



**Missouri Baptist**  
MEDICAL CENTER

**BJC** HealthCare

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# Community Health Needs Assessment

2013

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## I. Executive Summary

**Missouri Baptist Medical Center (MBMC)** is a 489-bed acute-care hospital at Highway 40 and I-270, in West St. Louis County. We are a community hospital serving both West and South St. Louis counties and offer a full continuum of medical and surgical services—specializing in heart, cancer, gastrointestinal, orthopedic, neurological, spine and women’s health services.

Missouri Baptist has been recognized as a ‘Top 100 U.S. Hospital’ for three consecutive years by Thomson Reuters (2009, 2010, 2011), received recognition as a Best Community Hospital with citations in seven specialties from U.S. News (2012-2014); has been ‘5-Star Rated for Treatment of Heart Attacks’ for nine consecutive years in Missouri by HealthGrades® and is cited as ‘One of America’s Safest Hospitals’ by Forbes.

**Reason for this report:** To continue to improve the health of the people and communities we serve, in 2012-2013 we conducted a Community Health Needs Assessment (CHNA). The primary audience for this report includes community health organization and social service agency leadership; public health professionals; health system managers and executives; elected officials and community members interested in the health status of their community.

**Methodology:** We began by studying a wealth of existing research about community health needs. As part of BJC Healthcare—one of America’s most respected hospital systems—we have access to sources of general information and data, including:

- Missouri Information for Community Assessment (MICA)
- Healthy Communities Institute (HCI)
- 2011 *St. Louis County Health Needs Assessment*
- *Health People 2020*

Next, we directly asked the people in our community *which health services were needed most in our community*. Collaborating with other BJC and other community hospitals that serve West and South St. Louis counties (Barnes-Jewish West County Hospital, St. Luke’s Hospital and St. Anthony’s Medical Center), we conducted two focus groups with 18 key community stakeholders. We also sought input from our Community Advisory Board, a sub-committee of the hospital’s Board of Directors whose members represent business, education, law, health and volunteerism.

Combined, these ‘voices of our community’ gave us a good foundation for understanding our community’s health needs and where we should focus. Areas of concern listed by the community focus groups are listed (priority order) in the table on page 5.

### **Assessing the results.**

Our next step was to dig deeper, analyze and prioritize what we learned. To achieve this, we created a steering committee representing emergency medicine, community dietetics, cancer care, nursing, mother-baby care, physical therapy, community health and Lean Six Sigma performance improvement experts at MBMC.

After assessing all of the data, our steering committee grouped health risks, diseases and needs into ten broad categories—their ‘Top 10 List.’

The table below compares priorities listed by our “Voices of our Community” group with priorities ranked by the MoBap steering committee of health professionals.

### Community Health Needs Comparison

‘Voices of our Community’ Priorities	Ranking	MoBap Steering Committee Priorities
Access to affordable care	1	Preventive health behaviors
Behavioral/Mental health issues	2	Chronic conditions
Preventive health behaviors	3	Health education
Social support and senior services	4	Heart disease
Chronic conditions	5	All cancers
Cultural competencies/health advocacy	6	Stroke/cerebrovascular disease
Maternal/newborn/pediatrics care	7	Maternal/newborn/pediatrics
	8	Social support and senior services
	9	Mental health
	10	Access to healthcare and preventive screenings

#### Conclusion:

Based on this primary and secondary research, the counsel of our advisory groups and our areas of medical expertise/resources, the following four needs will be the focus of our implementation plan.

1. **Management of Chronic Disease with focus on congestive heart failure**
2. **Cardiovascular and Health Risk Factor Management**
3. **Cancer – Early Detection and Risk Factor Education**
4. **Prevention of Seasonal Flu**

Like other communities across America, we face daunting healthcare challenges. We are actively using the results of our Community Health Needs Assessment to improve care for the people who call West and South St. Louis counties home.

#### What’s next?

The following pages detail what we learned and our implementation plan for ensuring the services we deliver in the community match what matters most to our community.

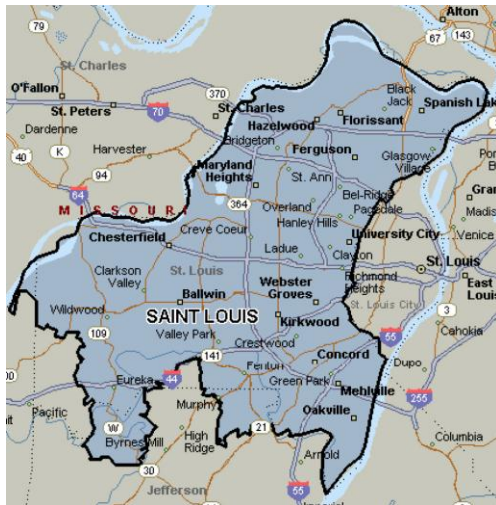
## II. Community Description

### *Description of Community Served by Missouri Baptist Medical Center*

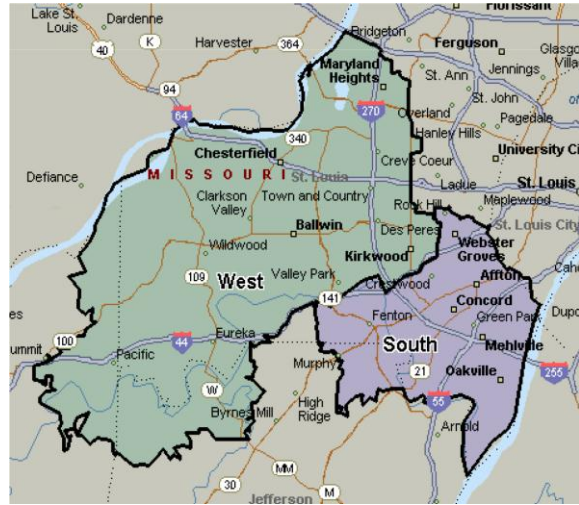
To better serve our primary areas of focus – West and South St. Louis Counties – we first have to study population and demographic data. This helps us understand community health issues and plan for future needs.

