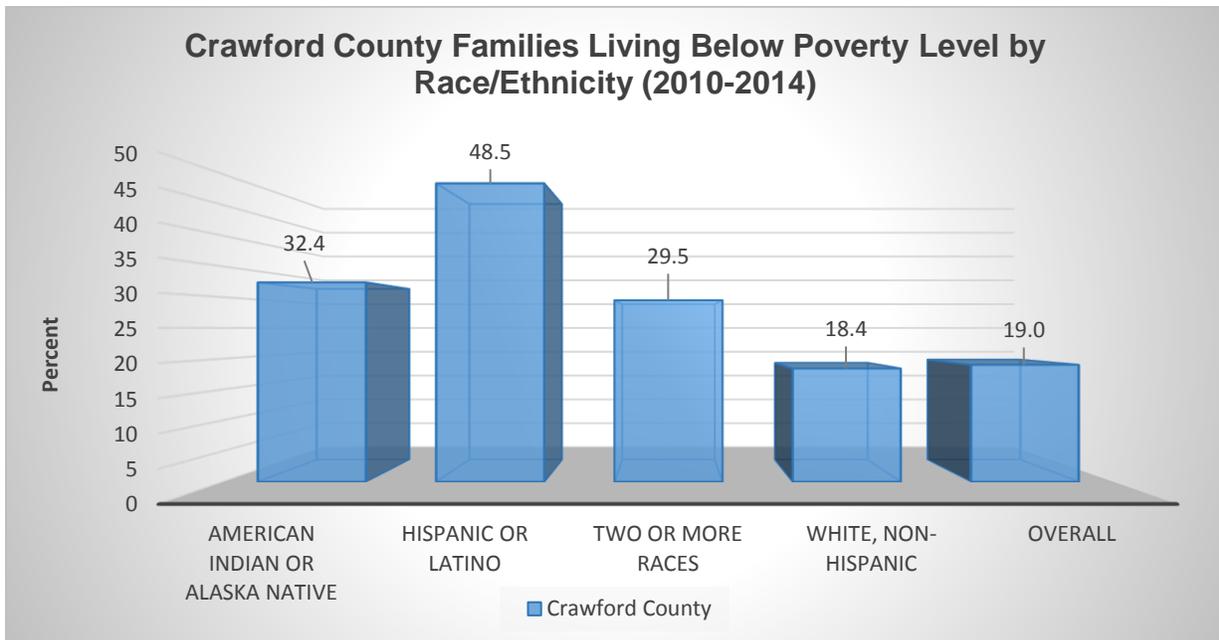
Source: Healthy Communities Institute

The overall rate of Crawford County children living below the poverty level was significantly higher than the state and driven by the 6 and under age group and the 12 to 17 age group. Across all age groups, the rate was higher in Crawford County when compared to Missouri.



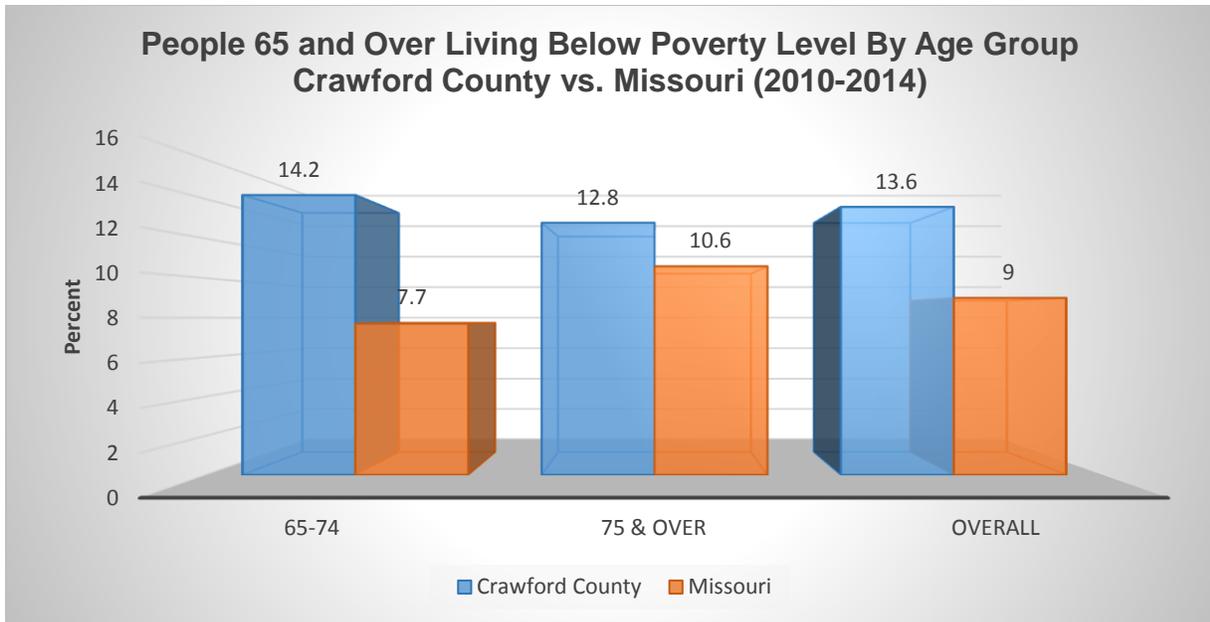
Source: Healthy Communities Institute

The rate of families living below the poverty level in Crawford County experienced a sustained increase during the period ending 2011 through period ending 2014. For the period ending 2014, 19 percent of Crawford County families lived below the poverty level, an increase of 61 percent since the period ending 2010.



Source: Healthy Communities Institute

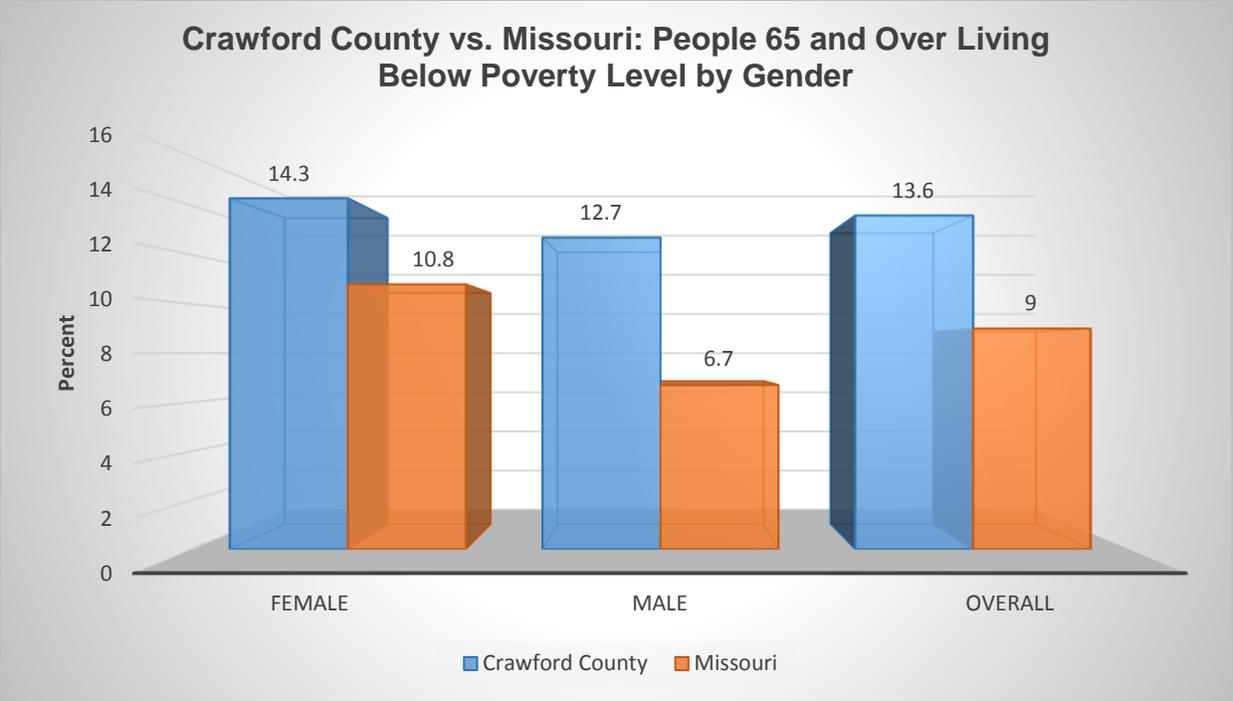
Hispanic or Latino families comprised the largest group of families by race/ethnicity in Crawford County living below the poverty level, followed by American Indian or Alaska Native.



Source: *Healthy Communities Institute*

The overall rate of people 65 and over in Crawford County living below the poverty level was one and one-half times higher than the state. In Crawford County, those 65-74 years of age had a higher rate of living below the poverty level than those 75 and over.

Seniors who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs and social isolation. Seniors often live on a fixed income from pensions or other retirement plans and social security. If this income is insufficient in the face of increasing prescription costs and other costs of living, most seniors have no way to supplement their income. Retirement plans may be vulnerable to fluctuations in the stock market as well; the increasing reliance of retirees on stock market-based retirement plans may explain why more seniors nationwide are now slipping into poverty. (Healthy Communities Institute).



Source: Healthy Communities Institute

Males 65 and over in the county were over one and one-half times more likely to live below the poverty level than females.

III. Previous CHNA Measurement and Outcomes Results

At the completion of the 2013 CHNA, Missouri Baptist Sullivan Hospital identified Health Literacy, Children’s Health & Safety and Access where focus was most needed to improve the health of the community served by the hospital. The following table details results, goals and current status of these community health needs. (See Full Report in Appendix D).

Table 3: Missouri Baptist Sullivan Hospital's 2013 CHNA Outcomes			
Nutrition Education and Outreach	Obesity	Physical Activity Education and Outreach	Access to Services
Goal	Goal	Goal	Goal
Increase local access to and consumption of fresh fruits and vegetables.	Reduce obesity-related diseases through screenings and education.	Increase physical activity by making Sullivan, a safe walkable and bikeable community.	Improve local resident's ability to access and receive health care.
Identified number of fresh fruits and vegetables vendors and increased the number each years. Implement Supplemental Nutritional Assistance Program (SNAP) payment option for low income individuals. Establish a nutritious gardening and cooking classes.	Missouri Baptist Sullivan Hospital will continue to hold a Community Health and Wellness Fair at Sullivan High School each year.	Establish a baseline of how many students walk or bike to participating schools and increase the number by 1%. Establish a baseline of knowledge gained in bike and pedestrian safety class by participants using pre- and post-test results.	Maintain existing financial counseling program to assist low income patients in signing up for eligible financial aid programs. Provide access to 300 free flu shots per year at Community Health and Wellness Fair.
A pre- and post-test is completed by participants to measure any increase in knowledge for program objectives.	Hospital staff will track the number of screenings offered at the Community Health and Wellness Fair each year.	All educational programs and trainings will be evaluated with a pre- and post-test.	Track number of individual counseled.
Current Status	Current Status	Current Status	Current Status
The Healthy Sullivan Coalition has implemented Sullivan Farmers Market and the Community Garden. The SNAP program at the Farmers Market has been finalized. Multiple gardening and nutrition education classes have been held.	The hospital continue to offer multiple screens at the annual Community Health Fair. Information was given to those who physicians referral.	The Healthy Sullivan Coalition completed the Eagle Trail by marking a safe, designated route between the Sullivan Primary School and Sullivan High School. The Walking School Bus program added additional weeks to their supervised walk-to-school program.	The financial counseling program continues to assist low-income patients with financial aid. The hospital Community Health Fair continues to offer free flu shots to all community members in attendance.

IV. Conducting the 2016 CHNA

A. Primary Data Collection

To fulfill the PPACA requirements, Missouri Baptist Sullivan Hospital conducted a single focus group with public health experts and those with a special interest in the health needs of Crawford County residents. Eight of 20 invited participants representing various Crawford County organizations participated in the focus group. (See Appendix B). The focus group was held on June 23, 2015 at the hospital with the following objectives identified:

1. Determine whether the needs identified in the 2013 CHNA remain the correct focus areas
2. Explore whether any previous needs are no longer a priority
3. Determine where gaps exist in the plan to address the prioritized needs
4. Identify potential organizations for collaboration
5. Discuss how the world has changed since 2013 when Missouri Baptist Sullivan Hospital first identified these needs and whether there are new issues to consider
6. Evaluate what issues the participants anticipate becoming a greater concern in the future

2016 CHNA Focus Group Summary

Although stakeholders did not dismiss the importance of those needs the hospital chose to address in the first implementation plan, several felt that some needs not addressed in 2013 should be included in the 2016 implementation plan.

Substance abuse, specifically the growing heroin crisis, has become more important than the concern about meth labs. As in other markets, it is blamed on the increase in addiction to prescription medications, i.e. opioids. Some felt it is now easier to drive to St. Louis to purchase heroin than to access prescription medications.

Children who come from homes where drug use is prevalent show signs of abuse and neglect. Those whose mothers abused drugs during pregnancy are showing signs of behavioral and mental health issues in school. Community stakeholders see a need for more education among families of drug users/abusers as to what they can do for those who are suffering from addiction and how to address it within their families.

Although nothing was identified to come off the list, several key stakeholders felt that progress has been made in access to dental care.

Gaps in Implementation Strategies

In the area of substance abuse, questions were raised about the availability of AA/NA and Al-Anon within the community for users and families of users as a source of support.

Influenza and pneumonia were identified as leading causes of death for Crawford County residents. Resident do not have the money for flu shots, and limited sources of free flu shots are available. Although the hospital does provide 300 free flu shots at its annual health fair, some residents who struggle with transportation are unable to take advantage of the opportunity.

Potential Partner Organizations

Understanding that hospitals alone cannot address these issues, several organizations were identified as potential partners for collaboration, including People Against Heroin; Grace's Place; Crawford County Department of Health; individual churches as well as the Ministerial Alliance; Backpack Program; Whatever It Takes; Lifeline Pregnancy Center; Children's Advocacy Service Association; Area Agency on Aging; and Sullivan Food Pantry.

Changes since the 2013 CHNA

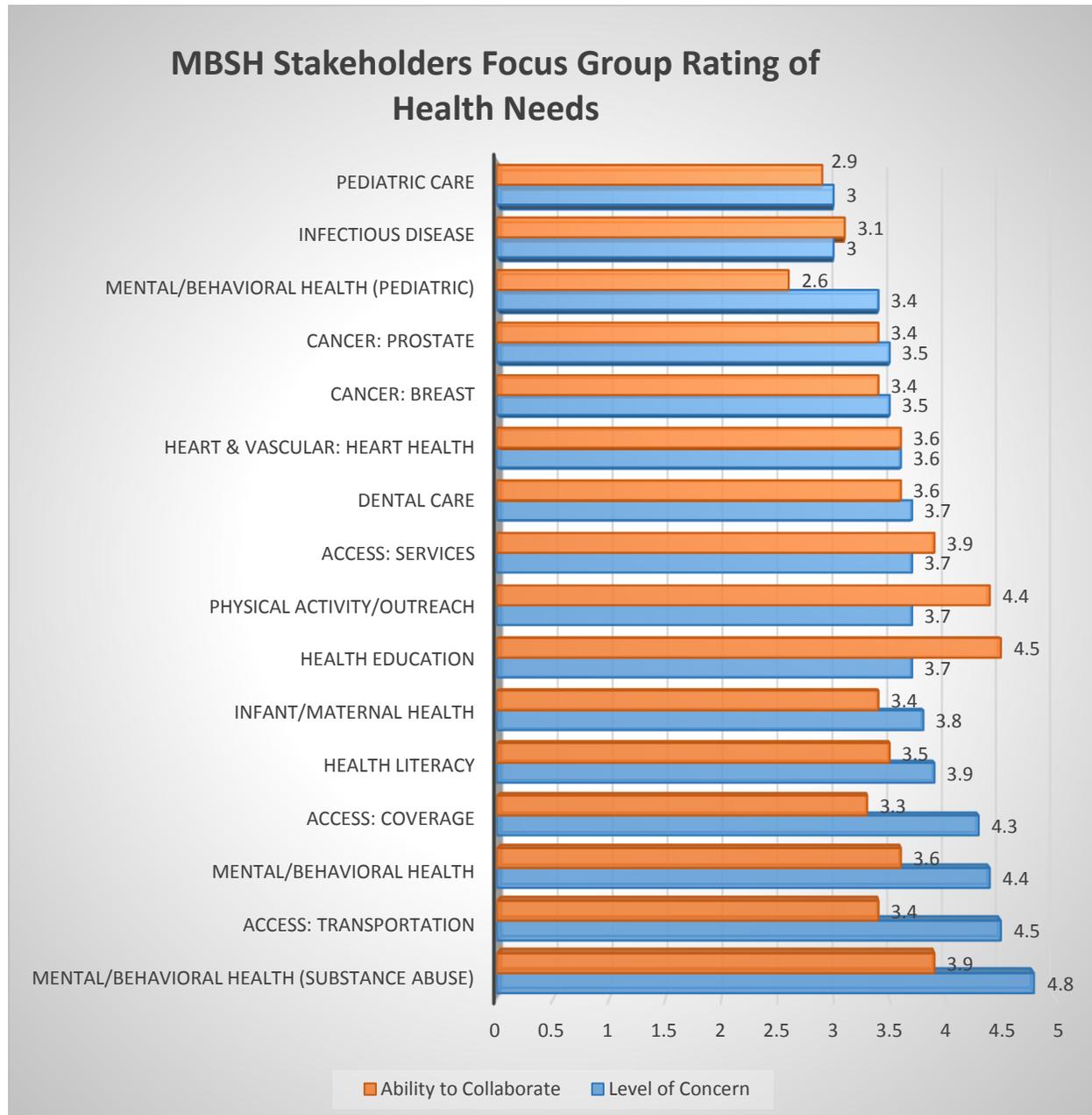
- New resources have become available within the Sullivan School District to address some of the behavioral/mental health needs of children.
- At the time of the last needs assessment, a new pediatrician had just located within the community. An infectious disease specialist established himself locally and is now available to address these health needs.
- The Crawford County Health Department is now offering parenting classes for parents whose children have been removed from their homes. Usually, these classes are court-ordered or DFS-referred because of issues related to parental drug or alcohol abuse. Classes are now offered twice a year.
- The availability of oncology services at Missouri Baptist Sullivan Hospital provides area residents certain treatments closer to home.
- In collaboration with the St. Louis Food Bank, a program is in development called Senior Boxes. Adults ages 60 and older with income below a certain level can receive a monthly box of food as an alternative to the Sullivan Food Pantry.

Possible Issues to Consider in the Future

- Transportation
- Awareness of available resources and services
- Senior housing
- Economic development

Rating of Needs

Participants were given the list of the needs identified in the 2013 assessment and directed to re-rank them on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate in addressing:



Mental/Behavioral Health (Substance Abuse) rated highest in terms of level of concern followed by Access: Transportation, Mental/Behavioral Health and Access: Coverage. Health Education and Physical Activity/Outreach were seen as the greatest opportunities for collaboration. (See Appendix D for Complete Focus Group Report).

B. Secondary Data Analyses

Based on the primary data reviewed by focus group members (see graph on previous page), key areas were identified for a secondary data analysis. These areas represent the most prevailing issues identified by the focus group.

Data sources used for the secondary data analysis included:

Healthy Communities Institute (HCI), an online dashboard of health indicators for St. Louis County, offers the ability to evaluate and track the information against state and national data and Healthy People 2020 goals. Sources of data include the National Cancer Institute, Environmental Protection Agency, U.S. Census Bureau, U.S. Department of Education, and other national, state, and regional sources.
<http://www.healthycommunitiesinstitute.com/>

Hospital Industries Data Institute (HIDI, 2014) is a data source that provides insight into the patterns and frequency of health care utilization in the hospital.

Centers for Disease Control and Prevention (CDC)/State Cancer Profiles is a web site that provide data, maps, and graphs to help guide and prioritize cancer control activities at the state and local levels. It is a collaboration of the National Cancer Institute and the Centers for Disease Control and Prevention.
<https://statecancerprofiles.cancer.gov>

Missouri Department of Mental Health provides numerous comprehensive reports and statistics on mental health diseases, alcohol and drug abuse.
http://dmh.mo.gov/ada/countylinks/crawford_link.html

The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. www.cdc.gov/brfss

Truven Health Analytics offers health care data management, analytics and services and consulting to customers across the health care industry including hospitals and health systems, employers, health plans, life sciences companies, and state and federal government agencies. <http://truvenhealth.com/>

The majority of the analysis was completed comparing Crawford County, Missouri and the U.S. In order to provide a comprehensive analysis of disparity and to identify trends, the most up-to-date secondary data was included on the following needs:

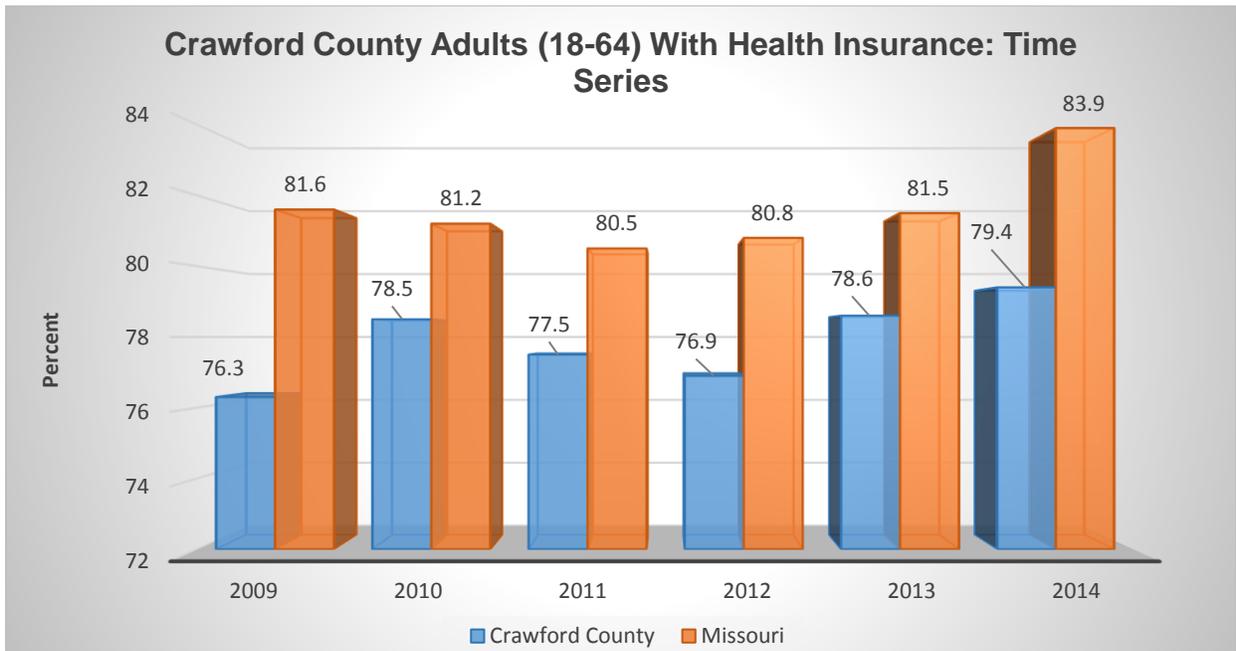
- Access to Health Care
- Access to Transportation
- Cancer
- Heart Health & Stroke
- Maternal and Infant Health
- Infectious Disease
- Mental Health
- Substance Use and Abuse

Following the secondary data analysis, a summary is provided that outlines observations noted in the disparities and trends for each of the above needs. (See Pages 58-59). While Missouri Baptist Sullivan Hospital has identified three needs as its primary focus, the following needs will continue to be appropriately addressed by the hospital and other organizations in Crawford County.

