



2016 Community Health Needs Assessment & Implementation Plan



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I. Executive Summary

Parkland Health Center includes a full-service hospital located in Farmington, Missouri, and a primary care facility located in Bonne Terre, Missouri. Parkland Health Center has delivered high quality health care services to patients in the St. Francois County region for more than 100 years. The hospital has also established effective partnerships towards the goal of improving the health of the community.

Like all nonprofit hospitals, Parkland Health Center 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. Parkland Health Center 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.

Parkland Health Center 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 Parkland Health Center 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 St. Francois County when compared against data for the state and country.

At the conclusion of the comprehensive assessment process, Parkland Health Center identified two health needs where focus is most needed to improve the future health of the community it serves: Diabetes and Obesity.

The analysis and conclusions were presented, reviewed and approved by the Patient and Family Advisory (PFAC), a volunteer advisory board that offers patient perspective on hospital and healthcare issues as well as the Community Benefit committee of the Parkland Health Center board of directors.

II. Community Description

About Us

Parkland Health Center has a very rich and unique history, as it is the product of three formerly independent community hospitals in St. Francois County – Bonne Terre Hospital, which opened in 1911; Mineral Area Regional Medical Center, which opened in 1952 and Farmington Community Hospital, which opened in 1969. All three hospitals have a fascinating history as they developed throughout the years to meet the growing needs of St. Francois and surrounding counties, eventually becoming one entity – Parkland Health Center.

Parkland Health Center -- Bonne Terre, located on Highway 67, is a primary-care facility with medical offices, 24-hour Emergency Department, inpatient services, radiology, laboratory, cancer center, infusion center and sleep study lab.

Parkland Health Center -- Farmington, east of Highway 67 on Liberty Street, is a 130-bed, full-service facility with services for maternity and pediatrics, laboratory and radiology, cardiac rehabilitation, a cardiopulmonary department, outpatient and inpatient surgery, physical therapy, diabetes clinic and renal dialysis. There is also a 24-hour Emergency Department.

Parkland Health Center 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.

Community Benefit

Parkland Health Center is committed to improving the health and well-being of the patients and communities it serves. It is the mission that drives Parkland Health Center forward, and the reason it exists. As the safety net hospital in the area, Parkland Health Center provides care for patients regardless of employment status, insurance status or ability to pay.

Charity care is only a portion of the benefits that Parkland Health Center brings to the community. In addition to taking excellent care of patients regardless of their ability to pay, Parkland Health Center provides financial and physical support to other important organizations, activities and groups within the community.

Parkland Health Center assists with a number of community events, including health fairs, food drives and activities to promote better health, including the March for Babies, Relay for Life, Alzheimer's Walk and the Walk to Tackle Heart Disease. Parkland Health Center has an active presence in local chambers of commerce.

As a nonprofit community hospital, Parkland Health Center's mission of providing excellent care to the people who come to its facilities for help drives the community

benefit efforts. Health and wellness education and support are an important part of the mission. Parkland Health Center’s annual women’s health conference, Seeds of Wisdom, offers health and wellness education for women. Classes on chronic disease management and active living are held throughout the year by the experts at Parkland Health Center. In addition, peer-to-peer discussion groups are led by trained volunteers in various locations in the community. Peer-to-peer discussion groups offer an open forum for discussing health-related topics of interest to attendees.

Parkland Health Center offers support groups to help community members live better, including a diabetic support group that meets each month, and regular grief support groups.

Patient-centered Care

Patients at Parkland Health Center experience individualized care, which is centered on the patient and his/her needs. With the involvement of the patient and family, a nurse coordinates all of the patient’s care, from admission to discharge.

Demographics

Parkland Health Center defines its community as St. Francois County. St. Francois County has a population of 66,520 (2015 census estimate). Below, the county population is compared to the population of Missouri:

St. Francois County 2015 Population	Missouri 2015 Total Population
66,520	6,083,672
46.6 percent Female (30,998)	50.9 percent Female (3,096,590)
53.4 percent Male (35,522)	49.1 percent Male (2,987,082)
93.3 percent White (62,063)	83.5 percent White (5,079,866)
4.6 percent African American (3,060)	11.8 percent African American (717,873)
1.5 percent Hispanic or Latino (998)	4.0 percent Hispanic or Latino (243,347)
1.1 percent Two or More Races (732)	2.1 percent Two or More Races (127,757)
0.4 percent Asian (266)	1.9 percent Asian (115,590)

Based on the 2015 census estimate, the county includes 1.1 percent of Missouri’s total population. The population of the county and the state has grown since the 2010 census. In 2010, St. Francois County reported a total population of 65,365 compared to the state population of 5,988,923. From 2010-2015, the county population grew 1.8 percent and the state experienced a 1.6 percent increase in its population.

St. Francois County, located in Southeast Missouri, has a land area of 451.89 square miles.

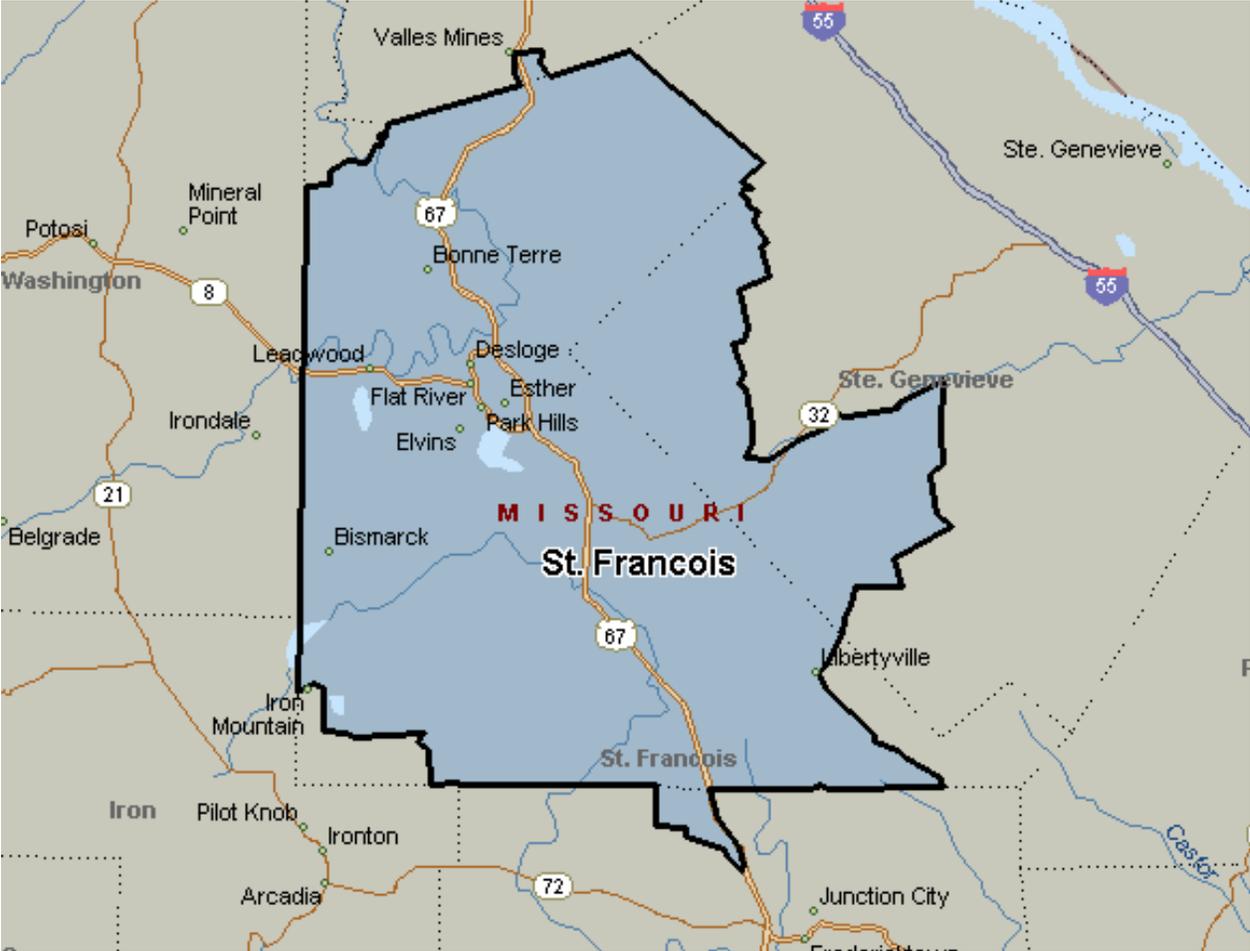


Table 1 further details the county's population as compared to the state.

Table 1: Demographic of St. Francois County Vs Missouri State		
	St. Francois County	Missouri
GEOGRAPHY		
Land area in square miles, 2010	451.89	68,741.52
Persons per square mile, 2010	144.60	87.1
POPULATION		
Population, July 1, 2015 estimate	66,520	6,083,672
Population, 2010 (April 1) estimates base	65,365	5,988,923
Population, percent change - April 1, 2010 to July 1, 2015	1.8%	1.6%
RACE / ETHNICITY / Language Spoken		
White alone, percent, 2015 (a)	93.3%	83.5%
White alone, not Hispanic or Latino, percent, 2014	92.0%	80.1%
African American alone, percent, 2015 (a)	4.6%	11.8%
Hispanic or Latino, percent, 2015 (b)	1.5%	4.0%
Two or More Races, percent, 2015	1.1%	2.1%
American Indian and Alaska Native alone, percent, 2015 (a)	0.4%	0.5%
Asian alone, percent, 2015 (a)	0.4%	1.9%
Native Hawaiian and Other Pacific Islander alone, percent, 2015 (a)	0.1%	0.1%
LANGUAGE		
Foreign born persons, percent, 2010-2014	0.7%	3.9%
Language other than English spoken at home, percent 5+, 2010-2014	1.8%	6.1%
AGE		
Persons under 5 years, percent, 2015	5.4%	6.2%
Persons under 18 years, percent, 2015	21.5%	23.0%
Persons 65 years and over, percent, 2015	15.5%	15.4%
GENDER		
Male person, percent, 2015	53.4%	49.10%
Female persons, percent, 2015	46.6%	50.9%

Source: Government Census Bureau

(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

Table 2: Demographic of St. Francois County Including Education, Income and Housing Vs. Missouri		
	St. Francois County	Missouri
EDUCATION		
High school graduate or higher, percent of persons age 25+, 2010-2014	81.2%	88.0%
Bachelor's Degree or higher, percent of persons age 25+, 2010-2014	14.6%	26.7%
INCOME		
Per capita money income in the past 12 months (2011 dollars), 2010-2014	\$19,044	\$26,006
Median household income (in 2014 dollars), 2010-2014	\$37,476	\$47,764
Persons below poverty level, percent, 2010-2014	20.3%	15.5%
HOUSING		
Housing units, July 2014	29,354	2,735,742
Homeownership rate, 2010-2014	66.3%	67.9%
Housing units in multi-unit structures, percent, 2010-2014	22.7%	19.70%
Median value of owner-occupied housing units, 2010-2014	99,600	136,700
Households, 2010-2014	24,868	2,361,232
Persons per household, 2010-2014	2.33	2.48

Source: Government Census Bureau

St. Francois County's median household income totaled \$37,476 (2010-2014) compared to Missouri (\$47,764). Persons living below the poverty level in St. Francois County totaled 20.3 percent compared to 15.5 percent in the state. Home ownership was lower in St. Francois County (66.3 percent) versus 67.9 percent in the state.

III. Previous (2013) CHNA Measurement and Outcomes Results

At the completion of the 2013 CHNA, Parkland Health Center identified Health Risks of Smoking Education, Obesity, Diabetes, Access to Services and Health Literacy 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 C).

Table 3: Parkland Health Center's Measures of Success by Priority				
Health risks of smoking education	Obesity	Diabetes	Access to Services	Health Literacy
Goals	Goals	Goals	Goals	Goals
To improve participants' knowledge level of health risks of smoking by 10 percent from pre-knowledge test score to post-knowledge test score.	To increase knowledge level of healthy lifestyle of 30 families in St. Francois County by five (5) percent from pre-test knowledge level to post-test knowledge level.	In 2014, Parklans Health Center will establish a baseline for the number of free blood sugar tests provided to its community.	Every year, Parklans Health Center will offer Medicaid and financial assistance enrollment to 100 percent of eligible patients presented for medical care.	To increase understanding and education of disease in the community.
Fifteen percent of St. Francois County program participants will quit smoking and remain non-smokers beyond 120 days after their participation.	Provide intensive group educational sessions that focus on nutrition, physical activity and emotional health to 30 children per year. The Well Life Center is responsible for this program.	In 2015 and thereafter, Parklans Health Center will increase the number of free blood sugar testing in the previous year by two (2) percent in the current year.	Every year, Parklans Health Center will provide transportation services to 100 percent of St. Francois County Extended Home Care wheelchair patients who need transportation to gain access to after-hours emergency department care.	To provide at least 10 monthly programs related to health topics in St. Francois County each year.
Before each educational session, participants will participate in a pre-knowledge test and a post-test at the end of the session to determine if participants' knowledge of health risk of smoking has improved and by how much.	An exercise specialist and a registered dietician will facilitate 12 intensive group sessions on topics regarding physical activity, nutrition and emotional health with children and their families.			
Current Status:	Current Status:	Current Status:	Current Status	Current Status
Due to the lack of resources and participation, the smoking cessation program was discontinued.	Due to lack of participation, the program was discontinued after a year of implementation. Currently the team is working with BJC school outreach to implement a program that reaches a wider audiences.	The diabetes program is ongoing. The team will revise the current program in order to have a focus on outcome.	Access to service is ongoing program.	The radio shows are ongoing. Coffe with a Doc is discontinued due to closure of the coffee house that was used to have the event.

IV. Conducting the 2016 CHNA

A. Primary Data Collection

Parkland Health Center conducted a focus group to solicit feedback from community stakeholders, including public health experts and those with a special interest in the health needs of residents located in St. Francois County. Nine of 19 invited participants representing various organizations participated in the discussion. (See Appendix A). The focus group was held Sept. 22, 2015, at the Farmington Civic Center, with the following objectives identified:

1. Determine whether the needs identified in the 2013 CHNA remain the correct focus areas.
2. Explore whether any needs on the list should no longer be a priority.
3. Determine where gaps exist in the plan to address the prioritized needs.
4. Identify other potential organizations for collaboration.
5. Discuss how the community has changed since 2013 when Parkland Health Center first identified these needs and whether there are new issues to consider.
6. Evaluate what issues the stakeholders anticipate becoming a greater concern in the future to consider now.

2016 CHNA Focus Group Summary

A general consensus was reached that the priorities identified in the previous assessment should remain as focus areas. A few areas were noted:

- Although still an area of concern, there has been a major impact on smoking since the last assessment due to changes in smoking policies. The creation of tobacco-free zones within the schools as well as at the community college has had a major impact on reducing smoking in public areas, as well as exposure to second-hand smoke. There was also discussion of establishing smoke-free environments within the City of Farmington.
- Although the high school graduation rates for young women who become pregnant are laudably high, the rate of teen pregnancy itself continues to be a concern.

Feedback on the Needs Being Addressed

- Although stakeholders did not dismiss the importance of the needs Parkland Health Center chose to address in the first implementation plan (Smoking Education, Obesity, Diabetes, Access to Services and Health Literacy), several felt the issue of mental health services has become more pressing in the last several years.
- There has also been a rise in prescription drug abuse (codeine, morphine, oxycodone, hydrocodone), which has led to an increased heroin use and associated deaths.

- Several members discussed how addressing risk factors is more economical than waiting until an issue becomes more severe or debilitating and requires more intensive resources.
- Stakeholders also acknowledged that access to services takes many forms. They recognized the importance of breaking down the need into access to insurance coverage separately from access to transportation.

Changes since the 2013 CHNA

- The Department of Mental Health (DMH) has instituted a program to identify Medicaid patients who are high users of health services and who also have mental health and substance abuse histories to link these patients to primary care services that may prevent hospitalization.
- Obtaining accurate data to document the volume of certain disease conditions has been impacted by a recent software upgrade by the ambulance district.
- The EMS team is also working with BJC to develop a program to identify frequent users of the emergency room and the 911 system to enroll these individuals in programs to receive home visits and will undertake an environmental assessment to determine needs.
- Community stakeholders see improvements in public awareness of issues such as smoking and chronic conditions, including heart disease and diabetes.
- Confusion remains regarding the national health insurance program.
- In an effort to reduce readmissions within 30 days of discharge, Parkland Health Center is improving care coordination and offering alternative services, including the mobile integrated health program in development with the ambulance district.
- A few of the local hospice programs now offer free outreach services to those in the general public with chronic conditions who may benefit from a home visit by a medical professional.
- St. Francois County has improved its child abuse and neglect ranking from 108 to 76 out of 108 counties in Missouri.

Gaps in Implementation Strategies

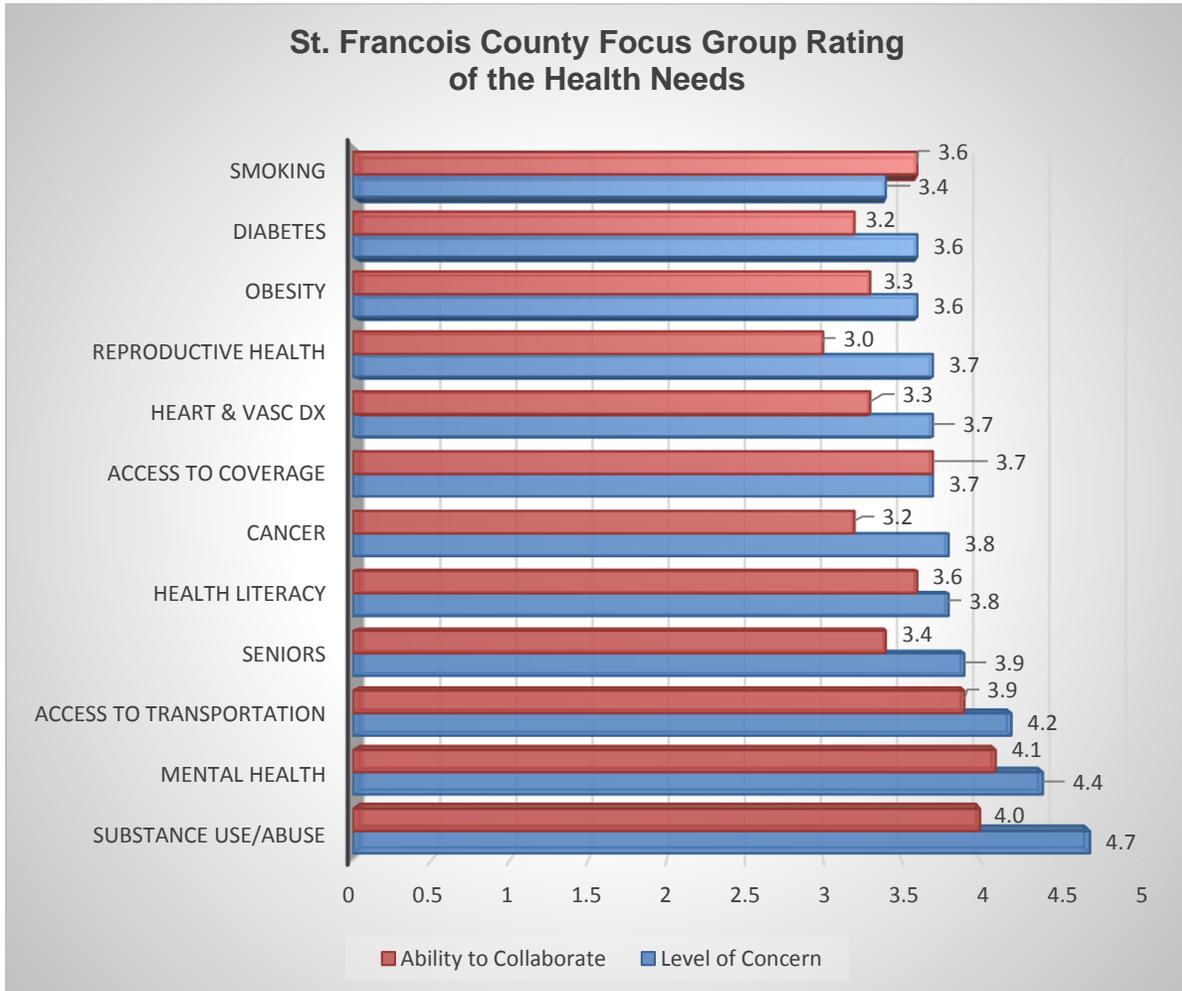
- The need for more inpatient mental health beds was reiterated.
- Addressing the issue of behavioral/mental health needs may take a smaller group of the right organizations, such as BJC and the DMH, to discuss possible solutions.

Potential Partner Organizations

The ambulance district has an electronic sign that could be used to rotate health messages to positively impact awareness. Other organizations include the libraries, faith-based organizations, Life Center (works with disabled individuals), Southeast Missouri Transportation Service as well as the Sainte Genevieve Ambulance District.

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:



Substance Abuse, Mental Health and Access to Transportation rated highest in terms of level of concern and ability to collaborate. (See Appendix C 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/saint_louis_county_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 St. Francois 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
- Obesity
- Heart Health & Stroke
- Diabetes
- Mental Health/Behavioral Health
- Substance Use and Abuse

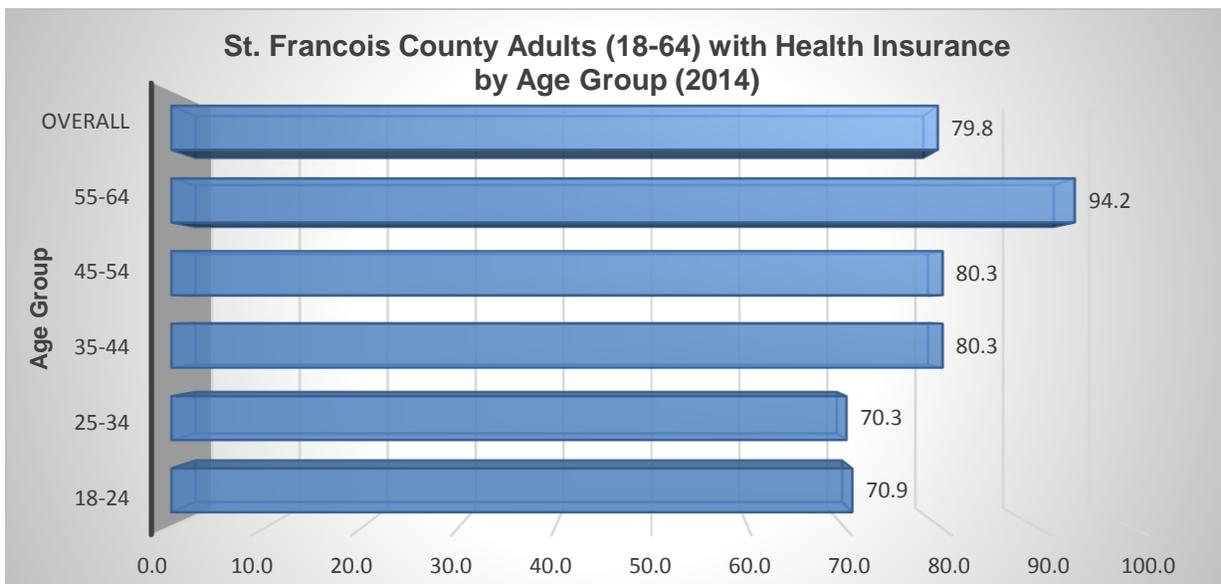
Data is provided regarding the Medicare population to address Senior Health.