### Population Trends

With 998,954 (2012 population ) adults and children, St. Louis County is 16% of the State of Missouri’s total population. It is the most populous county in Missouri. Approximately 29% of the county’s population resides in West County.



St. Louis County



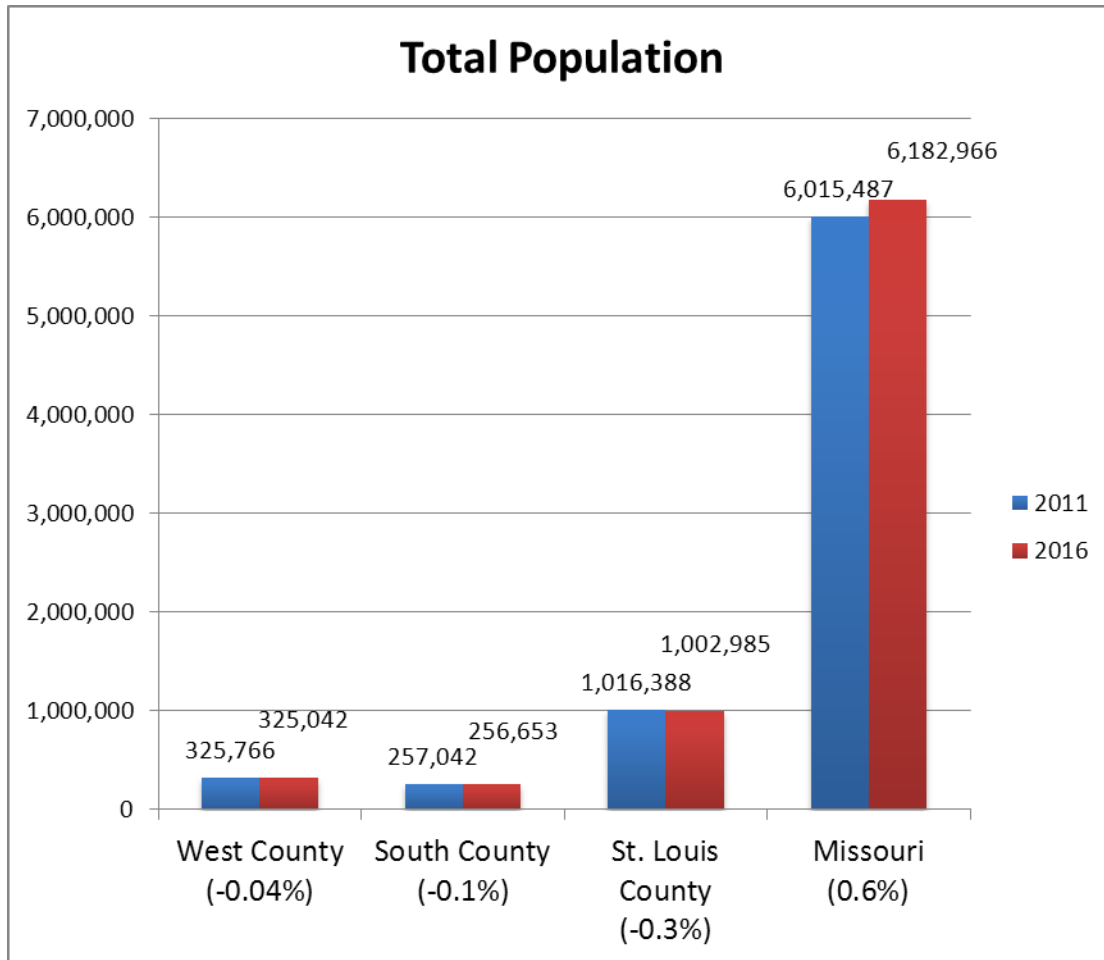
West and South St. Louis County

A community’s population growth affects the need and demand for health services and its ability to meet that demand. According to the *St. Louis County Health Needs Assessment* data, the population of St. Louis County appears relatively stable and is not expected to grow. Between 2000 and 2010, St. Louis County’s population declined 1.7%. (the first decline recorded in 130 years, according to *St. Louis County Health Needs Assessment*). This decline is in significant contrast to the growth of Missouri’s overall population during the same period: a full 7%.

The population of Missouri is expected to increase by 6.3% between 2000 and 2015. The Missouri Office of Administration (MOA) projects that the overall population of St. Louis County will continue to incrementally decline through 2030, decreasing by 3.1% from its 2012 population.

### West and South St. Louis County

In 2011, the total population of West St. Louis County was 325,766 and South St. Louis County was 257,633. Total population trends projected for 2016 indicate a 0.04% decline for West St. Louis County and a 0.01% decline for South St. Louis County.