Access to Health Care

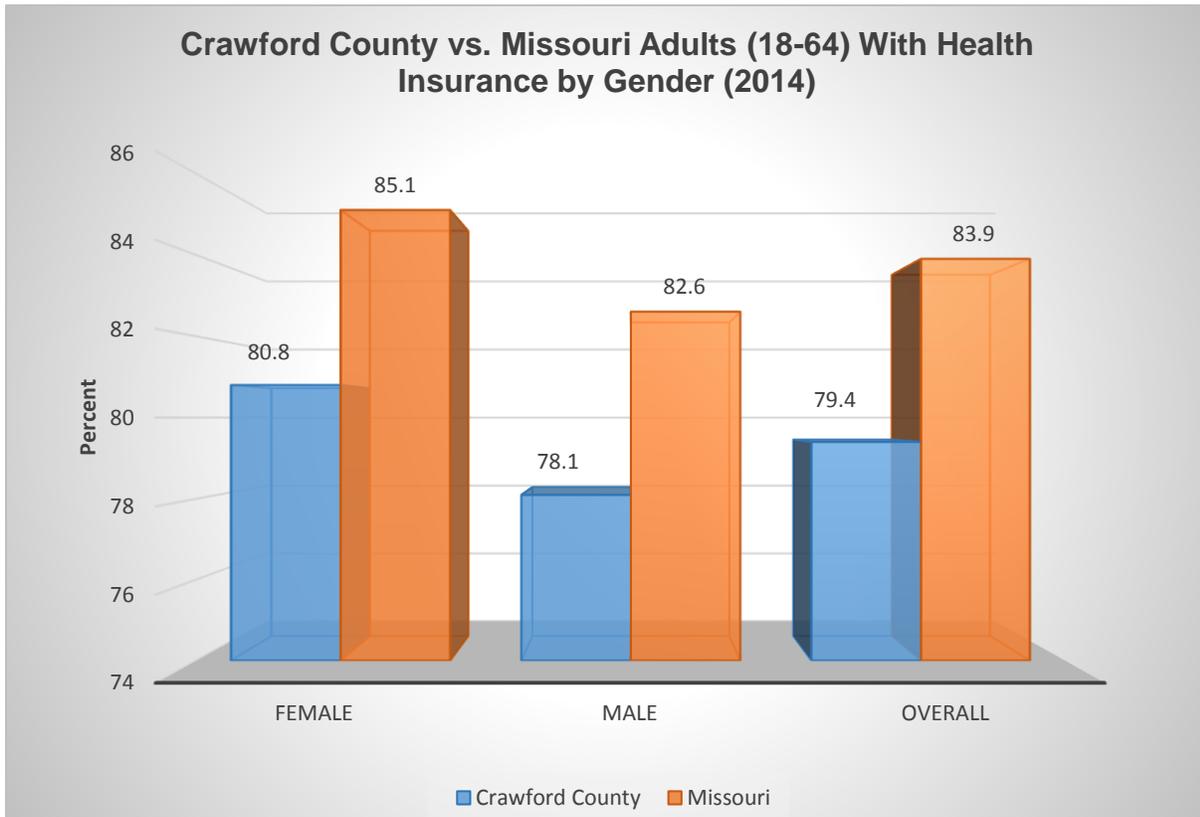
The ability to access health services has a profound and direct effect on every aspect of a person’s well-being. Beginning in 2010, nearly 1 in 4 Americans lacked a primary care provider (PCP) or health center to receive ongoing medical services. Approximately 1 in 5 Americans, children and adults under age 65, do not possess medical insurance.

Individuals without medical insurance are more likely to lack a traditional source of medical care, such as a PCP, and are more likely to skip routine medical care due to costs, therefore, increasing the risk for serious and debilitating health conditions. Those who access health services are often burdened with large medical bills and out-of-pocket expenses. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of the community. (Healthy Communities Institute).



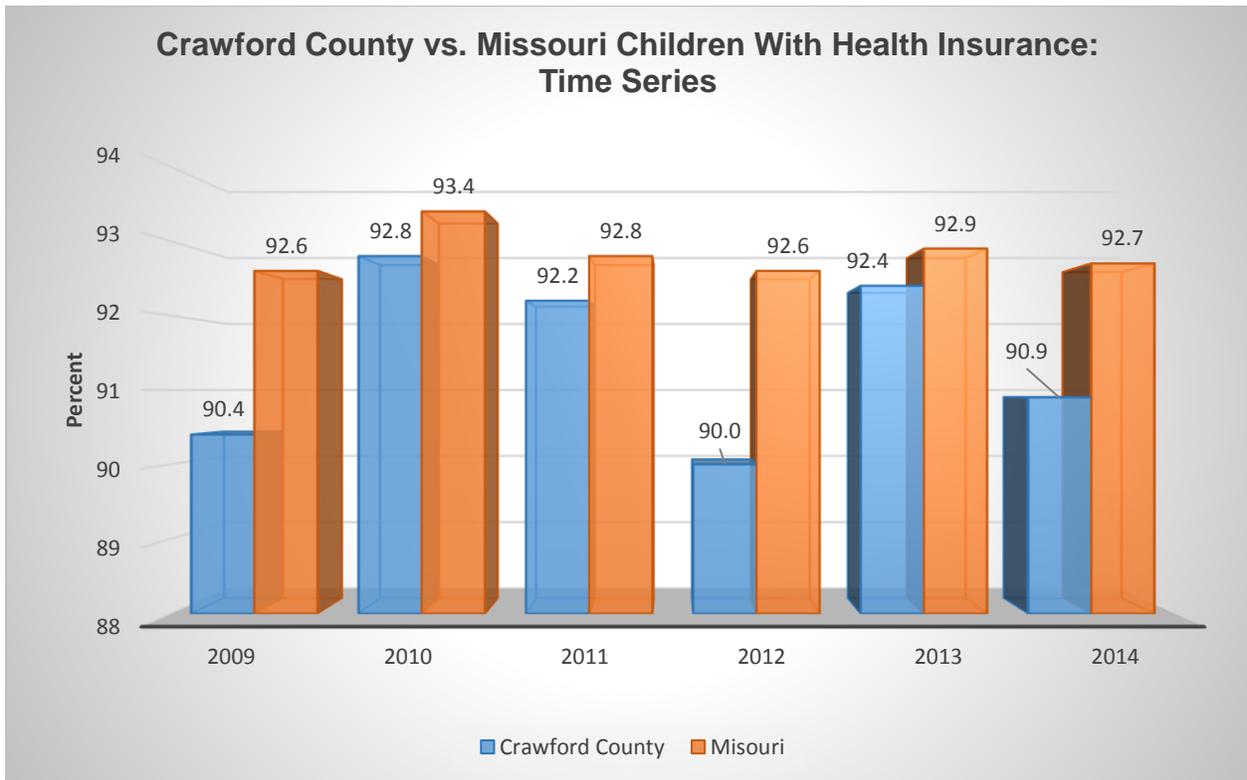
Source: Healthy Communities Institute

Crawford County, like the state of Missouri, saw a slight dip in adults with health insurance in 2011 and 2012. However, 2014 had the highest level of adults with health insurance at 79.4 percent in the county and 83.9 percent in the state. The Healthy People 2020 national health target is to increase the proportion of people with health insurance to 100 percent.



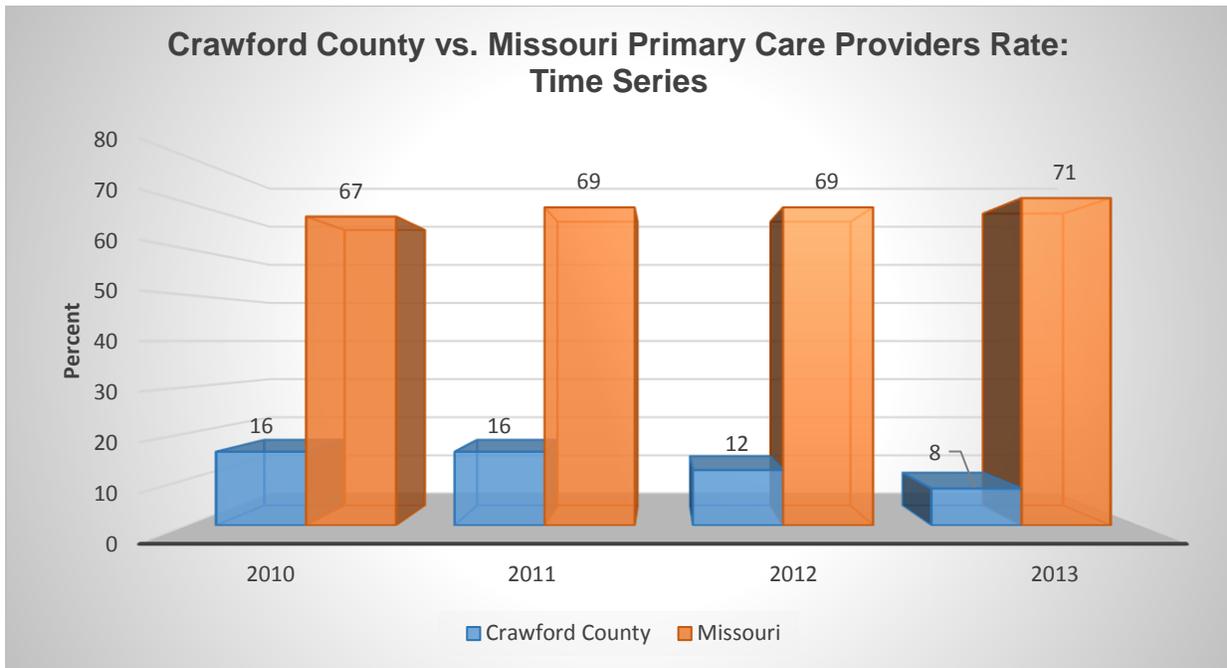
Source: Healthy Communities Institute

Males in Crawford County and Missouri had slightly less health insurance coverage respectively at 78.1 and 82.6 percent when compared to females with 80.8 and 85.1 percent.



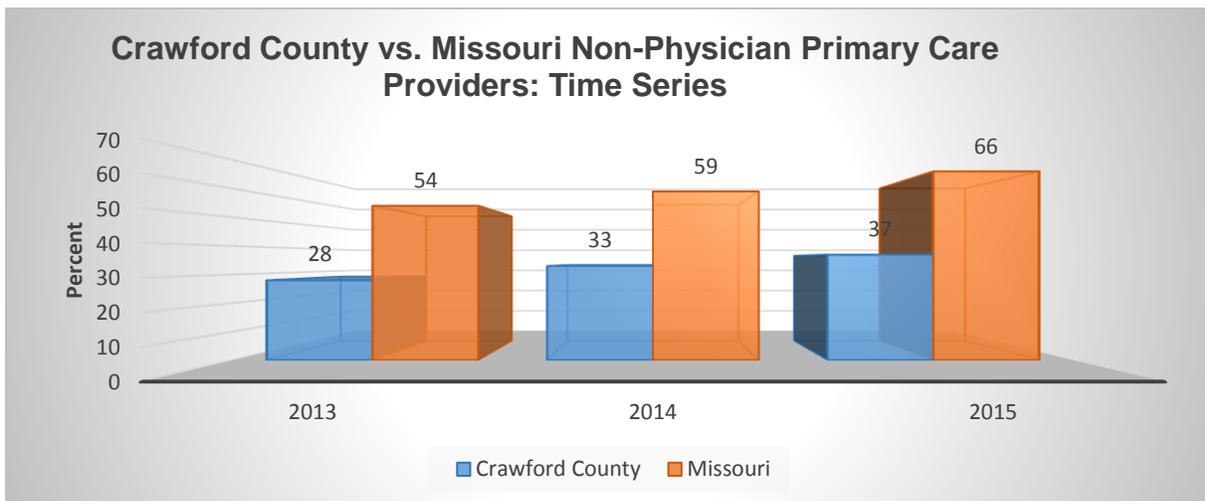
Source: *Healthy Communities Institute*

From 2009-2014, the rate of children with health insurance in Crawford County has remained relatively stable in the low 90 percent range. This rate has historically lagged behind children in Missouri by approximately two points.



Source: Healthy Communities Institute

Crawford County saw a decline in the rate of primary care providers from 2010 through 2013 while the state saw an increase. The rate of primary care providers in the state was nine times higher than the rate in the county.



Source: Healthy Communities Institute

Like Missouri, Crawford County saw an increase in non-physician care providers from 2013 through 2015; however, the county was significantly lower than the state.

Table 4: Access to Health Care		
Health Indicators	Crawford County	Missouri
Adults with Health Insurance in Percent: Age 18-64 (2014)	79.4	83.9
Children With Health Insurance in Percent (2014)	90.9	92.8
Primary Care Providers Rate / 100,000 (2012)	8	71
Dentist Rate/100,000 (2013)	12	54
Mental Health Providers Rate/100,000 (2014)	37	167
Non-Physicians Primary Care Providers Rate / 100,000 (2015)	37	66
Preventable Hospital Stays. Discharges / 1000 Enrollees (2013)	46	59

Source: Healthy Communities Institute

The rate of primary care providers was nearly nine times lower in Crawford County when compared to the state; only 8/100,000 providers per population in the county.

There were four and one-half times fewer dentists and mental health providers in the county than the state.

For non-physician primary care providers, there were one and one-half times fewer in the county than the state. The rate of preventable hospital stays was higher in the county than in the state.

Access: Transportation

Owning a car has a direct correlation with the ability to access health care. Individuals with no car in the household make fewer than half the number of trips compared to those with a car and have limited access to essential local services such as, supermarkets, post offices, doctors' offices and hospitals. Most households with above-average income own a car while only half of low-income households have a car.

Public transportation offers mobility to U.S. residents, particularly people without cars. Transit can help bridge the spatial divide between people and jobs, services and training opportunities. Public transportation is also beneficial because it reduces fuel consumption, minimizes air pollution and relieves traffic congestion.

Table 5: Access: Transportation (2010-2014)		
Health Indicators	Crawford County	Missouri
Households Without a Vehicle in Percent	6.3	7.4
Workers Commuting by Public Transportation in Percent	0.1	1.5
Mean Travel Time to Work; Age 16+	28 minutes	23.1

Source: Healthy Communities Institute

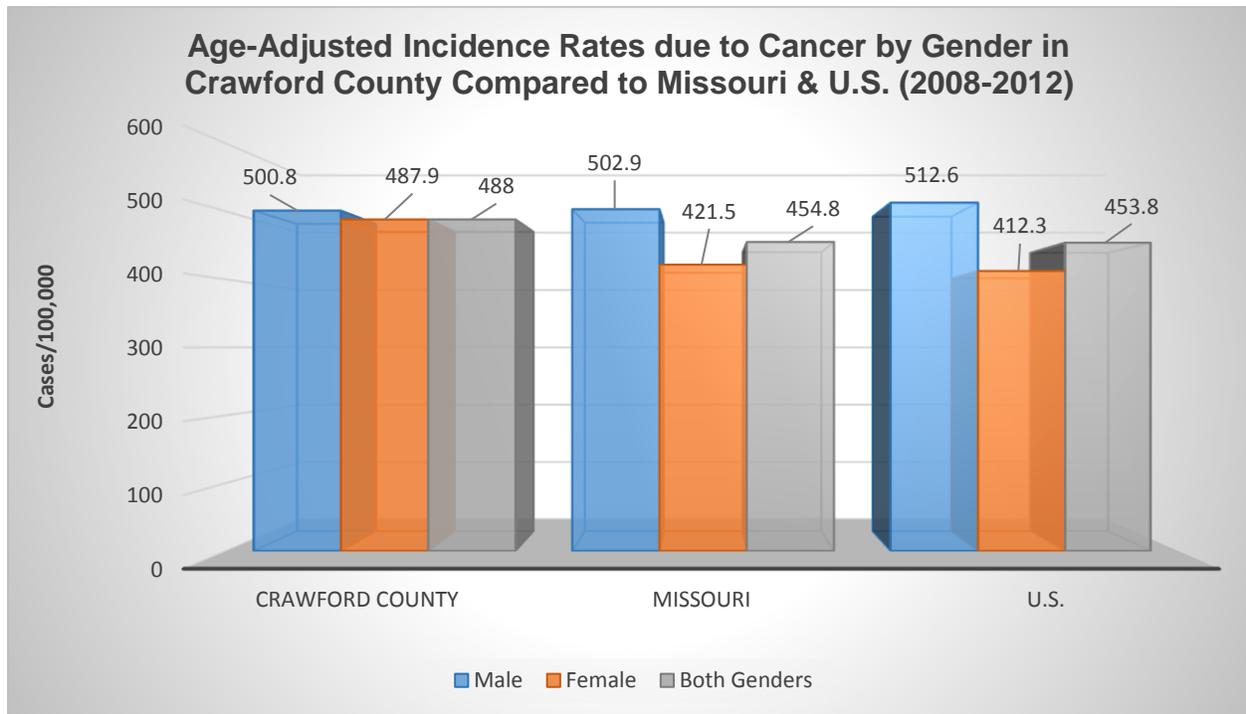
The percentage of workers commuting by public transportation in Crawford County is far below the rate of the state as well as the rate set by the Healthy People 2020. The Healthy People 2020 national health target is to increase the proportion of workers who take public transportation to work to 5.5 percent.

Lengthy commutes cut into workers' free time and can contribute to health problems such as headaches, anxiety and increased blood pressure. Longer commutes require workers to consume more fuel, which is both expensive for workers and damaging to the environment. (Healthy Communities Institute).

Additionally, the chart above shows 6.3 percent of households in the county did not own a car from 2010-2014 compared to 7.4 percent in the state. Owning a car has a direct correlation with the ability to access health care. Individuals with no car in the household make fewer than half the number of trips compared to those with a car and have limited access to essential local services such as, supermarkets, post offices, doctors' offices and hospitals. Most households with above-average income own a car while only half of low-income households own a car. (Healthy Communities Institute).

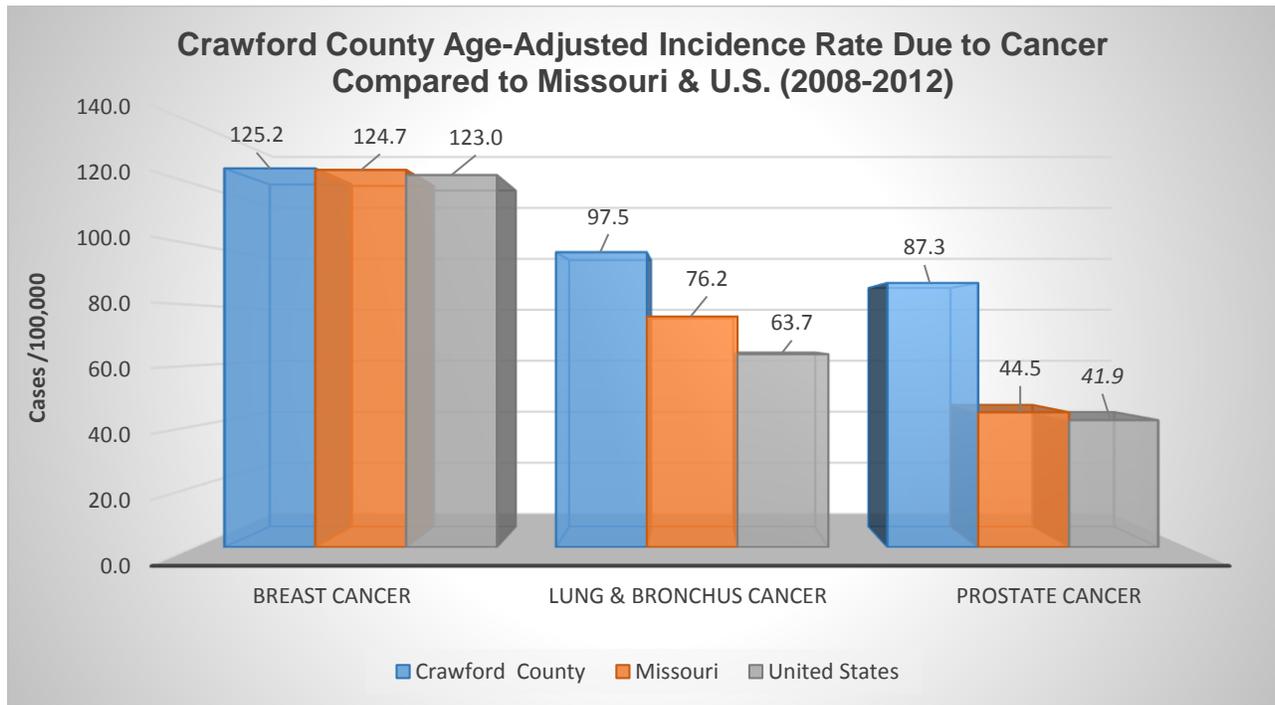
Cancer

Cancer is a leading cause of death in the United States, with more than 100 different types of the disease. According to the National Cancer Institute, lung, colon and rectal, breast, pancreatic and prostate cancer lead in the greatest number of annual deaths.

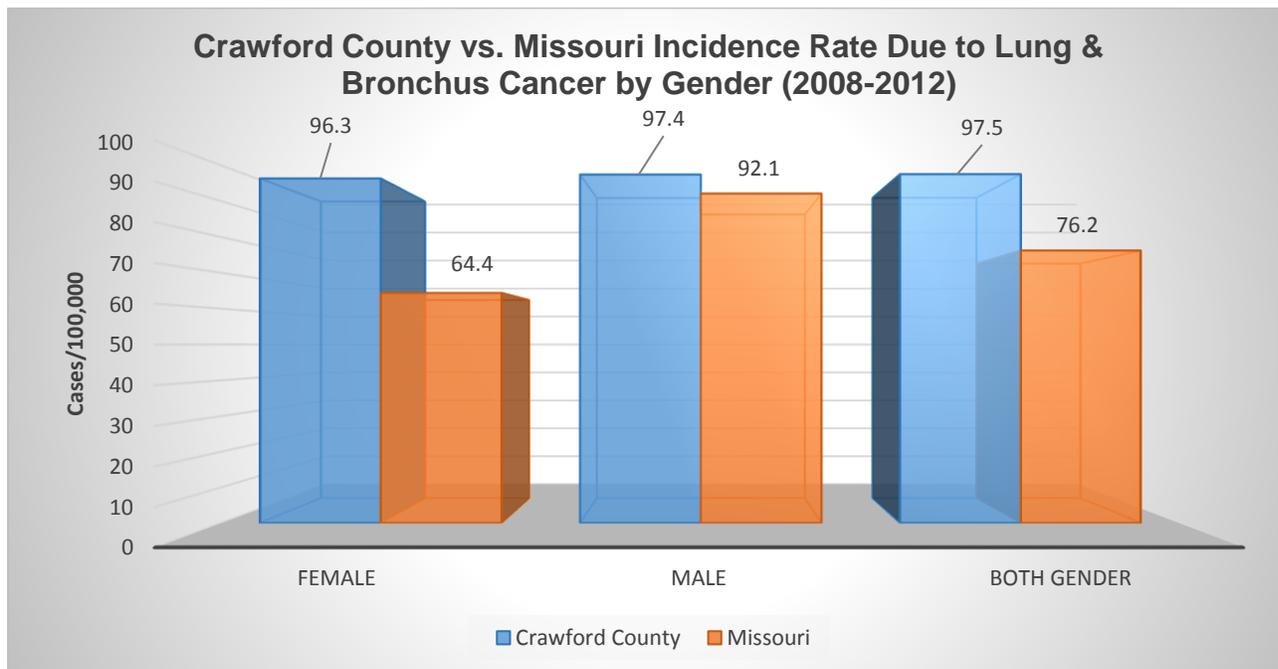


Source: CDC National Cancer Profile

The overall cancer incidence rate in the county for both genders was 488.0/100,000, higher than Missouri and the U.S. The incidence of cancer among males in Crawford County was slightly less when compared to Missouri and the U.S. Conversely, the rate of cancer among females in Crawford County was higher when compared to Missouri and the U.S.