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 Page 50). While Parkland Health Center has identified two needs as its primary focus, the following needs will continue to be appropriately addressed by the hospital and other organizations in St. Francois County.

Access to Health Care

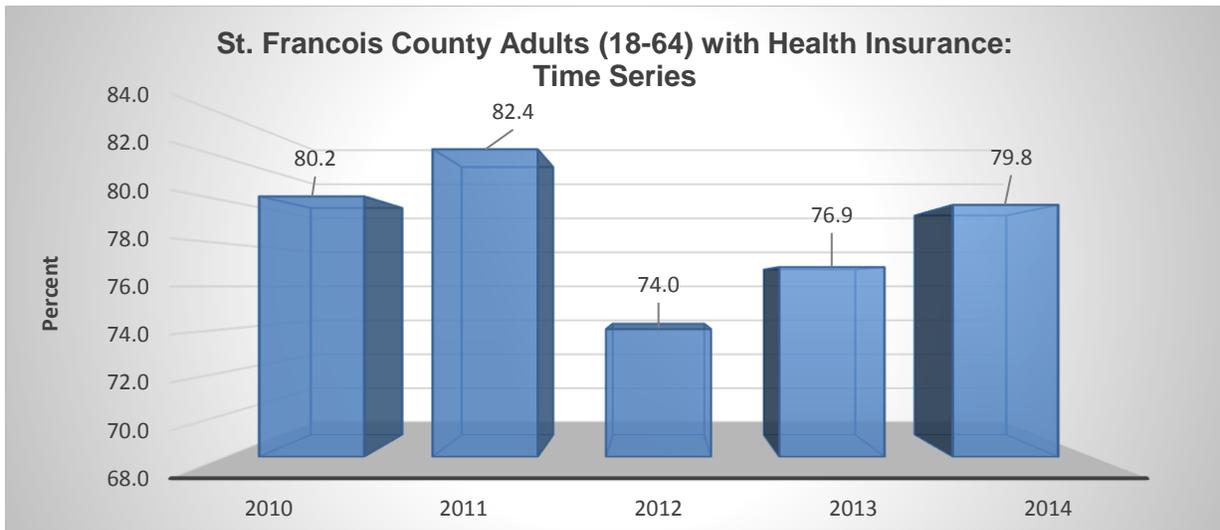
The ability to access health services has a profound and direct effect on every aspect of a person’s well-being. Beginning in 2010, nearly 1 in 4 Americans lacked a primary care provider (PCP) or health center to receive ongoing medical services. Approximately 1 in 5 Americans today, children and adults 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 Parkland Health Center’s community. (Healthy Communities Institute).



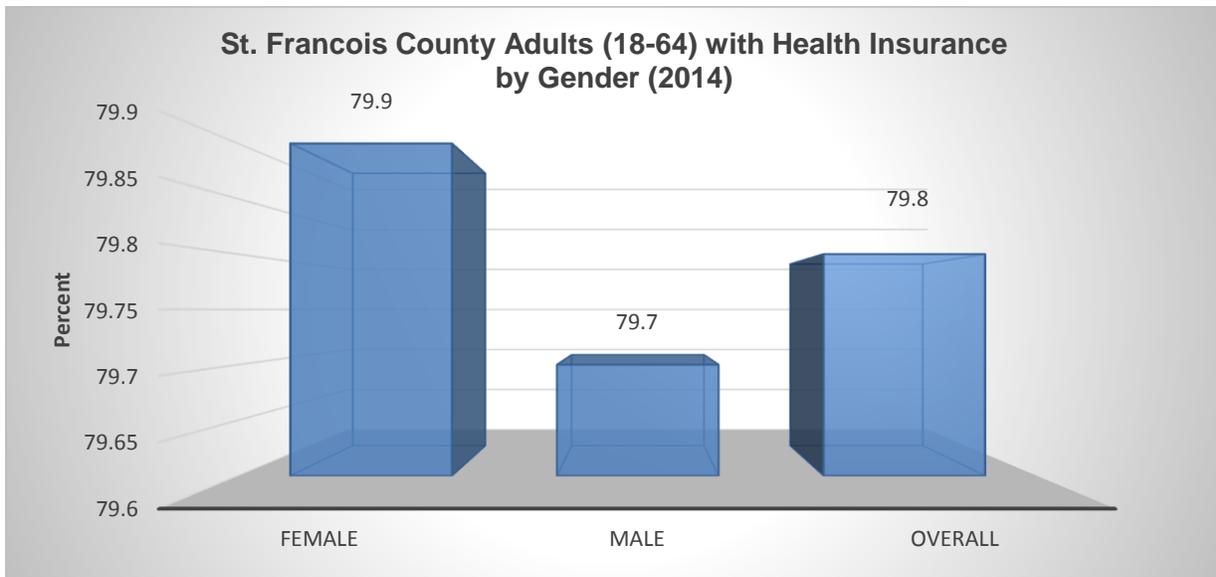
Source: Healthy Communities Institute

The rate of health insurance coverage increased as the population aged. The Healthy People 2020 national health target is to increase the proportion of people with health insurance to 100 percent.



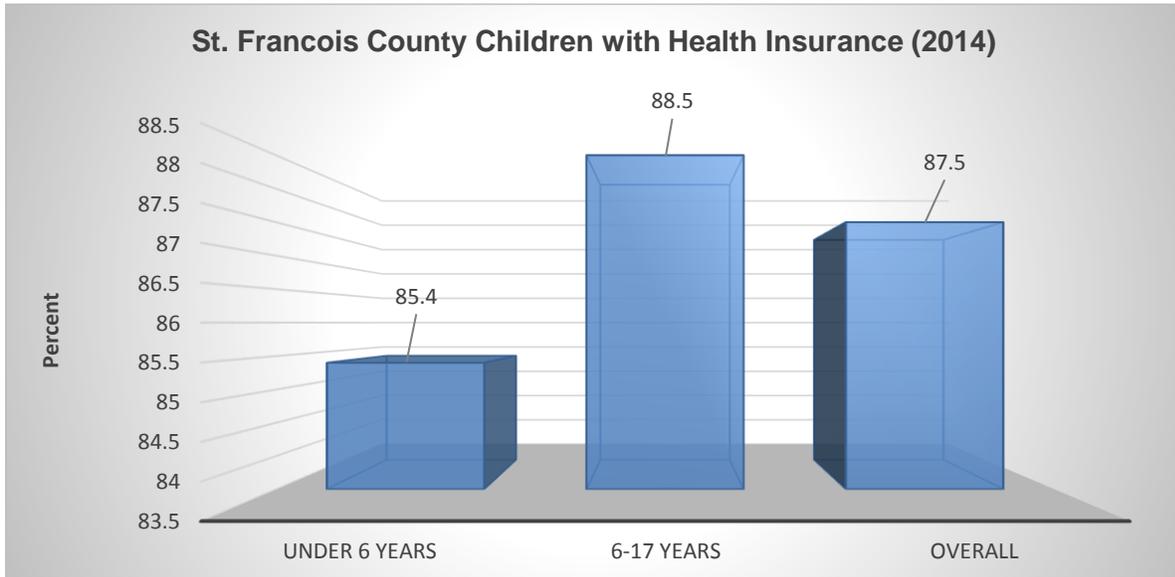
Source: Healthy Communities Institute

The county experienced an increase of adults with health care coverage from 2010 to 2011, followed by a decrease. In 2012, a gradual increase began to occur. This increase may be due to the Affordable Care Act, which mandates that all residents should be covered under some form of health insurance.



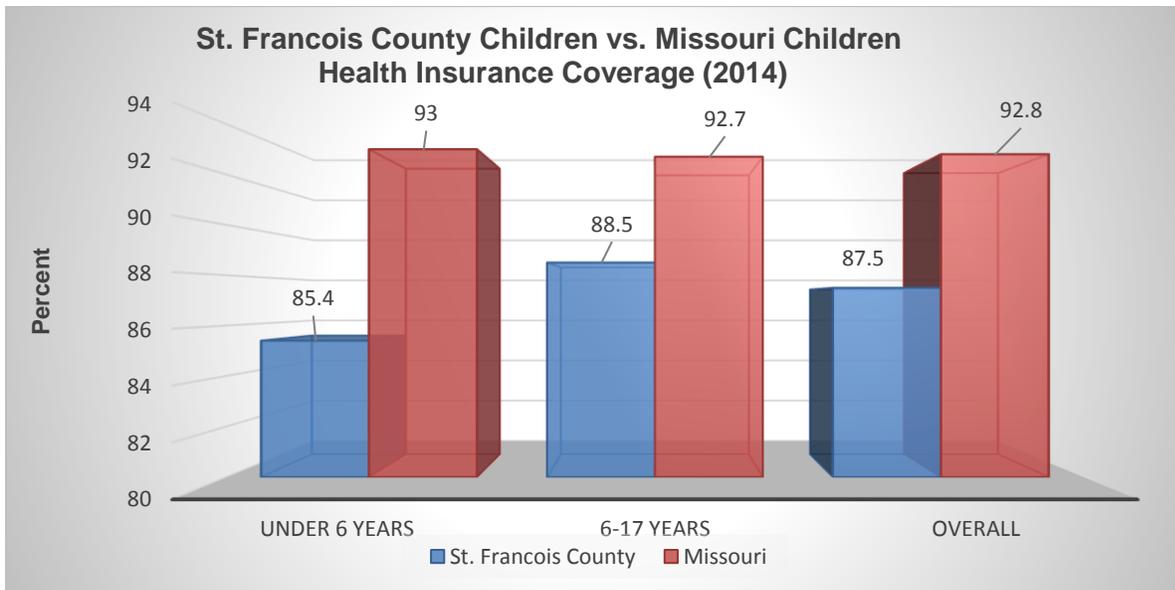
Source: Healthy Communities Institute

The percent of adults with health insurance coverage by gender in St. Francois County was statistically the same.



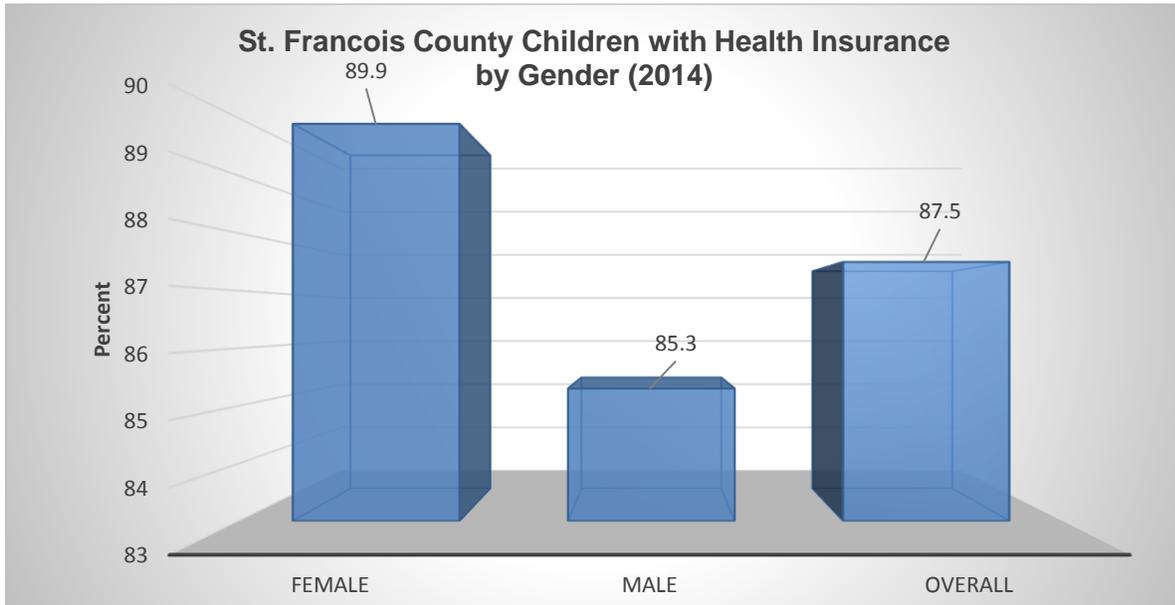
Source: Healthy Communities Institute

The overall rate of children in St. Francois County with health insurance coverage was 87.5 percent. Children age 6-17 years had a slightly higher rate than those under 6 years.



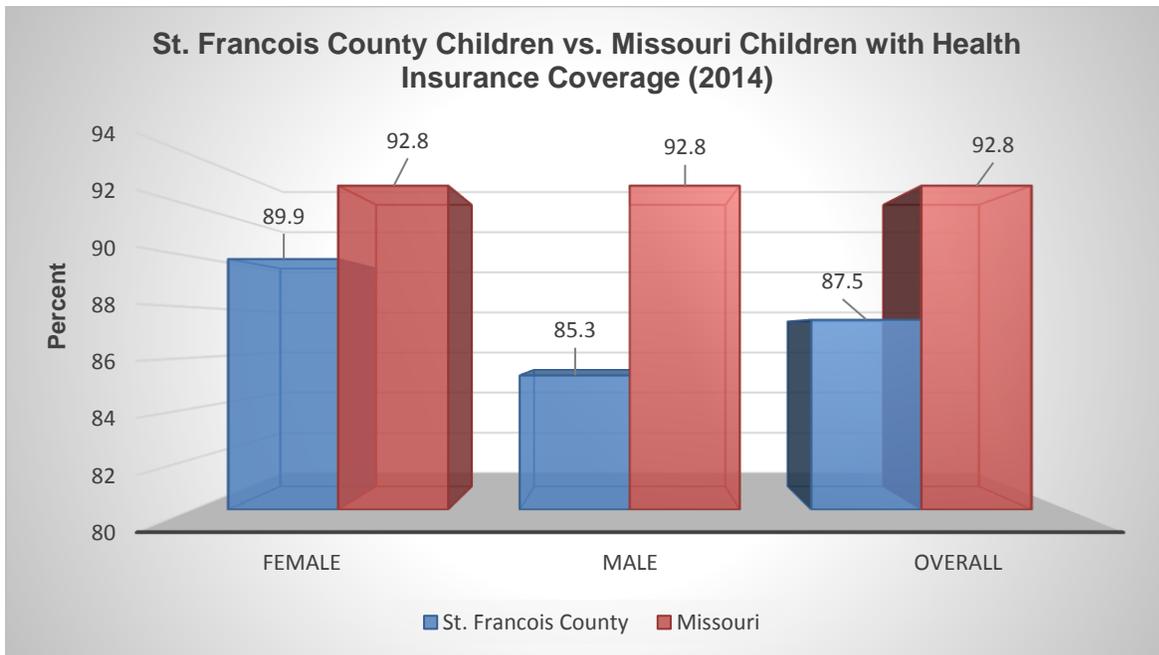
Source: Healthy Communities Institute

Compared to the state, the rate of St. Francois County children with health insurance was lower. Even though the rate in the state does not meet the Healthy People 2020 target of 100 percent, the state was closer to the target than the county.



Source: Healthy Communities Institute

Female children had a higher rate of health insurance than male children in St. Francois County.



Source: Healthy Communities Institute

The rate of female and male children in St. Francois County with health insurance coverage was lower when compared to Missouri.

Table 4: Access to Health Care			
Health Indicators	St. Francois County	Mo	Healthy People 2020 Target
Adults with Health Insurance in Percent: Age 18-64 (2014)	79.8	83.9	100
Children's With Health Insurance in Percent (2014)	87.5	92.8	100
Primary Care Providers Rate/100,000 (2013)	79	71	83.9
Dentist Rate /100,000 (2014)	36	52	
Mental Health Providers Rate/100,000) (2015)	136	158	
Non-Physicians Primary Care Providers Rate/100,000 (2015)	65	66	
Preventable Hospital Stays Discharges/1,000 (2013)	78	59	

Source: Healthy Communities Institute / County Health Ranking

The rate of primary care providers was higher in the county than in the state. However, the rate for mental health providers, non-physician primary care providers and dentists was lower in the county than in the state. The rate of preventable hospital stays was higher in the county when compared to the state.

Access to Transportation

A lengthy commute can shorten an employee's free time and contribute to health problems, such as headaches, anxiety and increased blood pressure. Additionally, longer routes to and from work consume more fuel, which is both expensive for an employee and harmful to the environment. The chart below shows a mean travel time of 24.3 minutes for those 16+ in the county compared to 23.1 minutes in the state.

Table 5: Access: Transportation		
Health Indicators	St. Francois County Rate	Missouri
Households Without a Vehicle (2010-2014)	7.50%	7.40%
Workers Commuting by Public Transportation (2010-2014)	0.10%	1.50%
Mean Travel Time to Work; Age 16+ (2010-2014)	24.3 minutes	23.1 minutes

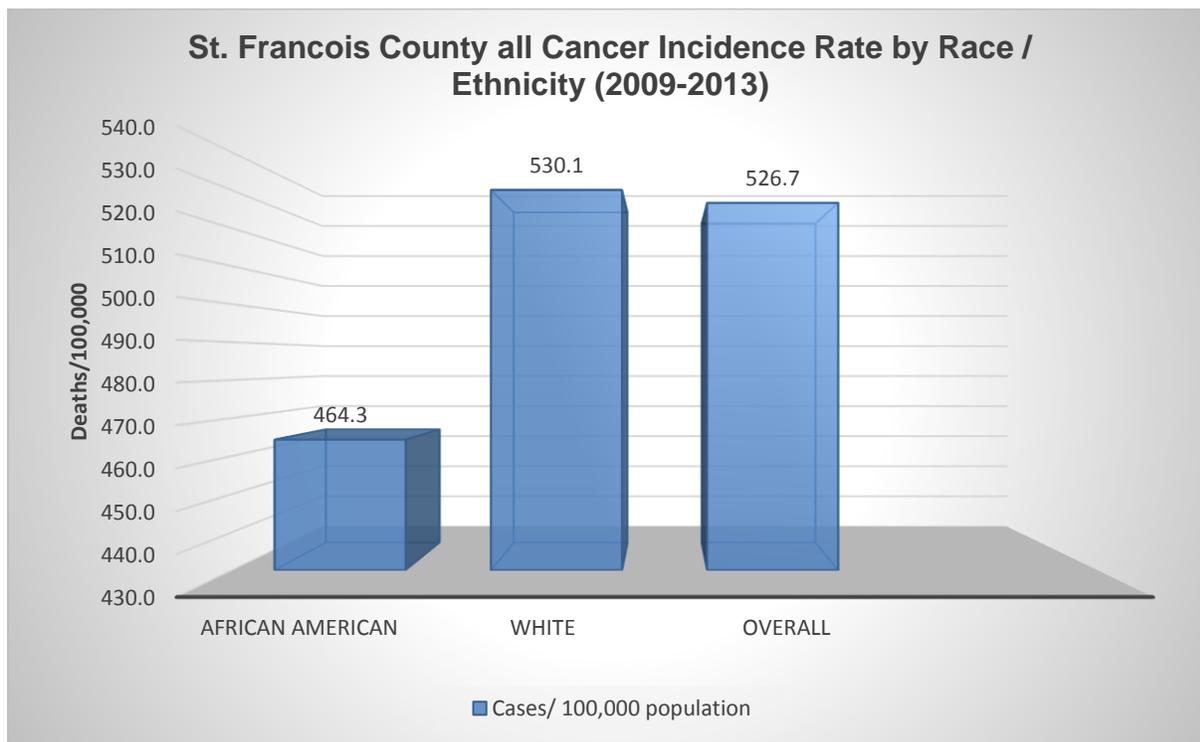
Source: Healthy Communities Institute

Public transportation offers mobility, particularly to people without cars, and can bridge the gap between people and jobs, services and training opportunities. While reducing fuel consumption, public transportation also minimizes air pollution and relieves traffic congestion. The Healthy People 2020 national health target is to increase the proportion of workers who take public transportation to work to 5.5 percent. The chart above shows that 0.10 percent of workers use public transportation in the county when compared to 1.5 percent in the state.

Additionally, the chart above shows 7.50 percent of households in the county did not own a car (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).

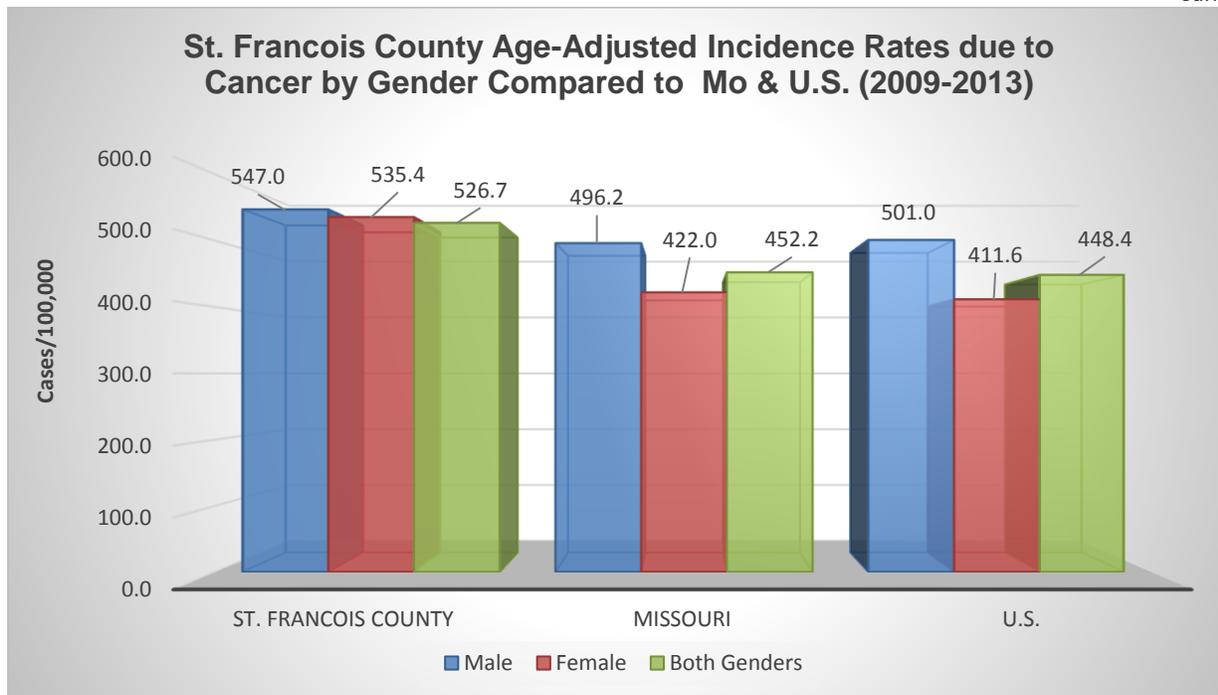
Cancer

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.