Source: US Census

### Age Profile

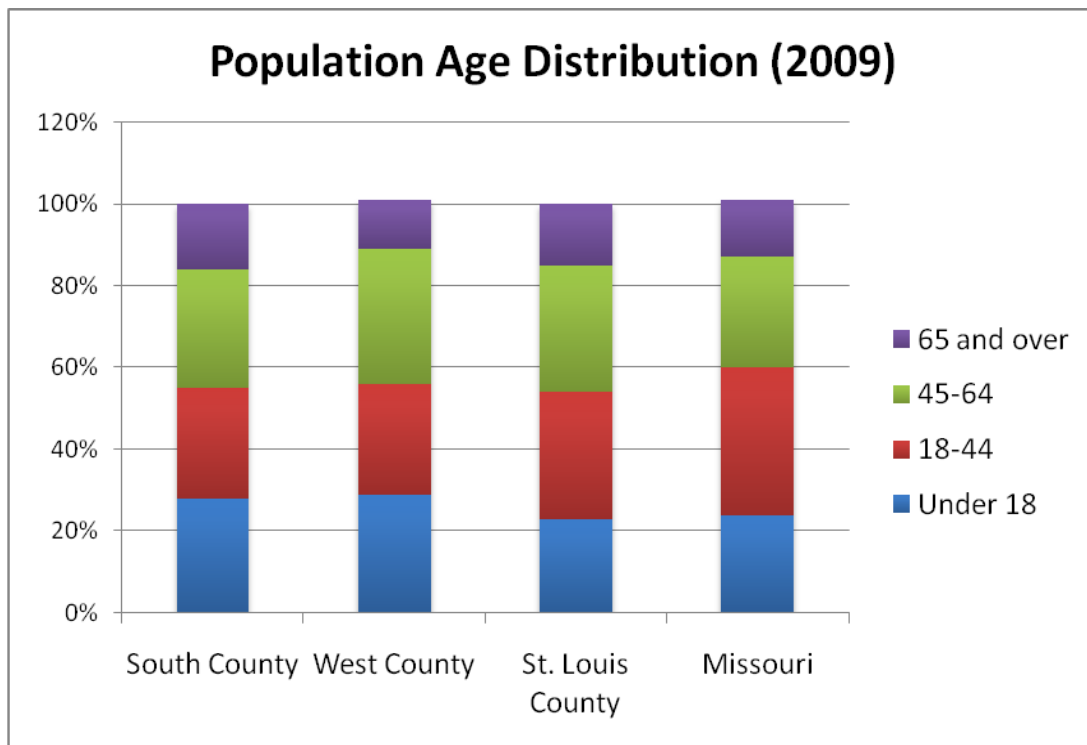
The age of a community's population is an important determinant of its health and in determining which health services are needed. The median age of St. Louis County's residents is 39 years, slightly older than Missouri's median age (37).

The percentage of youth under 18 in West St. Louis County (29%) and South County (28%) is slightly higher than in St. Louis County (23%) and the state average (24%). The MOA expects the county's youth population to decline by about 5.8%, while the Missouri youth population is expected to increase by about 5.9%.

The proportion of adults aged 18-44 in West and South St. Louis County is 27%, slightly less than the average for St. Louis County (31%) and state average (36%). MOA anticipates this segment of the population to decrease by approximately 3.6% in St. Louis County through 2030, while increasing statewide by about 7.8%.

The percentage of adults aged 45-64 within West St. Louis County (33%) and South St. Louis County (29%) is similar to St. Louis County (31%) and state average (27%). MOA projects that this population will decrease statewide by about 5.4% and countywide by 25% through 2030.

The proportion of adults aged 65 years and older in West St. Louis County (12%) and South St. Louis County (16%) varies slightly from St. Louis County (15%) and the state (14%).



Source: 2009 Census data

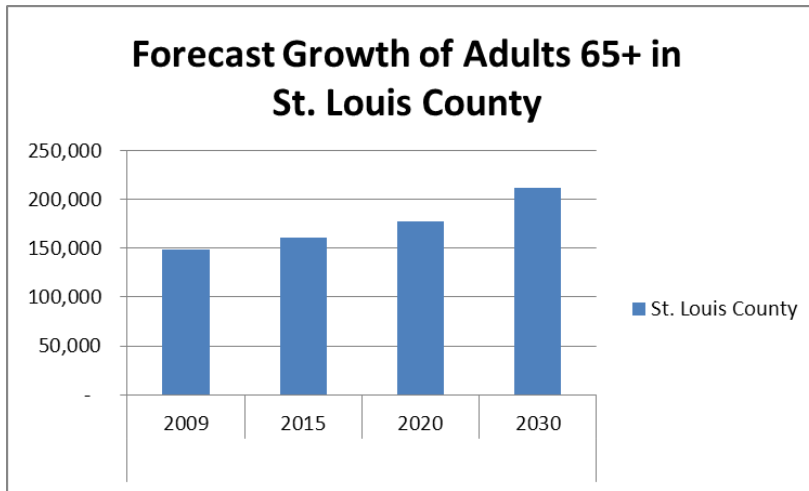
Looking at MOA projections for St. Louis County, those aged 65+ are anticipated to grow substantially during the coming two decades. The growth rate for the 65+ population is projected to increase 8% by 2015, 19% by 2020 and 42% by 2030. Statewide, this age demographic will grow by 13% by 2015; 30% by 2020; and 71% by 2030.

#### Anticipated 65+ Population Growth

	2015	2020	2030
St. Louis County	+8%	+19%	+42%
Missouri	+13%	+30%	+71%



As our 65+ population continues to grow, the implications on the demand for health services will be significant. This group is more likely to have chronic medical conditions and require more medical care.

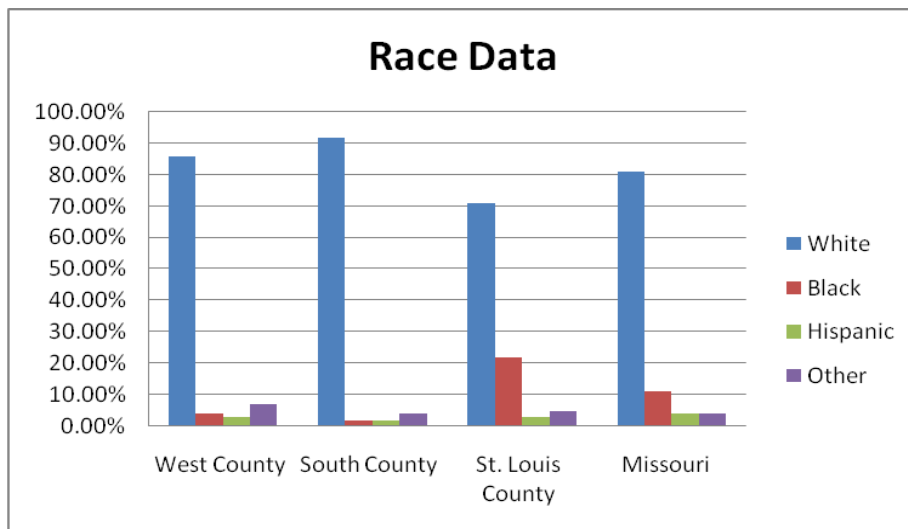


Source: Census Bureau

### Race and Ethnicity Profile

St. Louis County varies in racial and ethnic composition. For example, South St. Louis County has a much higher percentage of people who identify as white (92%) compared to North County (53%). Conversely, 45% of North County’s residents identify as black non-Hispanic compared to less than 6% of residents in South and West St. Louis County.