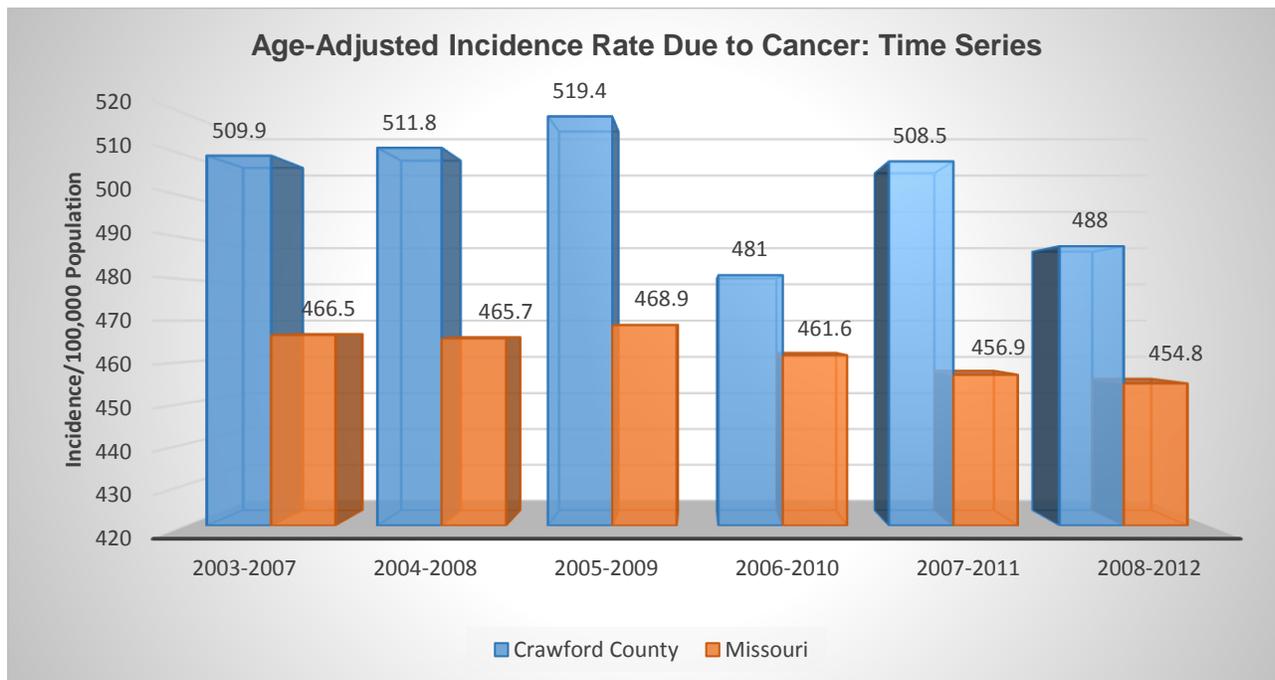


The incidence rate of breast cancer in Crawford County was similar to the rate in the state and county. The rate of lung and bronchus cancer as well as prostate cancer was significantly higher in Crawford County when compared to the state and the country. The rate of prostate cancer in the county was almost twice the rate in the state and more than twice the rate of the U.S.



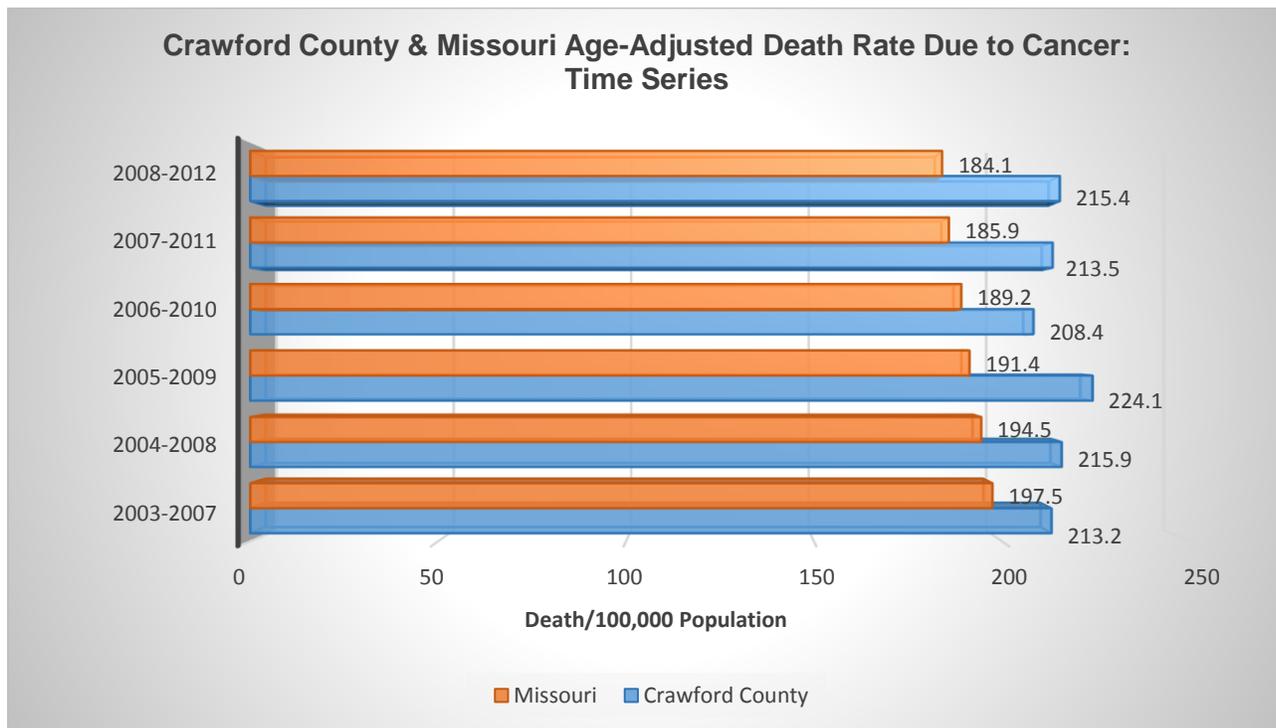
Source: CDC National Cancer Profile

The incidence rate of lung and bronchus cancer among both genders was higher in the county than the state. This was primarily driven by the female population, which had an incidence rate of nearly 50 percent higher (31 points) in the county than in the state.



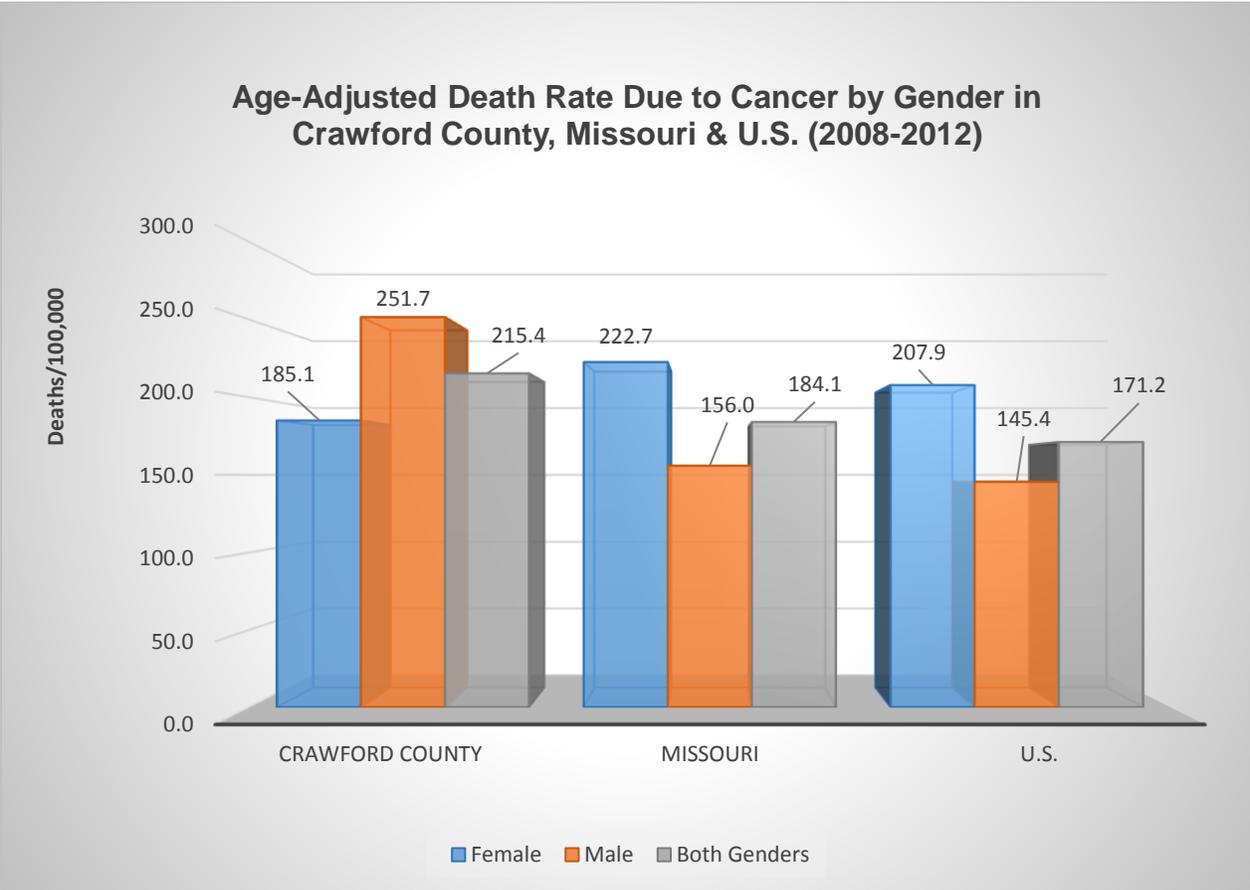
Source: CDC National Cancer Profile

The age-adjusted incidence rate due to cancer in the state slowly declined from the period ending 2007 through the period ending 2012, with the exception of a slight increase during the period ending 2009. However in Crawford County, the rate experienced a gradual increase during the period ending 2007 through the period ending 2009. A sharp drop followed in the period 2006-2010 only to return to rates observed in earlier years.



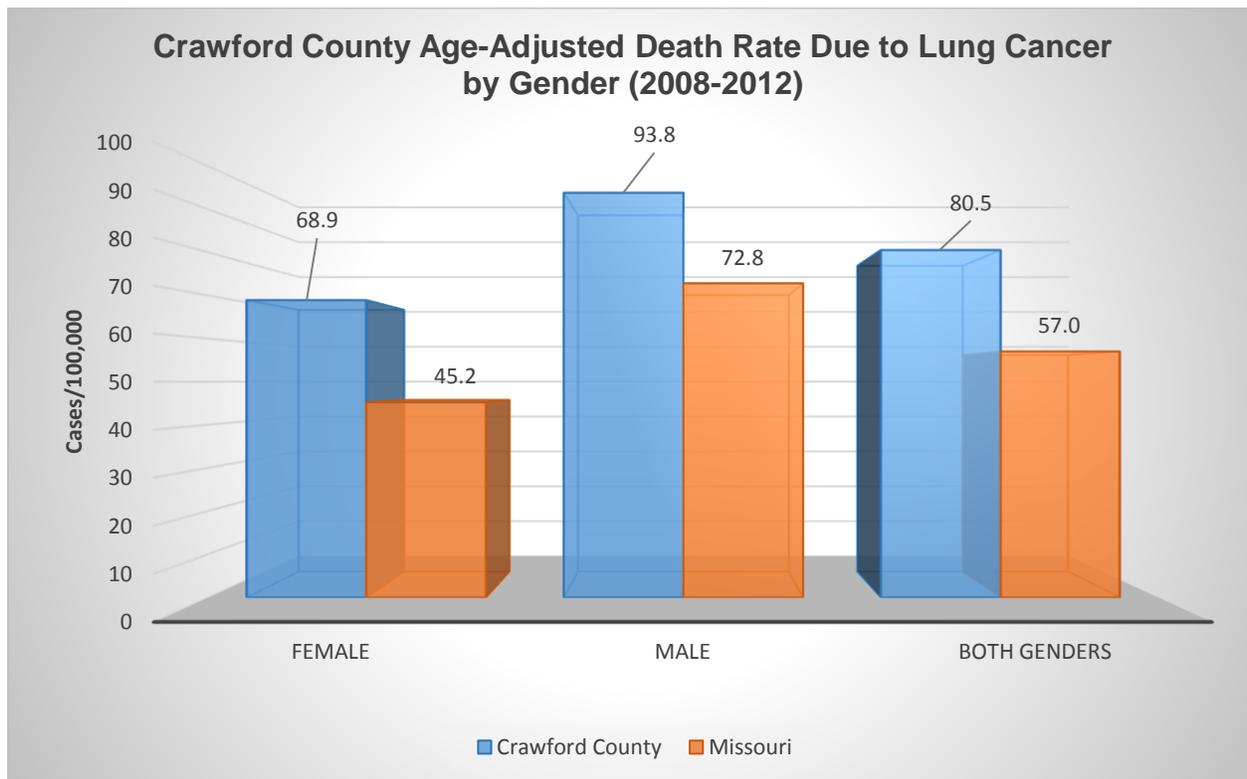
Source: CDC National Cancer Profile

The age-adjusted death rate due to cancer slowly declined in Missouri, while the rate remained relatively stable in Crawford County



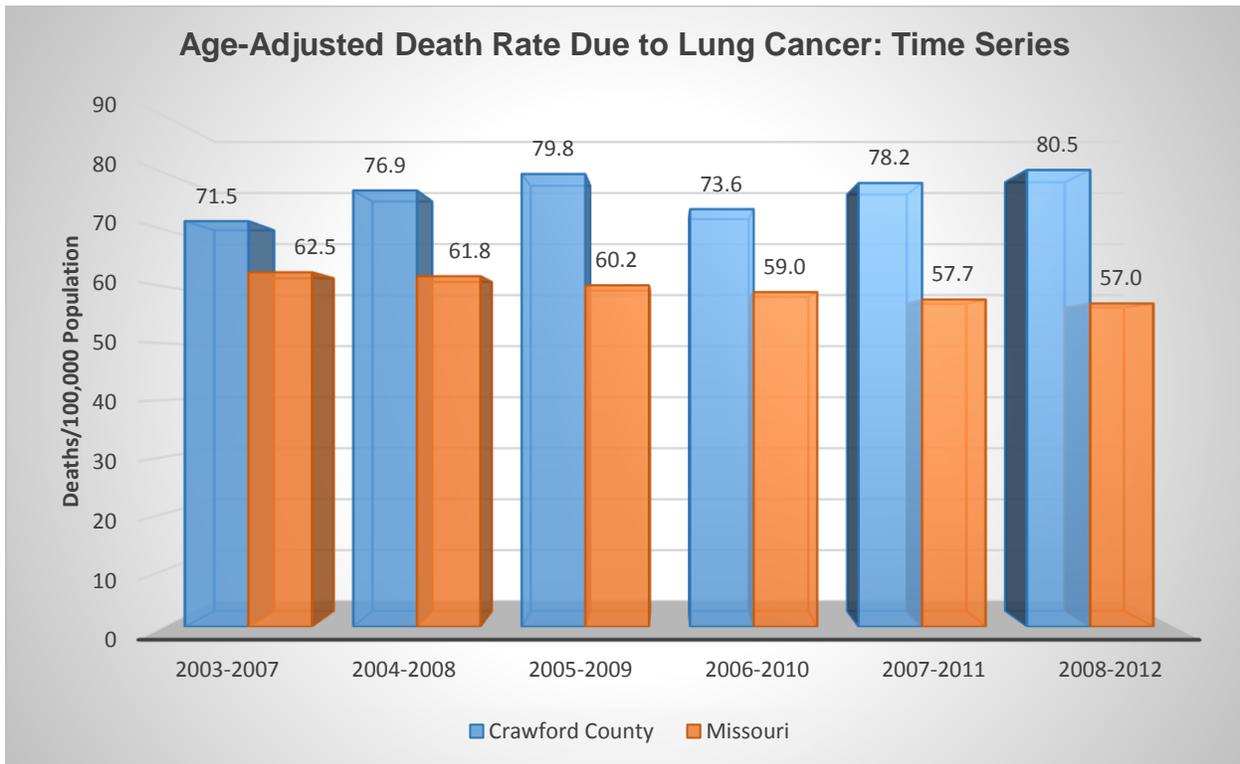
Source: CDC National Cancer Profile

The age-adjusted death rate due to cancer for males in Crawford County was more than one and one-half times higher than the rate in Missouri and in the U.S. While the rate for females was lower than males in Crawford County, the rate for females was also lower when compared to Missouri and the U.S. The Healthy People 2020 target is to reduce the overall cancer death rate to 161.4 deaths per 100,000 population.



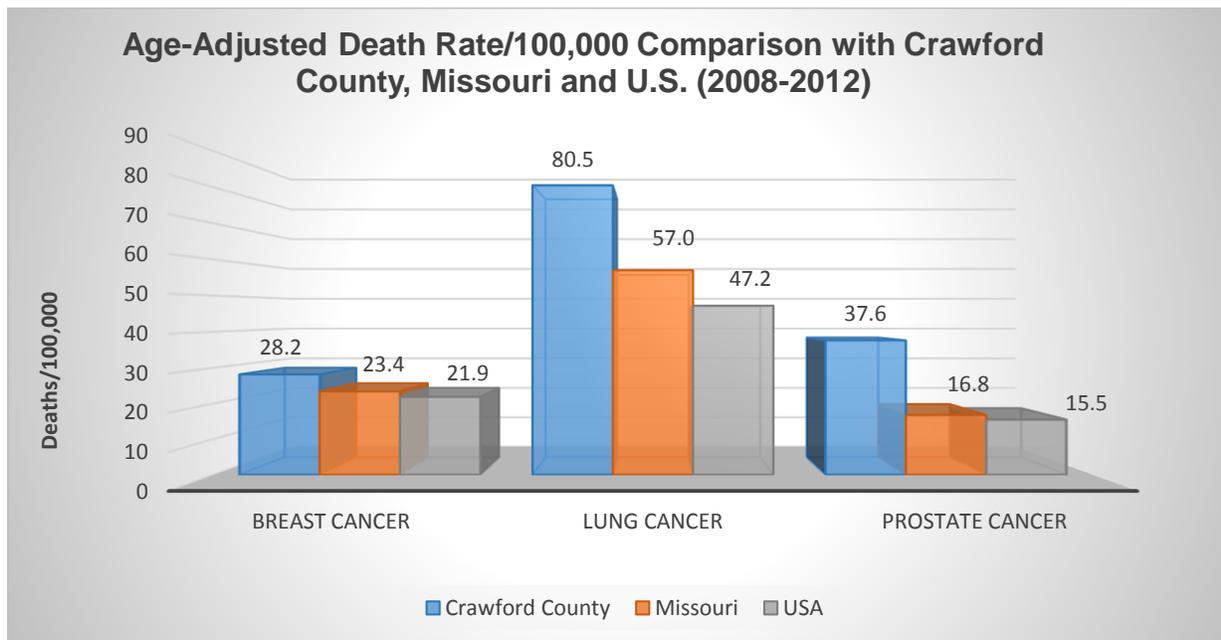
Source: CDC National Cancer Profile

The age-adjusted death rate for lung cancer for females was 52 percent higher than the rate in Missouri; the death rate for males was 29 percent higher than the state. The overall age-adjusted lung cancer death rate for both genders in Crawford County was 80.5 percent compared to 57 percent in Missouri. The Healthy People 2020 national health target is 45.5 per 100,000 population.



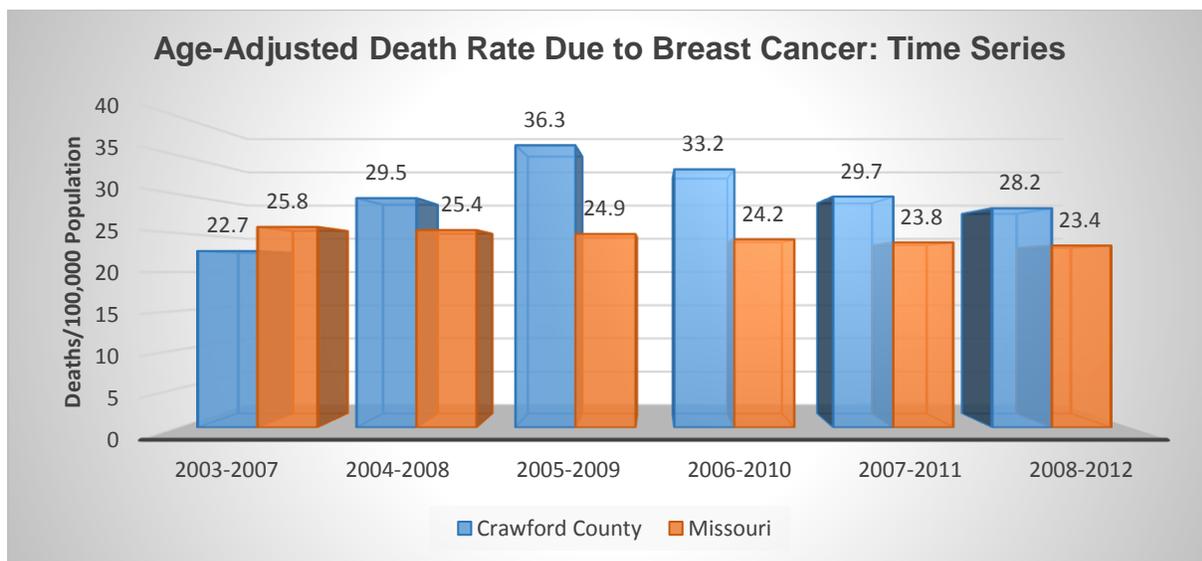
Source: CDC National Cancer Profile

While the death rate due to lung cancer in Missouri steadily declined since the period ending in 2007, the rate in Crawford County gradually increased from the period ending in 2007 through the period ending in 2009. A slight decrease followed only to return to rates observed in earlier years.



Source: CDC National Cancer Profile

The age-adjusted death rate of breast cancer in Crawford County was higher than the rate in Missouri and the U.S. The death rate of lung cancer (80.5) and prostate cancer (37.6) were significantly higher in Crawford County compared to Missouri and the U.S.