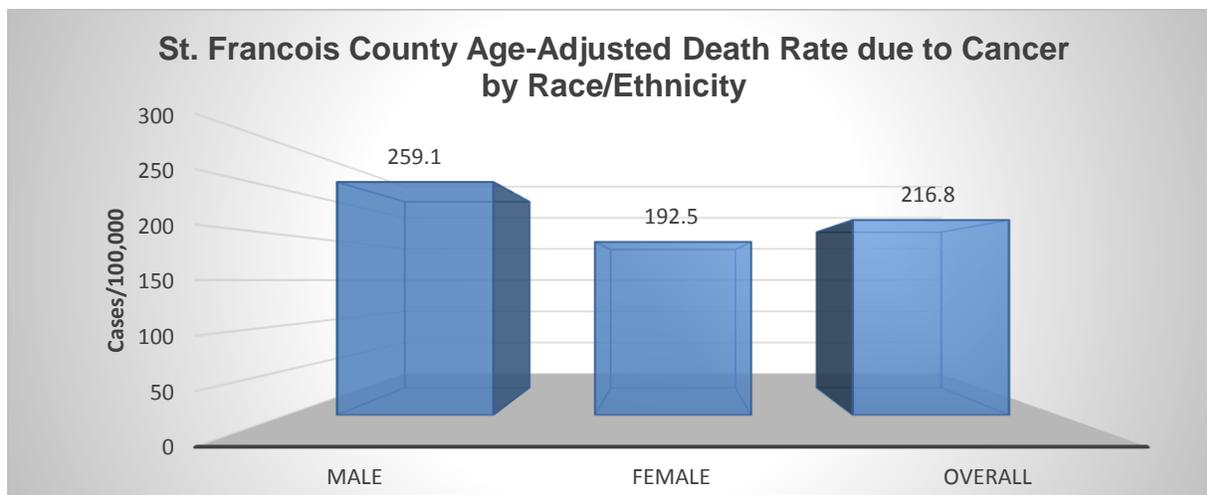
Source: Healthy Communities Institute

The overall incidence rate due to all cancer in St. Francois County was 526.7/100,000 population. When comparing the incidence rate by race, African Americans had a lower rate than Whites in the county.



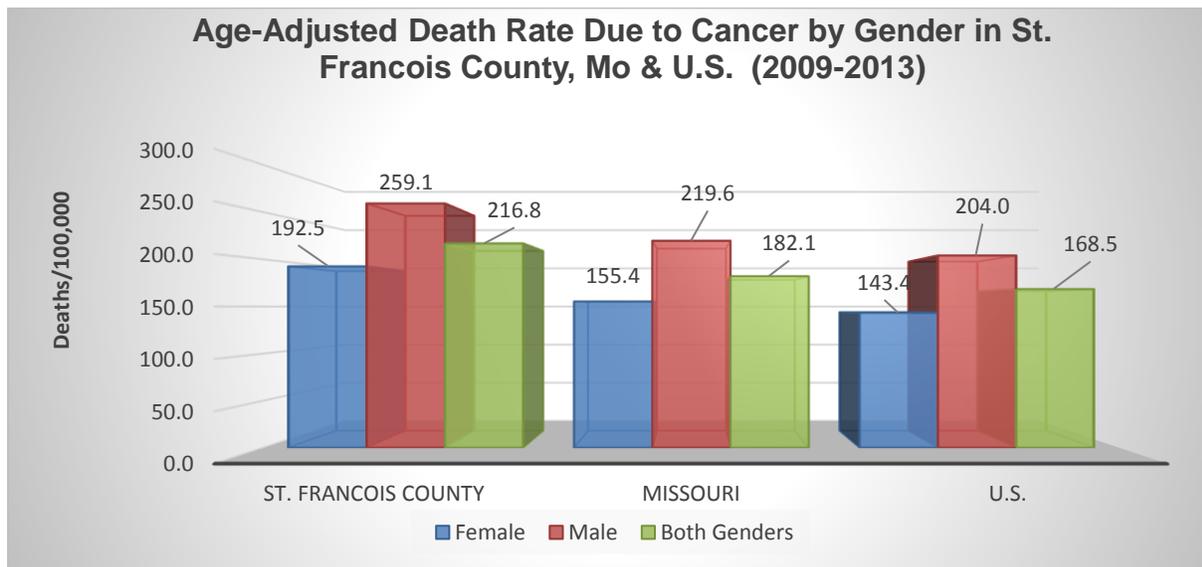
Source: CDC State Cancer Profile

The age-adjusted incidence rate due to cancer by both genders combined was 15.22 percent higher in St. Francois County than Missouri and 16 percent in the U.S. While males had a higher incident rate than females in St. Francois County, females had a greater variance in the incident rate to Missouri (23.68 percent higher) and the U.S. (26.14 percent higher). Males were 9.73 percent higher when compared to Missouri and 8.78 percent higher when compared to the U.S.



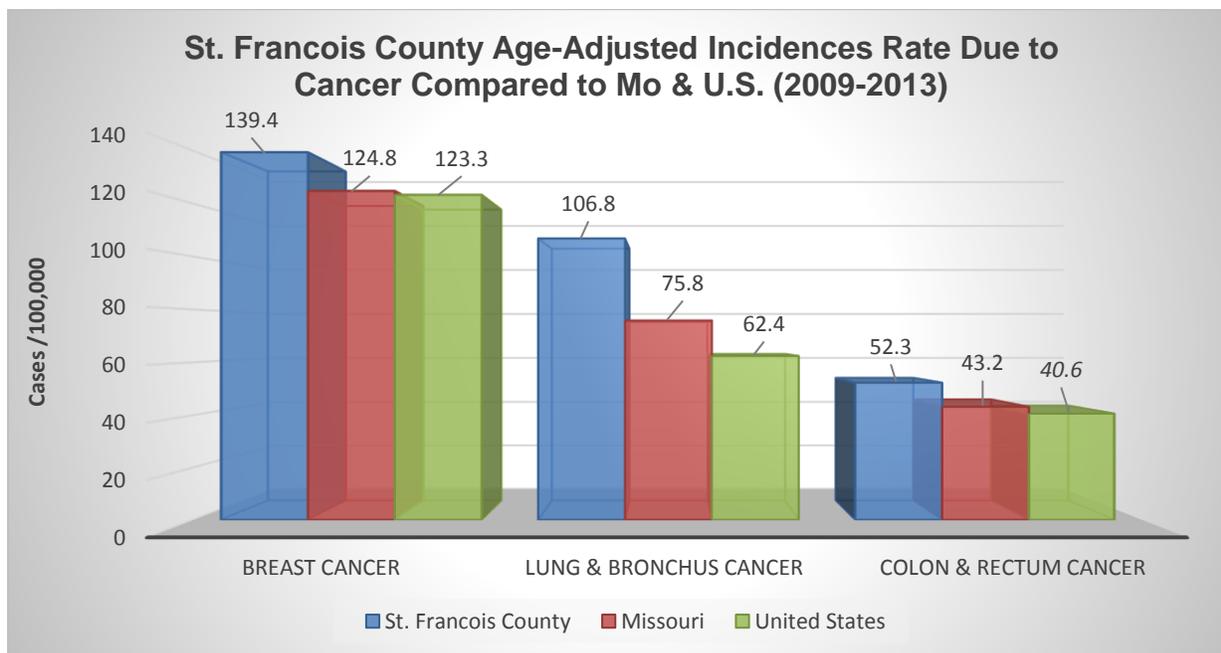
Source: Healthy Communities Institute

Males had a 29.5 percent higher cancer death rate than female in St. Francois County.



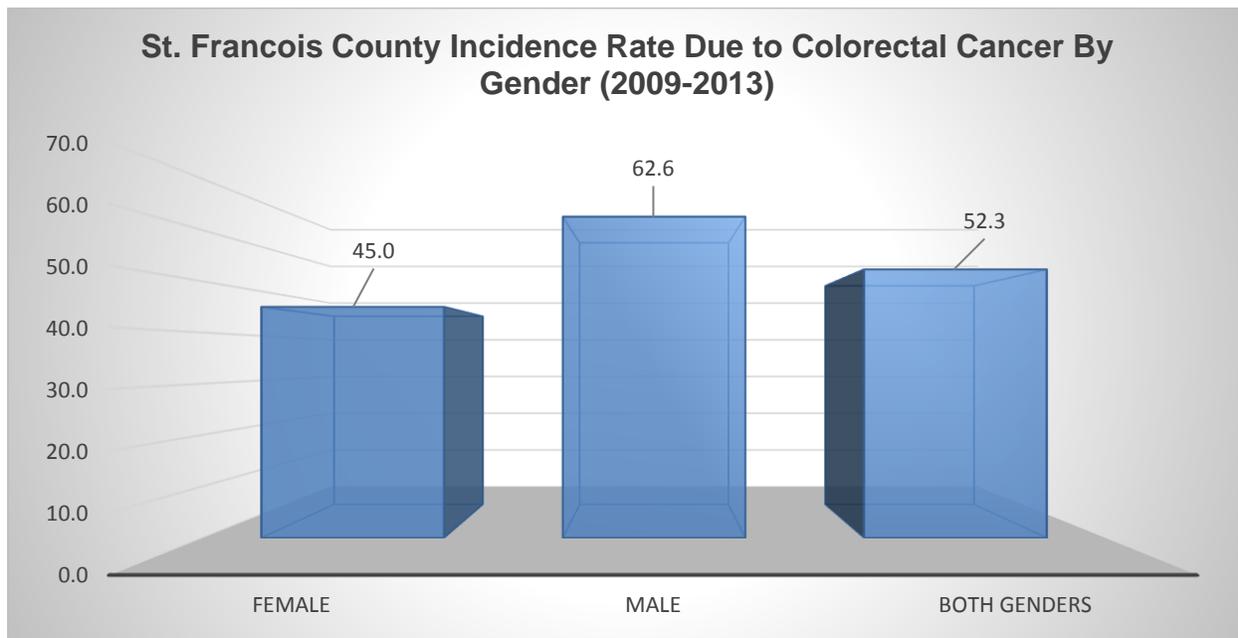
Source: CDC State Cancer Profile

The age-adjusted death rate of males in the county was higher than the rate in Missouri and the U.S. The death rate of females in the county was also higher than the rate in the state and in the country.



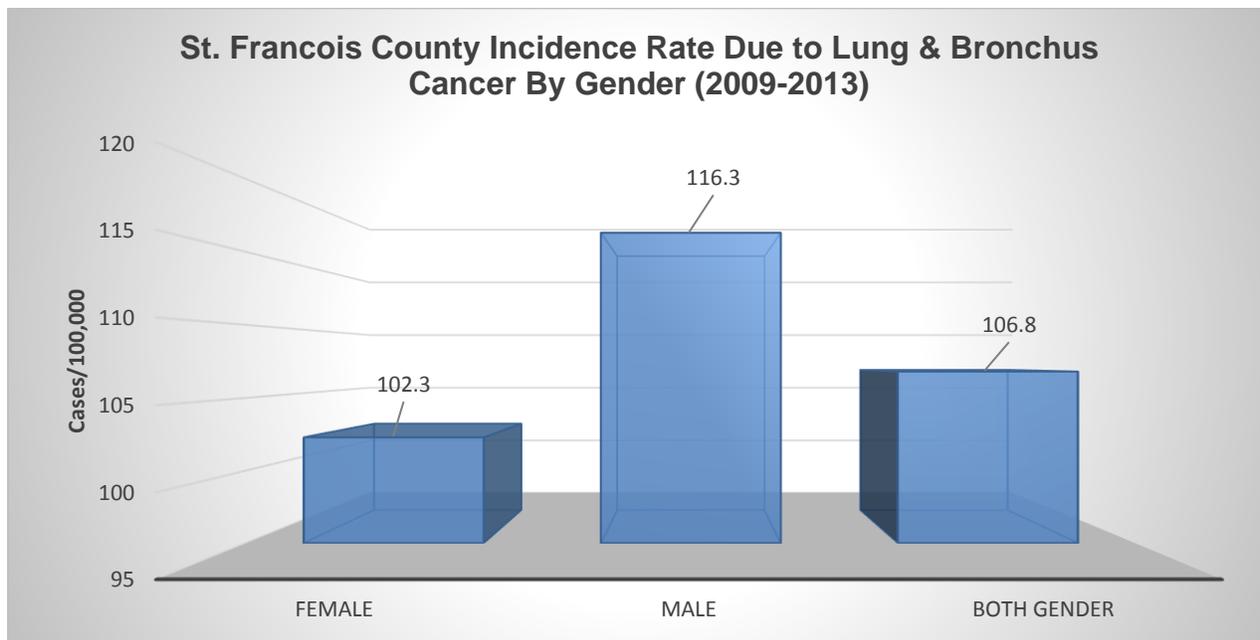
Source: CDC State Cancer Profile

St. Francois County had the highest age-adjusted incidence rate due to breast, lung & bronchus and colon & rectum cancer when compared to the state and country.



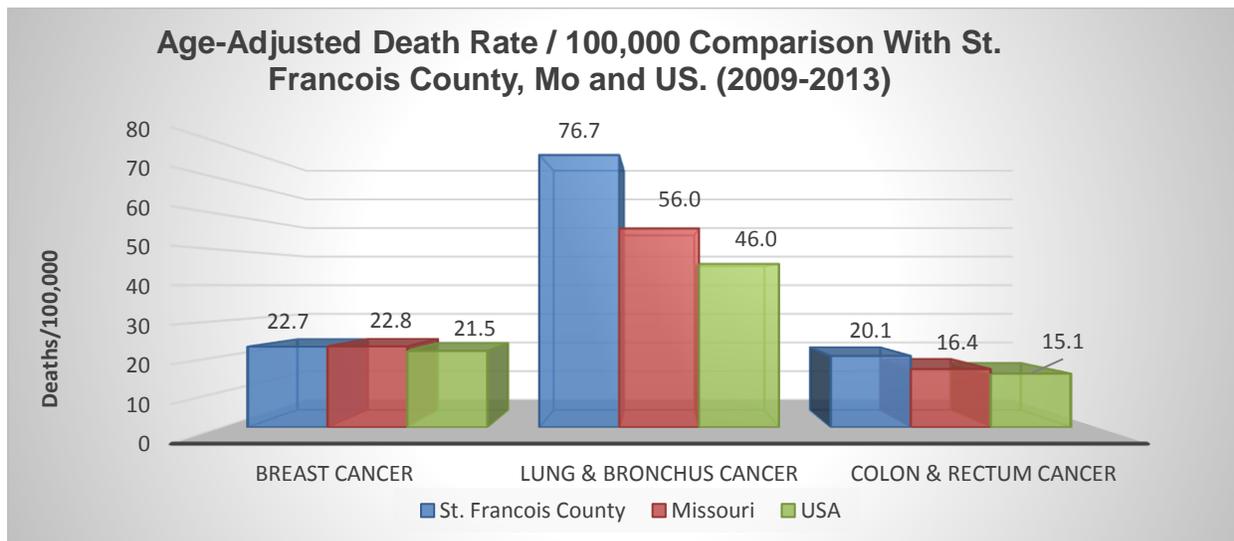
Source: Healthy Communities Institute

The overall rate of both genders of colorectal cancer in the county was 52.3/100,000. The rate of males was 32.7 percent higher than the rate of females.



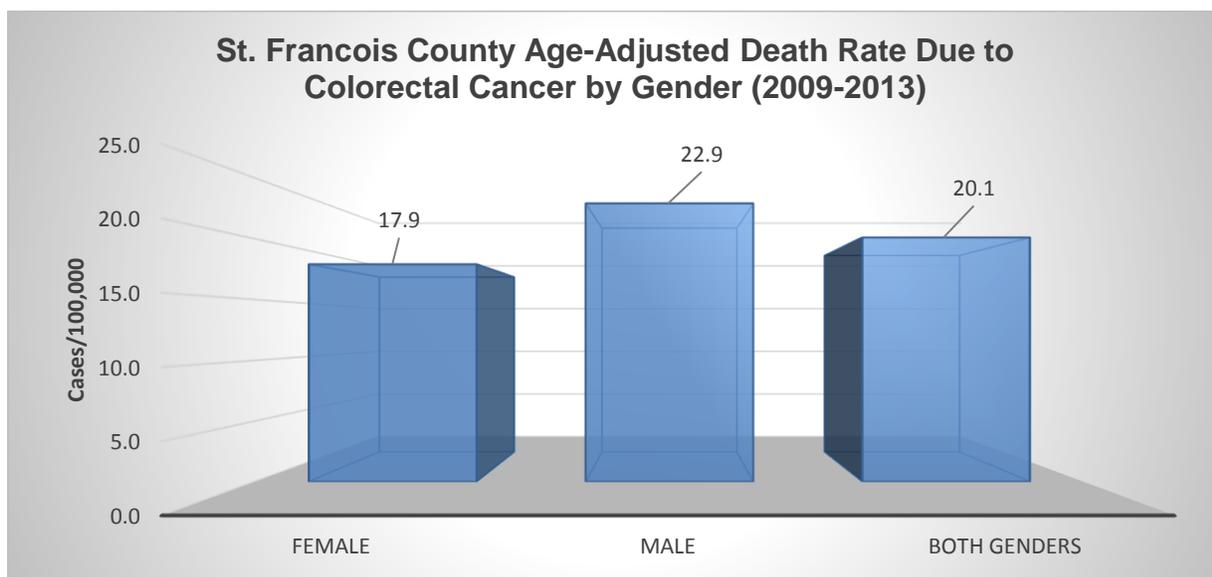
Source: Healthy Communities Institute

Males in the county had a higher incidence rate due to lung & bronchus cancer than females.



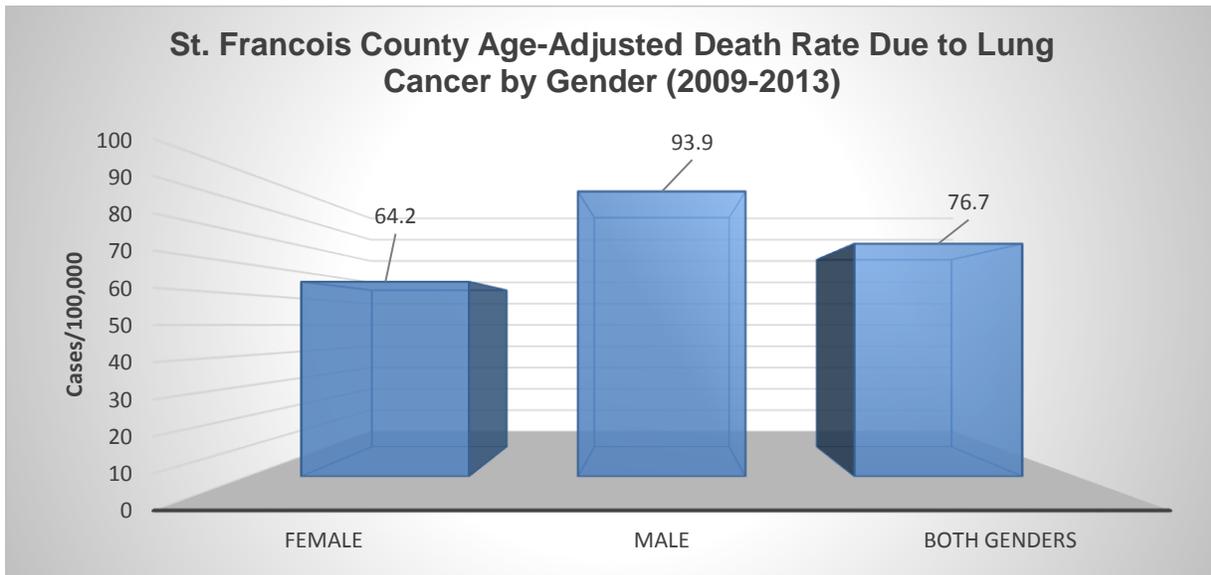
Source: CDC State Cancer Profile

Lung & bronchus cancer is one of the leading causes of cancer death in the country. Compared to the state and country, St. Francois County had the highest rate of age-adjusted death due to lung & bronchus cancer and colon & rectum cancer when compared to Missouri and the U.S. When comparing breast cancer death, the county had the same rate with the state. However, the death rate of breast cancer in the country is slightly lower than the rate of both county and state.



Source: Healthy Communities Institute

The overall age-adjusted death rate due to colorectal cancer was 20.1/100,000. The rate among males was higher than the rate among females.