In 2011, race data for West St. Louis County reported 86% white; 5% black; 3% Hispanic and 7% other, while South St. Louis County reported 92% white; 2% black; 2% Hispanic; and 4% other. In addition, more than 70,000 (6.8%) Bosnians reside in St. Louis. The first wave arrived in South St. Louis City between 1992 and 1995. As South City property values increased, they migrated to South St. Louis County. This is the largest Bosnian population outside of Bosnia.



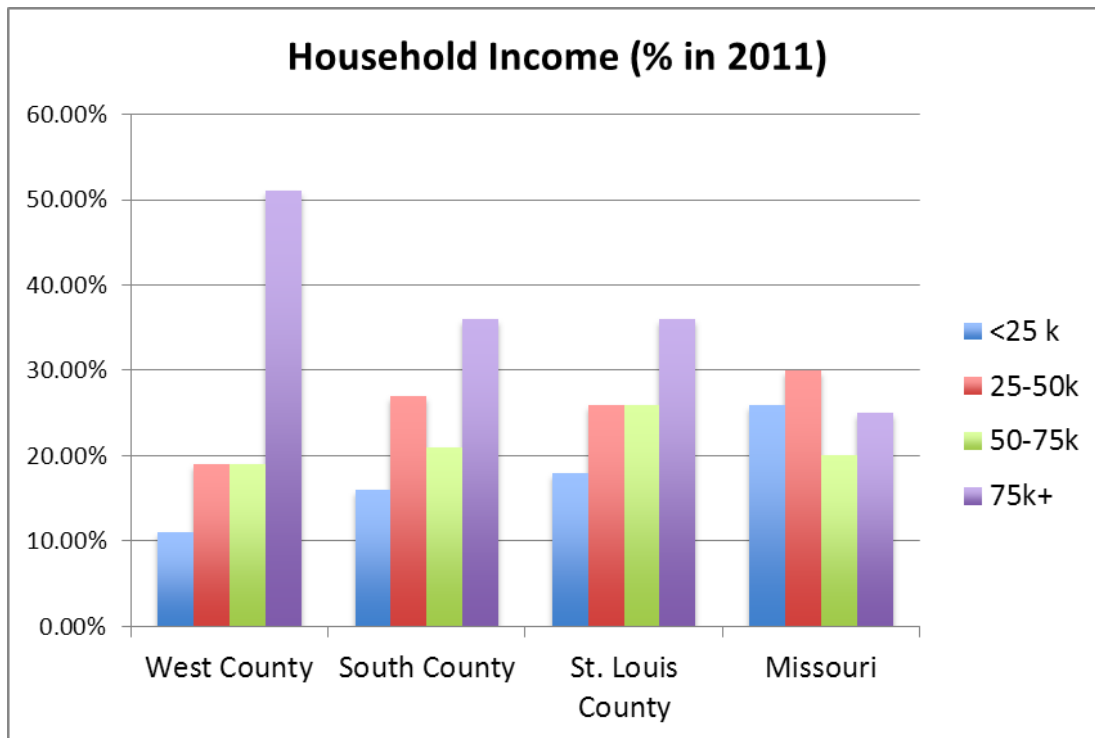
Source: Thompson Reuters

## Social and Economic Characteristics

Factors such as income, employment, education and insurance status overlap and influence the health status of a community. Education is an important indicator of future success, as those with at least a high school diploma are more likely to have better employment opportunities. Conversely, limited education and employment opportunities can adversely impact a community. Poverty and household income can affect whether a person has a healthy diet, healthy lifestyle and availability of medical care. Therefore, it is important to understand the impact that socioeconomic conditions have on the health and well-being of its residents.

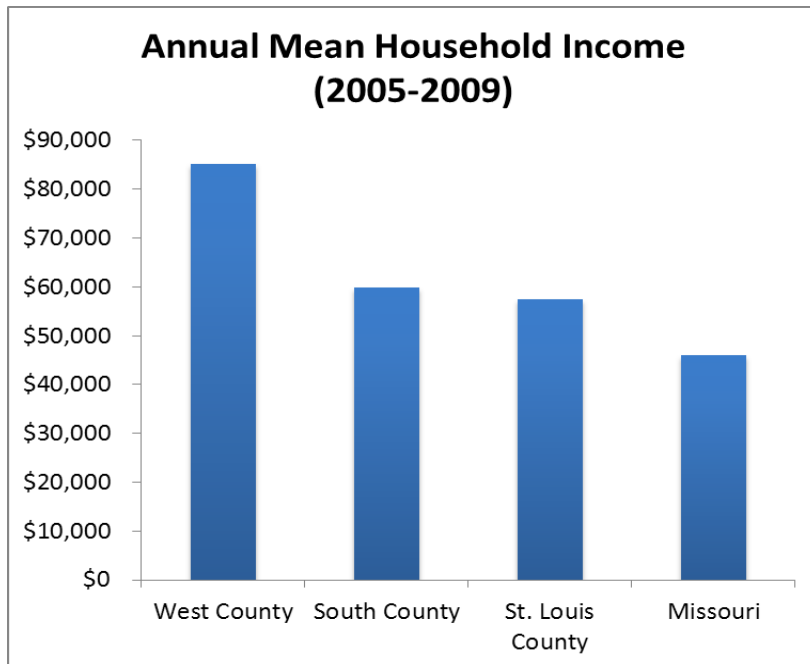
## Household Income Status

West and South St. Louis County are by far the most socio-economically prosperous regions of St. Louis County; their populations are less likely to be unemployed and more likely to have a high school education. According to health analytics information from Thompson Reuters, 5.2% of West St. Louis County households reported living in poverty in 2011 (household income less than \$15k), compared to 7% in South St. Louis County, 8.8% in St. Louis County, and 13.9% in Missouri.