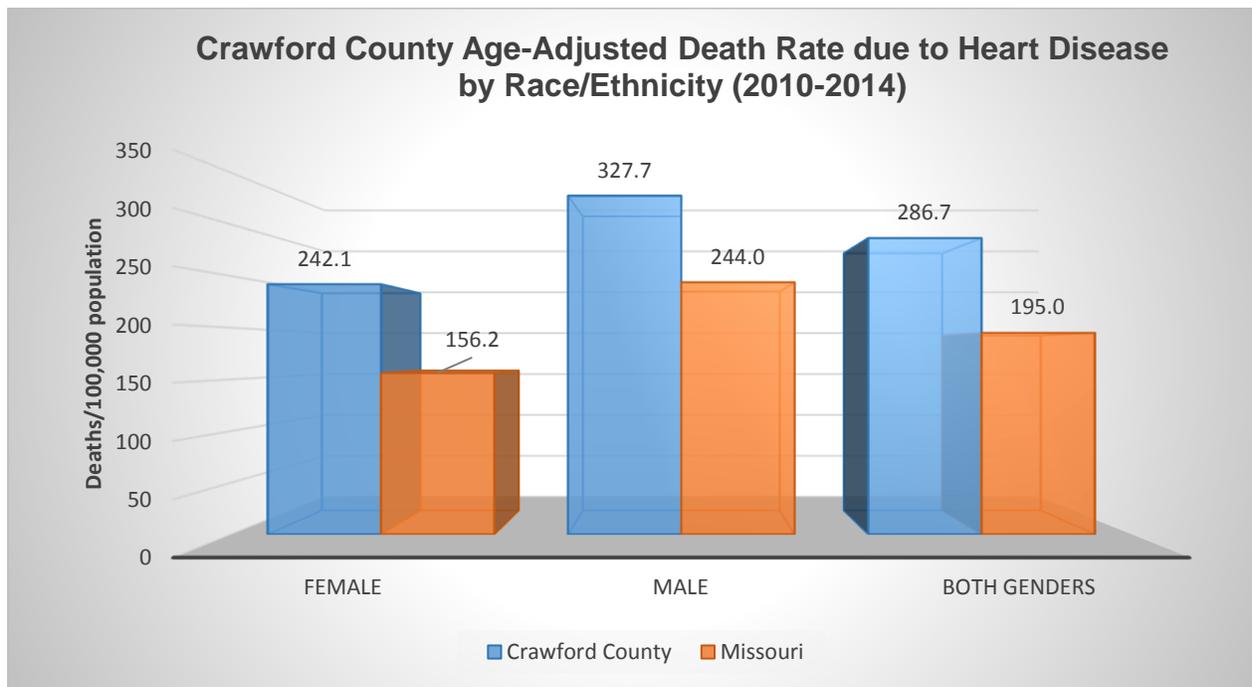
Source: CDC National Cancer Profile

Since the period ending 2009, death rates due to breast cancer steadily declined in Crawford County; however, for the period ending 2012, the county remained nearly five points higher than the rate in Missouri.

Heart & Vascular Disease

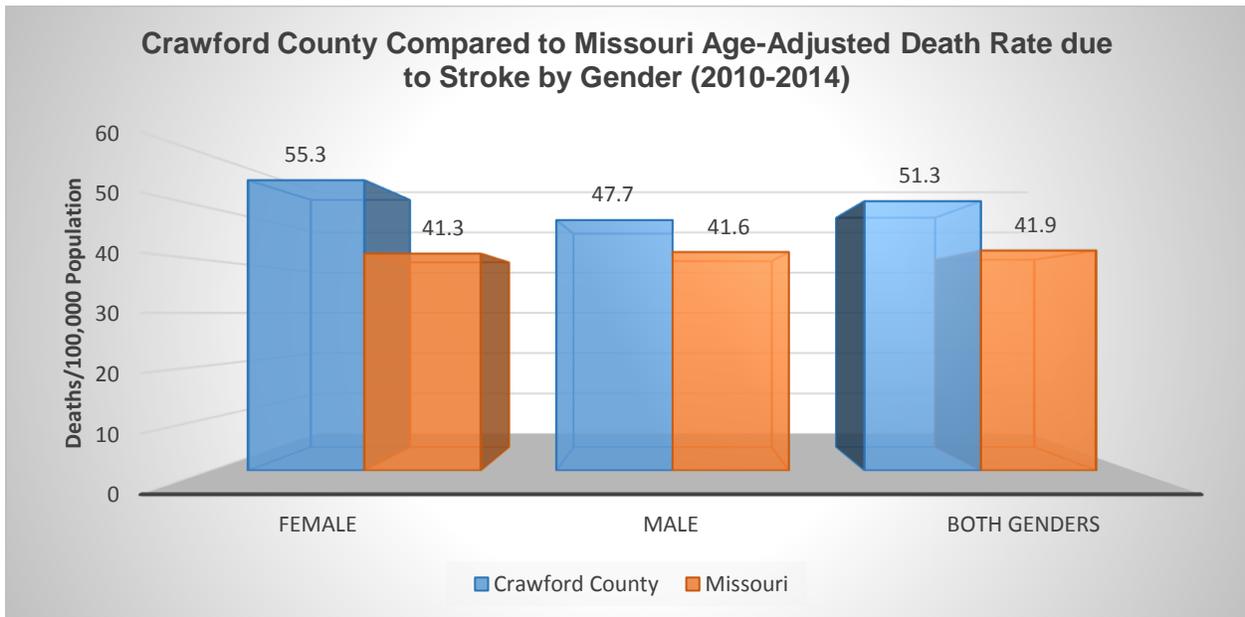
Heart disease and stroke are among the most preventable disease in the U.S., yet are the most widespread and costly health conditions facing the nation today. Heart disease and stroke are the first and third leading causes of death for both women and men.

These diseases are also major causes of illness and disability and are estimated to cost the U.S. hundreds of billions of dollars annually in health care expenditures and loss of productivity. (CDC Division for Heart Division and Stroke Prevention).



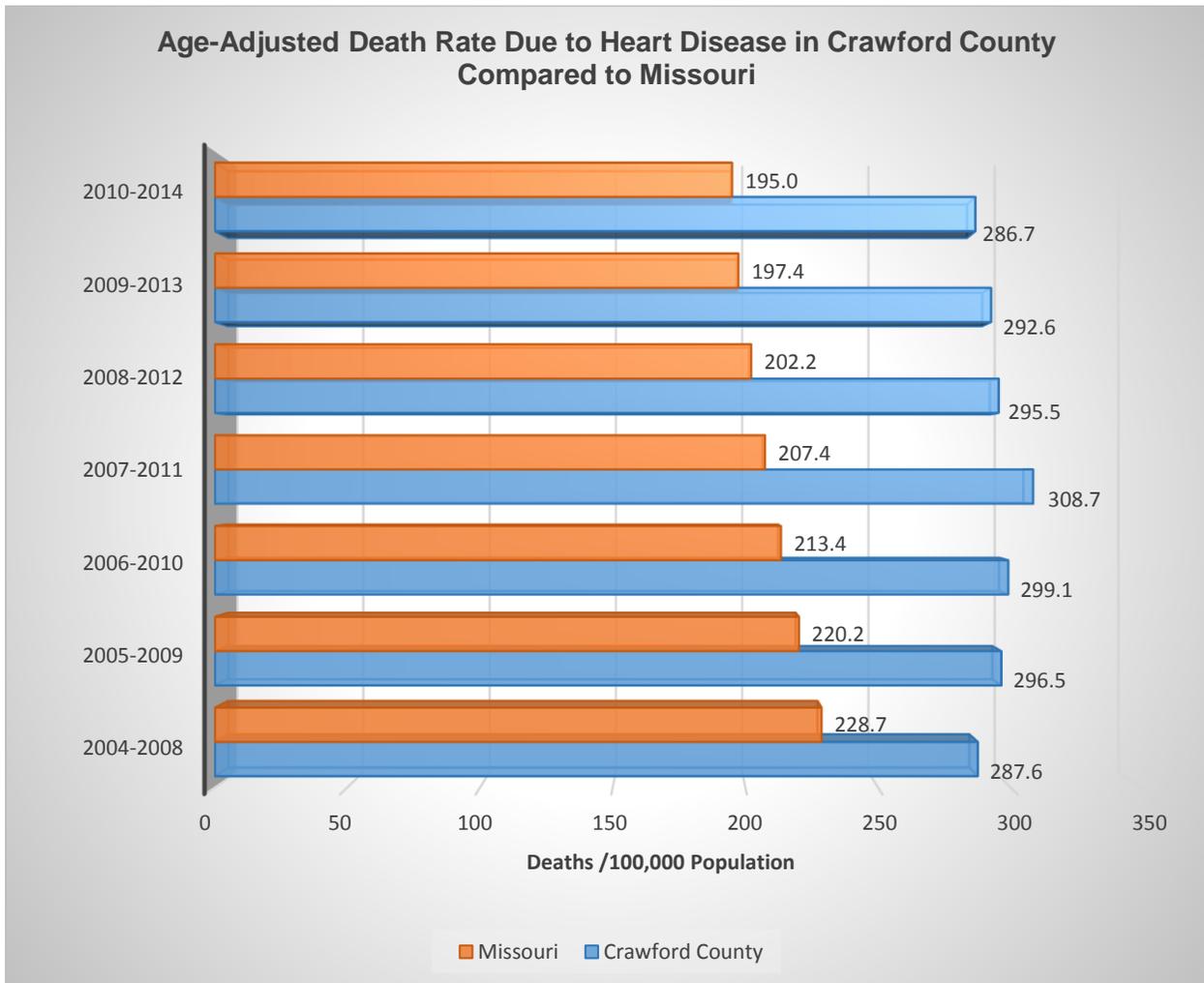
Source: Healthy Communities Institute

The overall age-adjusted death rate due to heart disease in the county was higher than the rate in the state. Among females in Crawford County, the rate was nearly 55 percent higher (86 deaths per 100,000) than in Missouri; for males, the rate was 34 percent higher (84 deaths per 100,000) than the state.



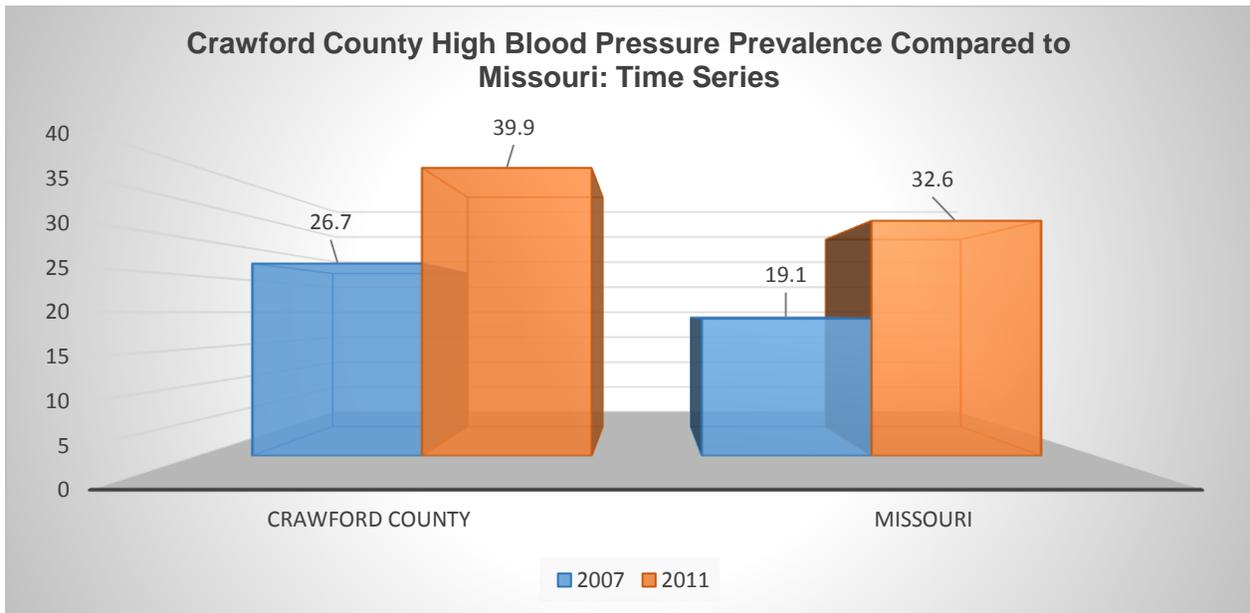
Source: Healthy Communities Institute

The overall death rate due to stroke in Crawford County was 51.3 per 100,000, which was higher than the Healthy People 2020 national health target of 34.8 deaths per 100,000 population. Females reported a higher rate than males in the county, while the rates were similar in the state.



Source: Healthy Communities Institute

While the death rate due to heart disease in Missouri slowly declined, the rate in Crawford County remained generally stable during the 10-year-period.

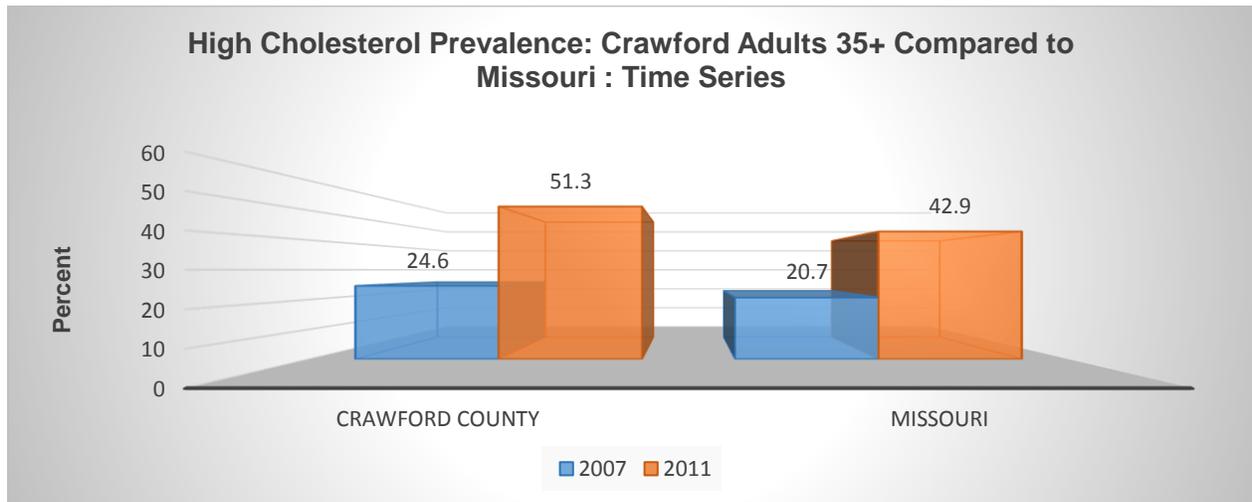


Source: Healthy Communities Institute

Crawford County reported approximately a six point higher prevalence rate of high blood pressure when compared to Missouri for both 2007 and 2011. Both Crawford County and Missouri observed significant increases in the prevalence rate of high blood pressure from 2007 to 2011.

High blood pressure is the number one modifiable risk factor for stroke. In addition to stroke, high blood pressure also contributes to heart attacks, heart failure, kidney failure, and atherosclerosis. The higher the blood pressure, the greater the risk of heart attack, heart failure, stroke, and kidney disease. In the United States, one in three adults has high blood pressure, and nearly one-third of these people are not aware they have the disease. It is particularly prevalent in African Americans, older adults, those who are obese, heavy drinkers, and women who take birth control pills. (Healthy Communities Institute).

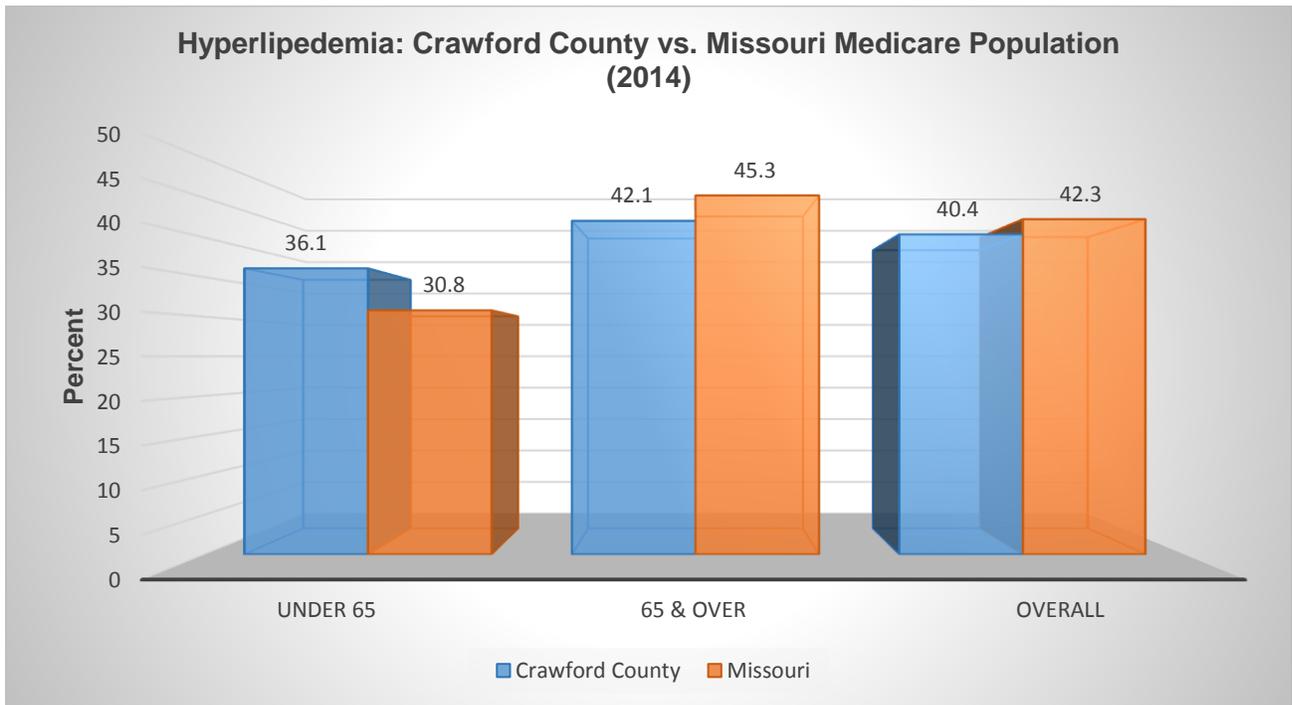
The Healthy People 2020 national health target is to reduce the proportion of adults aged 18 years and older with high blood pressure to 26.9 percent.



Source: Healthy Communities Institute

Crawford County and Missouri saw the incidence rate of high cholesterol double from 2007 to 2011.

High blood cholesterol is one of the major risk factors for heart disease. Studies show that the higher the blood cholesterol level, the greater the risk for developing heart disease or having a heart attack. Heart disease is the number one killer of men and women in the United States. Every year, approximately 785,000 Americans experience their first heart attack. Add to that approximately 470,000 Americans who suffer subsequent heart attacks. In 2006, more than 630,000 Americans died from heart disease. Lowering cholesterol levels lessens the risk for developing heart disease and reduces the chance of having a heart attack. (Healthy Communities Institute).



Source: Healthy Communities Institute

The overall rate of hyperlipidemia in the Medicare population was slightly lower in Crawford County than the state; however, the rate for those under 65 population was higher than the state.

Hyperlipidemia is an increase in the amount of cholesterol in the blood, which can lead to heart disease and acute pancreatitis. Risk factors for hyperlipidemia include gender, family history, chronic renal failure, physical inactivity, obesity and smoking. In many cases, this condition is reversible through healthy eating and regular exercise. (Healthy Communities Institute).

Table 6: Crawford County Three-Year Moving Heart Disease Average Rates Compared to Missouri						
Health Topic	2009-2011		2010-2012		2011-2013	
	Crawford County	Missouri	Crawford County	Missouri	Crawford County	Missouri
Heart Disease						
Deaths / 100,000	310.67	200.75	287.94	196.22	282.44	194.11
Hospitalizations / 10,000	148.53	151.84	148.47	142.91	145.76	136.57
ER Visits / 1,000	18.15	13.06	18.53	13.07	18.67	13.63
Ischemic Heart Disease						
Deaths / 100,000	241.74	132.55	222.43	128.05	214.48	122.38
Hospitalizations / 10,000	64.37	55.14	60.15	49.38	58.66	45.21
ER Visits / 1,000	2.26	0.84	2.24	0.73	2.04	0.67
Stroke / Other Cerebrovascular Disease						
Deaths / 100,000	44.81	43.90	44.73	42.83	50.14	41.73
Hospitalizations / 10,000	21.28	30.42	24.60	29.55	26.31	29.51
ER Visits / 1,000	1.40	0.81	1.47	0.79	1.60	0.77

Source: Missouri Department of Health

Table 6 represents the trend of heart disease in the last four years by using a three-year moving average. This provides information about the direction of heart disease. For Crawford County, a decrease was noted in deaths related to heart disease and ischemic heart disease, also known as coronary artery disease. There was also a decline related to ischemic heart disease hospitalizations and ER visits. For stroke in the county, an increase was reported in deaths during 2011-2013, hospitalizations and ER visits.

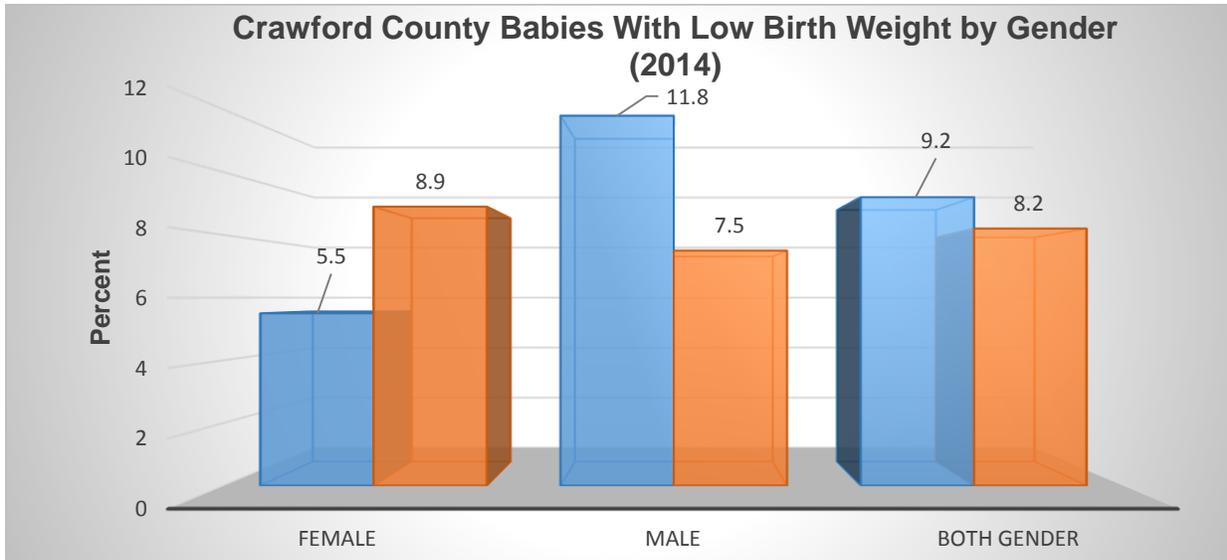
Table 7: Heart Disease & Stroke: Crawford County vs. Missouri Age-Adjusted Rate Comparison		
Health Topics	Crawford County	Missouri
Heart Disease		
Deaths / 100,000 (2003-2013)	288.9	216.75
Hospitalizations / 10,000 (2009-2013)	124.4	123.11
ER Visits / 1,000 (2009-2013)	20.8	14.65
Ischemic Heart Disease		
Deaths / 100,000 (2003-2013)	230.9	144.7
Hospitalizations / 10,000 (2009-2013)	46.70	38.34
ER Visits / 1,000 (2009-2013)	2.40	0.62
Stroke / Other Cerebrovascular Disease		
Deaths / 100,000 (2003-2013)	53.50	47.75
Hospitalizations / 10,000 (2009-2013)	25.50	28.79
ER Visits / 1,000 (2009-2013)	1.70	0.77

Source: Missouri Department of Health

Based on Table 7, death, hospitalization and ER visit rates due to heart disease, ischemic heart disease (also known as the coronary artery disease) and stroke in Crawford County were higher than the rate in Missouri with the exception of stroke hospitalizations.