Source: Healthy Communities Institute

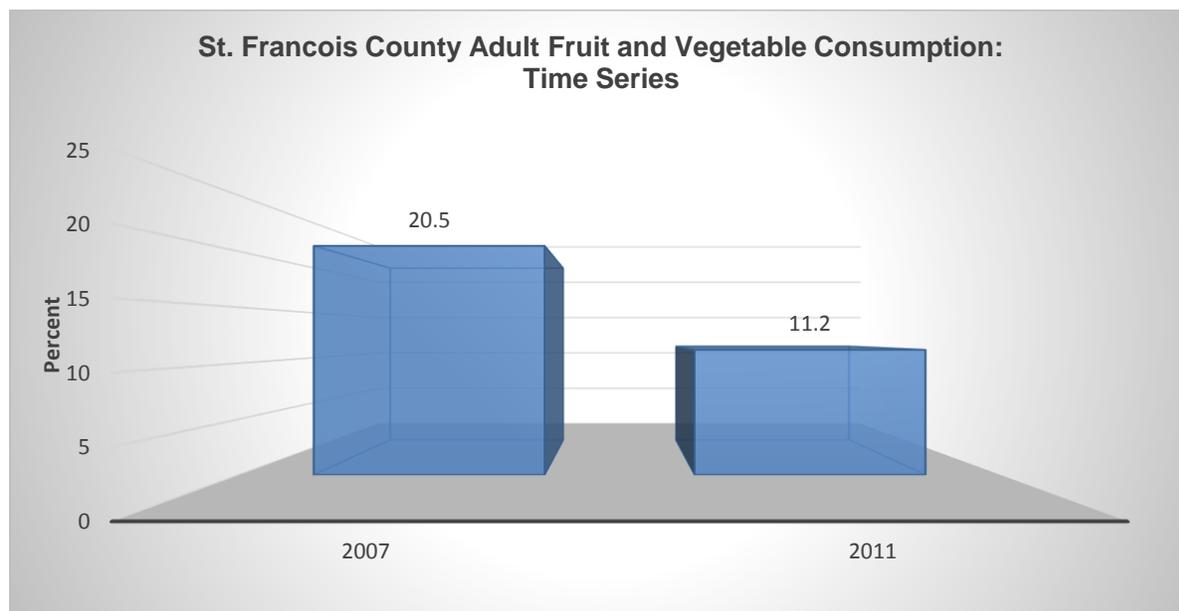
The overall age-adjusted death rate due to lung cancer in the county was 76.7/100,000. The rate among males in the county was 37.57 percent higher than the rate of females.

Obesity

The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions including heart disease, type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis. Losing weight and maintaining a healthy weight help to prevent and control these diseases. Being obese also carries significant economic costs due to increased healthcare spending and lost earnings.

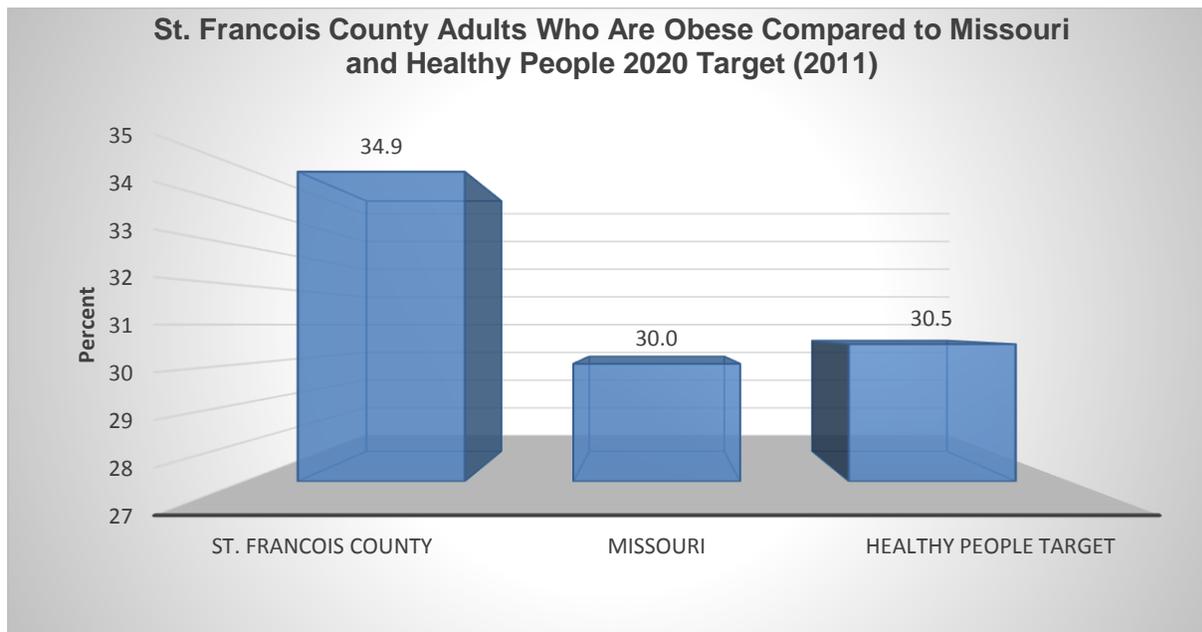
Numerous studies have shown a clear link between the amount and variety of fruits and vegetables consumed and rates of chronic diseases, especially cancer. According to the World Cancer Research Fund International, about 35 percent of all cancers can be prevented through increased fruit and vegetable consumption.

The U.S. Department of Agriculture (USDA) currently recommends four and one-half cups (nine servings) of fruits and vegetables daily for a 2,000-calorie diet, with higher or lower amounts depending on the caloric level. Despite the benefits, many people still do not eat recommended levels of fruits and vegetables.



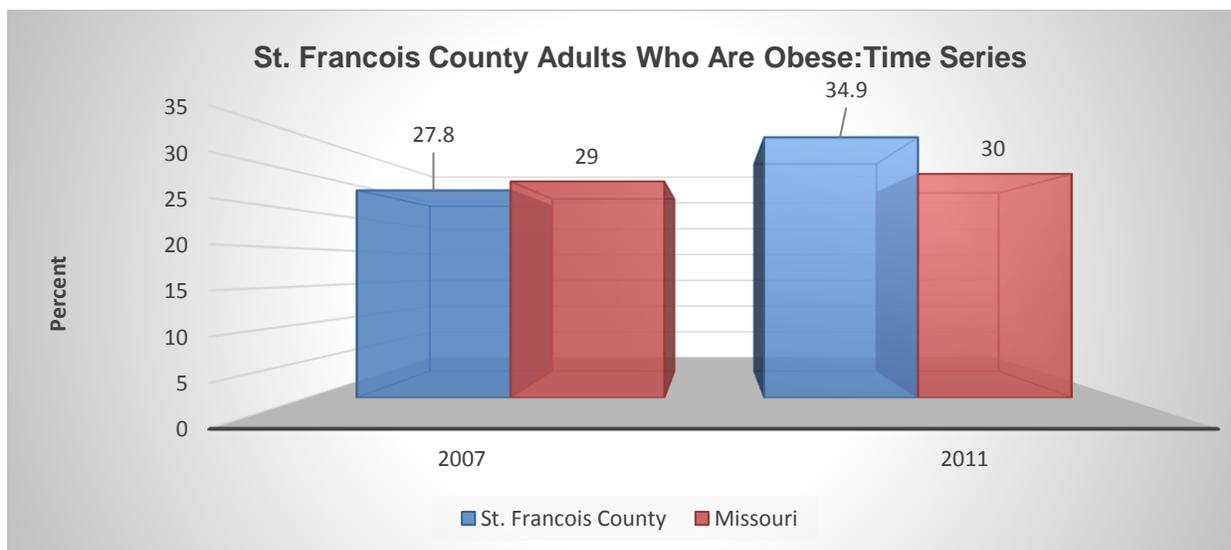
Source: Healthy Communities Institute

The percent of adults who consume fruit and vegetables in the county declined 45 percent from 2007 to 2011.



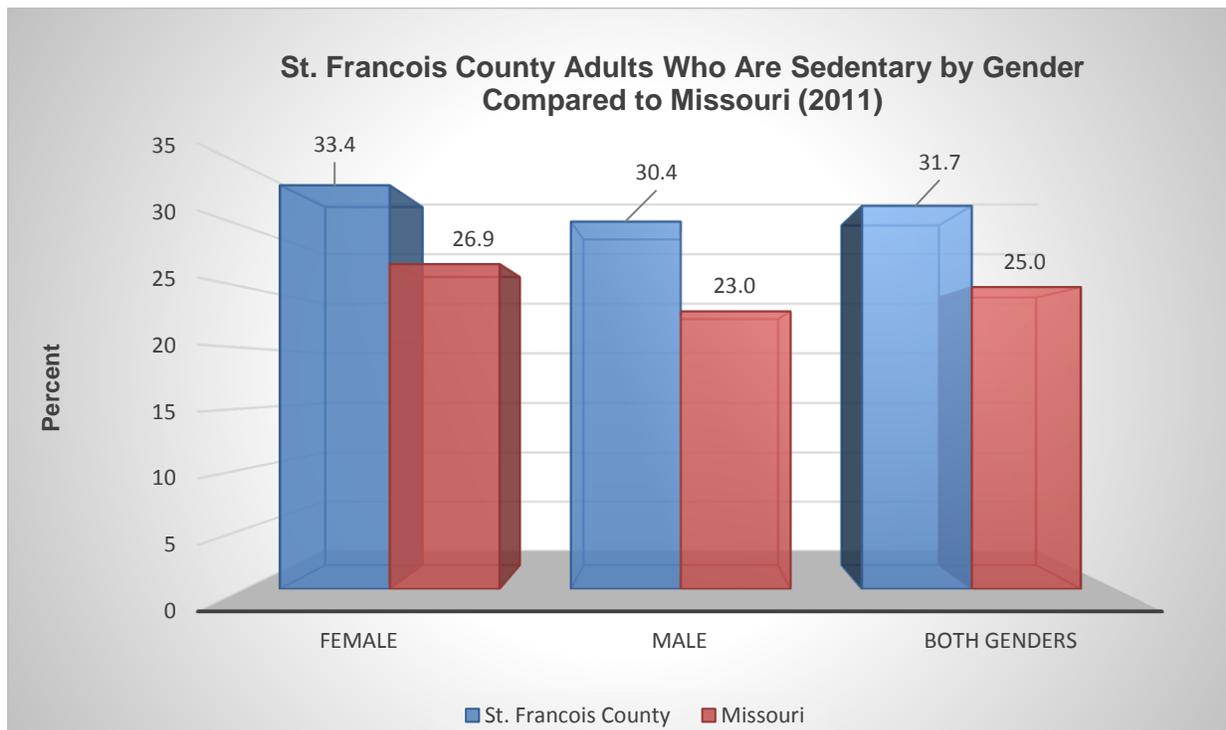
Source: Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the proportion of adults age 20 and older who are obese to 30.5 percent. The St. Francois County rate of obesity was higher than the target rate; Missouri met the target.



Source: Healthy Communities Institute

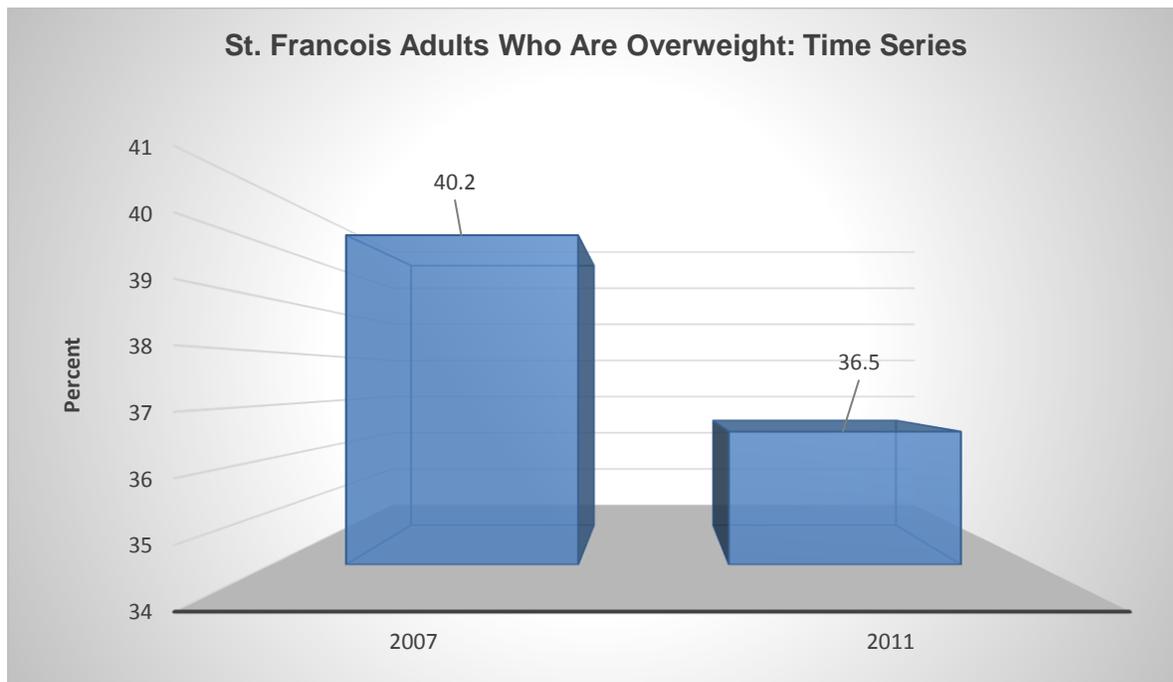
St. Francois County adults who are obese increased 25.5 percent or 7.1 points while the rate in the state only increased 1 point from 2007 to 2011.



Source: Healthy Communities Institute

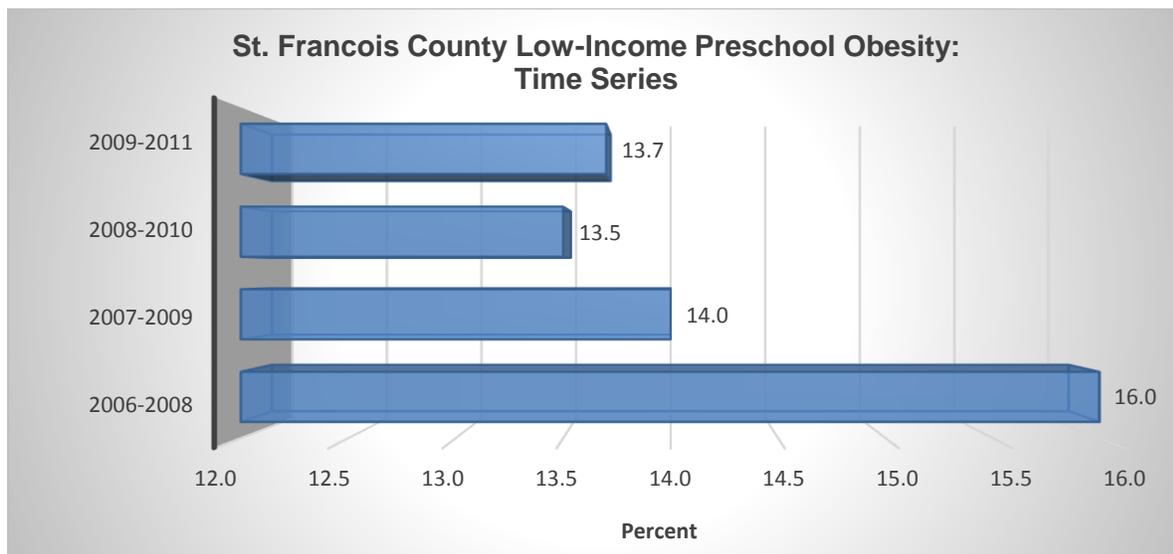
The graph above shows the percentage of adults who did not participate in any leisure-time activities (physical activities other than their regular job). The Healthy People 2020 national health target is to reduce the percentage of adults (ages 18 and up) who do not engage in any leisure-time physical activity to 32.6 percent. The percentage of both genders in St. Francois County who did not engage in any leisure-time physical activity was lower than the target. Females in the county had a higher percent than males who are sedentary. When comparing the county to the state, the county had a higher percentage of both genders who are more sedentary than the state population.

Adults who are sedentary are at an increased risk of many serious health conditions. These conditions include obesity, heart disease, diabetes, colon cancer and high blood pressure. In addition, physical activity improves mood and promotes healthy sleep patterns. The American College of Sports Medicine (ACSM) recommends adults perform physical activity three to five times each week for 20 to 60 minutes at a time to improve cardiovascular fitness and body composition.



Source: Healthy Communities Institute

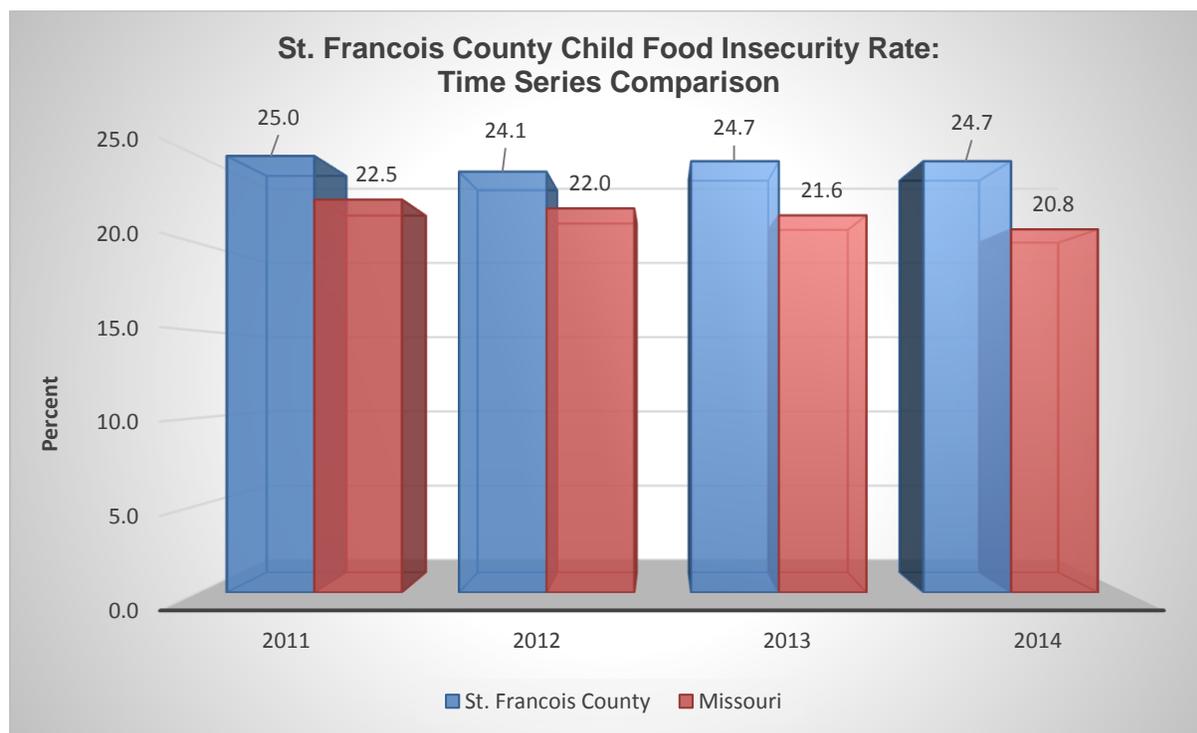
The percentage of overweight adults is an indicator of the overall health and lifestyle of a community. The rate of adults who are overweight in the county decreased 9.2 percent or 3.7 points from 2007 to 2011.



Source: Healthy Communities Institute

The rate of low-income, preschool obesity based on a time series in the graph above shows a decline in the rate from 2007- 2009 and 2008-2010. A slight increase occurred between the period 2008-2010 and 2009-2011.

Childhood obesity has both immediate and long-term health effects. Children and adolescents who are obese are at greater risk for bone and joint problems and sleep apnea, and are more likely than normal weight peers to be teased and stigmatized, which can lead to poor self-esteem. Moreover, obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. Finally, overweight and obese youth are more likely than normal weight peers to be overweight or obese adults and are therefore, at risk for the associated adult health problems, including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis. (Healthy Communities Institute).

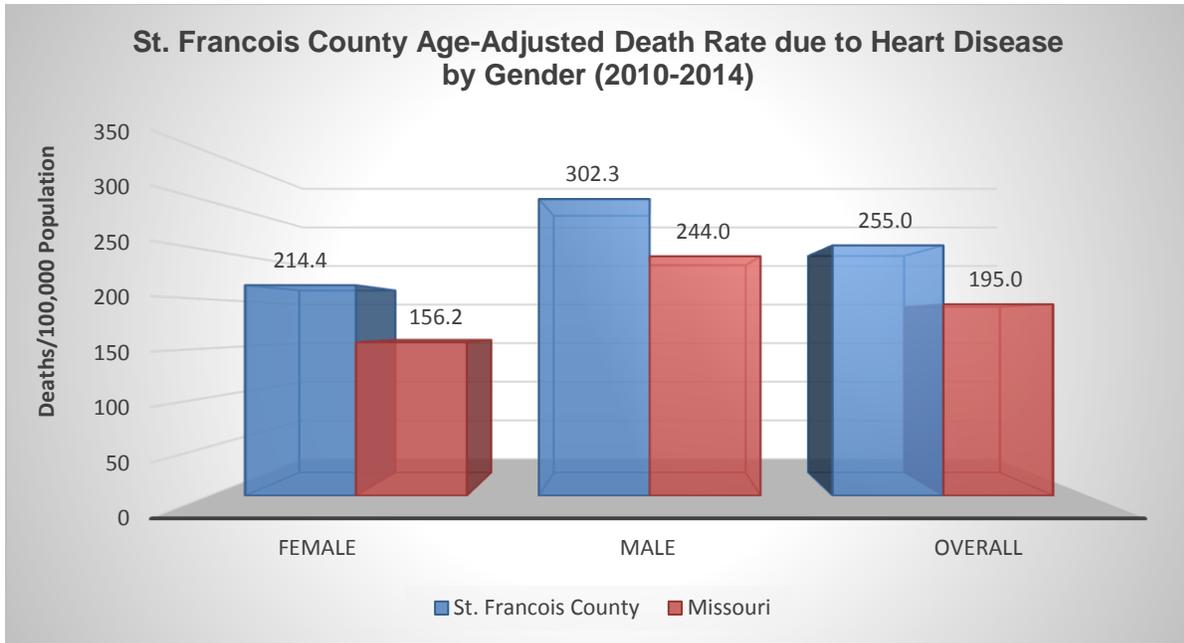


Source: Healthy Communities Institute

St. Francois County had a higher rate of child food insecurity than the state across the time series shown. The USDA defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Children exposed to food insecurity are of particular concern given the implications scarce food resources pose to a child’s health and development. Children who are food insecure are more likely to be hospitalized and may be at higher risk for developing obesity and asthma. Children who experience food insecurity may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety and bullying. (Healthy Communities Institute).