Source: Thompson Reuters

- From 2005-2009, the annual mean household income for West St. Louis County totaled \$85,210 (St. Louis County Health Department Assessment). In 2011, this number increased to \$103,793.
- From 2005-2009, the annual mean household income for South St. Louis County totaled \$59,943. In 2011, income increases to \$72,934.



Source: US Census Bureau

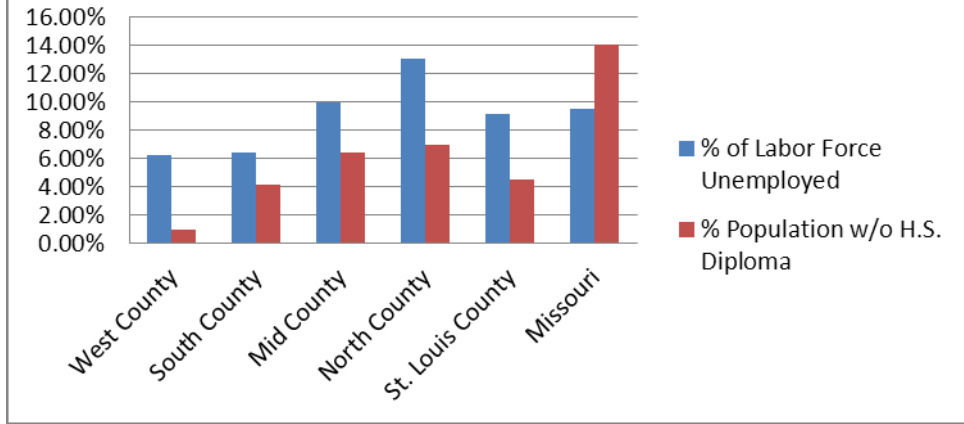
## Education

According to the 2009 census data, West and South St. Louis County vary in the number of residents aged 25+ who do not have a high school diploma.

- South St. Louis County: 10%
- West St. Louis County: 5.2%
- St. Louis County overall: 9.6%
- Statewide: 14%

The residents of West and South St. Louis County are less likely to be unemployed or to lack a high school education compared to the other counties and the state.

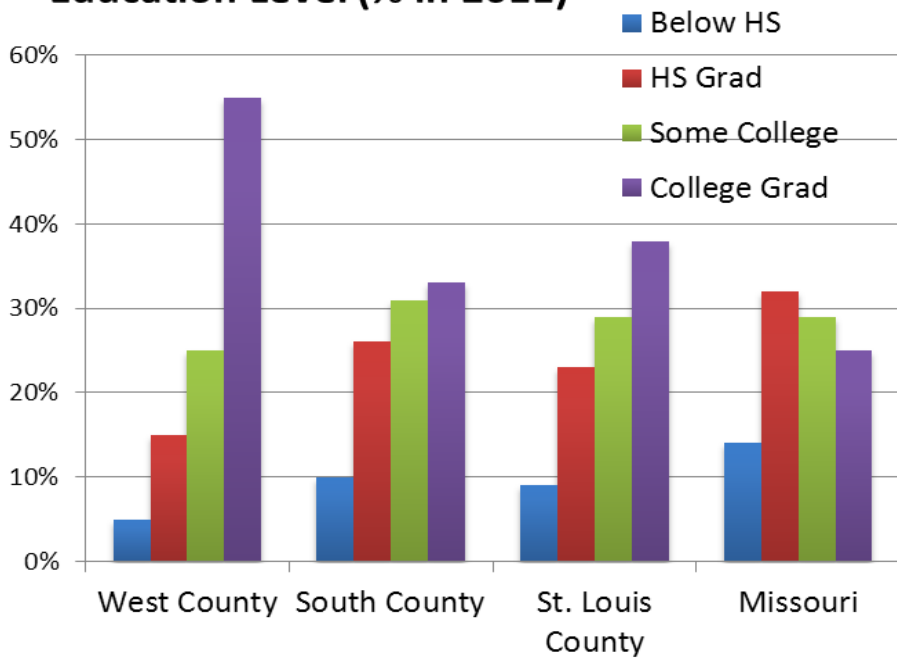
## Education and Unemployment St. Louis County



Source: Missouri Department of Economic Development 2009-2010

In 2011, data shows that West and South St. Louis County had higher levels of education when compared to countywide and statewide data. Only 5% of the population of West St. Louis County and 10% of South St. Louis County reported an education below high school diploma compared to 9% countywide and 14% statewide.