Maternal and Infant Health

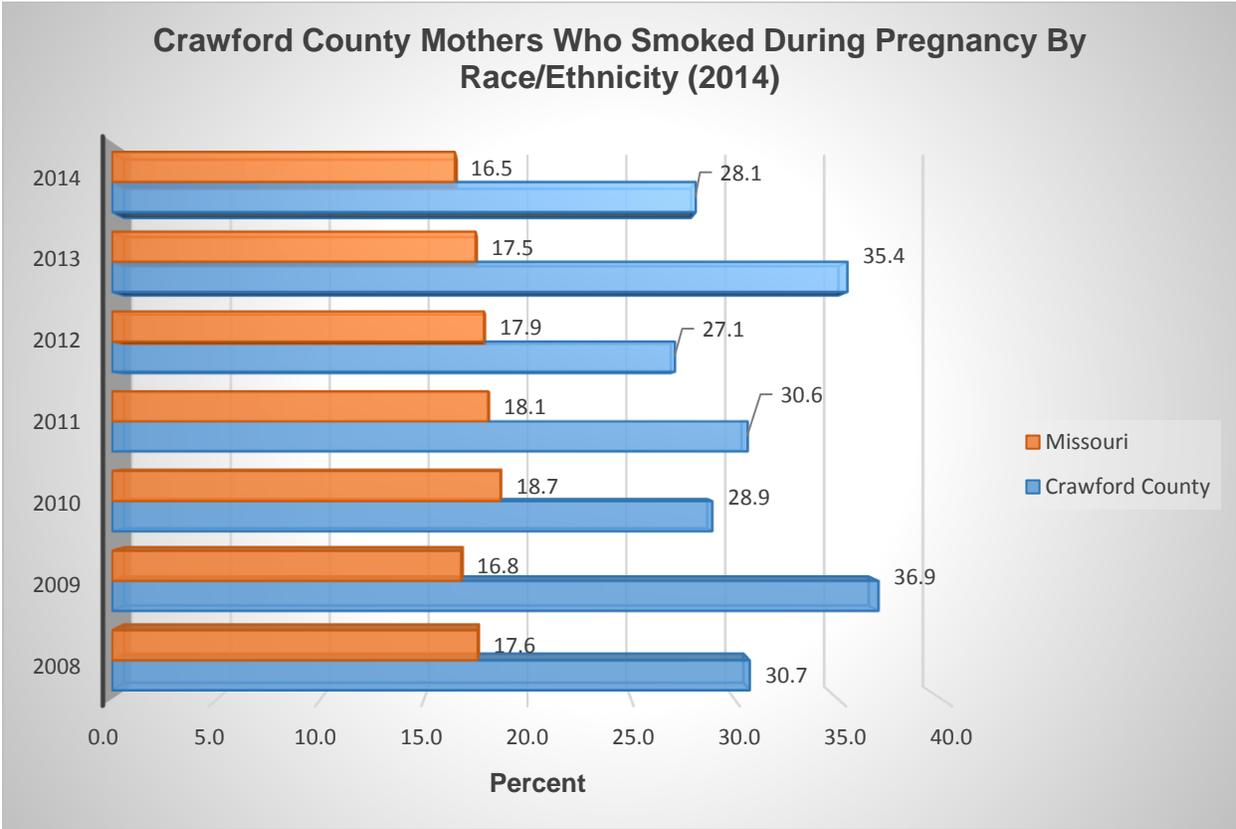
The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. (Healthy People 2020).



Source: Healthy Communities Institute

The rate of babies with low birth rate in Crawford County was 9.2 percent compared 8.2 percent in the state. The Healthy People 2020 national health target is to reduce the proportion of infants born with low birth weight to 7.8 percent.

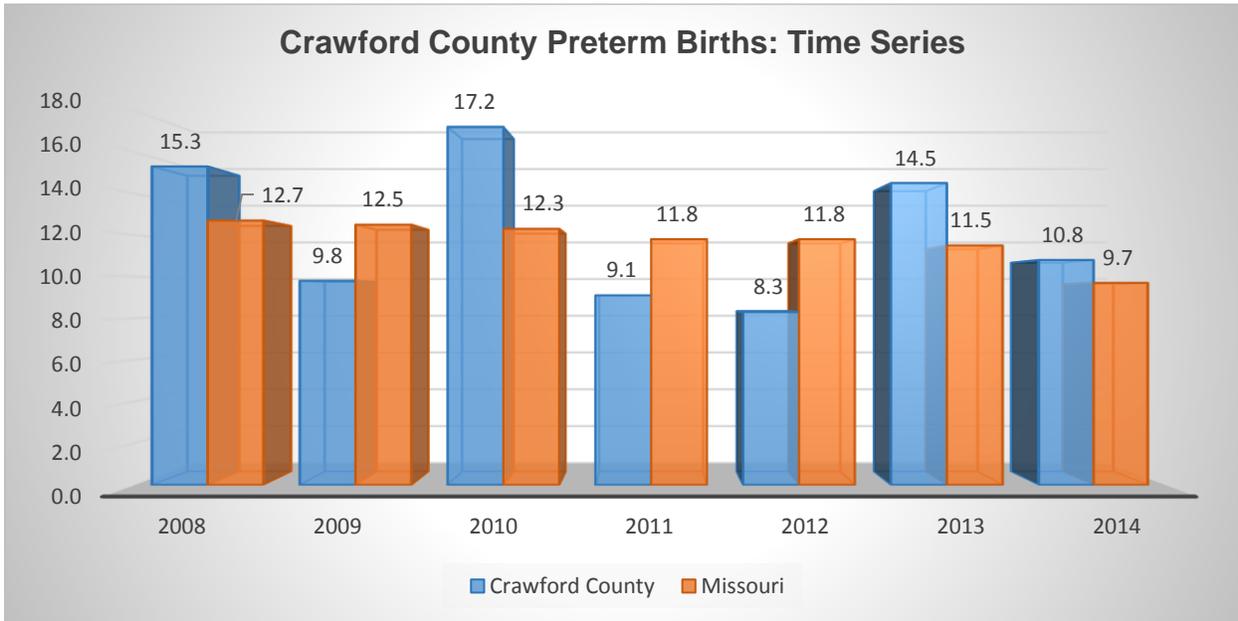
Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in a neonatal intensive care unit. (Healthy Communities Institute).



Source: Healthy Communities Institute

In both Missouri and Crawford County, there was no appreciable reduction in the rate of mothers who smoked during pregnancy. The Healthy People 2020 national health target is to decrease the percentage of women who gave birth and who smoked cigarettes during pregnancy to 1.4 percent.

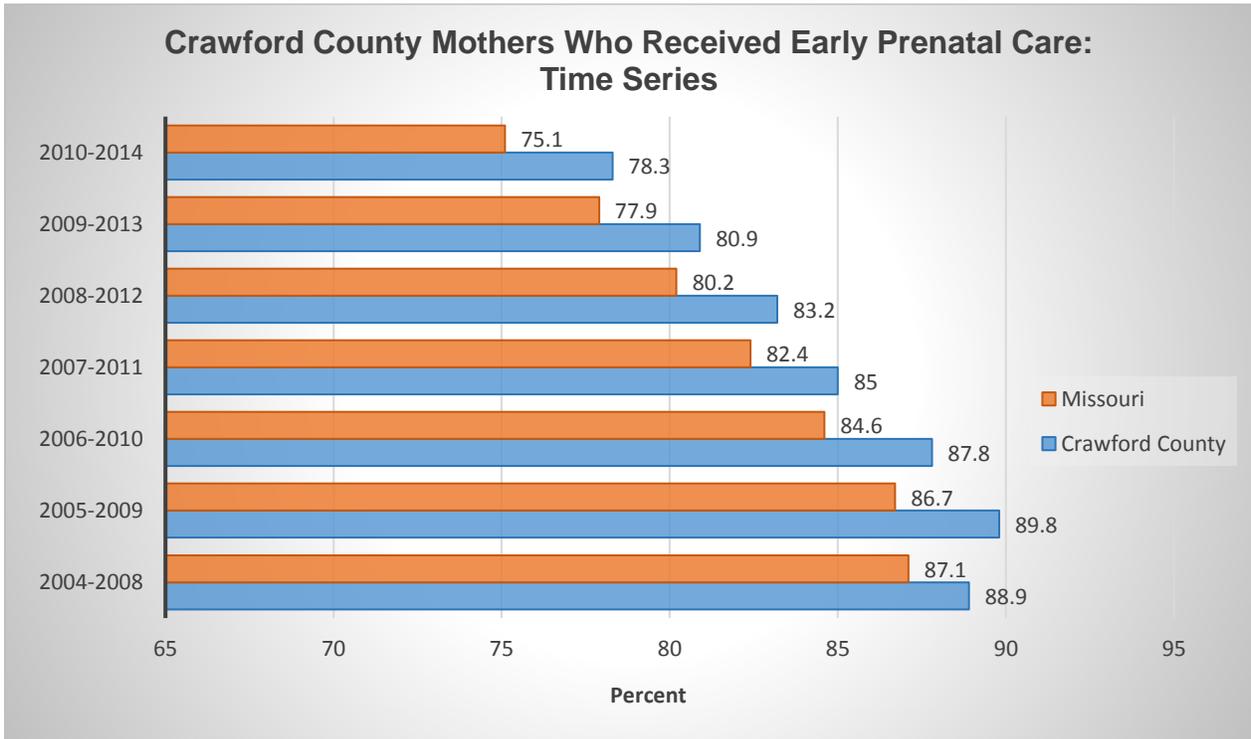
Smoking during pregnancy poses risks for both mother and fetus. A baby born to a mother who has smoked during her pregnancy is more likely to have less-developed lungs and a lower birth weight, and is more likely to be born prematurely. It is estimated that smoking during pregnancy causes up to 10 percent of all infant deaths. Even after a baby is born, secondhand smoking can contribute to Sudden Infant Death Syndrome (SIS), asthma onset and stunted growth.



Source: Healthy Communities Institute

This graph shows irregular rates of preterm births in Crawford County from 2008 – 2014. The Healthy People 2020 national health target is to reduce the proportion of infants who are born preterm to 11.4 percent.

Babies born premature are likely to require specialized medical care, and oftentimes must stay in intensive care nurseries. While there have been many medical advances enabling premature infants to survive, there is still risk of infant death or long-term disability. (Healthy Communities Institute).



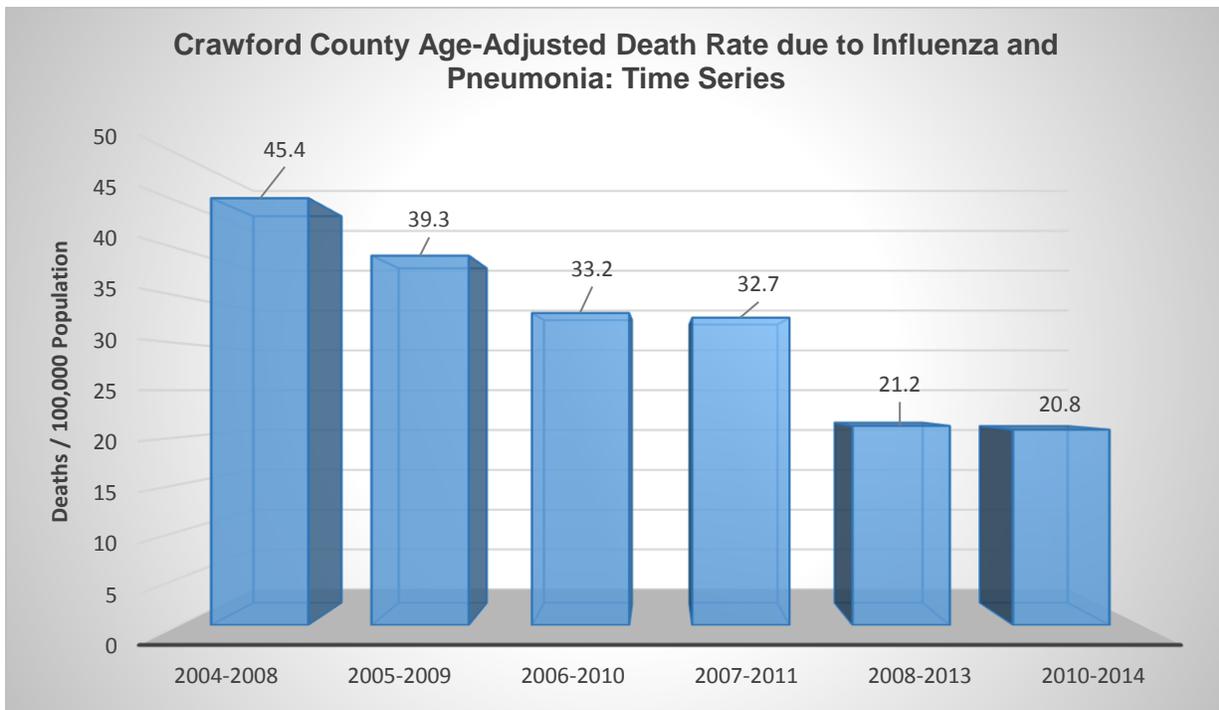
Source: Healthy Communities Institute

In Crawford County, the rate of mothers who received early prenatal care continued to decline over the past decade to 78.3 percent during the period ending in 2014. Similarly, the rate in Missouri followed the same pattern with 75.1 percent during the period ending in 2014. The Healthy People 2020 national health target is to increase the proportion of pregnant women who receive prenatal care in the first trimester to 77.9 percent.

Babies born to mothers who do not receive prenatal care are three times more likely to have a low birth weight and five times more likely to die than those born to mothers who do get care. (Healthy Communities Institute).

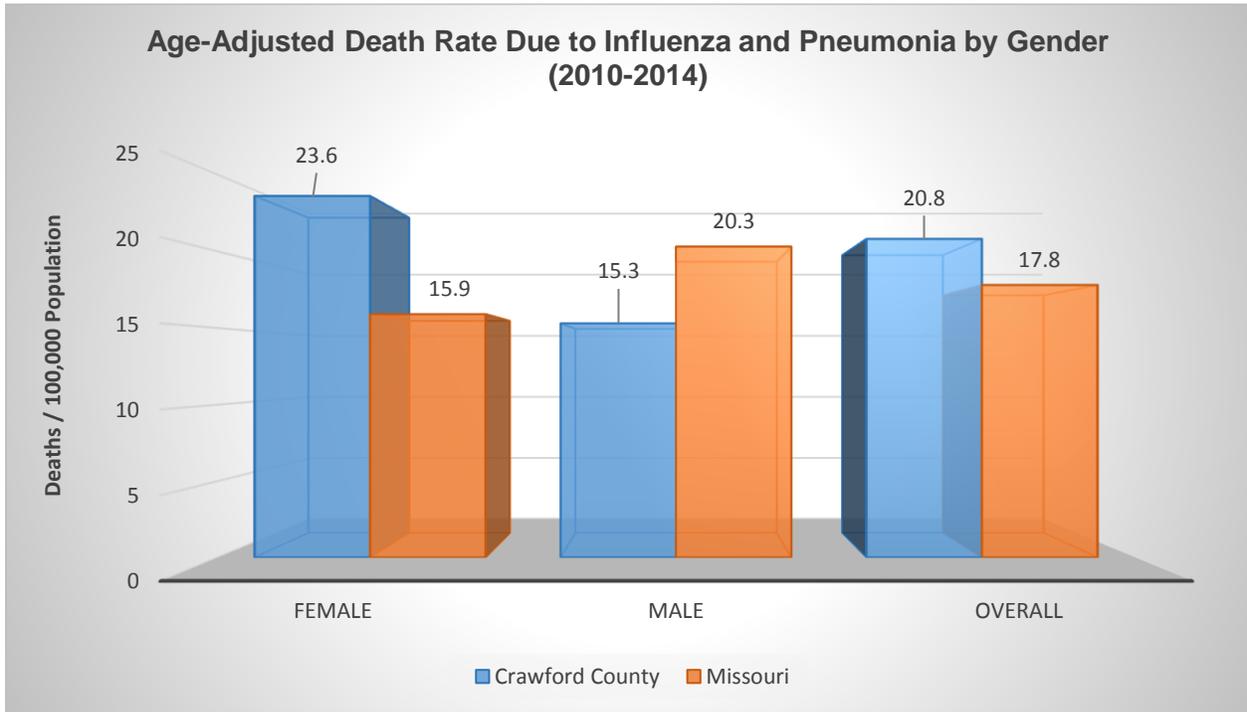
Infectious Diseases/Influenza & Pneumonia

Influenza and pneumonia are a leading cause of death in the United States. The two diseases are traditionally reported together because pneumonia is frequently a complication of influenza. Influenza is a contagious disease caused by a virus. The number of influenza deaths can fluctuate considerably from one year to the next as influenza can be caused by more virulent virus strains in some years than others as the viruses constantly mutate. Typically there are more deaths from pneumonia than from influenza. Influenza vaccination is suggested for all individuals six months and older, but influenza and pneumonia vaccination are especially recommended for persons most at risk, including the elderly, the very young, and the immunocompromised. (Healthy Communities Institute).



Source: *Healthy Communities Institute*

The age-adjusted death rate due to influenza and pneumonia steadily decreased from 45.4 deaths per 100,000 in the period ending in 2008 to 20.8 deaths per 100,000 in the period ending 2014. This represents a 54 percent decrease in the death rate.



Source: Healthy Communities Institute

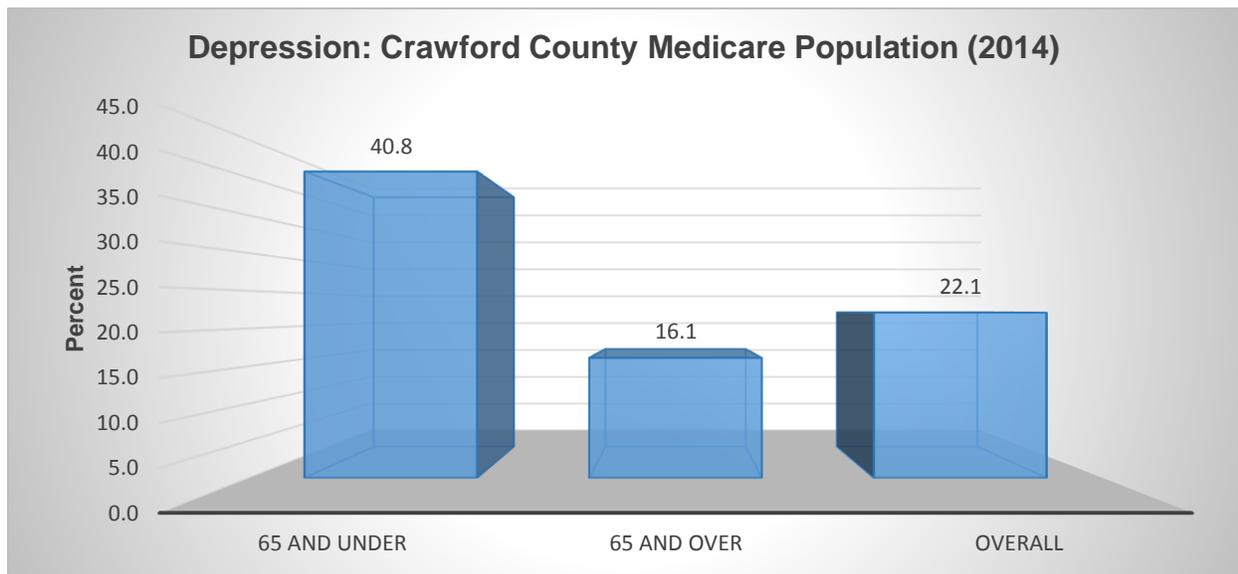
The overall death rate due to influenza and pneumonia was higher in the county than the state. The female death rate in the county was 48 percent higher than the death rate of females in the state. The death rate of males in the county was 25 percent less than the death rate of males in the state.

Mental Health

In 2014, there were an estimated 9.8 million adults age 18 or older in the U.S. with serious mental illness. This number represented 4.2 percent of all U.S. adults. (National Institute of Mental Health).

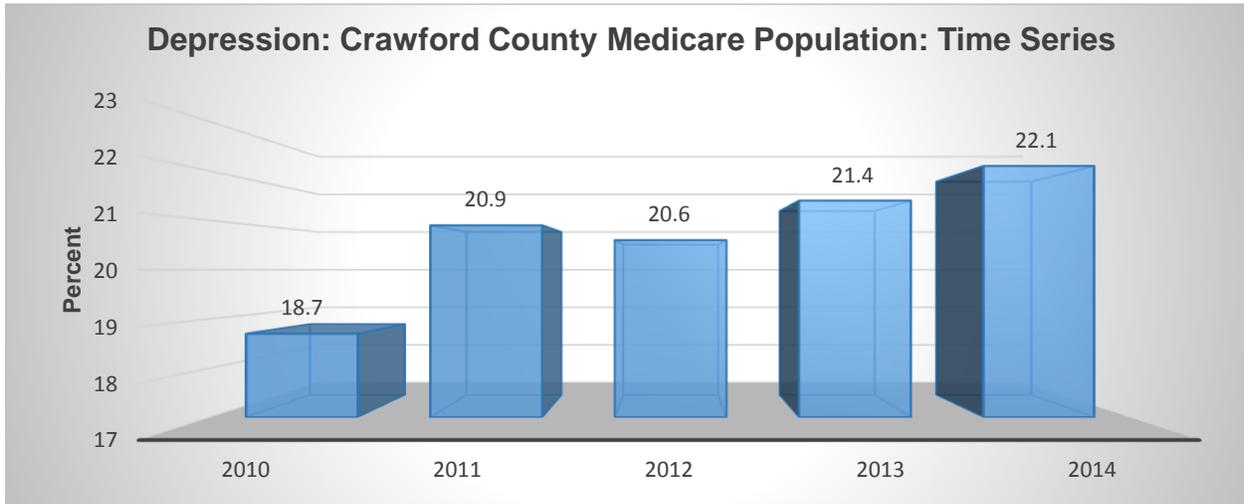
Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue and a marked loss of interest in activities that used to be pleasurable. Many people with depression never seek treatment; however, even those with the most severe depression can improve with treatments including medications, psychotherapies and other methods.

According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7 percent in people over the age of 60 compared to 16.9 percent overall. The rate of depression in the county among adults less than 65 was 34 percent and 17.6 percent among 65+.