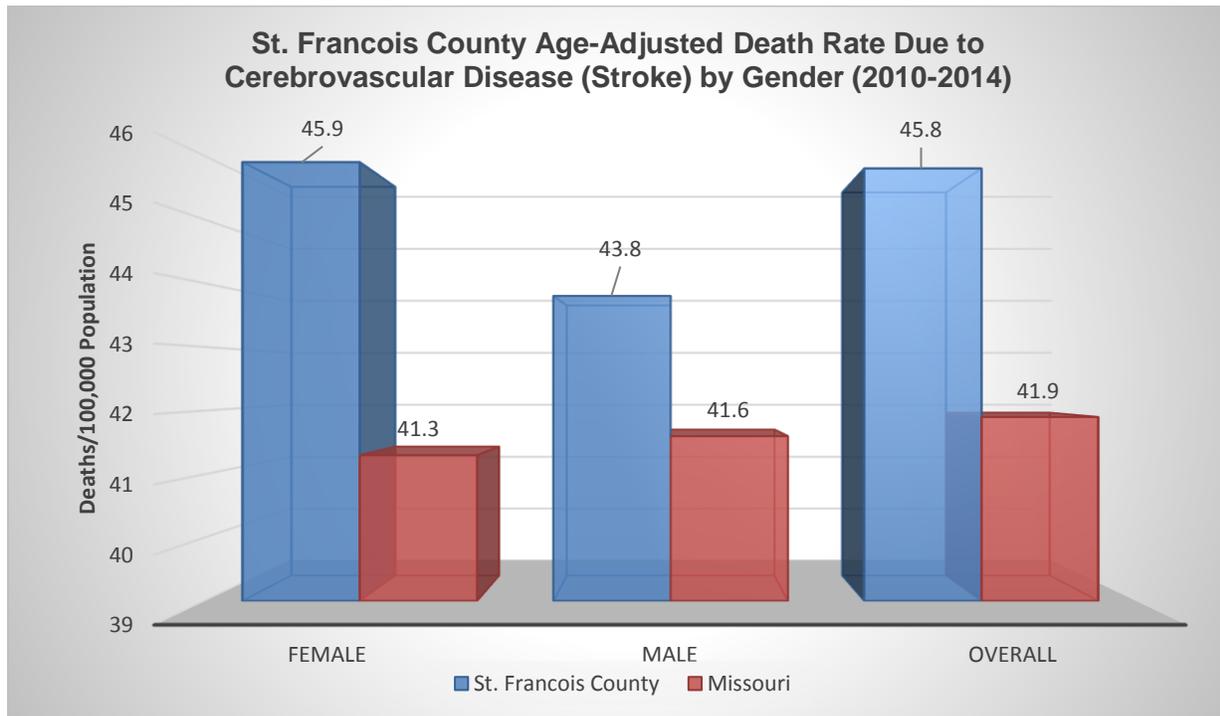
Heart Disease and Stroke

Heart disease is a term that encompasses a variety of different diseases affecting the heart. It is the leading cause of death in the United States, accounting for 25.4 percent of total deaths. Heart disease is the number one killer of women in the United States. (Healthy Communities Institute).



Source: Health Communities Institute

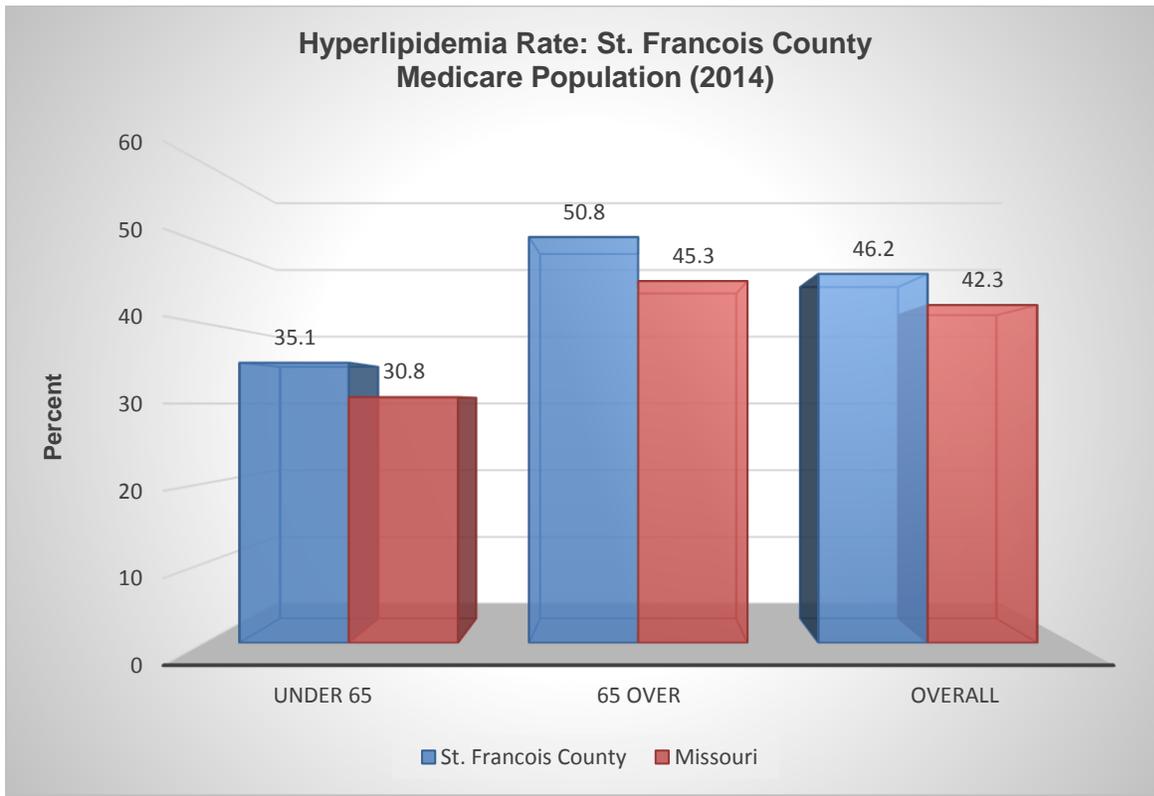
Females in the county had a 1.3 times higher death rate due to heart disease compared to the state. Males in the county had a 1.2 times higher death rate due to heart disease compared to the state.



Source: Healthy Communities Institute

Cerebrovascular disease is a leading cause of death in the United States. Although cerebrovascular disease is more common in older adults, it can occur at any age. The most important modifiable risk factor for stroke and cerebrovascular disease is high blood pressure. Other risk factors include high cholesterol, heart disease, diabetes mellitus, physical inactivity, obesity, excessive alcohol use, and tobacco use.

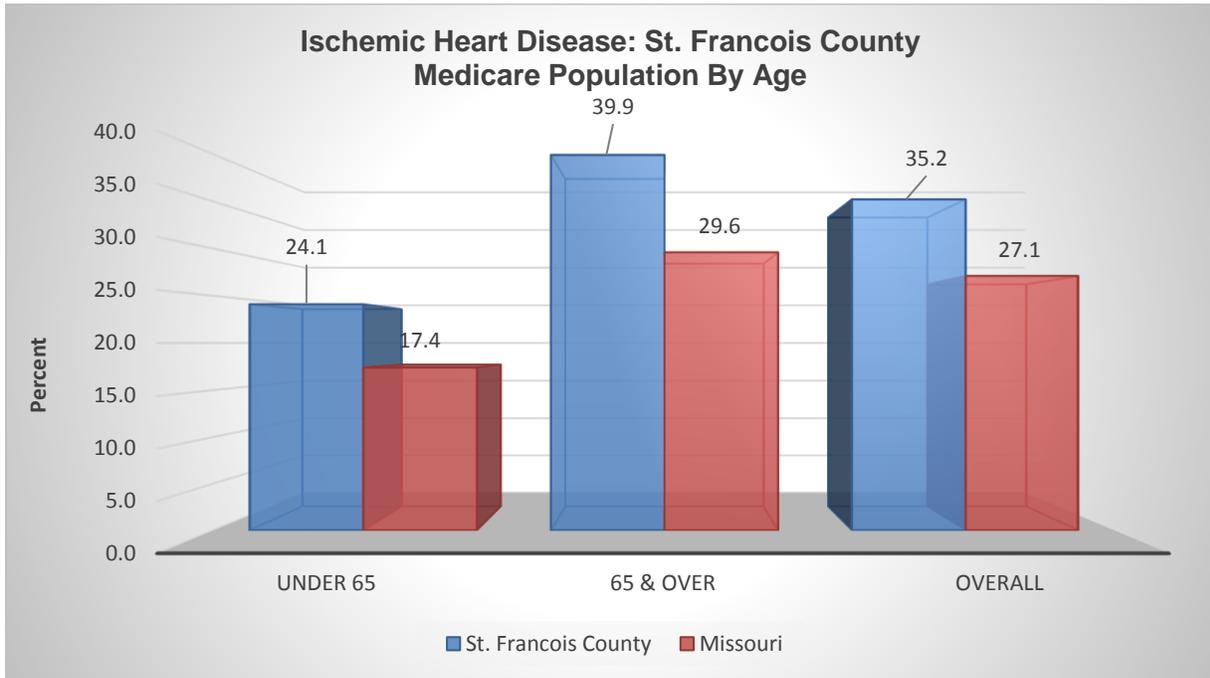
The rate represented in the graph above shows the rate of females and males in the county was higher than the rate in the state. The overall rate for the county was 45.8/100,000 compared to 41.9/100,000 in the state.



Source: Healthy Communities Institute

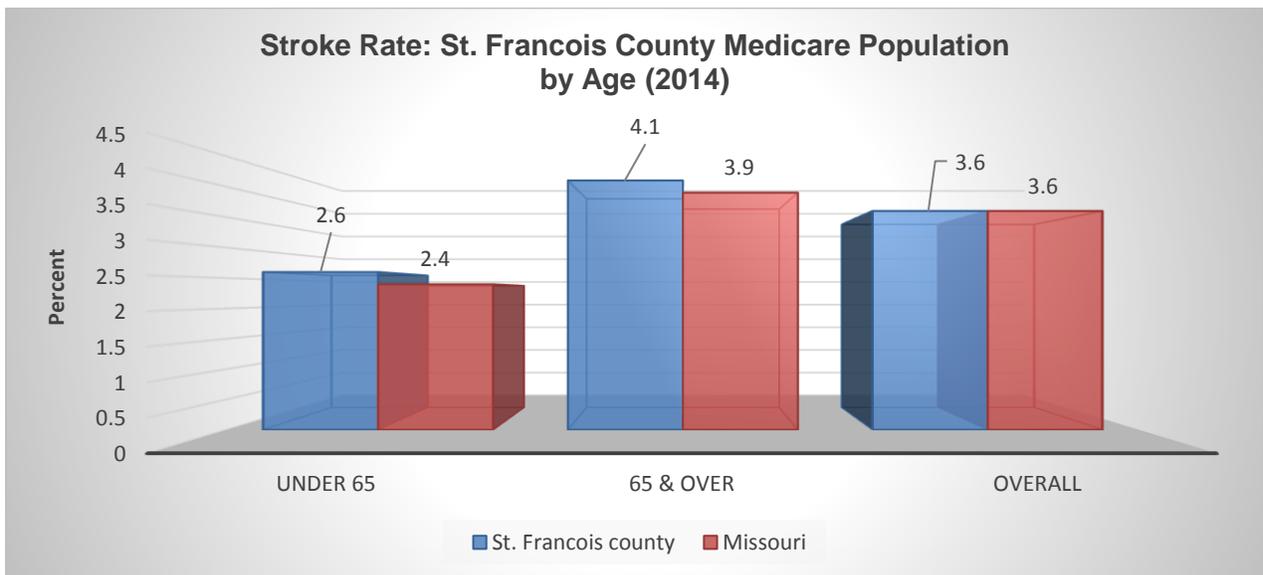
Among the Medicare population 65 and over, the rate of hyperlipidemia, also known as high cholesterol and high triglycerides, was higher than those under 65 years of age in the county and the state. The overall rate in the county was higher than the rate in the state.

Medicare is the federal health insurance program for persons aged 65 years or older, persons under age 65 years with certain disabilities, and persons of any age with end-stage renal disease.



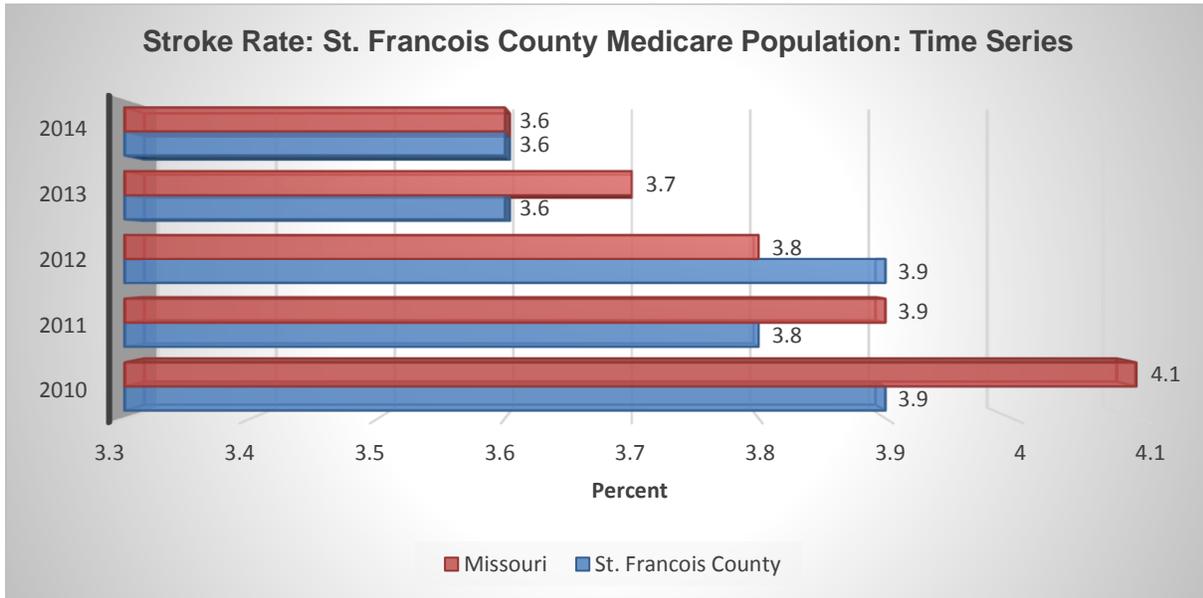
Source: Healthy Communities Institute

In comparing the county Medicare population for ischemic heart disease, the highest rates were found in the 65 and over age group for the county and the state.



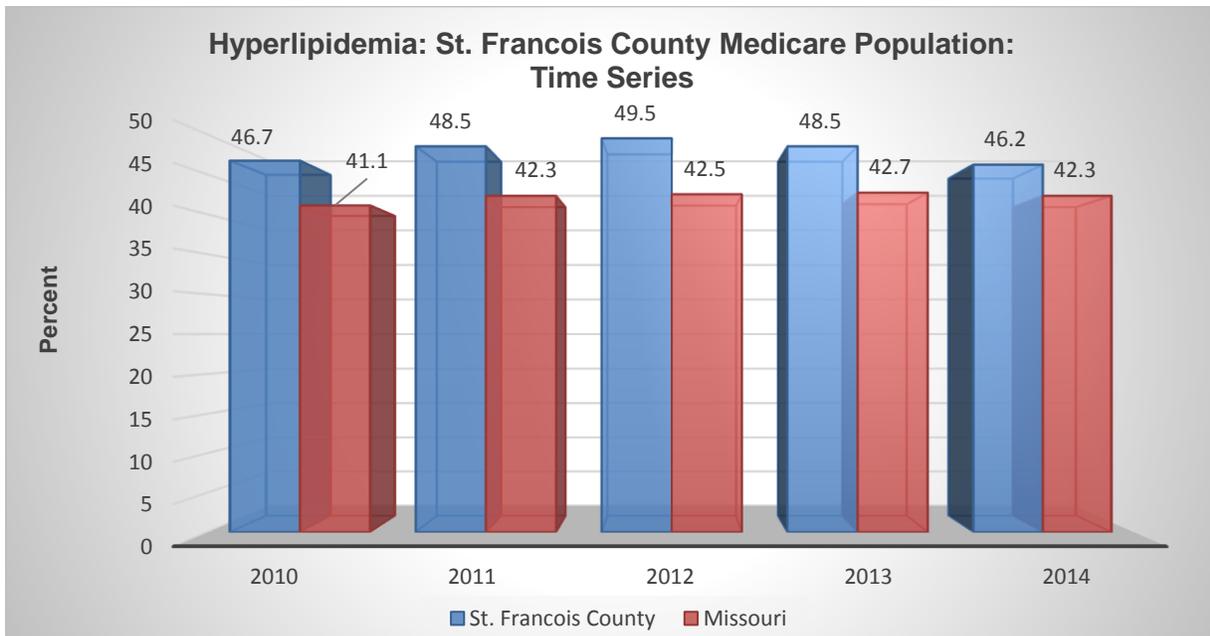
Source: Healthy Communities Institute

The stroke rates among the Medicare population under 65 and 65 and over were slightly higher in the county than the state. The overall rate was 3.6 percent for the county and the state.



Source: Healthy Communities Institute

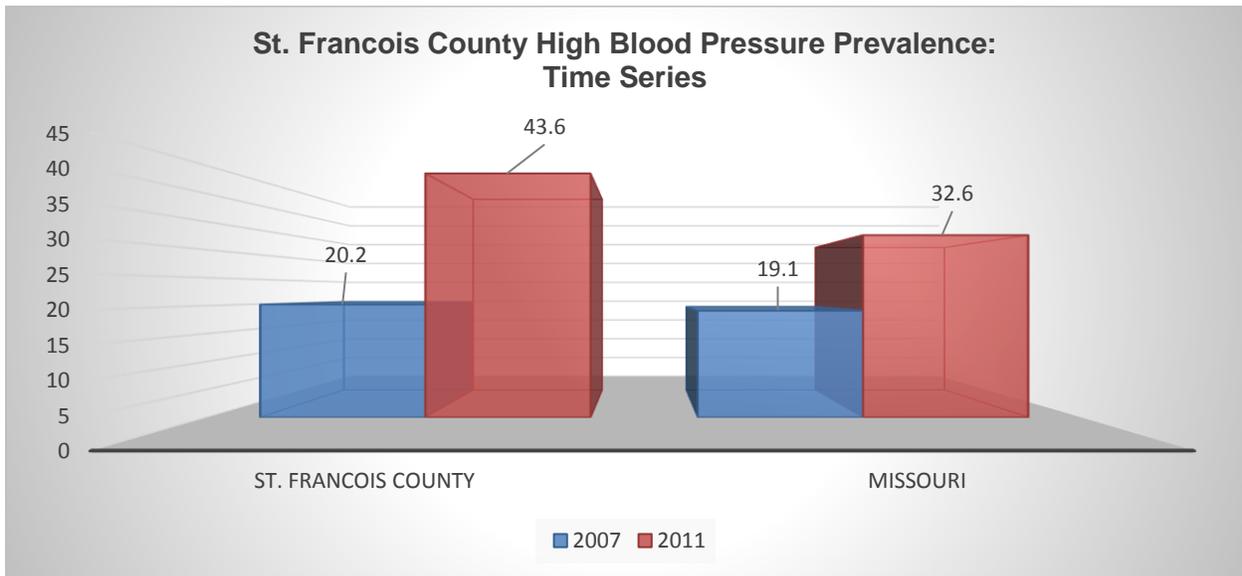
While sporadic through the years, the stroke rate among the county Medicare population experienced a decrease from 2010-2014.



Source: Healthy Communities Institute

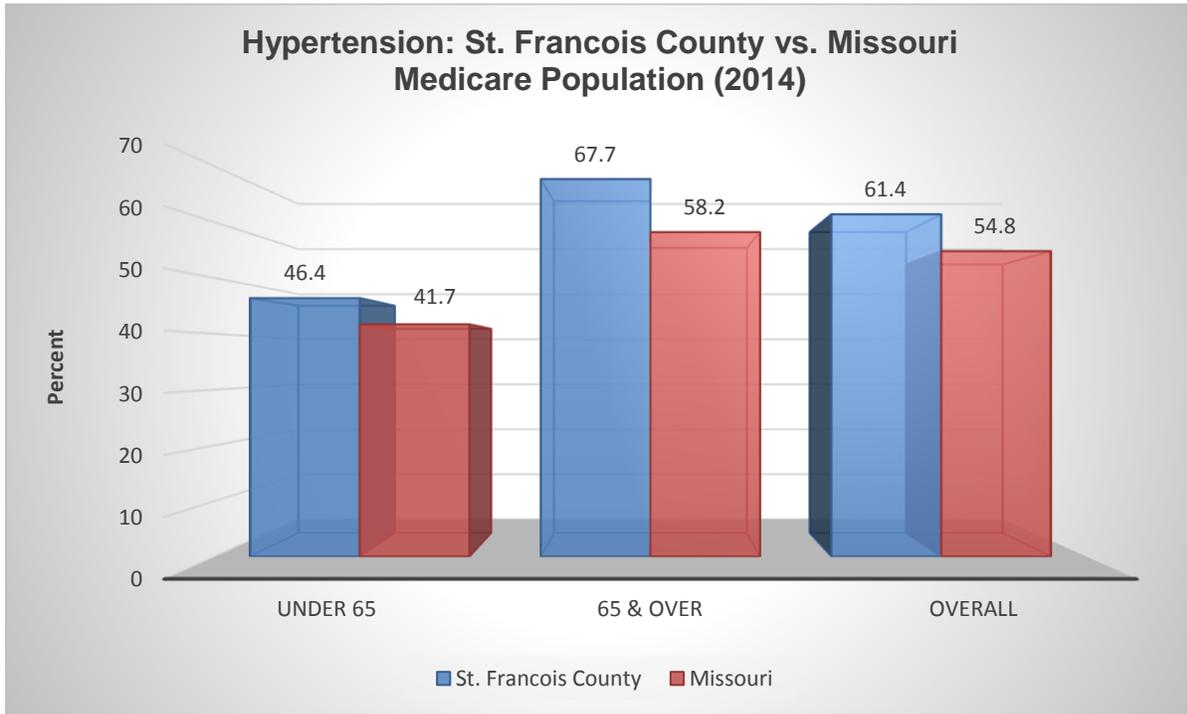
The county experienced an increase in hyperlipidemia in the Medicare population from 2010 to 2012, followed by a decrease for the next two years.

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, obese people, heavy drinkers, and women who take birth control pills. (Healthy Communities Institute).



Source: 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. From 2007-2011, the rate of high blood pressure in St. Francois County more than doubled. Missouri had a 71 percent increase.