## Education Level (% in 2011)



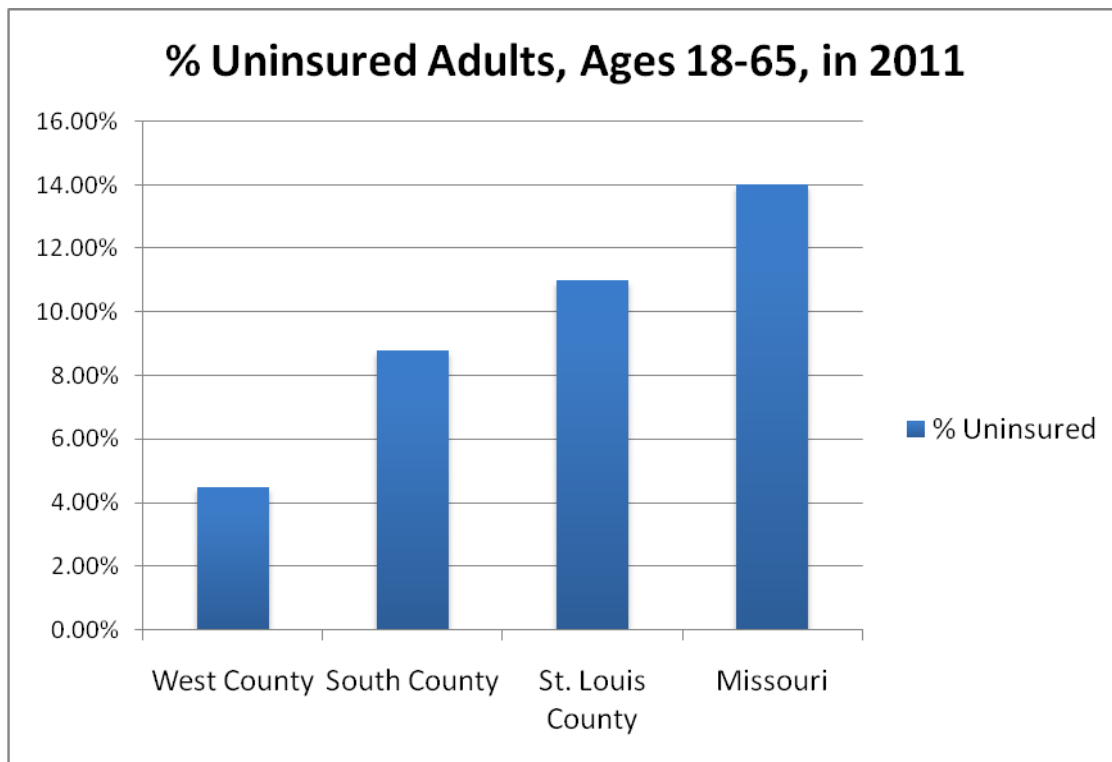
Source: Missouri Department of Economic Development 2009-2010

## Insurance Status

People without health insurance are a particularly vulnerable population in a community. They are at risk for inconsistent and inadequate care, have higher medical bills, lack access to preventive and diagnostic services and tend to be more severely ill when diagnosed. As such, the number of uninsured can contribute to the community's burden of disease and disability.

In St. Louis County, 11% adults aged 18-65 are currently uninsured, with highest rates in Mid County (17%) and North County (16%). West and South St. Louis County report lower rates of uninsured residents, with 4.5% and 8.8%, respectively. The St. Louis County rate compared favorably to the state rate of 15%. The primary reasons St. Louis County residents do not have insurance coverage include, but are not limited to:

- Unable to afford premiums
- Job loss
- Change of employer
- Employer does not offer
- Employer has discontinued offering coverage.

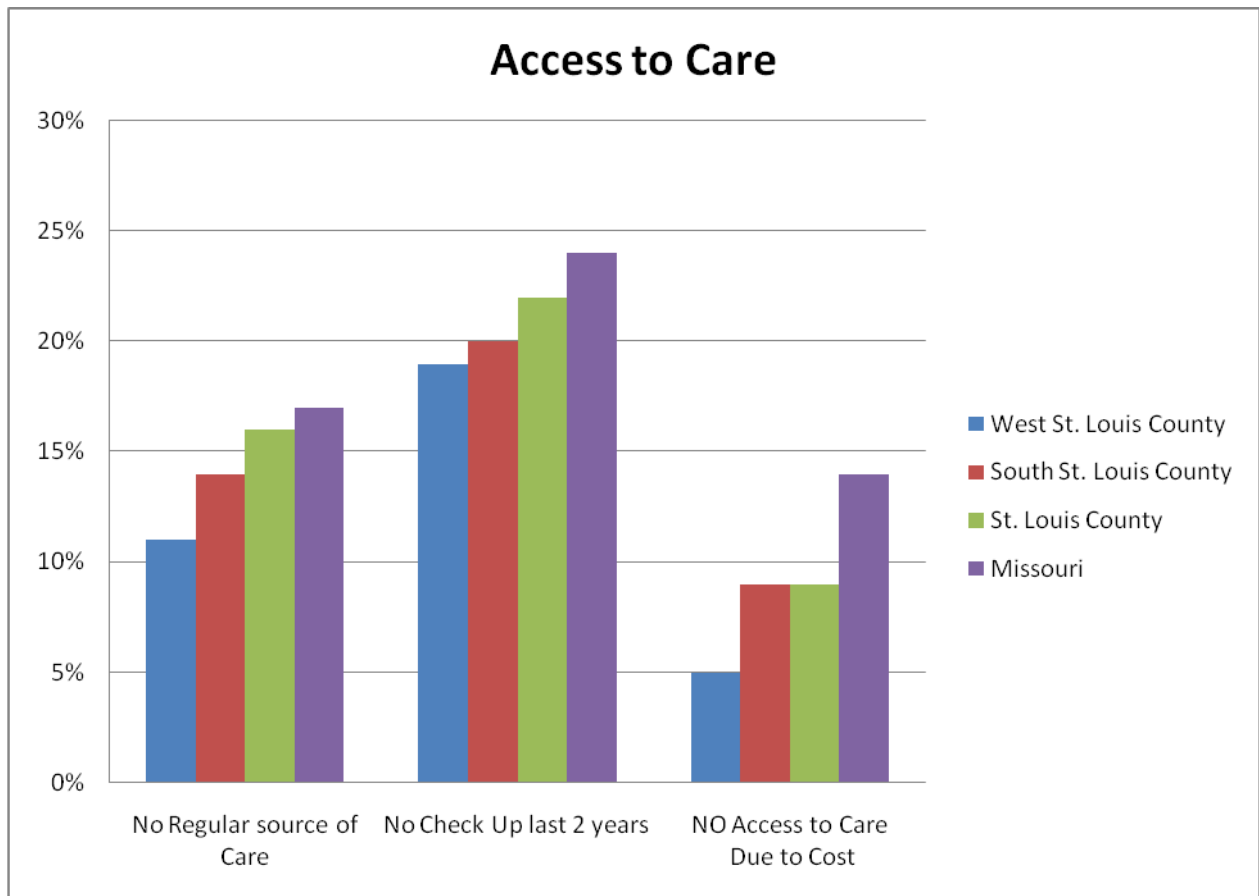


Source: St. Louis County Community Health Needs Assessment

## Access to Care

Adults in West and South St. Louis County are more likely to have a regular source of care than other adults in the county and the state. This community is served by five community hospitals and numerous healthcare providers. Availability of health providers is not a concern for those who have insurance, but access to healthcare is a concern for those who do not have insurance.