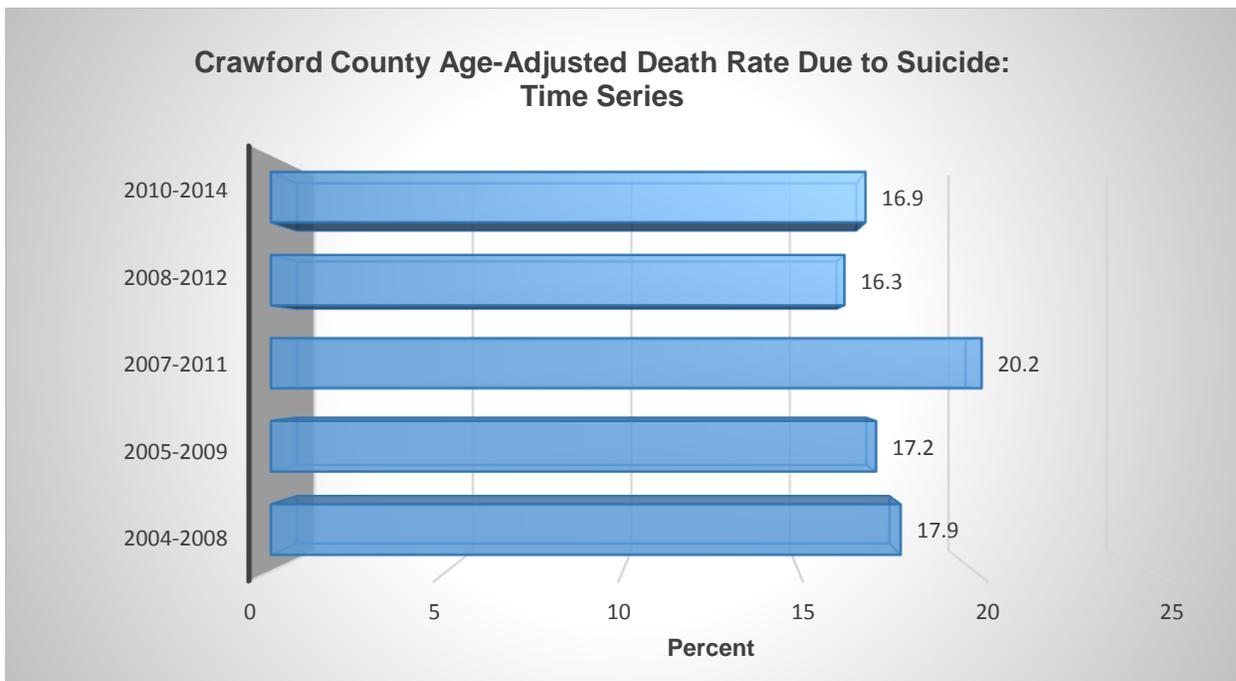
Source: Healthy Communities Institute

The rate of depression among the Crawford County population 65 and under was 40.8 percent compared to 16.1 percent for those 65 and over.



Source: Healthy Communities Institute

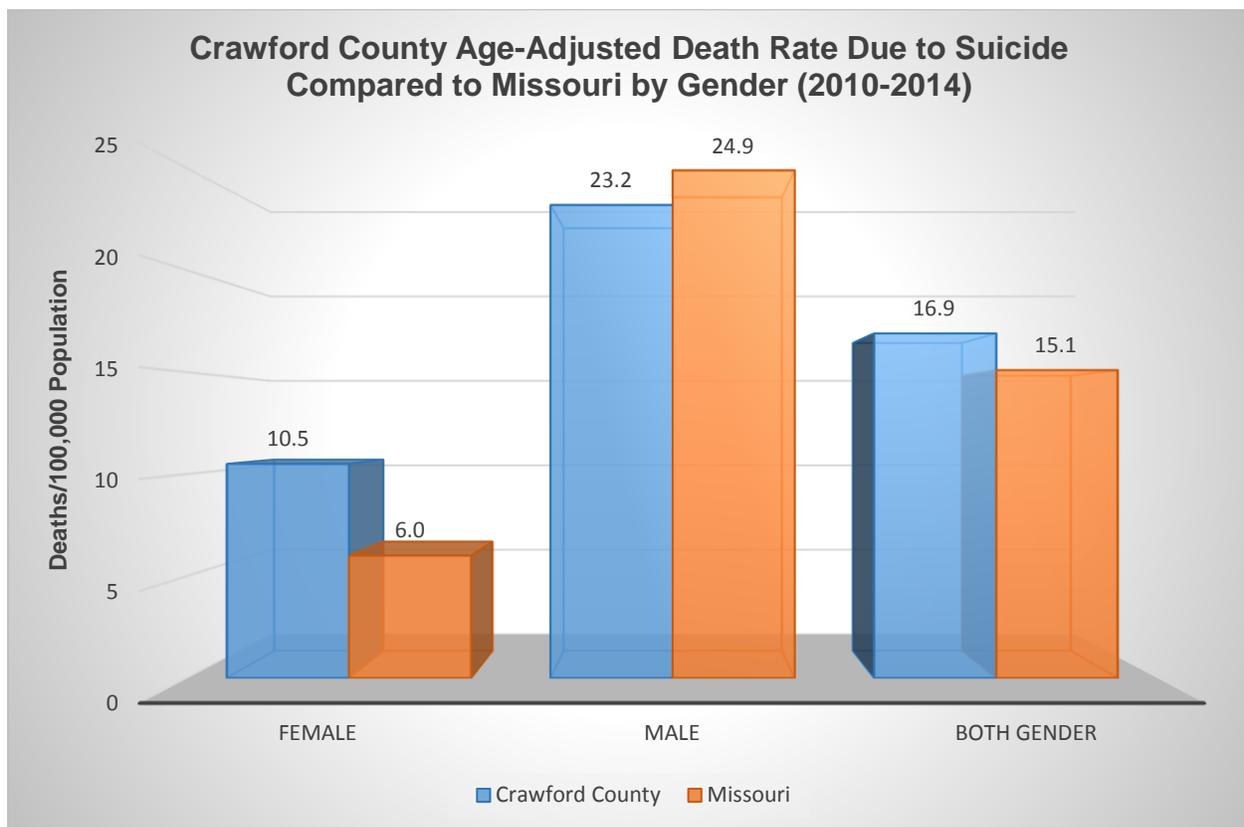
The incidence rate of depression among the Crawford County Medicare population steadily increased from 18.7 percent in 2010 to 22.1 percent in 2014.



Source: Healthy Communities Institute

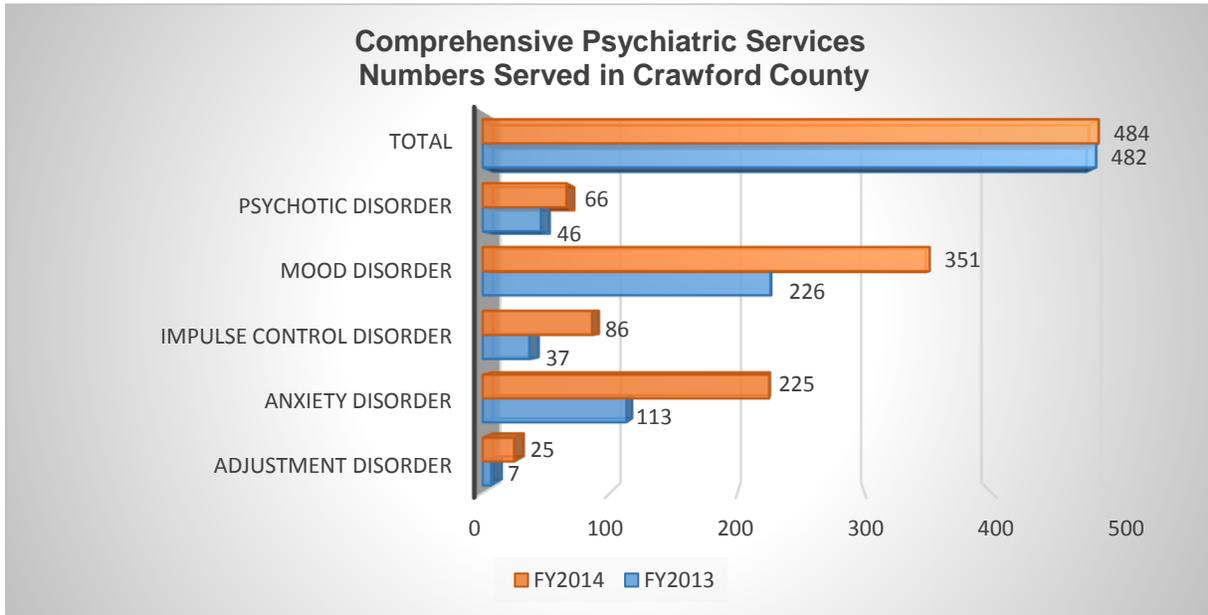
The age-adjusted death rate due to suicide in Crawford County remained relatively stable from the period ending in 2008 through the period ending in 2014, with the exception of an increase during the period 2007-2011.

Suicide is a leading cause of death in the United States, presenting a major, preventable public health problem. More than 33,000 people kill themselves each year according to the Centers for Disease Control and Prevention, but suicide deaths only account for part of the problem. An estimated 25 attempted suicides occur per every suicide death, and those who survive suicide may have serious injuries, in addition to having depression and other mental problems. Men are about four times more likely than women to die from suicide, but three times more women than men report attempting suicide. Suicide occurs at a disproportionately higher rate among adults 75 years and older.



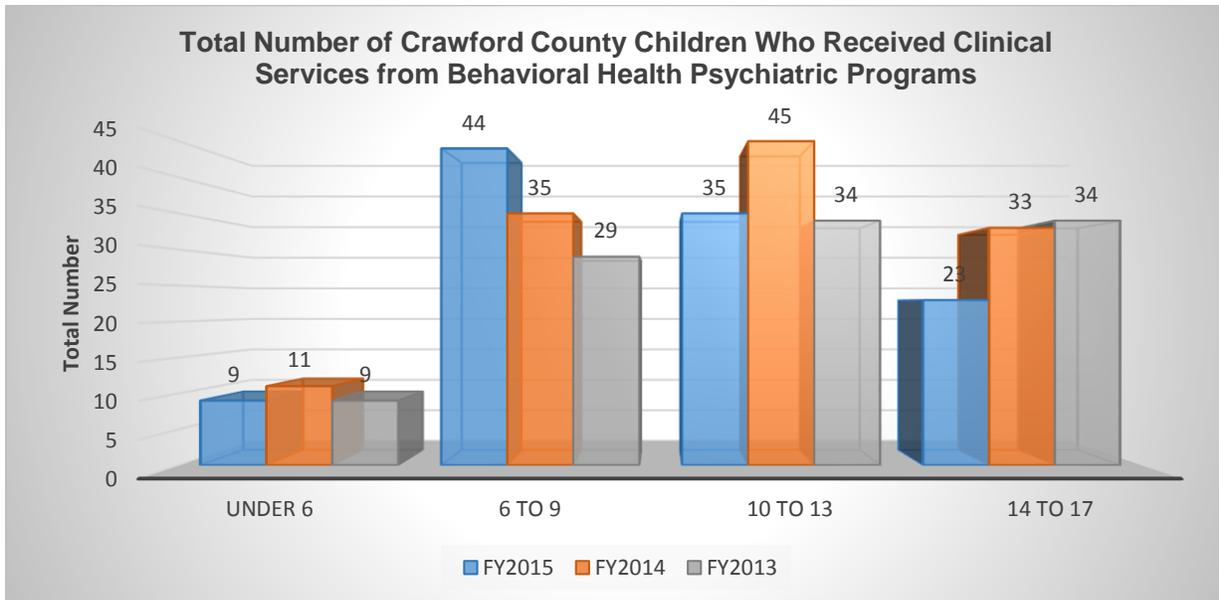
Source: Healthy Communities Institute

In Crawford County, the female death rate due to suicide was higher than the rate in Missouri. The rate of males in Crawford County is slightly lower than the rate in the state. The Healthy People 2020 national health target is to reduce the suicide rate to 10.2 deaths per 100,000 population.



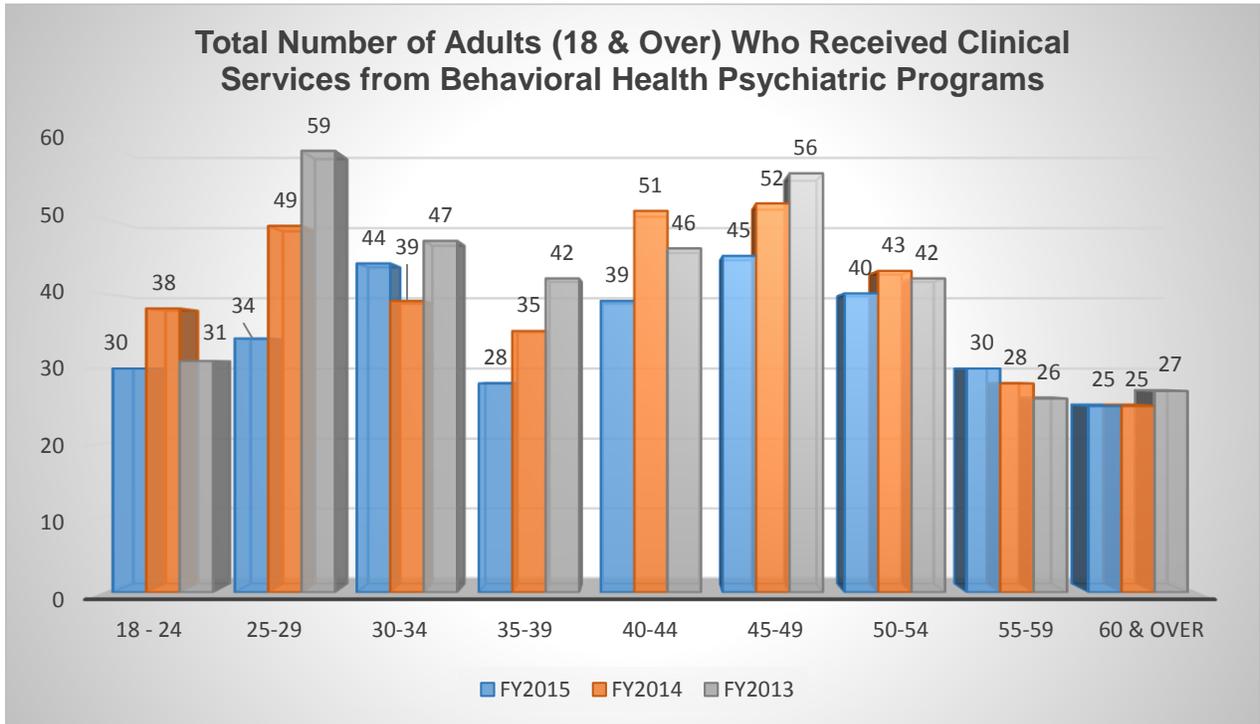
Source: Missouri Department of Mental Health

Mood disorder and anxiety disorder were the two most prevalent types of psychiatric services received in Crawford County in 2013 and 2014.



Source: Missouri Department of Mental Health

Among the four age groups, the 10 to 13 age group reported the highest number of children in Crawford County who received clinical services from behavioral health psychiatric programs from 2013-2015, followed by the 6 to 9 age group.



Source: Mo Department of Mental Health

The 45-49 age group reported the highest number of adults who received clinical services from behavioral health psychiatric programs from 2013-2015, followed by the 25-29 age group.

Substance Use and Abuse

The availability of county-level data on substance use and abuse is limited. The Missouri Student Survey provides estimates for youth in most Missouri counties. This survey is administered in even-numbered years to 6th -12th-grade students in participating school districts. (Missouri Department of Mental Health).

For Crawford County (2014):

Smoking

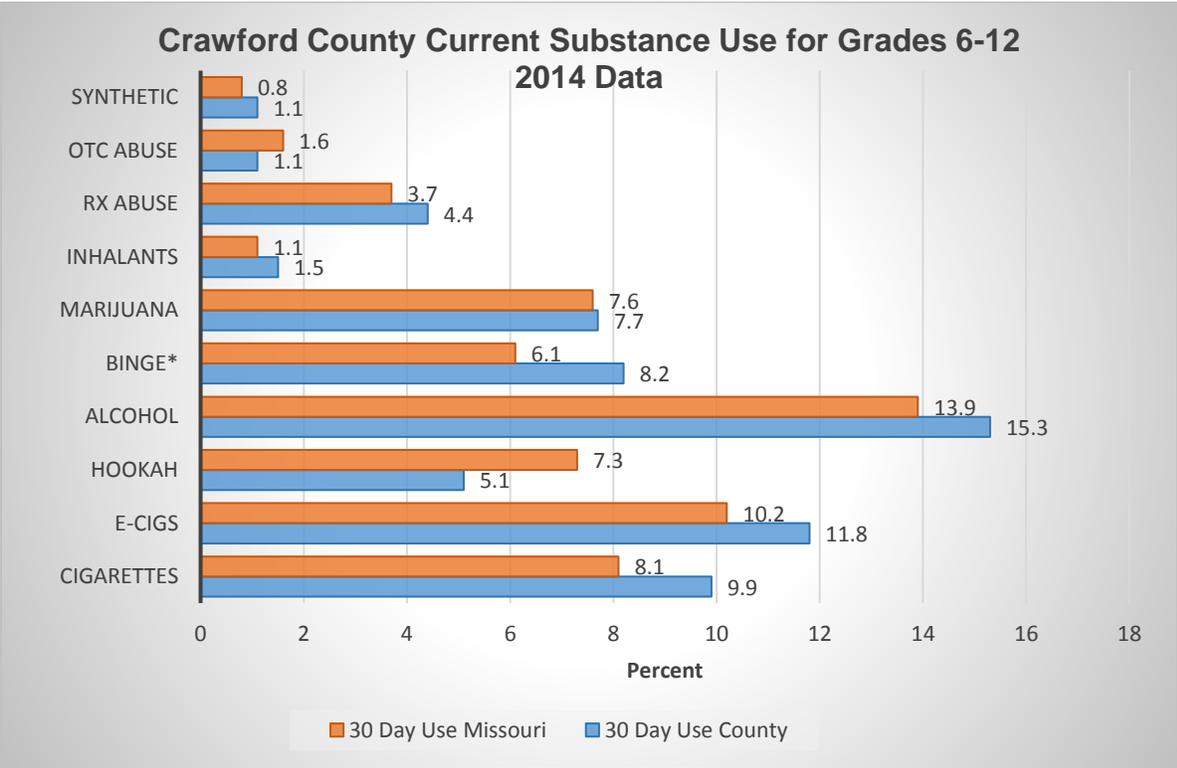
- 50.7 percent of youth believe that it would be easy to get cigarettes
- 36.1 percent have friends who smoke
- 9.5 percent believe their friends would think it would be at least a little cool if someone their age smoked cigarettes

Alcohol

- An estimated 51.4 percent of youth in Crawford County believe that it would be easy to get alcohol
- 23.4 percent think that their friends believe it is at least pretty cool to drink
- 49.6 percent have friends who drink alcohol

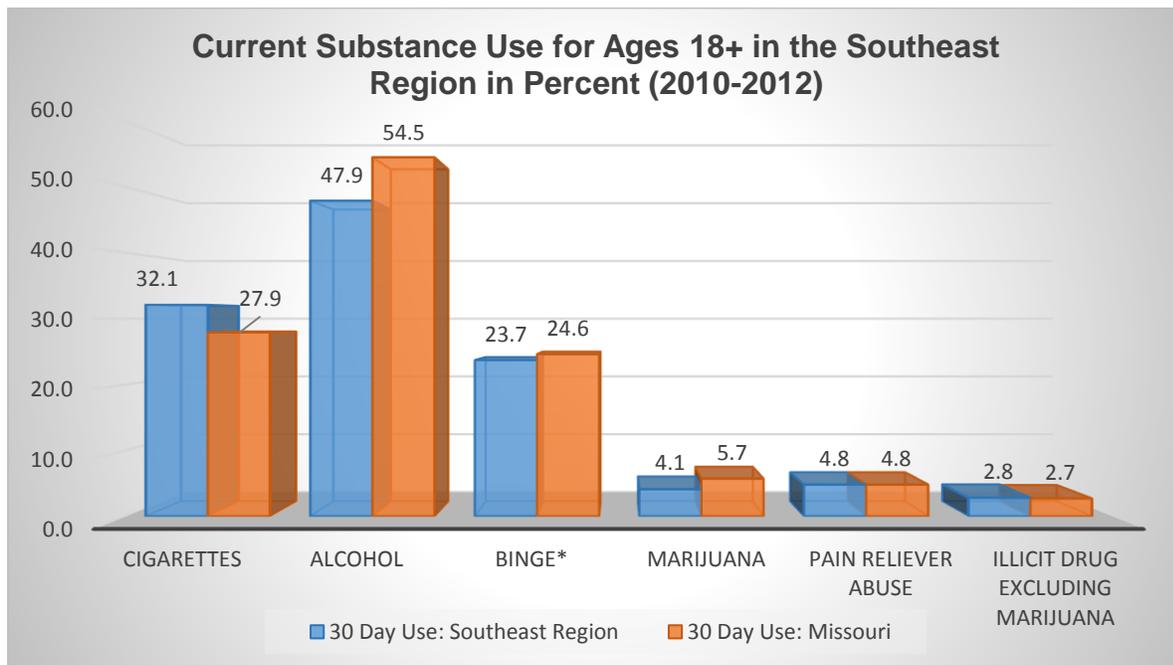
Drugs

- 35.6 percent of county youth said that marijuana is easy to get
- 32.1 percent report having at least one friend that uses it
- 17.9 percent think that their friends believe it is at least pretty cool to use
- 22.1 percent said that smoking marijuana is 'no risk at all'
- 14.7 percent of youth believe that it would be easy to get other drugs such as cocaine, methamphetamine and ecstasy



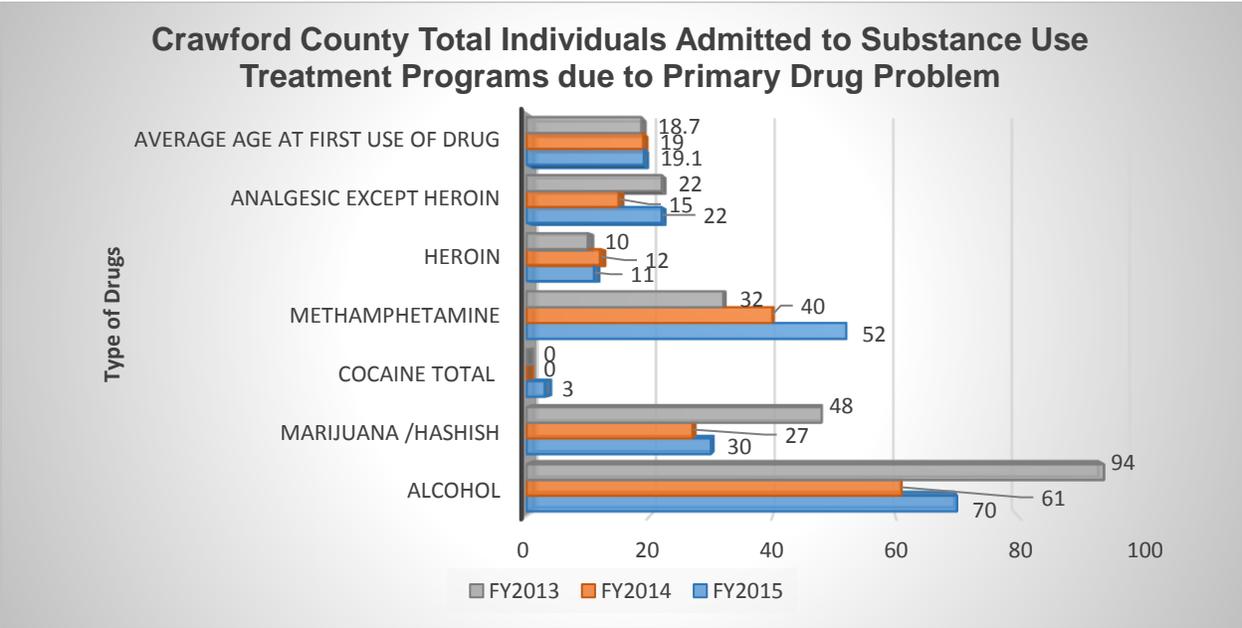
Source: Missouri Department of Mental Health

Alcohol and E-cigarettes were the highest substances used among children in grades 6-12 in Crawford County and in Missouri.