Source: Healthy Communities Institute

Hypertension is also known as high blood pressure. The overall rate of hypertension among the Medicare population in the county is 61.4 percent compared to 54.8 percent in the state. The population 65 and over had a higher rate in both the county and the state compared to those under 65.

Table 6: Three-Year Moving Heart Disease & Stroke Average Rates						
Health Topics	2009-2011		2010-2012		2011-2013	
	St. Francois County	Missouri	St. Francois County	Missouri	St. Francois County	Missouri
Heart Disease						
Death / 100,000 population	258.17	200.75	260.82	196.22	272.6	194.11
Hospitalizations /10, 000 population	198.9	151.84	197.88	142.91	194.2	136.57
ER Visits/ 1000 population	18.65	13.06	17.7	13.07	18.92	13.63
Ischemic Heart Disease						
Death / 100,000 population	180.5	132.55	182.64	128.05	190.75	122.38
Hospitalizations /10, 000 population	84.4	55.14	83.6	49.38	79.0	45.21
ER Visits/ 1000 population	2.88	0.84	2.82	0.73	2.96	0.67
Stroke / Other Cerebrovascular Disease						
Death / 100,000 population	51.26	43.9	46.42	42.83	43.55	41.73
Hospitalizations /10, 000 population	30.73	30.42	32.14	29.55	31.71	29.51
ER Visits/ 1000 population	1.76	0.81	1.71	0.79	1.82	0.77

Source: Missouri Department of Health and Senior Services

This table 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. In the county, the death rate from heart disease and ischemic heart disease increased while the death rate from stroke decreased. Ischemic heart disease, also known as coronary artery disease, is the most common form of heart disease and the leading cause of heart attack and angina. Hospitalization rates in the county decreased for heart disease and ischemic heart disease while rates for stroke slightly increased. ER visits due to all diseases listed in the table remained stable.

Table 7: Heart Health & Stroke: St. Francois County Vs. Missouri Age-Adjusted Rate Comparison		
Health Topics	St. Francois County	Missouri
Heart Disease		
Deaths / 100,000 (2003-2013)	279.1	216.8
Hospitalizations / 10,000 (2009-2013)	154.9	123.1
ER Visits / 1,000 (2009-2013)	16.2	14.7
Ischemic Heart Disease		
Deaths / 100,000 (2003-2013)	185.1	144.7
Hospitalizations / 10,000 (2009-2013)	35.1	39.3
ER Visits / 1,000 (2009-2013)	0.3	0.6
Stroke / Other Cerebrovascular Disease		
Deaths / 100,000 (2003-2013)	53.8	47.8
Hospitalizations / 10,000 (2003-2013)	38.4	38.3
ER Visits / 1,000 (2009-2013)	0.4	0.8

Source: Missouri Department of Health and Senior Services

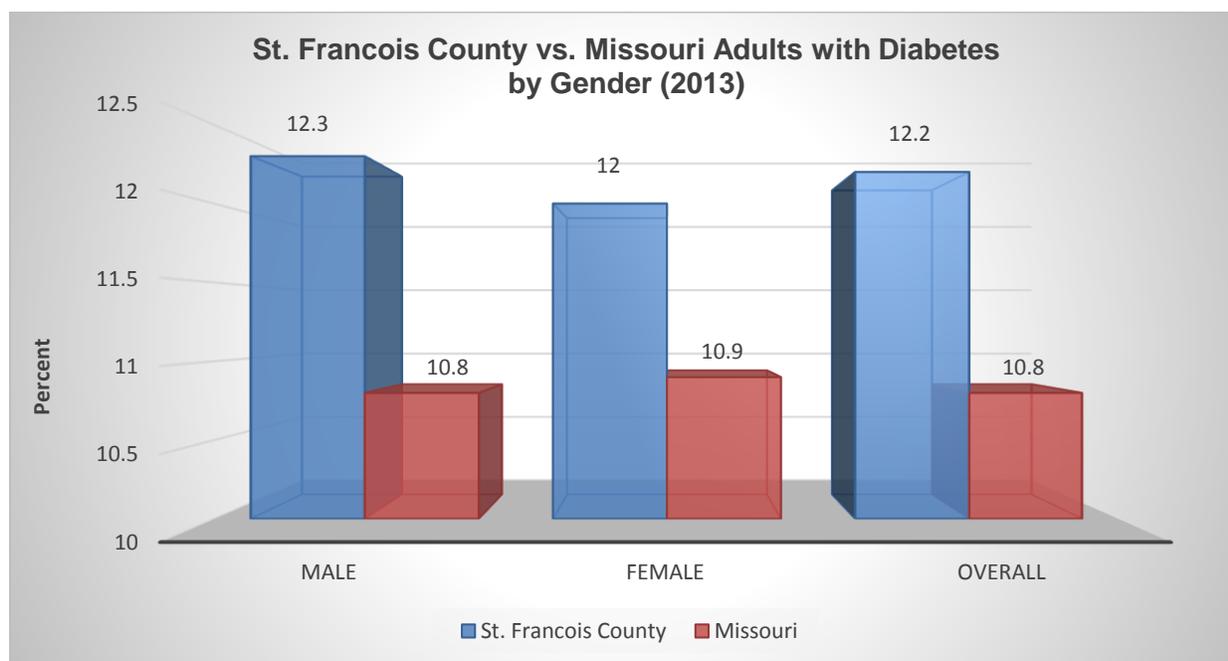
The death rate, hospitalization and ER visits due to heart disease and stroke were higher in the county than the state. For ischemic disease in the county, death rates were higher while hospitalizations and ER visits were lower.

Diabetes

Diabetes is a leading cause of death in the United States. According to the Centers for Disease Prevention and Control, more than 25 million people have diabetes, including both individuals already diagnosed and those who have gone undiagnosed.

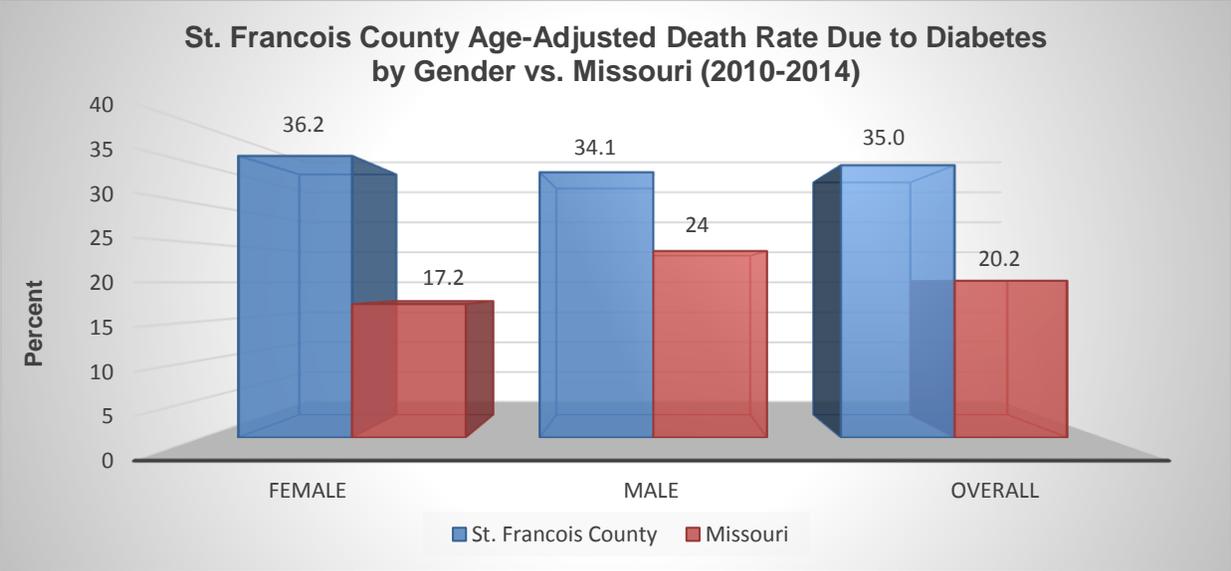
This disease can have harmful effects on most of the organ systems in the human body. It is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working-age adults. Persons with diabetes are also at increased risk for coronary heart disease, neuropathy and stroke.

Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older. (Healthy Communities Institute).



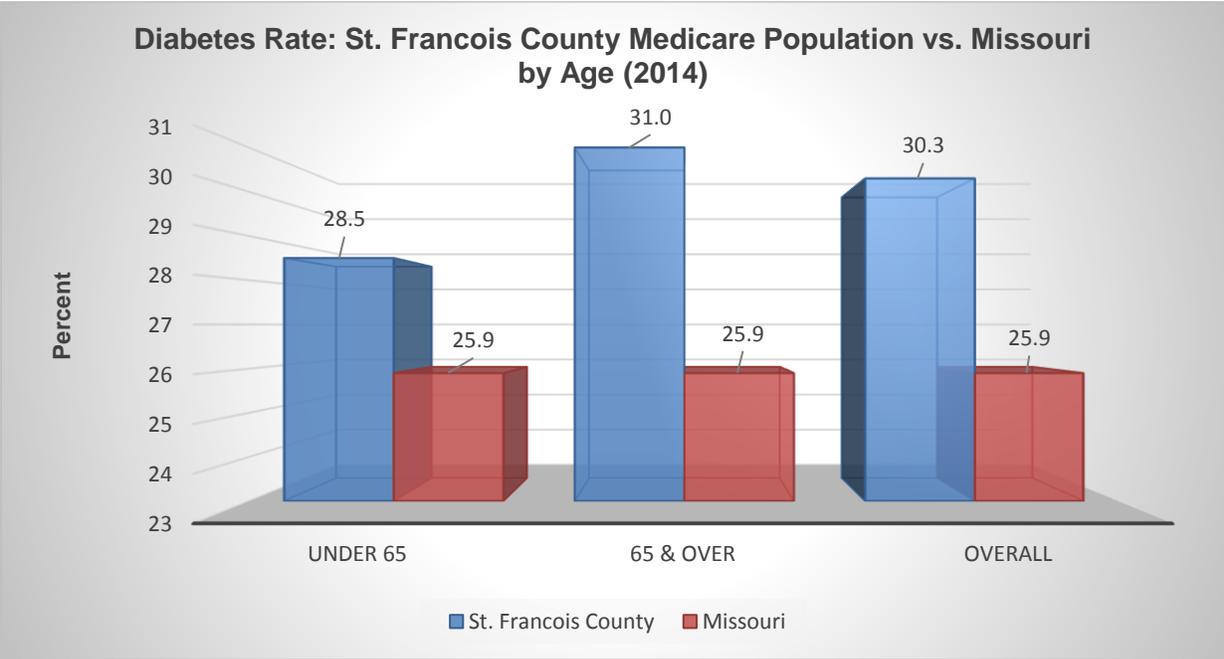
Source: Healthy Communities Institute

The overall rate of adults with diabetes in the county was higher than the rate in the state. The male and female rates in the county were statistically equal and slightly higher than the rate of both genders in the state.



Source: Healthy Communities Institute

The age-adjusted death rate due to diabetes for females in the county was slightly higher than males in the county and more than double the rate in the state.

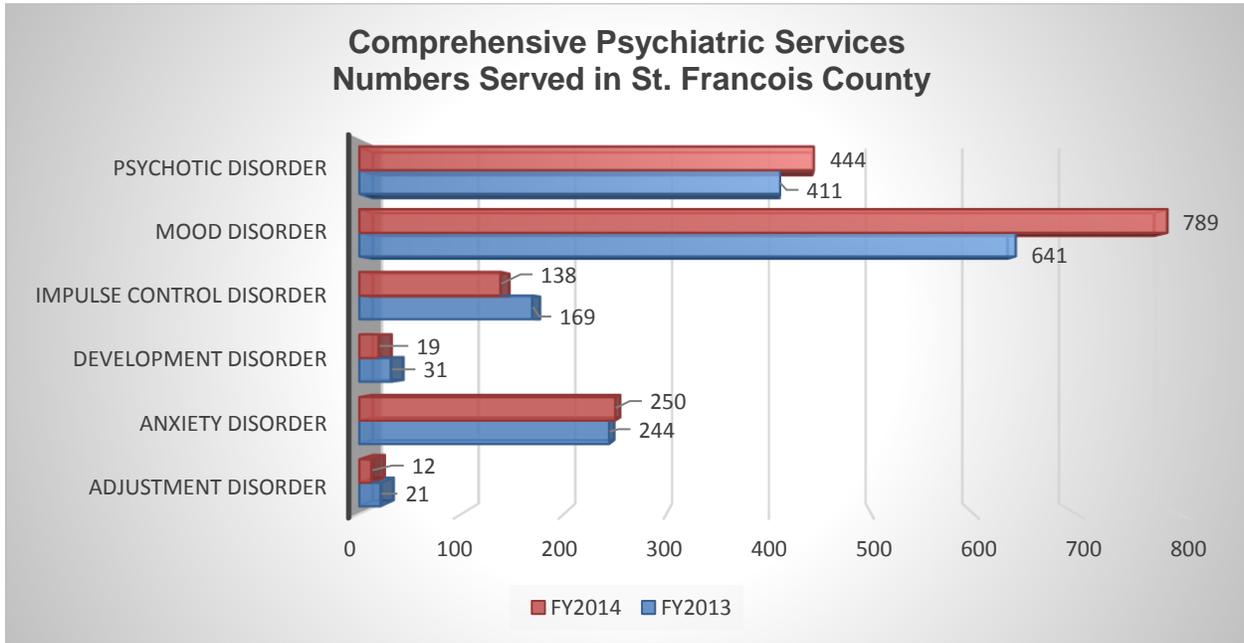


Source: Healthy Communities Institute

The overall rate of diabetes in the county is 30.3 percent compared to 25.9 percent in the state. Those 65 & over in the county had the highest rate of diabetes.

Mental/Behavioral Health

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

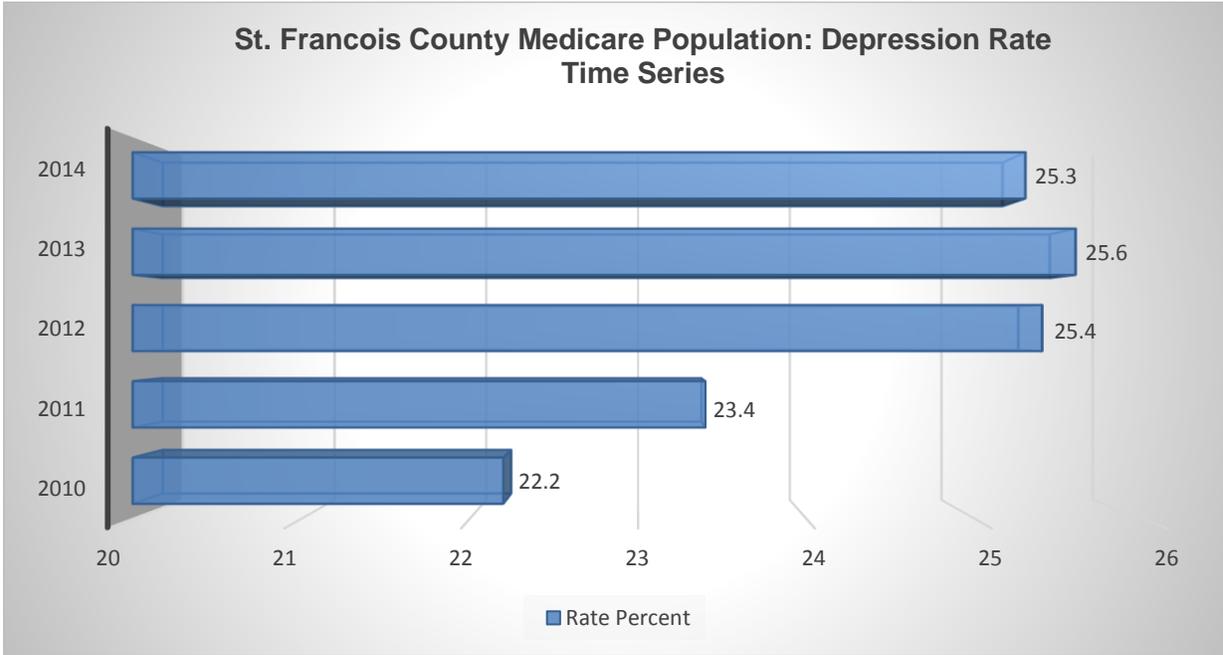


Source: Missouri Department of Mental Health

The graph above represents the total number of individuals who received comprehensive psychiatric services in St. Francois County. For both years, mood disorder had the highest number served followed by psychotic disorder. A 23 percent increase was noted in mood disorder numbers served from 2013 to 2014.

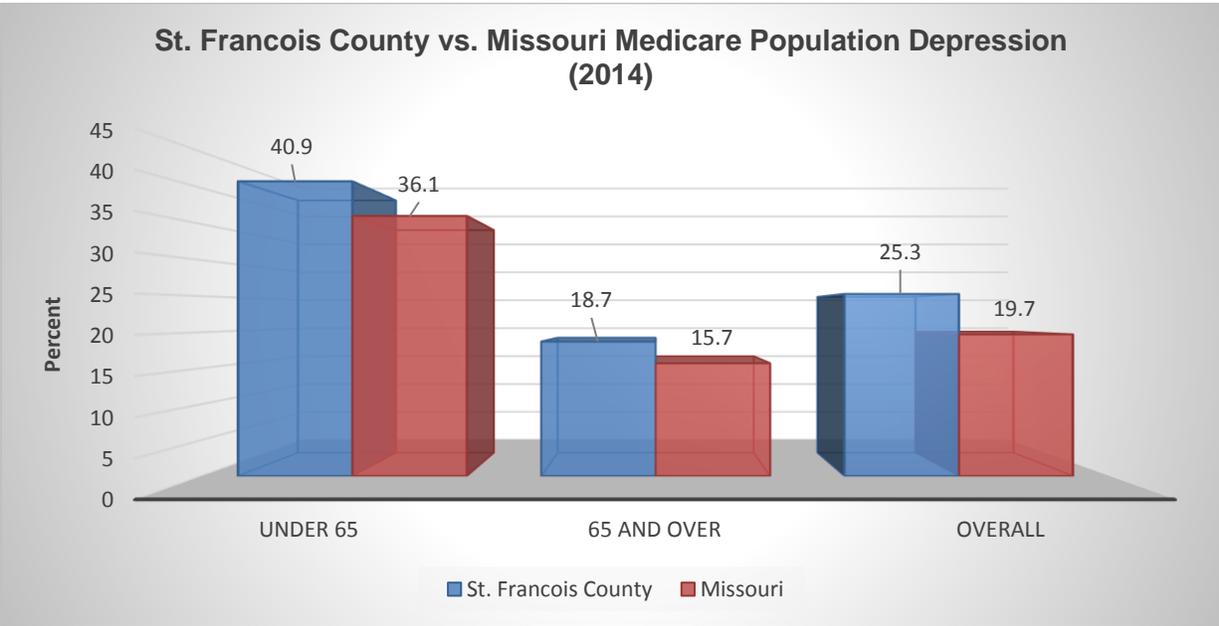
Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue, and a marked loss of interest in activities that used to be pleasurable.

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 Center for Medicare Services estimates that depression in older adults occurs in 25 percent of those with other illnesses, including: arthritis, cancer, cardiovascular disease, chronic lung disease, and stroke.



Source: Healthy Communities Institute

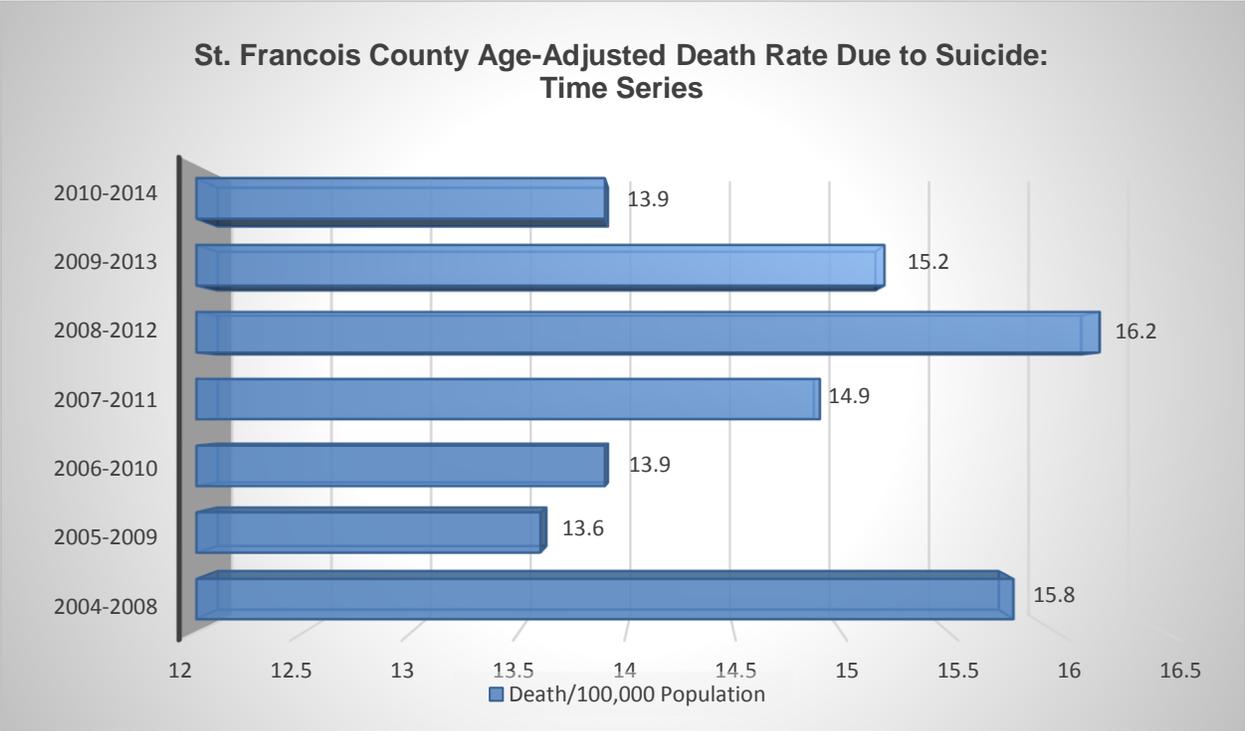
Among the Medicare population in the county, a gradual increase occurred in the rate of depression from 2010 to 2014.