For those uninsured and underinsured living in West and South County, there are fewer federally funded health facilities than in other areas of St. Louis County. In West St. Louis County, one such clinic opened in 2012. St. Louis County Health Department has one clinic in South St. Louis County.



Source: St. Louis County Community Health Needs Assessment, HCI

## **III. Conducting the Needs Assessment**

### ***A. Organizational Structure***

BJC HealthCare has taken a leadership role in assisting Missouri Baptist Medical Center, Barnes-Jewish West St. Louis County Hospital, St. Luke's Hospital and St. Anthony's Medical Center in the Community Health Needs Assessment process. BJC HealthCare first procured secondary data sources, which were shared with all hospitals.

### **Key Stakeholder Focus Groups**

Next, BJC HealthCare staff worked with the four hospitals to collect primary data through two focus group sessions with 18 key community stakeholders representing:

- County government
- Department of Health
- Schools
- Churches
- Emergency services
- Clinics
- Health organizations such as the American Heart Association, American Cancer Society, National Council on Alcohol and Drug Abuse and Mid East Area on Aging (Appendix 1).

Working in partnership, all four hospitals contributed to the selection of community participants. These community representatives were first contacted by telephone and invited to become a member of the focus group. Each participant also received a letter, signed by all four hospital presidents, requesting their participation and describing the importance of the project.

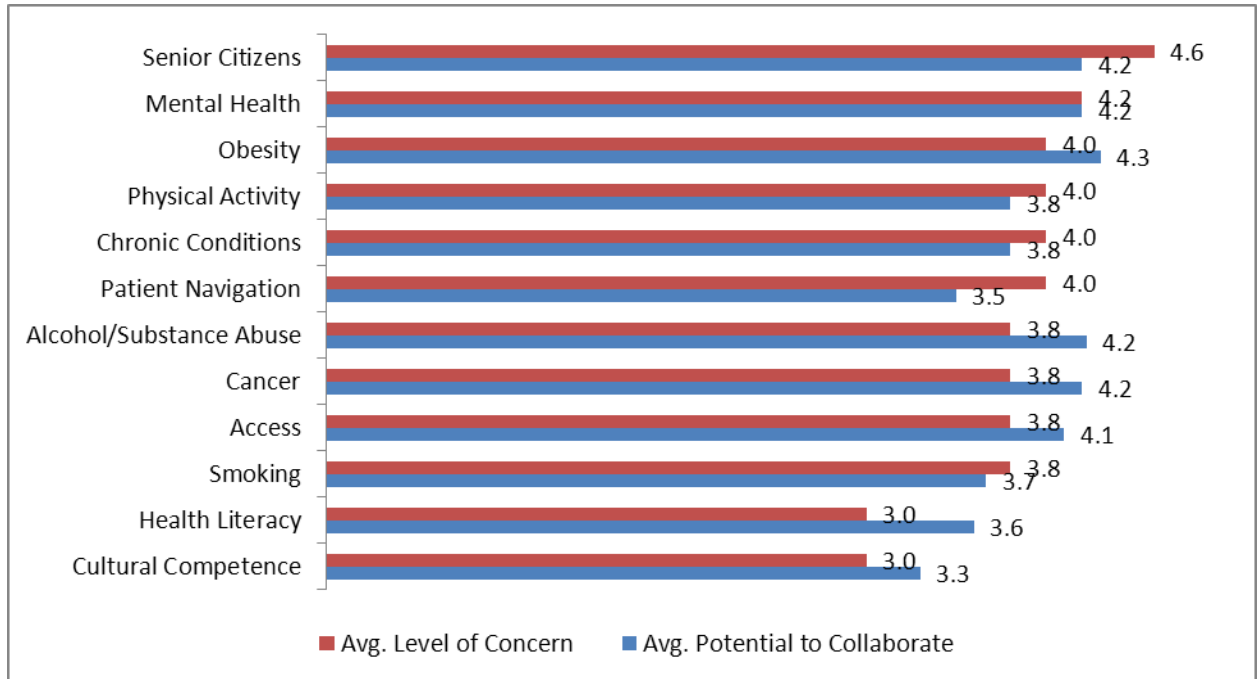
The first community stakeholder's focus group was conducted in June 2012 at Missouri Baptist Medical Center to solicit feedback on the health needs of the West and South St. Louis County population. Prior to the focus group, attendees were asked to complete a worksheet to identify their:

- 1) Perceptions of the greatest healthcare needs in St. Louis County
- 2) Knowledge of available resources to address these needs
- 3) The greatest gap that exists between need and available resources.

The second community stakeholder's focus group was held in July 2012 at St. Anthony's Medical Center. Here, we shared the results of the first focus group, as well as the findings from additional secondary data analyses. After reviewing the secondary data on the identified community health needs, key stakeholders were asked to re-evaluate each community health need based on two attributes:

- Level of community concern
- Potential to collaborate around the health issue

They then ranked each community health need on a scale of 1 (low) to 5 (high).



- An average score was calculated for each healthcare need. No issue had an average score less than 3.0.
- The healthcare needs of Senior Citizens, Mental Health and Obesity were rated the highest in terms of level of community concern and ability to collaborate; all had an average score greater than 4.0.
- Physical Activity, Chronic Conditions and Patient Navigation also scored high relative to community concern (average score  $\geq 4.0$ ), but their ability to collaborate was rated lower.
- Alcohol/Substance Abuse, Cancer and Access were considered high based on ability to collaborate, but were rated lower relative to their level of community concern.
- Smoking, Health Literacy and Cultural Competence were rated lower on both attributes of community concern and ability to collaborate.