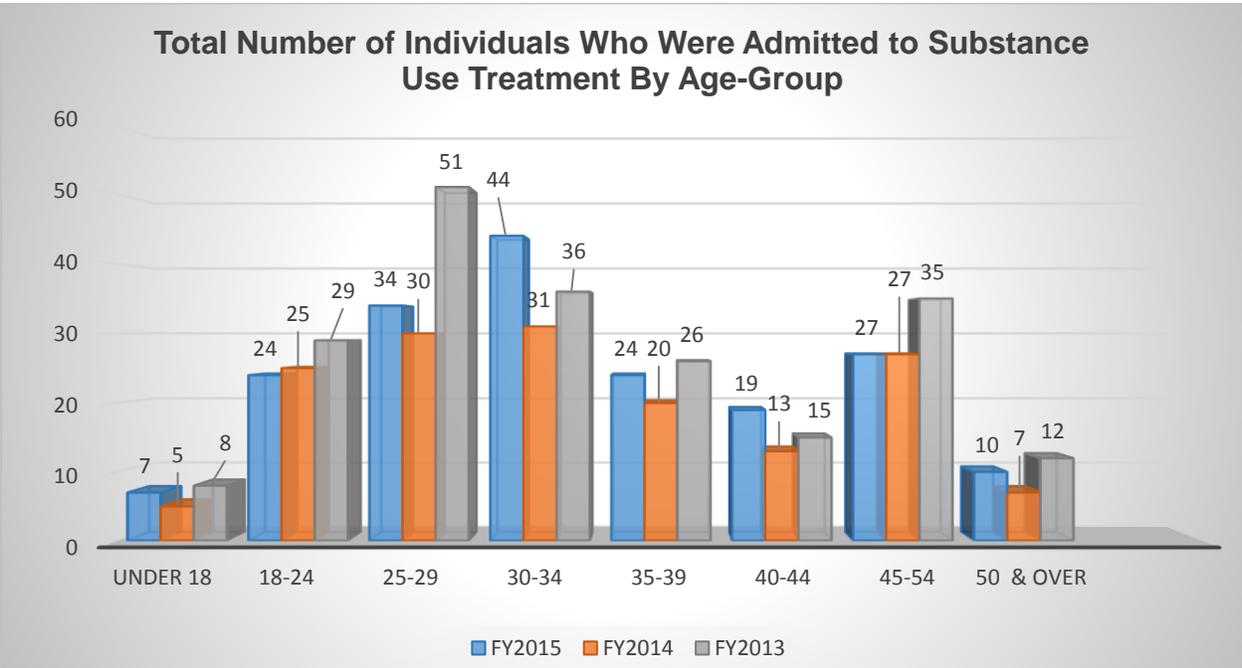
Source: Missouri Department of Mental Health

Alcohol was the most highly used substance for ages 18+ in the Southeast Region and Missouri followed by cigarette smoking. The rate of illicit drug, pain reliever abuse and binge drinking (*5+ drinks on a single occasion in last 2 weeks.) in the Southeast Region was similar to the rate in the state while the marijuana rate was higher in the state when compared to the region.



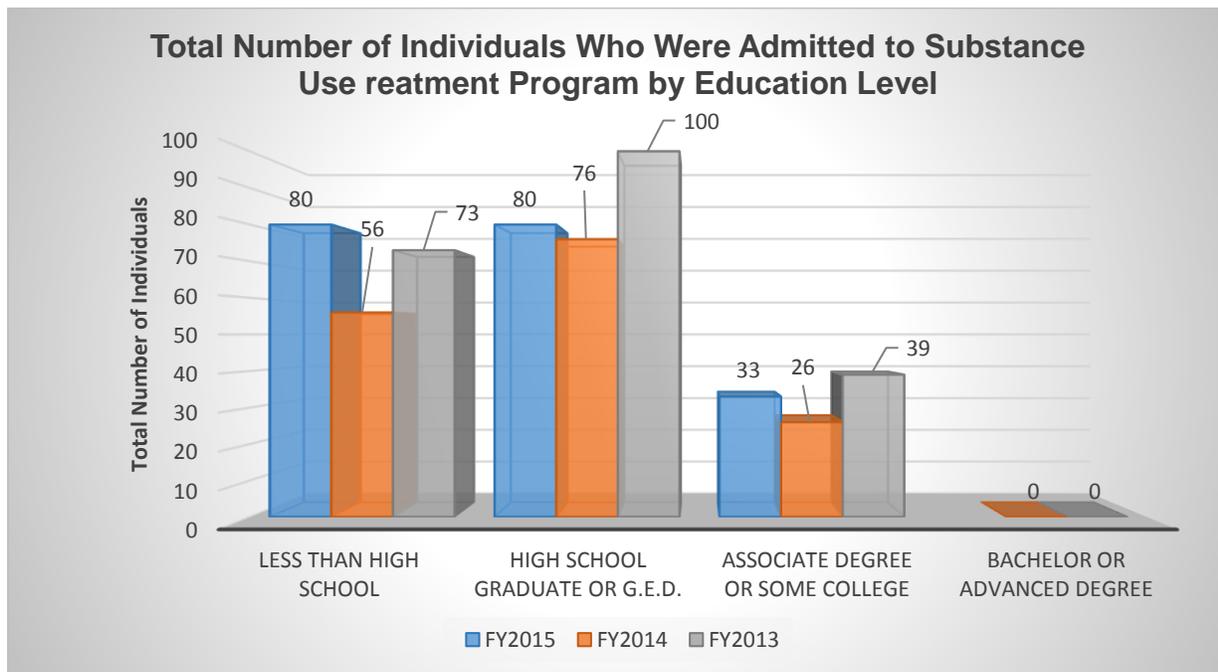
Source: Missouri Department of Mental Health

In Crawford County, methamphetamine use saw a significant increase as the primary drug problem for those admitted to treatment programs from 2013 to 2015.



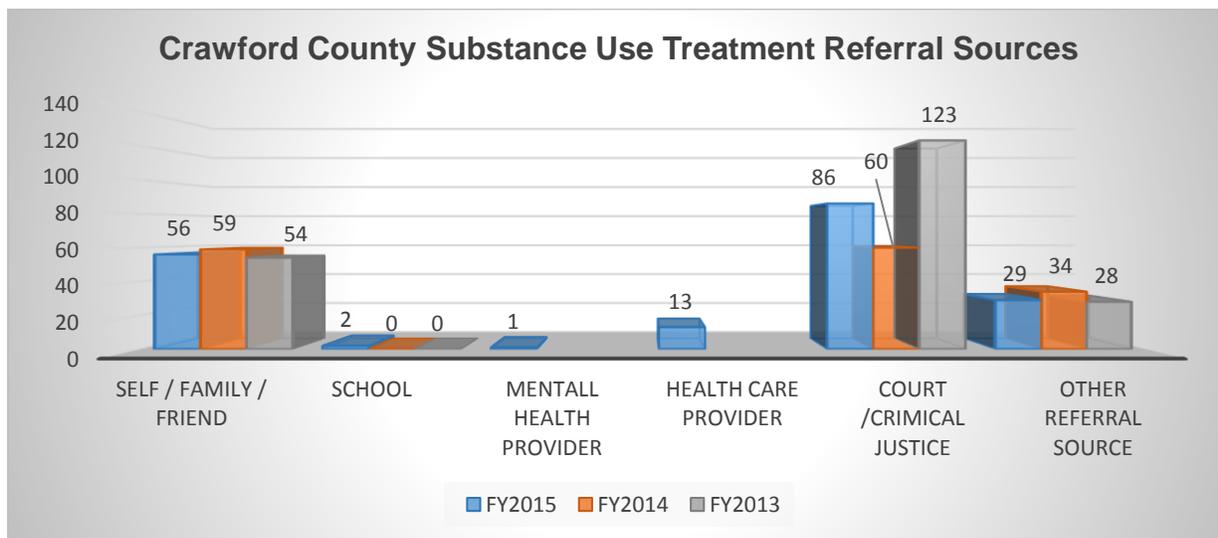
Source: Missouri Department of Mental Health

The 25-29 age group, followed closely by the 30-34 age group, reported the highest number of individuals admitted to substance use treatment programs.



Source: Mo Department of Mental Health

Individuals with a high school degree or less were more likely to be admitted for substance use treatment than those with some level of college or a college degree.



Source: Mo Department of Mental Health

Most substance abuse treatment referrals in Crawford County from 2013-2015 originated from the court or the criminal justice system followed by self/family/friend referral. In 2015, there were 14 referrals from mental health and health care providers.

Secondary Data Summary

The collection of secondary data available about Crawford County and presented on the preceding pages revealed a number of concerning findings:

Nineteen percent of Crawford County families live below the poverty line.

The rate of primary care providers was almost nine times lower than the state; there were four and one-half times fewer dentists and mental health providers in the county than the state and one and one-half times fewer non-physician primary care providers in the county.

The age-adjusted death rate for lung cancer for females was 52 percent higher than the rate in Missouri; the death rate for males was 29 percent higher than the state. The overall age-adjusted lung cancer death rate for both genders in Crawford County was 80.5 percent compared to 57 percent in Missouri.

The age-adjusted death rate of breast cancer in Crawford County was higher than the rates in Missouri and the U.S., the death rate of lung cancer (80.5 percent) and prostate cancer (37.6 percent) were significantly higher in Crawford County compared to Missouri and the U.S.

In 2011, 33.4 percent of adults in Crawford County were considered obese, up slightly from 2007.

Crawford County and Missouri saw the incidence rate of high cholesterol double from 2007 to 2011. Both Crawford County and Missouri observed significant increases in the prevalence rate of high blood pressure from 2007 to 2011. The age-adjusted death rate due to heart disease among females in Crawford County was nearly 55 percent higher than in Missouri; for males, the rate was 34 percent higher than the state.

The rate of mothers who received early prenatal care has continued to decline over the past decade to 78.3 percent in the period ending in 2014.

Males have a lower death rate due to influenza and pneumonia in Crawford County at 15.3 percent compared to females at 23.6 percent. The age-adjusted death rate due to influenza and pneumonia steadily decreased from the period ending in 2008 through the period ending in 2014.

The rate of depression among the Crawford County population 65 and under was 40.8 percent compared to 16.1 percent for those 65 and over. Mood disorder and anxiety disorder were the two most prominent types of psychiatric services received in Crawford County in 2013 and 2014.

Alcohol and E-cigarettes use were highest substances used among children in grades 6-12 in Crawford County and in Missouri. Alcohol was the most highly used substance for

ages 18+ in the Southeast Region and Missouri. Methamphetamine use saw a significant increase as the primary drug problem for those admitted to treatment programs from 2013 to 2015. The 25-29 age group, followed closely by the 30-34 age group, reported the highest number of individuals admitted to substance use treatment programs.

C. Internal CHNA Work Group Prioritization Meetings

Missouri Baptist Sullivan Hospital chose 15 employees to participate on an internal CHNA work group from various hospital departments representing Community Education & Events; Case Management; Finance; Surgical Services; Marketing and Communications; ICU; Patient Access; Emergency Department; Pharmacy; Cardiac Catheterization; Total Quality Management/Continuous Quality Improvement; Medical Oncology; and Missouri Baptist Sullivan Foundation. (See Appendix C).

The work group met twice to analyze the primary and secondary data and to complete the priority ranking for the hospital's CHNA.

Meeting 1

The work group met as a team April 11, 2016 and reviewed the purpose for the CHNA, role of the work group and goals for the project. The team reviewed the key findings from the 2013 report and the current findings from the 2015 focus group. The 2015 focus group perceptions were then reviewed and discussed.

Through discussion and consensus, the team narrowed the list of the health needs from 16 to 11 needs. The team made its decision by reviewing resources available including staffing, program availability and hospital service lines. Further, the work group engaged in a ranking exercise.

Table 8: Missouri Baptist Sullivan Hospital List of Primary Data	
Stakeholders Focus Group: List of Community Health Needs	Parkland Health Center CHNA Work Group: Top 11 Community Health Needs
Mental/Behavioral Health: Substance Abuse	Access: Coverage
Access: Transportation	Access: Services
Mental/Behavioral Health	Cancer: Breast
Access: Coverage	Cancer: Prostate
Health Literacy	Health Education
Infant/maternal Health	Heart & Vascular: Heart Health
Health Education	Mental/Behavioral Health
Physical Activity/Outreach	Physical Activity and Outreach
Access: Services	Health Literacy
Dental Care	Mental/Behavioral Health: Substance Abuse
Heart & Vascular: Heart health	Access: Transportation
Cancer: Breast	
Cancer: Prostate	
Mental/Behavioral Health: Pediatric	
Infectious Disease	
Pediatric Care	

Highlighted in red above are the needs the internal work group elected not to include in its top list: Infant/Maternal Health, Health Education, Dental Care and Pediatric Care. Further, the group wanted a broader category of Mental/Behavioral Health rather than focusing only Mental/Behavioral Health: Pediatric (highlighted in blue). The right column lists the top 11 community health needs the work group selected in rank order.

Meeting 2

The work group met again April 25, 2016 for the purpose of reviewing the secondary data and discussing and prioritizing the top 11 community health needs. The team reviewed all the available community health needs and held a discussion about the importance of each need and its effect on the community.

During the second meeting, the work group also reviewed the criteria to rank all the top health needs. The criteria (below) for prioritizing the needs identified by the focus group was agreed upon by the work group.

Table 9: Criteria For Priority Setting			
	Rating	Weight	Score
How many people are affected by the problem?			
What are the consequences of not addressing this problem?			
Are existing programs addressing this issue?			
How important is this problem to community members?			
How does this problem affect vulnerable populations?			
The total score			

Source: Catholic Health Association

The work group used a ranking process to assign weight to criteria by using the established criteria for priority setting above. Criteria of overriding importance were weighted as “3,” important criteria were weighted as “2,” and criteria worthy of consideration, but not a major factor, were weighted as “1.” Health needs were then assigned a rating ranging from one (low need) to five (high need) for each criteria. The total score for each need was calculated by multiplying weights by rating. This process was done individually.

Table 10: Missouri Baptist Sullivan Hospital Internal Work Group: Ranking of Top 14 Community Health Needs	
Highest to the Lowest Needs	Total Scores
Mental/Behavioral Health: Substance Abuse	525
Mental/Behavioral Health	463
Access: Coverage	394
Access: Transportation	387
Heart & Vascular: Heart health	359
Physical Activity and Outreach	358
Access: Services	352
Health Education	317
Health Literacy	272
Cancer: Breast	251
Cancer: Prostate	225

Participants were then encouraged to discuss how and why each arrived at the ranking. The internal work group ranked Mental/Behavioral Health: Substance Abuse as the highest community health need followed by Mental/Behavioral health. Prostate Cancer scored the lowest of all the needs. Additionally, the group compared its results to the external team ranking. (See Page 16).

Next, the work group reviewed results of the secondary data using the Healthy Communities Institute (HCI) Data Scoring Tool, which compares data from similar communities in the nation. The tool provides a systematic ranking of indicators for the county and helps prioritize the needs. The scoring is based on how a county compared to other similar counties within the state, U.S. and Healthy People 2020 targets depending on data availability. The team reviewed the scores by indicators.

Primary and Secondary Rating Summary

The table below shows:

- primary data from the focus group ranking
- needs identified by the internal work group ranking
- results of HCI scoring tools

Table 11: Missouri Baptist Sullivan Hospital Primary Data vs. Secondary Comparison		
Stakeholders Rating of the Needs	MBS Internal Work Group Rating of the Needs	HCI Scoring of the Data
Mental/Behavioral Health: Substance Abuse	Mental/Behavioral Health: Substance Abuse	Children Living Below Poverty Level
Access: Transportation	Mental/Behavioral Health	Chronic Kidney Disease: Medicare Population
Mental/Behavioral Health	Access: Coverage	Families Living Below Poverty Level
Access: Coverage	Access: Transportation	People Living 200% Above Poverty Level
Health Literacy	Heart & Vascular: Heart Health	People Living Below Poverty Level
Infant/Maternal Health	Physical Activity & Outreach	Single-Parent Households
Health Education	Access: Services	Age-Adjusted Death Rate due to Lung Cancer
Physical Activity/Outreach	Health Education	Adults Who Smoke
Access: Services	Health Literacy	Age-Adjusted Death Rate due to Cancer
Dental Care	Cancer: Breast	Workers Commuting by Public Transportation
Heart & Vascular: Heart Health	Cancer: Prostate	Depression: Medicare Population
Cancer: Breast		Households with Cash Public Assistance Income
Cancer: Prostate		Median Household Income
Mental/Behavioral Health (Pediatric)		People 65+ Living Below Poverty Level
Infectious Disease		Primary Care Provider Rate
Pediatric Care		Students Eligible for the Free Lunch Program

- Mental/Behavioral Health; (and related conditions) Access: Transportation; Access: Coverage: (and related subgroup); and Cancer (and various types) were ranked by all three groupings.
- Mental/Behavioral Health: Substance Abuse was listed first by the focus group and the internal work group. Health Literacy; Health Education; Physical Activity

& Outreach; Access: Services; and Heart & Vascular: Heart Health were also ranked by these two groups.

After reviewing the secondary data, the team discussed the health disparity among the various populations in Crawford County. Additionally, members considered needs based on impact on the community and if other organizations were already addressing a particular need. The work group also reviewed hospital resources available, including staffing, program availability and hospital service lines to meet the need.

Participants reviewed and discussed the differences among all rankings and were provided the opportunity to change their rankings. However, the team decided to keep the initial ranking. Individual rankings were totaled to yield a composite ranking.

At the conclusion of the comprehensive assessment process to determine the most critical needs in the Crawford County community, Missouri Baptist Sullivan Hospital identified three health needs where focus is most needed to improve the health of the community it serves:

- Mental Health: Substance Abuse
- Mental/Behavioral Health
- Heart & Vascular: Heart Health

V. Appendices

Appendix A

About Missouri Baptist Sullivan Hospital

Missouri Baptist Sullivan Hospital is a critical access hospital committed to providing quality health care services to the residents in Crawford, Franklin and Washington counties. The hospital's physicians and staff members offer excellent medical care and take pride in their community service.

In recent years, the hospital has improved and expanded the health care services available to the greater Sullivan community. In the early 1990s, a new and expanded Emergency Department was added along with updated admitting, and renovated Cardiac Rehabilitation and Physical Rehabilitation departments. In 1995, a new 12,000-square-foot Medical Office Building opened, home to numerous primary care physicians, and a variety of visiting medical and surgical specialists from the St. Louis area.

The latest accomplishment is completion of the facility replacement project. On December 15, 2010, an open house and ribbon cutting was held to celebrate the completion of the final \$6 million, 25,000 square-foot wing. Since 2002 the original 1962 building has been removed and replaced with a brand new facility. This represents an investment of nearly \$35 million by BJC HealthCare to build the new hospital in the community.

Appendix B		
Missouri Baptist Sullivan Hospital Focus Group Participants		
Last Name	First Name	Organization
Breese	Cindy	Cuba School District
Campbell	Greg	N. Crawford County/Ambulance District
Drace	Chris	Meramec Community Mission
Davis	Trice	Cuba School District
Hardy	J.T.	City of Sullivan
Johnson	Patrick	Sullivan Police Department
Johnston	Marcus	Sullivan School District
Loehrer	Treedy	Pattonville Fire Department
Landenberg	Sandy	Franklin County United Way
Martin	Randy	Crawford County Sherriff's Department
McDowell	Cheryl	Parents as Teachers
Milstead	Cindy	Sullivan Area Chambers of Commerce
Nickles	Sonya	Steelville R-3 School District
Pratt	Bill	Steelville Ambulance District
Ritter	Lee	Parents as Teachers
Smith	Kim	Crawford County Health Department
Stockley	Sherry	Parents as Teachers
Thompson	Patricia	Bourbon School District
Thompson	Johnny	Cuba School District
Todd	Franky	Crawford County
Voss	Tanya	Sullivan School District

Appendix C

Missouri Baptist Sullivan Hospital CHNA Internal Work Group

Last Name	First name	Title	Department
Paneitz	Kelly	Manager, Support Services	Dietary
Anderson	Tracy	Manager	Sullivan Clinics
Hedges	Robyn	Bourbon Clinics	Bourbon Clinic
Dr. Zimmerman	Mathew	Physician	Clinics
Carpenter	Johsna	STEMI Coordinator	Emergency Department
Dace	Stacey	Spec, Communication & Marketing	Public Relations
Reeves	Teresa	Manager, Patient Access	Patient Accounts
Counts	Natalie	Community Health Educator	Community Health Education
Reed	Kathy	Human Ressources	Human Resources Manager
Wildhaber	Amy	Quality Compliance & Risk Manager	Risk Management
King	Karley	Community Benefit Manager	Corporate Communications & Marketing

Appendix D

**PERCEPTIONS OF THE HEALTH NEEDS
OF CRAWFORD COUNTY RESIDENTS
FROM THE PERSPECTIVES OF COMMUNITY LEADERS**

PREPARED BY:

Angela Ferris Chambers
Manager, Market Research & CRM
BJC HealthCare

APRIL 7, 2016

TABLE OF CONTENTS

BACKGROUND	2
RESEARCH OBJECTIVES	2
METHODOLOGY.....	3
KEY FINDINGS.....	4
RATING OF NEEDS	7
NEXT STEPS.....	8
APPENDIX A (PARTICIPANT LIST)	9

BACKGROUND

In the Patient Protection and Affordable Care Act (PPACA) passed in March 2010, non-profit hospitals were mandated to conduct a community-based health needs assessment every three years. As a part of that process, each hospital is required to solicit input from those who represent the broad interests of the community served by the hospital as well as those who have special knowledge and expertise in the area of public health.

Missouri Baptist Sullivan Hospital (MBSH) conducted its first stakeholder assessment in 2013 and released its first Community Health Needs Assessment (CHNA) and implementation plan on December 31, 2013. These are effective through December 31, 2016 at which time, its next CHNA and implementation plan are due.

RESEARCH OBJECTIVES

The main objective for this research is to solicit input from health experts and those who have a special interest in the health of the community served by Missouri Baptist Sullivan Hospital in Crawford County.

Specifically, the discussion focused around the following objectives:

- 1) Determine whether the needs identified in the 2013 CHNA are still the right areas on which to focus
- 2) Explore whether there are there any needs on the list that should no longer be a priority
- 3) Determine where there are the gaps in the plan to address the prioritized needs
- 4) Identify other organizations with whom MBSH should consider collaborating
- 5) Discuss what has changed since 2013 when MBSH first identified these needs and whether there are there new issues they should consider
- 6) Evaluate what issues the stakeholders anticipate becoming a greater concern in the future that we need to consider now

METHODOLOGY

To fulfill the PPACA requirements, MBSH conducted a single focus group with public health experts and those with a special interest in the health needs of Crawford County residents. It was held on February 24, 2016 at Missouri Baptist Sullivan Hospital. The group was facilitated by Angela Ferris Chambers, Manager of Market Research & CRM for BJC HealthCare. The discussion lasted ninety minutes.

Eight individuals representing various Crawford County organizations participated in the discussion. 12 others were invited, but were unable to attend (Appendix A).

Tony Schwarm, Missouri Baptist Sullivan Hospital President, welcomed participants at the beginning of the meeting. Those who were observing on behalf of MBSH were also introduced.

During the group, the moderator reminded the community leaders why they were invited - that their input is needed to help the hospital move forward in this next phase of the needs assessment process. The hospital views this iteration of its CHNA as more of a modification than a total revision of the first assessment; insufficient time has passed to have a substantive impact on the needs that were prioritized.

The moderator shared the needs prioritized by the hospital in the first assessment and discussed the hospital's implementation plan. She also mentioned that BJC is working to standardize the language for identifying prioritized needs across all of its hospitals so that impact can be measured consistently. This will allow the sharing of best practices among all system facilities.

The following needs (based on the revised nomenclature) were identified in the 2013 MBSH CHNA and implementation plan.