Source: Healthy Communities Institute

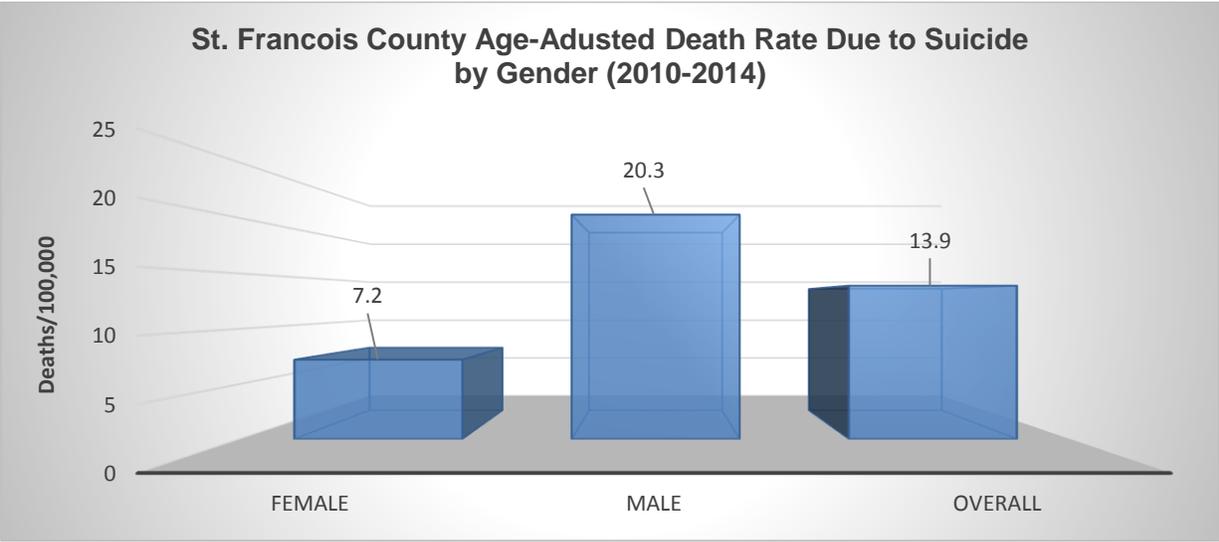
As previously noted, the rate of depression among the population under 65 was higher than the rate of depression among those 65 and over. The overall rate of depression was 25.3 percent in the county compared to 19.7 in the state.

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 of suicide, but three times more women than men report attempting suicide. Suicide occurs at a disproportionately higher rate among adults 75 years and older. (Healthy Communities Institute).



Source: Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the suicide rate to 10.2 deaths per 100,000 population. While the rate of suicide in the county has decreased over the past decade, 2008-2012 showed the highest suicide rate than any time period during 2004-2014.

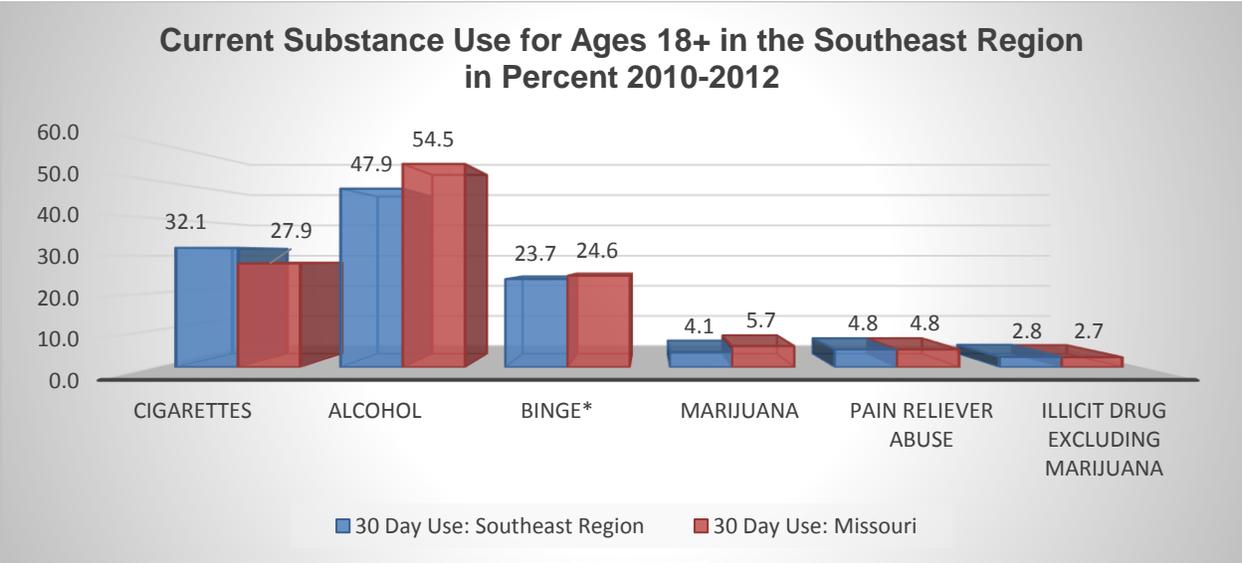


Source: Healthy Communities Institute

The rate of suicide in the county among males was more than two and one-half times higher than the rate of females in the county.

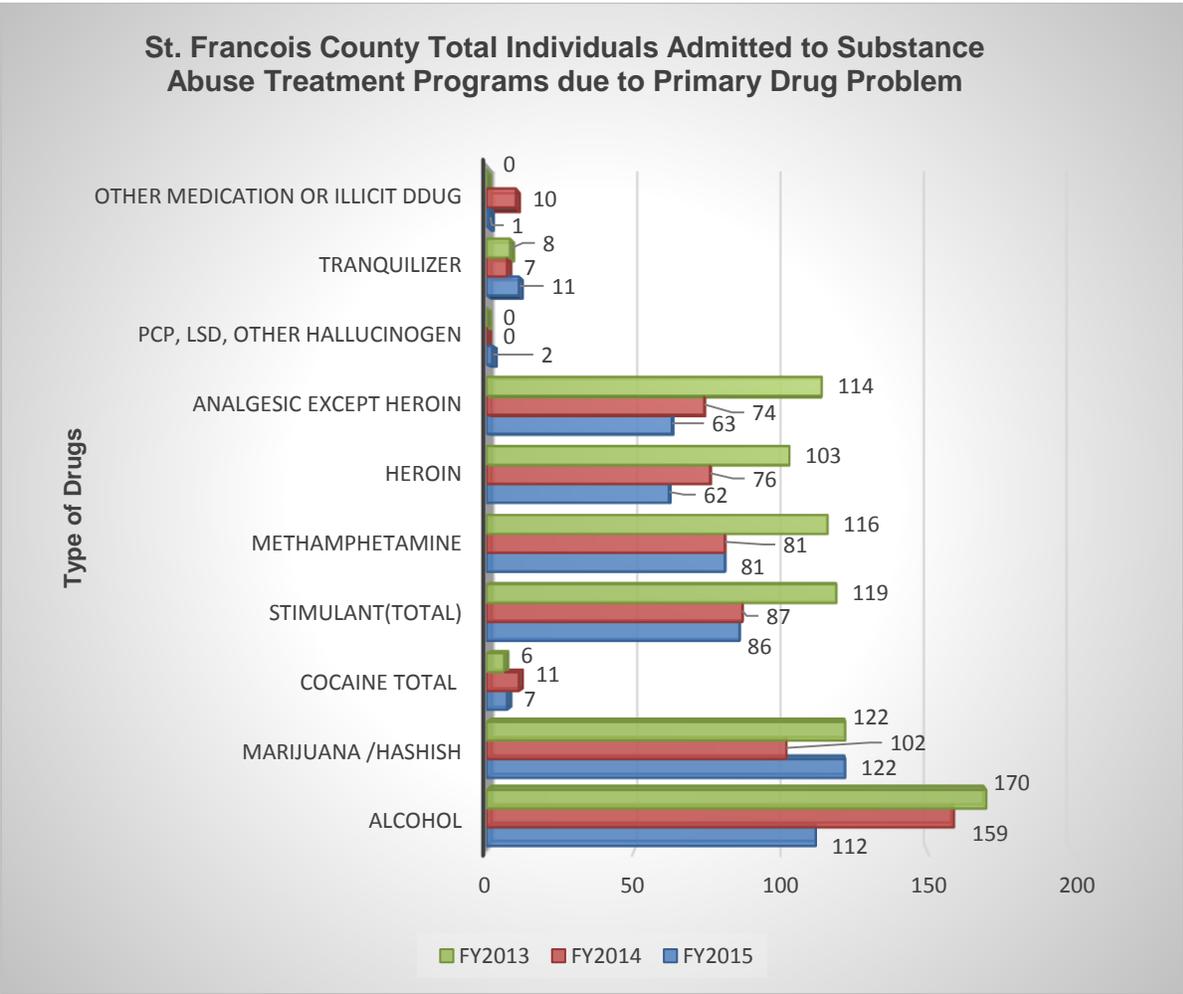
Substance Use and Abuse

The availability of county-level data on substance use and abuse is limited. The current data was compiled through the Missouri Student Survey 6th through 12th grade students in participating school districts. Five plus drinks on a single occasion in the last 30 days is classified as binge drinking.



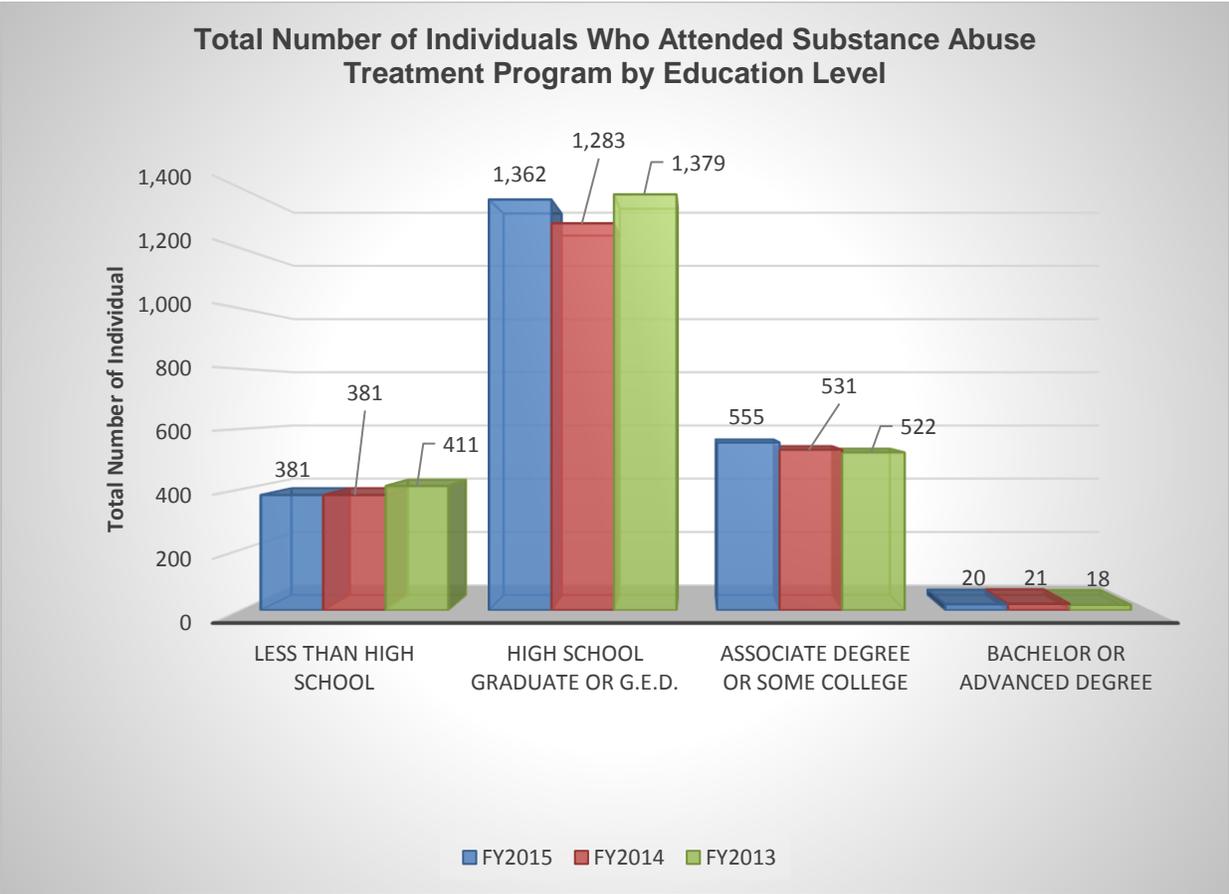
Source: Missouri Department of Mental Health

For the Southeast Region, alcohol use was the highest rated substance use for age 18+. However, this rate was lower than the state. Cigarette use in the Southeast Region was also higher than the state.



Source: Missouri Department of Mental Health

Alcohol use was the cause for the highest number of individuals admitted to substance abuse programs in 2013 and 2014. Marijuana use was the highest cause for admission in 2015.



Source: Missouri Department of Mental Health

This graph shows the highest number of individuals who attended substance abuse treatment program over the three years had completed high school or attained a G.E.D., followed by those with an associate degree or some college.

Secondary Data Summary

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

- St. Francois County had a higher age-adjusted incidence rate due to breast, lung & bronchus and colon & rectum cancer when compared to Missouri and the U.S. Males had a 29 percent higher cancer death rate than females in St. Francois County.
- From 2007-2011, the rate of high blood pressure in St. Francois County more than doubled.
- Females in the county had a 1.3 times higher death rate from heart disease compared to the state. Males in the county had a 1.2 times higher death rate from heart disease compared to the state.
- The age-adjusted death rate due to diabetes for females in the county was slightly higher than males in the county and more than double the rate in the state.
- St. Francois County adults who are obese increased 25.5 percent or 7.1 points while the rate in the state only increased 1 point. The percent of adults who consume fruit and vegetables in the county declined 45 percent from 2007 to 2011.
- In the southeast region, alcohol use is the most current substance use for those age 18+, followed by cigarette smoking. Alcohol use was the cause for the highest number of individuals admitted to substance abuse programs in 2013 and 2014. Marijuana use was the highest cause for admission in 2015.
- The rate of suicide in the county among males was more than two and one-half times the rate of females in the county.

C. Internal Work Group Prioritization Meetings

Parkland Health Center chose nine employees to participate on an internal CHNA work group from various hospital departments representing community health education, marketing and communications, case management, finance, patient access, emergency department, diabetic education and medical oncology. (See Appendix B).

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 on Jan.15, 2015 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 12 health needs to 10. (See Table 8 on next page).The team made its decision by reviewing resources available including staffing, program availability and hospital service lines.

Table 8: List of Primary Data	
Stakeholders Focus Group: List of Community Health Needs	Parkland Health Center CHNA Work Group: Top 10 Community Health Needs
Substance Use/Abuse	Smoking
Mental Health	Obesity
Access to Transportation	Diabetes
Seniors	Access: Coverage
Health Literacy	Substance Use/Abuse
Cancer	Health Literacy
Access to Coverage	Heart Health & Vascular Diseases
Heart & Vasc Dx	Access: Transportation
Reproductive Health	Cancer
Obesity	Mental Health
Diabetes	
Smoking	

Highlighted above in red are the needs the hospital CHNA work group decided not to include in its top list from the focus group list: Seniors and Reproductive Health. The right column lists the top community health needs the internal work group selected to include in its discussion and ranking.

BJC developed common, system-wide nomenclature guidelines to ensure that each hospital uses the same terminology in its CHNA and implementation plan when referring to community health needs. As a result, the Parkland Health Center work group made changes to its list of top identified needs prior to prioritization. Each health need is listed in black followed by a break down shown in green. After discussion, the Parkland Health Center internal team requested further description of prescription drug use and illegal drug use shown below in blue.

Table 9: Community Health Needs List for Ranking including Nomenclature Revisions

Health Literacy
Obesity
Heart & Vascular Disease
Heart Health
Diabetes
Access to Health Care
Services
Coverage
Transportation
Smoking
Mental / Behavioral Health
Mental Health Services
Mental / Behavioral Health: Substance Abuses
Prescription drug abuse
Codeine
Morphine
Oxycodone
Hydrocodone
Illegal Drugs Abuse
Heroin
Meth
Cancer
Colorectal
Lung
Breast

Following the nomenclature revision, the internal work group list of top community health needs expanded from 12 to 14 shown in the right column in table below.

Table 10: List of Primary Data Collection By Focus Group & PHC Internal Team	
Stakeholders Focus Group: List of Community Health Needs	Parkland Health Center CHNA Work Group: Top 14 Community Health Needs
Substance Use/Abuse	Smoking
Mental Health	Obesity
Access to Transportation	Illegal Drugs
Seniors Health	Cancer: Colorectal
Health Literacy	Diabetes
Cancer	Access: Coverage
Access to Coverage	Prescription Drug Abuse
Heart & Vasc Dx	Health Literacy
Reproductive Health	Heart Health & Vascular Diseases
Obesity	Access: Transportation
Diabetes	Access: Services
Smoking	Cancer: Lung
	Mental Health
	Cancer: Breast

Highlighted in blue in the table above, the internal work group added these needs to its list: Illegal Drugs; Colorectal Cancer; Prescription Drug Abuse; Access: Services; Lung Cancer; and Breast Cancer.

Meeting 2

The work group gathered again on Jan. 29, 2015 for the purpose of reviewing the secondary data and discussing the results of the ranking. 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 the top 14 health needs. The criteria (in table below) for prioritizing the needs identified by the focus group was agreed upon by the work group.

Table 11: 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.

The table below shows the ranking of the needs from highest to the lowest health need.

Table 12: Internal Work Group: Ranking of Top 14 Community Health Needs	
Highest to the Lowest Needs	Total Scores
Obesity	254
Smoking	248
Diabetes	238
Mental Health	228
Illegal Drugs	226
Heart Health	219
Prescription drug abuse	217
Health Literacy	180
Access : Coverage	165
Access: Transportation	165
Access: Services	149
Cancer: Lung	136
Cancer: Colorectal	116
Cancer: Breast	101

Participants were then encouraged to share how and why each arrived at the ranking. Obesity ranked as the highest community health need followed by Smoking. Breast Cancer scored the lowest of all needs.

Additionally, the group compared its results to the external team ranking. (See Page 12).

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 St. Charles 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. The team reviewed the scores by indicators.

Primary and Secondary Rating Summary

The table on the next page shows:

- Primary data from the focus group ranking
- Needs identified by the internal work group ranking
- Results of the secondary data using Healthy Communities Institute scoring tools that compared data from similar communities in the nation

Table 13 : Community Health Needs Primary and Secondary Data Ranking Comparison			
Rank	Focus Group Team	Parkland Health Center Internal Work	HCI Scoring Based on available National Data
1	Substance Use/Abuse	Obesity	Chronic Kidney Disease: Medicare Population
2	Mental Health	Smoking	Depression: Medicare Population
3	Access to Transportation	Diabetes	Diabetes: Medicare Population
4	Seniors	Mental Health	Hyperlipidemia: Medicare Population
5	Health Literacy	Illegal Drugs	Hypertension: Medicare Population
6	Cancer	Heart Health	Age-Adjusted Death Rate due to Cancer
7	Access to Coverage	Prescription Drug Abuse	Colorectal Cancer Incidence Rate
8	Heart & Vascular Disease	Health Literacy	Workers Commuting by Public Transportation
9	Reproductive Health	Access : Coverage	Households with Cash Public Assistance Income
10	Obesity	Access: Transportation	Age-Adjusted Death Rate due to Colorectal Cancer
11	Diabetes	Access: Services	All Cancer Incidence Rate
12	Smoking	Cancer: Lung	Asthma: Medicare Population
13		Cancer: Colorectal	COPD: Medicare Population
14		Cancer: Breast	Ischemic Heart Disease: Medicare Population

- Diabetes, Cancer, Heart Disease and Mental Health were listed by all groups.
- Substance Abuse, Access to Transportation, Access to Coverage and Health Literacy were ranked by the focus group and the internal team.

After reviewing the secondary data, the internal work group discussed the health disparity among seniors and children in St. Francois County as well as the underserved areas. The team looked into each need, reviewed other community services in the county as well as services provided through the county. The team was very enthusiastic

in analyzing and discussing the lack of mental health services in the area. With the presence of several community organizations who have expressed similar concerns regarding the mental health needs in the county, the team concluded that it will serve as a catalyst for the creation of a coalition. This group will explore options for more robust mental health services in St. Francois County.

Participants reviewed and discussed the differences among all rankings and were provided the opportunity to change their rankings after the resources were reviewed. Individual rankings were totaled to yield a composite ranking.

After thorough discussion and review of the current plan, the group concluded Parkland Health Center will address diabetes and obesity in the 2016 implementation plan. The team determined the appropriate skills and resources are available to address obesity and diabetes in the community. The team decided to discontinue some of the 2013 programs in order to focus their resources on the programs that will have a greater impact on the community.

IV. Appendix

Appendix A			
Focus Group Participants & Hospital Observants			
Focus Group Participants			
First Name	Last Name	Organization	Attended
Ron	Allen	Bone Terre Chamber of Commerce	
Rob	Baker	East Missouri Action Agency	x
Tamara	Coleman	Park Hills-Leadington Chamber of Commerce	
Nancy	Faulkner	Farmington Ministerial Alliance	
Sandy	Francis	Desloge Chamber of Commerce	
Laura	Glasburner	Mineral Area College	x
Chuck	Hasty	Bismarck School District	
Clif	Johnson	Southeast Missouri Behavioral Health	x
Dr. Steven	Kurtz	Mineral Area College	x
Dr. Desmond	Mayberry	Central School District	
Jessica	McKnight	St. Francois County Health Department	x
Dr. Yancy	Poorman	North County School District	
Laura	Raymer	Farmington Chamber of Commerce	x
Matthew	Ruble	Farmington R-7 School District	
Stacy	Stevens	West County School District	
Al	Sullivan	St. Francois County Community Partnership	x
David	Tetrault	St. Francois County Ambulance District	x
Clay	Whitener	United Way of St. Francois County	
Mona	Yates	Farmington Oaks Senior Center	x
Focus Group Observers:			
Angela	Chambers	BJC HealthCare	
Karley	King	BJC HealthCare	
Ursula	Kthiri	Parkland Health Center	
Dr. Elna	Nagasako	BJC HealthCare / WASHU	
Lisa	Stringer	St. Louis University	

Appendix B

Parkland Health Center CHNA Internal Team Members

Last Name	First name	Title	Department
Berrong	Barbi	Assistant Administrator	Clinical Services
Goldsmith	Cheri	Director	Financial Department
Graham	Sheri	Director	Personnel
Jepsen	Christina	Administrator	General Administration
Karl	Thomas	President	Executive Administration
Marler	Jack	Manager	Medical Staff Affair
Marler	Steve	Assistant Administrator	Operations
Robinson	Kimberly	Administrator	Divisional Administration
Westrich	Christie	Director	Marketing
King	Karley	Facilitator	Corporate Communication & Marketing

Appendix C

Focus Group Report
PERCEPTIONS OF THE NEEDS
OF ST. FRANCOIS COUNTY RESIDENTS
FROM THE PERSPECTIVES OF COMMUNITY LEADERS

PREPARED BY:

Angela Ferris Chambers
Manager, Market Research & CRM
BJC HealthCare

NOVEMBER 2, 2015

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BACKGROUND

In the Patient Protection and Affordable Care Act (PPACA) passed in March 2010, non-profit hospitals were mandated to conduct a community-based 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.

Parkland Health Center (PHC) conducted its first stakeholder assessment in 2012 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.

In 2015, BJC HealthCare purchased Mineral Area Regional Medical Center (MARMC), a facility that was not required to conduct a CNHA due to its for-profit status. MARMC has since merged with PHC and each facility has been renamed. The original PHC is now referred to as Parkland Health Center Liberty. MARMC is referred to as Parkland Health Center Weber Road.

RESEARCH OBJECTIVES

The main objective for this research is to solicit input from health experts and those who have a special interest in the community served by both Parkland Health Center locations in St. Francois County.

Specifically, the discussion focused around the following objectives:

- 1) Determine whether the needs identified in the 2012/2013 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 we should consider collaborating
- 5) Discuss what has changed since 2012/2013 when PHC 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, PHC conducted a single focus group with public health experts and those with a special interest in the health needs of St. Francois County residents. It was held on September 22, 2015 at the Farmington Civic Center. The group was facilitated by Angela Ferris Chambers, Manager of Market Research & CRM for BJC HealthCare. The discussion lasted ninety minutes.

Nine individuals representing various St. Francois County organizations participated in the discussion. Ten others were invited, but were unable to attend (Appendix A). Although the school district superintendents planned to participate, a conflicting meeting prevented them from attending.

Ursula Kthiri, representing Parkland Health Center, welcomed participants at the beginning of the meeting. Those who were observing on behalf of PHC were also introduced (Appendix A).

During the group, the moderator reminded the community leaders why they were invited - that their input is needed to help each hospital move forward in this next phase of the needs assessment process. The hospitals view 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 were identified in the 2013 PHC CHNA and implementation plan.

- Chronic conditions: heart disease
 - The implementation plan addressed issues of smoking and obesity.
- Chronic conditions: diabetes
- Access to care: coverage
- Access to care: transportation
- Health Literacy

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:

- Mental health
- Reproductive health

- Substance abuse
- Seniors
- Cancer

KEY FINDINGS

FEEDBACK ON THE NEEDS BEING ADDRESSED:

Although stakeholders did not dismiss the importance of those needs PHC chose to address in the first implementation plan, several felt that the issue of **mental health services** has become more pressing in the last several years. There are fewer resources available, with the closing of the emergency room at the Farmington psychiatric facility and a limited number of inpatient beds.

- EMS continues to spend more time transporting patients out of the area to access mental health beds, leaving emergency vehicles unavailable to local residents who may be in need.
- There is a specific need for mental health beds for adolescents, as well as adolescent mental health services in general.

There has also been a rise in **prescription drug abuse** (codeine, morphine, oxycodone, hydrocodone) which has led to more heroin use and associated deaths. Opioid dependency is among the most difficult to address. Although there continues to be issues with methamphetamine use, as well as marijuana and alcohol, the issue opioid addiction is seen as a greater threat to the community. Many of those with this type of abuse/addiction are dealing with mental health issues at the same time.

There are three areas of focus for the Department of Health:

- risk factors for chronic diseases such as nutrition, smoking and physical activity
- emergency preparedness
- maternal and child health

Several discussed how addressing risk factors is more economical than waiting until an issue becomes more severe or debilitating, and needs more intensive resources. Stakeholders also acknowledged that access to services takes many forms. They recognized the importance of breaking it down into **access to insurance coverage** separately from **access to transportation**.

- Access to transportation continues to be a major obstacle to receiving health care services, especially for the elderly.
- A lack of sidewalks in this community prevents those living on major highways or busy roads from safely walking to health services, even if they are able.

- Although there are some public services available for medical transportation, they are limited in terms of the hours available. If your medical appointment is late in the day, you might be able to get there but would not have transportation home.
- A distinction should also be made between access to emergency transportation and non-emergency transportation. A person may need an ambulance to transport them to the emergency department, but it may not be medically necessary for the ride home. However, there are few options available for the return journey. Non-emergency transportation could also be further defined as healthcare and non-healthcare related.
 - Transportation not related to healthcare could include transport to the grocery store or farmer's market to buy nutritious food.
- The SMTS (Southeast Missouri Transportation Service) has restrictions on who can access it. One must be able to independently walk to the vehicle. If you need assistance with walking, or have a wheelchair with which you need assistance, you would be unable to access this form of transportation.
- Changes in the payment system for Medicaid and Medicare nursing home patients have impacted their ability to access transportation to health services. Nursing homes are no longer reimbursed for transportation, and yet it is still their responsibility to get their patients to their appointments. They will often call an ambulance to transport the patient, but the ambulance district may not get paid for that trip. As a result, they write off millions of dollars of expenses each year.

NEEDS THAT SHOULD COME OFF OF THE LIST:

Nothing was identified to come off the list. A few areas were noted as seeing improvements.

Although still an area of concern, there has been a major impact on **smoking** since the last needs assessment due to changes in smoking policies. The creation of tobacco-free zones within the schools as well as at the community college has had a major impact on reducing smoking in public areas, as well as exposure to second-hand smoke.

- There is also discussion of establishing smoke-free environments within the City of Farmington. A local vote on the issue is scheduled for November 2015.
- Discussions are taking place statewide on raising the tobacco tax.

In the last needs assessment, there was discussion about **teen pregnancy rates**.

Although the high school graduation rates for young women who become pregnant are laudably high, the rate of teen pregnancy itself continues to be a concern.

- Related to this is the issue of low birth weights and high infant mortality rates in this community.

CHANGES SINCE THE 2012/2013 CHNA:

Since the last study was conducted, the Department of Mental Health (DMH) has instituted a program to identify Medicaid patients who are high users of health services and who also have **mental health and substance abuse** histories. When one of these individuals uses a hospital, they are flagged so that the DMH can contact them and link them to some of the primary care services that may keep them out of the hospital. They are also offered the opportunity to receive mental health and substance abuse treatment. They are finding that putting more money into outreach saves the state money on the back end.

Obtaining **accurate data** to document the volume of certain disease conditions has been impacted by a recent software upgrade by the ambulance district. All reports are now filed electronically with the state of Missouri. However, the state is on a lower version of this software. As a result, the reports filed by the local EMS are not being coded correctly by the state, resulting in an inaccurate picture of the types of cases that are being transported. Psychiatric patients end up being coded as cancer patients, resulting in an unrealistic portrayal of who is being transported for care.

The EMS team is also working with BJC to develop a mobile unit similar to the one at Christian Hospital to identify those individuals who are **frequent users of the emergency room** and the 911 system. These high acuity patients are being enrolled in a 90-day program, which includes home visits and an environmental assessment to determine what they need to keep them out of the emergency room.

Since the last CHNA, community stakeholders feel that there have been **improvements in public awareness** of issues such as smoking, and chronic conditions such as heart disease and diabetes. Signage is clearly visible to identify that certain places, like the community college and school properties, are smoke-free zones.

- The message about smoking has also changed from “smoking is bad for your health” to “we have resources to help you quit.”

Signage relating to certain areas being “gun-free zones” was also recognized as new in the community. **Gun violence** was not perceived as being any worse here than in any other community, although the number of shootings was noted to having increased from 25 to 75 in the last year. Whether or not the shootings could be identified as intentional or accidental could not be determined.

The implementation of a **national health insurance** program is a major change from three years ago. Some people feel that there is still a lot of confusion about how to choose and sign up for a health plan.

- Not everyone is aware that there are navigators and certified insurance counsellors available and how to access them.

- People are also unaware that certain preventive services are now free under all insurance plans due to “Obamacare.” They are not taking advantage of these opportunities to which they are entitled.
- Understanding what is covered in an insurance plan and what is not, and how the co-insurance and deductibles work is confusing for many people, whether or not they have purchased insurance on the exchange.

Also new since the last CHNA is the hospital’s need to gain further control over **reducing readmissions** within 30 days of discharge. This has created greater motivation for hospitals to improve care coordination and offer alternative services, like the mobile integrated health program they are developing with the ambulance district. A few of the local hospice programs (Serenity was mentioned by name) are now offering **free outreach services** to those with chronic conditions who may benefit from a home visit by a medical professional. Although it has not been well promoted, this service is available to the general public and not just hospice patients.

Seven or eight years ago, St. Francois County had among the worst figures for **child abuse and neglect** (ranking 108 out of 114 counties in Missouri). Since that time, St. Francois’ ranking has improved to 76 through long-term dedication to address this issue via raising public awareness.

GAPS BETWEEN DEFINED NEEDS AND OUR ABILITY TO ADDRESS THEM:

The need for more inpatient mental health beds was reiterated.

Addressing the issue of behavioral/mental health needs may take a smaller group of the right organizations, such as BJC and the Mental Health board, meeting on a regular basis to talk about possible solutions and how they can work together to develop and implement them.

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE:

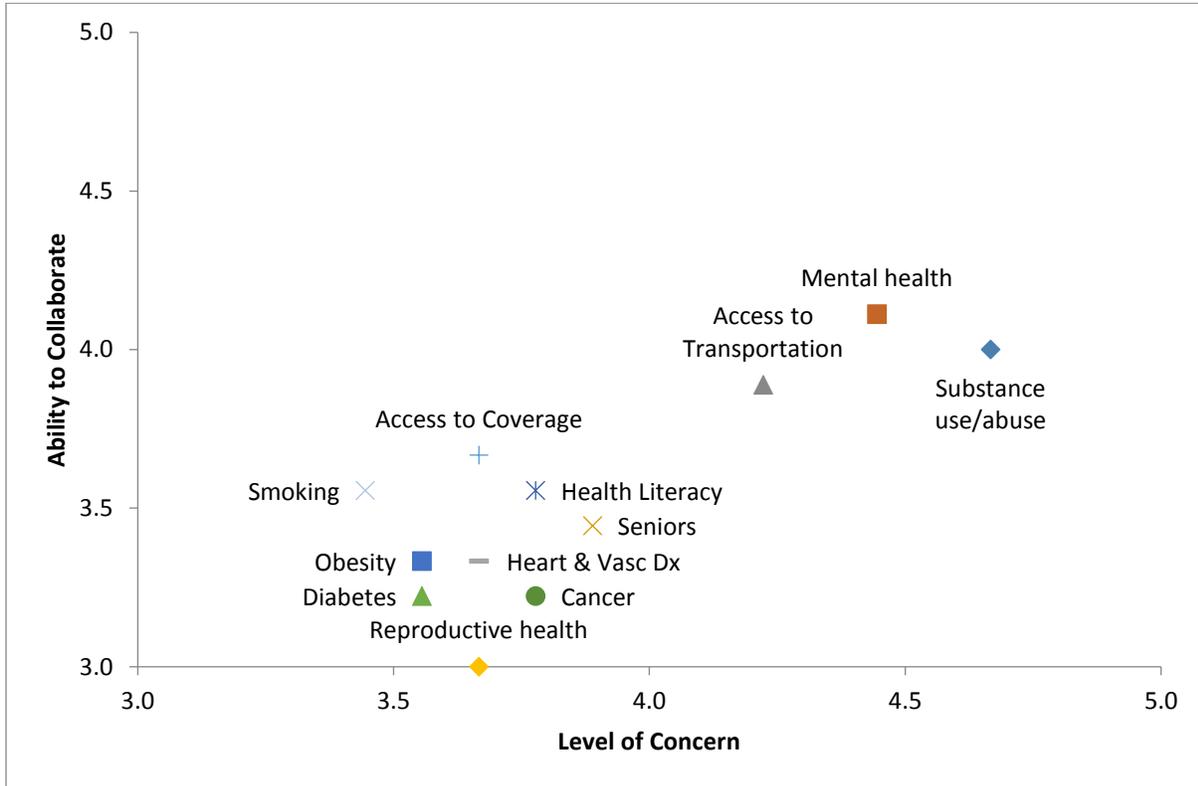
The ambulance district indicated that they have an electronic sign that could be used to rotate health messages to positively impact awareness. Knowing what health messages are important to communicate may depend on the community’s current level of comprehension.

Other organizations with whom we should consider involving include the libraries, faith-based organizations, the Life Center (works with disabled individuals), SMTS as well as the Sainte Genevieve Ambulance District.

RATING OF NEEDS

Participants were given the list of the needs identified in the 2012/2013 assessment and asked 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 around them.

Substance abuse, mental health and access to transportation rated highest in terms of level of concern and ability to collaborate.



	Level of Concern	Ability to Collaborate
Substance use/abuse	4.7	4.0
Mental health	4.4	4.1
Access to Transportation	4.2	3.9
Seniors	3.9	3.4
Health Literacy	3.8	3.6
Cancer	3.8	3.2
Access to Coverage	3.7	3.7
Heart & Vasc Dx	3.7	3.3
Reproductive health	3.7	3.0
Obesity	3.6	3.3
Diabetes	3.6	3.2
Smoking	3.4	3.6

NEXT STEPS

Based on the input the hospital received from community stakeholders, PHC will examine secondary data for St. Francois 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.

IMPLEMENTATION PLAN

A. Community Health Needs to Address

I. **Diabetes**

Diabetes Self-Management Program

Rationale:

Diabetes affects an estimated 29.1 million people in the United States and is the 7th leading cause of death. About 28 percent of Americans with diabetes are undiagnosed, and another 86 million American adults have blood glucose levels that greatly increase their risk of developing type 2 diabetes in the next several years. Diabetes complications tend to be more common and more severe among people whose diabetes is poorly controlled, which makes diabetes an immense and complex public health challenge. Preventive care practices are essential to better health outcomes for people with diabetes. Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals. Additionally influencing various behavioral risk factors, such as specific dietary choices and physical activities can reduce the risk of type 2 diabetes or its complications. Therefore, Parkland Health Center is offering bi-monthly diabetes classes to individuals who are diagnosed with pre-diabetes and diabetes in St. Francois County.

Program Goal:

Reduce the disease burden of diabetes mellitus (DM) and improve the quality of life for all persons who have, or are at risk for DM.

Program Objectives:

- a) Baseline measure of number of total individuals living in St. Francois County who are diagnosed with diabetes who receive formal diabetes education through Parkland diabetes education classes by the end of 2017.
- b) Increase the proportion of individuals living in St. Francois County with diagnosed diabetes who receive formal diabetes education by 10% from the baseline from 2018 and thereafter.
- c) Increase the knowledge level of lifestyle change through diet and physical activity of individuals at high risk for diabetes with pre-diabetes living in St. Francois County by 10% at the end of the educational session.

Program Action plan:

Parkland Health Center registered dieticians will held diabetes education class twice a month on Wednesdays. The class will involve individuals living in St. Francois County community

Knowledge level pretest is administered to individuals who registered for the first time to determine their knowledge level of lifestyle change through diet and physical activities.

The registered dieticians will focus the first education class on educating individuals on different type of diabetes, its risks factors, diagnostic criteria, calories intake and a diabetic diet.

The second class of the month focus on label reading, meal planning, diabetes medication, complication prevention, exercise and stress.

The registered dieticians will administer the posttest at the end of the session.

Expected Outcomes:

- a) Increase participation in diabetes education by individuals diagnosed by pre-diabetes and diabetes in St. Francois County.
- b) Improve knowledge of healthy lifestyle change among individuals with pre-diabetes and diabetes through diabetes education classes.

Outcomes Measurement:

Number of participants in the class will be tracked by the register dieticians and document as a baseline for 2017. After the baseline is obtained RD will try to increase the number of participants by 10 percent each year after 2017.

Registered dieticians will administer pre-posttest to participants at the beginning of their first attendance and a post at the end of the class or section.

Attendance will be tracked on a spread sheet with patient's information excluding any personal identifiers.

The results of the pre-posttest will also be documented on an excel sheet and analyze to determine if patients' knowledge level of healthy lifestyle change including diet and physical activities improve.

II. Obesity

Rationale: Obesity now affects 17% of all children and adolescents in the United States - triple the rate from just one generation ago. Childhood obesity can have a harmful effect on the body and lead to a variety of adult-onset diseases in childhood such as high blood pressure, high cholesterol, diabetes, breathing problems, socio-emotional difficulties and musculoskeletal problems. To address obesity in St. Francois County, Parkland Health Center partners with BJC School Outreach and Youth Development to implements two programs in St. Francois County school district.

a) Program: “Fun”tastic Nutrition

Program Description

BJC School Outreach and Youth Development currently provides “Fun”tastic Nutrition, a classroom-based program that teaches students in grades 2-8 the importance of healthy eating habits and a healthy lifestyle.

Program Goal:

To improve knowledge and emphasize the overall importance of healthy eating and good nutritional habits.

Program Objective

To improve overall knowledge of healthy eating and nutritional habits of students by 10 percent from pre- to post-test assessment.

Action Plan

“Fun”tastic Nutrition consists of six, one-hour sessions taught by a registered dietitian and includes the following topics:

- Importance of healthy eating and MyPlate
- Exercise and heart health
- Label reading
- Healthy snacks
- The digestive system
- Calcium and bone health

After the program is delivered, a final program report is given to teachers, administrators, and staff to help foster future classroom-based education.

Expected Outcomes

The intended outcome of this program is to increase knowledge of healthy eating and good nutritional habits by 10 percent.

Outcome Measurements:

To measure the overall increase in knowledge, a pre- and post-test is administered to all students enrolled in the program. Questions on the assessments not only measure knowledge, but student attitude, perception, and intention to change specific health behaviors.

b) Program: SNEAKERS

Program Description:

BJC School Outreach and Youth Development currently provides SNEAKERS, a classroom-based program that teaches students in grades 3-6 the importance of cardiovascular health and understanding fitness principles.

Program Goal:

To improve knowledge and emphasize the importance of the relationship between how the body systems work and relate to physical activity.

Program Objective:

Improve overall knowledge of cardiovascular health and fitness principles of students by 10 percent from pre- to post-test assessment.

Action Plan:

SNEAKERS consists of four, one-hour sessions taught by a registered dietitian and includes the following topics:

- Systems of the body
- Ways to keep the heart healthy
- Eating to maximize energy and muscle development
- How to exercise and stretch the major muscle groups
- Setting exercise goals

After the program is delivered, a final program report is given to teachers, administrators and staff to help foster future classroom-based education.

Expected Outcomes:

The intended outcome of this program is to increase knowledge of cardiovascular health and fitness principles by 10 percent.

Outcome Measurements:

To measure the overall increase in knowledge, a pre- and post-test is administered to all students enrolled in the program. Questions on the assessments not only measure knowledge, but student attitude, perception, and intention to change specific health behaviors.

B. COMMUNITY HEALTH NEEDS THAT WILL NOT BE ADDRESSED

While there are many and varied health needs within St. Francois County, Parkland Health Center has carefully chosen priorities that reflect needs that can be affected through the hospital's efforts.

Many of the needs identified through the CHNA fall outside the hospital's area of expertise, and/or outside the hospital's resources.

The following section discusses the health needs that were identified through this CHNA that Parkland Health Center will not address within the scope of this assessment.

Behavioral/Mental Health

Due to limited resources and the significant need, Parkland Health Center is partnering with others to help identify strategies to impact the mental health needs within the community. The hospital does have a geriatric psychiatry department, but does not provide inpatient or outpatient services for other patients in need of psychiatric care. BJC Behavioral Health, also a part of BJC HealthCare, works closely with Parkland Health Center to bring education and awareness to the community at large while providing care for those in need. Parkland Health Center will continue to provide services to these patients, but a properly funded statewide and community-wide solution is necessary to more effectively address this complex issue. With the presence of several community organizations who have expressed similar concerns regarding the mental health needs in the county, the Parkland Health Center team concluded that it will serve as a catalyst for the creation of a coalition. This group will explore options for more robust mental health services in St. Francois County.

Reproductive Health

Teen pregnancy, pre-term birth and low birth weights are significant issues within St. Francois County. Parkland Health Center will continue its support and collaboration with the March of Dimes and the Parkland Pregnancy Resource Center. Both of these organizations are working diligently within the county on these issues.

Substance Abuse

Parkland Health Center does provide a drug and alcohol inpatient treatment program called New Vision. In addition, Parkland Health Center supports local programs that are administered by other agencies and aimed at educating the public on the dangers of substance abuse.

Cancer (Breast, Colorectal, Lung)

The data indicates that St. Francois County has a higher rate of instances of certain types of cancer, but not all types of cancer. The hospital will continue its ongoing support of other organizations that are addressing cancer locally, regionally and nationally, including the American Cancer Society's Relay for Life.

Smoking

Parkland Health Center no longer has the appropriately certified smoking cessation coach and therefore, does not feel it has adequate resources to address this community health need. However, the Parkland Foundation continues to provide grant funds to BJC School Outreach to provide “The Power of Choice” curriculum to schools in St. Francois County. The hospital will continue its ongoing support of other organizations that are addressing this area, such as the St. Francois County Smoke Free Coalition.

Heart Health & Vascular Diseases

At this time Parkland Health Center is not directly focusing on heart and vascular disease.

Access: Services

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Parkland Health Center continues to recruit PCPs and APNs to St. Francois County in order to address the access to service issue.

Senior Health

Health issues as they relate to seniors are many and varied. Many of the issues identified in seniors can be addressed under the priorities identified by the hospital in this Community Health Needs Assessment. While a variety of programs are available for seniors through Parkland Health Center, only a small selection of them will be formally addressed in this implementation plan.

Health Literacy

Parkland Health Center will address this need in St. Francois County through health diseases education by medical providers through media, face-to-face conversations and health fair programs.

Access: Transportation

Parkland Health Center being part of a rural community, is often presented with transportation issues. Due to a lack of transportation, patients from extended home care are often left in the emergency room during late and early hospital visits. Therefore, PHC has a wheelchair-accessible van program that addresses this need.