- Access: coverage
- Access: services (formerly public safety)
- Breast cancer
- Prostate cancer
- Health education (nutrition)
- Heart and vascular: heart health (formerly obesity-related disease screening & education)
- Mental/behavioral health
- Physical activity and outreach

Other health needs were identified in the 2013 plan, but not addressed due to factors such as lack of expertise and limitations in resources. These included:

- Dental care
- Health literacy
- Infant/maternal health
- Infectious diseases
- Mental/behavioral health: substance abuse
- Mental/behavioral health: pediatrics
- Pediatrics

KEY FINDINGS

FEEDBACK ON THE NEEDS BEING ADDRESSED:

Although stakeholders did not dismiss the importance of those needs MBSH chose to address in the first implementation plan, several felt that some needs not addressed in 2013 should be included in the 2016 implementation plan.

Substance abuse, specifically the growing heroin crisis, has become more important than the concern about meth labs. As in other markets, it is blamed on the increase in addiction to prescription medications i.e. opioids. Some felt, though, that it is now easier to drive to St. Louis to purchase heroin than to access these prescription medications.

Children who come from homes where drug use is prevalent show signs of abuse and neglect. Those whose mothers abused drugs during pregnancy are showing signs of behavioral and mental health issues in school. Community stakeholders feel there is a need for more education among families of drug users/abusers as to what they can do for those who are suffering from addiction and how to address it within their families.

NEEDS THAT SHOULD COME OFF OF THE LIST:

Although nothing was identified to come off the list, several key stakeholders felt that progress has been made in access to **dental care**. They mentioned that there are now several resources available to those in the community who need dental services, including some private dentists who periodically provide free services. There was also mention of a dental van that will come to the elementary school several times a year and offers services to both parents and children.

GAPS BETWEEN DEFINED NEEDS AND OUR ABILITY TO ADDRESS THEM:

In the area of **substance abuse**, there were questions surrounding the availability of AA/NA and Al-Anon within the community for users and families of users as a source of support.

Influenza and pneumonia are identified as leading causes of death for Crawford County residents. People don't have the money for flu shots, and there are limited sources of free flu shots. Although Sullivan does provide 300 free flu shots at their annual health fair, some residents who struggle with transportation are unable to take advantage of that opportunity.

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE:

In the area of substance abuse, there was reference to an organization called **People Against Heroin** that might be worthy of consideration for collaboration. The group felt

there was a need to increase awareness and education on the issue, as well as identify what solutions are available for getting people into treatment.

Another group, **Grace's Place**, provides services to parents who feel like they are in crisis and unable to keep their children safe. Grace's Place will take them, no questions asked. They currently have a facility in Washington, MO and are applying for a grant in Franklin County. It was identified as they type of service from which the area would benefit to keep children from being subjected to situations in which they may be neglected and be unsafe.

The **County Department of Health** is a reliable source of information for area residents about available services. Including them on the notification about the annual health fair and the availability of free flu shots would be an effective way to get the word out to those in need.

Individual churches as well as the **Ministerial Alliance** were identified as major sources of help to the community. The fact that some churches have their own independent food banks means that some people may go from place to place to receive services. Having an alliance means that services can be better coordinated and recipients tracked to ensure that services are not being duplicated.

One program that is church-sponsored is the **Backpack Program** in which a child who needs food over the weekend is given a backpack with food so their family can eat over the weekend.

Whatever It Takes is a charitable organization that provides funds to families with specific needs like glasses, dental care or even tennis shoes. They raise money every year by putting on a gospel music concert.

In Cuba, there an organization called the **Lifeline Pregnancy Center** that provides resources to pregnant teens for themselves and their babies.

Another important resource in Crawford County is **CASA**, Children's Advocacy Service Association. They are a legal advocacy group that focuses on the needs of children.

The **Area Agency on Aging** has a Community Center to serve older adults. It provides meals to those who are able to get there as well as Meals on Wheels to the homebound.

In addition to the **Sullivan Food Pantry**, there is a mobile food market located at Grace Methodist Church every fourth Friday. People drive their cars through and pick up food items, including fresh produce. It's also open to residents of Bourbon and St. Clair as well as those from Sullivan.

CHANGES SINCE THE 2012/2013 CHNA:

New resources have become available within the Sullivan School District to address some of the behavioral/mental health needs of children.

- As a result of the Putting Kids First initiative through Franklin County, there will be additional counseling resources available at the high school, in collaboration with the **Crider Center**.
- A behavioral room has also been added at the school in collaboration with **Learning Momentum**. Students will be enrolled in an 8 – 12 week alternative program to address their outbursts in the classroom and the disruptive behaviors that go along with them.
- A nurse will be housed at the high school as a result of a partnership with **MBSH**. She will be available to the entire district for students and staff so they can be quickly diagnosed and reduce the amount of missed work/school. The students/employees will be able to make an appointment to see the nurse in person. There will also be opportunities for telemedicine appointments.

At the time of the last needs assessment, a new pediatrician had just located within the community. An infectious disease specialist has also established himself locally and is now available to address those health needs.

The **Crawford County Health Department** is now offering parenting classes for parents whose children have been removed from their homes. Usually, these classes are court-ordered or DFS-referred because of issues related to parental drug or alcohol abuse. They are now offered twice a year.

The availability of oncology services at MBSH means that area residents no longer have to drive to St. Louis for certain treatments and can receive them closer to home.

In collaboration with the **St. Louis Food Bank**, a program is in development called Senior Boxes. Adults ages 60 and older with income below a certain level will be able to receive a box of food once a month as an alternative to going to the Sullivan Food Pantry.

ISSUES THAT MAY BECOME MORE IMPORTANT IN THE FUTURE:

Transportation was not specifically identified in the 2013 needs assessment but was raised as an issue by several stakeholders. Even if a family is able to afford a car, they are unable to afford the insurance. Public transportation is limited, although older adults can access the OATS bus and those on Medicaid can request non-emergency medical transportation, though it has the reputation of being unreliable.

Being able to find resources that are available to local residents is often challenging. Although there is a resource book of services for Franklin County, there is nothing similar

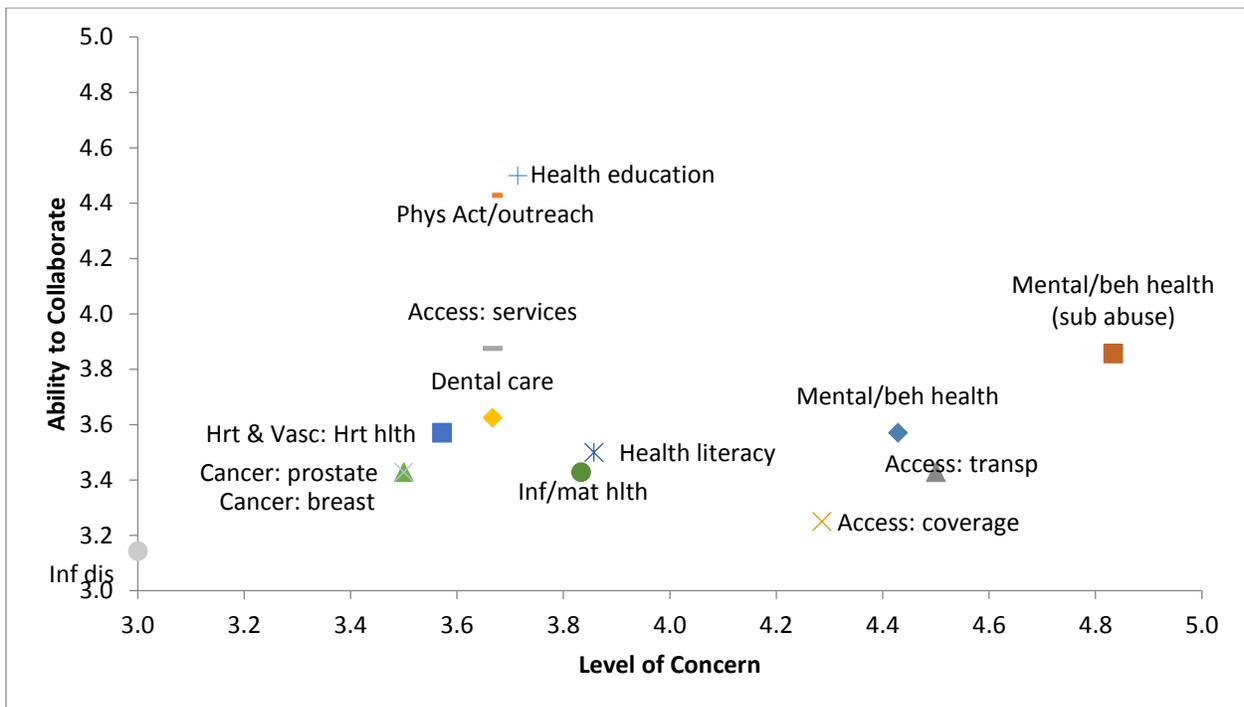
for Crawford County residents. An alternative would be to have a meeting for every organization that offers resources in the area so everyone can be educated about what is available.

There is concern that what is currently **Senior Housing** is being converted into Section 8, creating a lack of housing for older adults and causing them to be put on a waiting list.

The City of Sullivan is making an effort to encourage and attract economic development in the community so that higher paying jobs will be more available, and provide better opportunities than the fast-food positions that are predominant in the area.

RATING OF NEEDS

Participants rated the needs identified in the 2013 assessment on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate around them. Mental/behavioral health (substance abuse) rated highest in terms of level of concern followed by access: transportation, mental/behavioral health and access: coverage. Health education and physical activity/outreach are seen as the greatest opportunities for collaboration



	Level of Concern	Ability to Collaborate
Mental/behavioral health (substance abuse)	4.8	3.9
Access: transportation	4.5	3.4
Mental/behavioral health	4.4	3.6
Access: coverage	4.3	3.3
Health literacy	3.9	3.5
Infant/maternal health	3.8	3.4
Health education	3.7	4.5
Physical Activity/outreach	3.7	4.4
Access: services	3.7	3.9
Dental care	3.7	3.6
Heart & Vascular: Heart health	3.6	3.6
Cancer: breast	3.5	3.4
Cancer: prostate	3.5	3.4
Mental/behavioral health (pediatric)	3.4	2.6
Infectious disease	3	3.1
Pediatric care	3	2.9

NEXT STEPS

Based on the input the hospital received from community stakeholders, MBSH will examine secondary data for Crawford County to explore the size of the needs that have been identified.

In addition, the hospital will establish an internal stakeholder workgroup to assess this information and evaluate whether the priorities should change.

The needs assessment and associated implementation plan must be revised and updated for release by December 31, 2016.

The community stakeholder group will continue to be updated about the progress of the internal work group as it works to meet this deadline.

VI. IMPLEMENTATION PLAN

A. Community Health Needs to Address

a) Mental/Behavioral Health: Substance Abuse

Rationale:

Substance abuse is an increasing problem in Crawford County with 188 individuals admitted into Substance Abuse Treatment Programs in 2015. There are limited resources for family members of those dealing with substance abuse, to provide them with the resources needed to assist their loved one with continuing care. Up to 50% of individuals who complete an addiction treatment program will later relapse with the highest risk of relapse in the first 60 days following discharge from treatment.

Individuals who receive continued care after treatment are less likely to relapse.

(Source: 2015 Status Report on Missouri's Substance Abuse and Mental Health; <http://alcoholrehab.com>)

While different substances can have varying immediate health effects, the most common issues include increased heart rate, high blood pressure, dizziness, tremors, mood changes and paranoia. In high dosages, the risk for more dangerous effects increases, and the potential for heart attack, stroke, respiratory failure and coma increase. The long-term health effects of substance abuse include a weakened immune system, psychosis, paranoia, cardiovascular conditions, neurological conditions and organ failure. (Source: <http://recovergateway.org>)

Program Goals:

Increase access to resources and education as well as family support for individuals who have undergone or are considering substance abuse treatment.

Program Objectives

- a. By May 2017, through pre/post testing, establish a baseline of the number of individuals seeking substance abuse treatment from the New Vision program and patients admitted to the Emergency Department for substance abuse related illness/injuries who are aware of available substance abuse resources in the area.
- b. By the end of 2017, establish a baseline of the number of individuals who seek substance abuse treatment at MBSH who have previously completed a substance abuse treatment program.
- c. Increase the percentage of individuals who are aware of available substance abuse resources in the area by 5% by the end of 2018 and thereafter.
- d. Decrease the percentage of individuals who relapse and are seeking repeat substance abuse treatment by 5% by the end of 2018 and thereafter.

Action Plan:

Missouri Baptist Sullivan Hospital will add to their website a link to an online resource database accessible to all staff, patients and community members to assist with locating available substance abuse resources in Crawford County and the surrounding areas. Once complete, staff, patients and their family members seeking information on substance abuse treatment and prevention can search the online database for nearly available resources.

To further provide education and support for individuals and family members of individuals seeking treatment for substance abuse, MBSH will facilitate monthly peer to peer support group meetings. These monthly group meetings will be led by a social worker or staff member of the New Vision program who will collaborate with available local resources to discuss various topics related to substance abuse.

Expected Outcomes:

Decrease the rate of reoccurrence of substance abuse and readmission into substance abuse treatment programs for those who have undergone treatment.

Outcomes Measurement:

Program success will be measured by surveying patients who seek substance abuse treatment to evaluate knowledge of available substance abuse resources for both treatment and continued care as well as by examining the number of patients seeking treatment who have previously completed a substance abuse program.

All educational programs offered at group meetings will be evaluated with a pre/post test to measure learning outcomes.

b) Mental/Behavioral Health

Rationale: Limited mental health resources exist locally, and there is a shortage of psychiatrists practicing in Crawford County. Low income, underinsured and uninsured community members are often unable to access the services that are available due to cost, availability and transportation issues. While the hospital operates an inpatient geriatric psychiatry program, there is a shortage of resources for patients under the age of 50 requiring inpatient care. With only one psychiatrist practicing at the specialty clinic, there is also a shortage of outpatient appointment availability, and many patients end up visiting the Emergency Department.

In 2013, the rate of Emergency Department visits in Crawford County due to mental disorders was 19.4 (per 1,000) which is significantly higher than Missouri's rate of 13.9, as well as an increase from the 2010 Crawford County rate of 15.2 (per 1,000).

(Source: MICA)

Individuals with mental and behavior health issues are at greater risk for decreased quality of life, educational difficulties, lowered productivity and poverty, social problems, vulnerability to abuse, and additional health problems. Education is often compromised when early-onset mental disorders prevent individuals from completing their education or successfully pursuing a career. (Source: <http://www.uniteforsight.org>) Children and adolescent mental and behavior health patients are significantly less likely to complete high school, enter college, or receive a college degree, compared to their peers without mental illness. Mental and behavior health disorders also often times result in lowered individual productivity due to unemployment, missed work, and reduced productivity at work. Reduced earnings and decreased employment potential put mentally ill individuals at an increased risk of poverty. Patients with a mental and/or behavior health diagnosis who also have another health condition are less likely to adhere to their medical treatment than patients who do not have a mental and/or behavior health dual diagnosis. (Source: <http://www.uniteforsight.org>)

Program Goals:

- a. To increase awareness of community resources for mental health
- b. To establish protocol to provide intervention and support for individuals presenting to the Emergency Department with self-harm behaviors.

Program Objectives:

- a. By the end of 2017, establish a baseline of the number of individuals who are unaware of available mental health resources by surveying those seeking Emergency Department treatment for self-harm behaviors.
- b. By May 2017, establish a baseline of the average number of individuals per month who attend outpatient therapy or receive follow up care after being treated in the Emergency department for self-harm behaviors.

- c. Decrease the percentage of individuals who experience repeat visits to the ED for self-harm behavior by 5% by the end of the 2018 and thereafter.
- d. Increase the attendance of outpatient therapy and follow up care for patients being treated in the ED for self-harm behavior by 5% by the end of 2018 and thereafter.

Action Plan:

Missouri Baptist Sullivan Hospital will add to their website a link to an online resource database accessible to all staff, patients and community members to assist with locating available mental health resources in Crawford County and the surrounding areas. Once complete, staff, patients and their family members seeking information on substance abuse treatment and prevention can search the online database for nearly available resources.

By May 2017, establish and implement an Emergency Department protocol to ensure all patients who are treated in the Emergency Department for self-harm behaviors are evaluated to determine if a psych consult is necessary prior to discharge from the ED, to educate ED nurses on identifying the signs and symptoms of self-harm behavior and to ensure patients presenting to the ED with self-harm behaviors who do not qualify for a psych consult are provided educational materials on available resources and tools to prevent them from continuing the self-harm behavior. The protocol will also require all self-harm patients who do not qualify for a psych consult be referred to a MBSH social worker so they can follow-up with the patient after discharge to determine if they have sought outpatient therapy and/or follow up care.

Expected Outcomes:

Decrease the number of patients treated in the ED for non-emergent mental and behavioral health issues as well as self-harm injuries.

Outcomes Measurement:

Program success will be measured by surveying patients who seek Emergency Department treatment for self-harm behaviors to determine if they have previously received ED treatment for self-harm behaviors and if they are aware of available mental health resources. Success will also be measured by social worker documentation of follow up calls and visits with patients who have presented to the ED with self-harm behavior to determine if they are continuing with therapy and/or follow up care.

c) Heart & Vascular: Heart Health

Rationale: Heart Disease was the leading cause of death in Crawford County from 2010-2014 at the rate of 286.7 (per 100,000) which is significantly higher than the Missouri rate of 195.0 (per 100,000). Along with elevated mortality rates, the number of Emergency Department visits for heart disease is higher than those found at the state level. While many of the factors contributing to heart disease can be positively affected through proper nutrition, physical activity, refraining from smoking and maintaining a healthy weight, there are some factors such as genetic predisposition that can also increase risk. Early detection and prevention are key in reducing the long term effects of heart disease. (Sources: MICA, <http://www.cdc.gov>) If left untreated, long-term effects of heart disease can include heart attack, stroke, pulmonary embolism, heart failure, cardiac arrest, peripheral artery disease and death. (Sources: <http://www.cdc.gov>)

Program Goals:

Improve cardiovascular health and quality of life through early detection and education of risk factors for heart attack and stroke to prevent cardiovascular events.

Program Objectives:

- a. By May 2017, establish a database of MBSH Health Fair participants with lipid panel, blood pressure, glucose and BMI above normal ranges.
- b. By May 2017, establish a baseline of knowledge gained in heart health risk factors to participants of the MBSH Health Fair lipid panel, blood pressure, glucose and BMI above normal ranges.
- c. Between 2018 and 2019, utilizing the database of participants, decrease the risk factors for heart disease in patients previously determined to have lipid panel, blood pressure, glucose and BMI above normal ranges by 10%.
- d. Between 2018 and 2019, increase the percentage of knowledge gained in heart health risk factors to participants of the MBSH Health Fair with lipid panel, blood pressure, glucose and BMI above normal ranges by 5%.

Action Plan:

A MBSH physician will establish a set of normal ranges for four heart and vascular health risk factors:

- Lipid panel
- Blood pressure
- Glucose
- BMI

At the annual MBSH health fair, screenings for the four identified cardiovascular risk factors will be offered at a minimum charge to all participants. Individuals with test results that fall outside of the established normal range will be invited to participate in a once per month, twelve session program to provide education and tools to decrease risk factors for cardiovascular disease. These monthly educational sessions will be led by a collaboration between the MBSH Cardiac Rehabilitation department, MBSH Dieticians and staff from MBSH Therapy and Wellness Center.

Participants will be asked to repeat the cardiovascular health risk screenings at each annual health fair to determine changes in each of the four identified risk factors.

Expected Outcomes:

Decrease the incidences of heart disease related occurrences in Crawford County.

Outcomes Measurement:

Database of participants will be established utilizing health factor screenings at the MBSH Health Fair and will be reevaluated annually to determine if and by how much risk factors have moved towards normal ranges.

All educational programs will be evaluated with pre/post testing completed by participants to measure any increase in knowledge for program objectives. MBSH will also track the number and content of programs implemented and the number of participants versus the number of Health Fair participants who were identified as at-risk for cardiovascular disease, to evaluate program impact.

II. COMMUNITY HEALTH NEEDS NOT TO ADDRESS

Mental/Behavioral Health (PEDIATRIC)

Missouri Baptist Sullivan Hospital currently has insufficient resources and facilities to address this need. There are a limited number of practicing psychiatrists in the area, which makes addressing this need especially challenging. Organizations are in place to address mental health issues in children, although some of these organizations are in neighboring communities:

- Child Advocacy Center (CAC)
- Court Appointed Special Advocates (CASA)
- Crider Center
- St. Louis Children's Hospital

INFANT/MATERNAL HEALTH

Missouri Baptist Sullivan Hospital currently has insufficient resources to address the socioeconomic factors and other risk factors that contribute to poor infant and maternal health outcomes. However, the hospital is currently exploring the possibility of providing free childbirth education classes in the future.

DENTAL CARE

Missouri Baptist Sullivan Hospital does not provide dental services. Patients seen in its emergency department for dental caries are referred to local dental providers. However, Crawford County lacks providers who accept uninsured or underinsured patients. The hospital realizes that lack of dental services for low income, underinsured or uninsured community members is a significant need. Unfortunately, the hospital does not have the resources, staffing or community support to address this need at the present time.

PEDATRIC CARE

While Missouri Baptist Sullivan Hospital recently hired a staff pediatrician who accepts Medicaid patients, there are few other pediatricians in the area. The hospital does not have sufficient resources to expand its pediatric program at this time. Patients in need of services unavailable in Sullivan can be referred to St. Louis Children's Hospital.

HEALTH LITERACY

While Missouri Baptist Sullivan Hospital does not have sufficient resources for a formal health literacy program for patients, the hospital is currently looking into ways it can increase awareness about health literacy issues among its physicians and staff.

INFECTIOUS DISEASE

Missouri Baptist Sullivan Hospital does address infectious disease each year at its Community Health and Wellness Fair by giving administering free flu shots. The hospital also takes great care and pride in taking measures to prevent infections among its patients. However, the hospital lacks sufficient resources and community partnerships at

this time to create an outreach program to address this need in a community setting.

HEALTH EDUCATION

Missouri Baptist Sullivan Hospital will continue to address Health Education through our annual health fair, educational events held at the hospital, social media, school and employer partnerships, as well as presentations within the community.

PHYSICAL ACTIVITY/OUTREACH

Missouri Baptist Sullivan Hospital will continue to provide events and education on the importance of staying physically active such as the Annual Kids on Track summer program, the Sullivan School District partnership and through collaboration with the Healthy Sullivan Coalition.

ACCESS: COVERAGE

Due to the implementation of the Affordable Health Care Act, many previously uninsured patients have been able to receive health care coverage through the Marketplace, privatized insurance or Medicaid/Medicare. Missouri Baptist Sullivan Hospital will continue to assist uninsured patients with resources to help obtain benefits if they have not already done so.

ACCESS: SERVICES

While Missouri Baptist Sullivan Hospital specialty clinic offers a variety of services, the hospital does not have sufficient resources to expand any program at this time. Patients in need of services unavailable in Sullivan can be referred to St. Louis Children's Hospital.

ACCESS: TRANSPORTATION

While Missouri Baptist Hospital does recognize transportation to and from appointments as a hindrance for patients, at this time the hospital does not have sufficient resources to provide transportation for patients. The hospital is currently exploring other ways to utilize the existing transportation resources in their service area to better serve their patients.

CANCER: BREAST

Missouri Baptist Sullivan Hospital will no longer offer free mammograms at the annual health fair as those services can be obtained through the Show Me Healthy Women program.

CANCER: PROSTATE

Missouri Baptist Sullivan Hospital will continue to provide free prostate screenings at the annual health fair.