### Missouri Baptist Community Advisory Board

In June 2012, Missouri Baptist also sought input on the following three questions from its Community Advisory Board, a sub-committee of the hospital’s Board of Directors whose members represent business, education, law, health and volunteerism (Appendix 2). Members were asked:

- 1) Their perceptions of the greatest healthcare needs in St. Louis County;
- 2) Knowledge of available resources to address these needs;
- 3) The greatest gap that exists between need and available resources.

The Missouri Baptist Community Advisory Board was also responsible for the final review of our Community Health Needs Assessment and approval of our plan to address those needs.



## Missouri Baptist Health Professional Steering Committee

A steering committee was assembled from key Missouri Baptist Medical Center staff to review and prioritize the data identified by the focus groups and the Community Advisory Board, as well as the secondary data sources. Steering committee members met over five months, representing emergency medicine, community dietetics, cancer, nursing, mother-baby, physical therapy, community health and Lean Six-Sigma performance improvement (Appendix 3).

The steering committee reviewed the following secondary data sources to help prioritize the health needs and conditions of West and South St. Louis County. The committee then compared the qualitative data identified by the focus group (Appendix 4) with the following secondary data sources:

- Missouri Information for Community Assessment (MICA)
- Healthy Communities Institute (HCI)
- 2011 *St. Louis County Health Needs Assessment*
- *Health People 2020*.

The steering committee also grouped the health risks, diseases and needs into ten broad categories. This enabled the committee to group similar diseases together (for example, acute versus chronic disease). Doing so made it easier to analyze and prioritize secondary and primary data for trends and comparisons. From this analysis, the committee identified the top ten health needs for West and South St. Louis County (Appendix 5).

The steering committee members then reviewed the top 10 health needs and prioritized them based on the following criteria:

- Availability of services
- Severity/impact of disease
- Prevalence.

For each of these categories, committee members identified and scored topics on a 1-5 scale. Total scores for each category determined its level of priority. Categories with scores above 75 were placed on a Decision Matrix (Appendix 6). Heart Disease, Health Risk Factors and Behaviors, Obesity, Chronic Conditions and Stroke scored the highest.

## ***B. Primary Data (Focus Group Results)***

The following needs were identified and described by the community stakeholder and the Community Advisory Board focus groups. These groups had access to secondary data to help prioritize community health needs. The descriptions are based on the qualitative statements given by focus group members.

### **Care of the Elderly**

- Due to the number of medications many elderly people are taking, there is a need for education on why they are taking such medications, potential side effects and how to take them properly.
- Being safe in their homes is a major concern, especially with regard to fall prevention.
- There is a need for social supports to help maintain the elderly in their homes, especially among the “frail” elderly. This includes when seniors are discharged from the hospital to home, and having the support to help make that transition. A directory of services would be helpful.
- Cost of eldercare is also a concern, including rehabilitation, cost of 24-hour care, access to financial resources, and hiring advocates for parents.
- Individuals who suffer from Alzheimer’s and dementia may be difficult to initially diagnose, and families and medical personnel may wait too long before seeking treatment.
- Understanding when a “Do Not Resuscitate” order may be appropriate requires education among the senior population, as well as their families and caregivers.

### **Behavioral/Mental Health Issues**

- There is a need for increased awareness and education around mental health conditions, as well as advocacy and support.
- Insurance often does not provide coverage for mental health.
- There continues to be a stigma around mental health that often prevents it from being openly addressed within the community.
- Outpatient mental health for adults (counseling and psychiatric services) is in short supply.
- Children discharged from the hospital often have a need for adolescent day care services that are not currently available.
- Pediatric concerns include children with behavioral problems on medications with Individualized Educational Plans (IEP), autism and related conditions.
- Mental health issues are often exacerbated by the presence of chronic conditions.
- There is concern about illicit drugs, including heroin, as well as prescription drugs.
- The use/abuse of alcohol is a growing concern, especially among women age 65 and older.
- Taking multiple medications at the same time, as well as mixing prescription medications with alcohol is an area of concern, including the lack of awareness around their interactions.
- Similar to mental health issues, there is a stigma around substance abuse that prevents it from being addressed.

### **Overweight/Obesity/Nutrition/Physical Activity**

- Being overweight is a major contributor to other chronic diseases, including diabetes and heart disease.
- The lack of access to healthy, fresh foods contributes (food deserts) to this situation, as well as too many fast food options (food swamps).
- There continues to be a need for education and establishing social norms around the consumption of healthy food.

- There is a need for education to encourage physical activity as a part of a healthy lifestyle as well as encouraging preventive care.

## **Heart Disease, including Stroke and Hypertension, and Chronic Conditions**

- Heart disease is the number one cause of death.
- Stroke is a significant cause of disability.
- Diabetes puts individuals at higher risk for heart disease and other health-related conditions.
- Asthma, COPD
- Congestive Heart Failure
- Individuals with one or more chronic disease have a higher readmission rate.

## **Access to Affordable Healthcare**

- The demographics of South and West counties are changing due to cutbacks and the loss of major companies, such as Chrysler. Many individuals lost their insurance when they lost their job.
- There continues to be a need for assistance and support among this subpopulation, including access to MO Healthnet facilities (locations, hours of operation, additional service providers).
- Those with limited or no health insurance are using the Emergency Department for primary care.
- Transportation issues contribute to the inappropriate use of ambulances, as well as individuals using the ER for primary care.
- These individuals also have limited access to specialty care.
- Volunteer healthcare providers are needed at facilities that serve those with no insurance.
- There are many fewer facilities in South and West St. Louis County where those with limited insurance can access care, compared to St. Louis City.
- The lack of public transportation and the limited availability of “ride services” in west and south St. Louis counties create obstacles for some individuals to access healthcare.
  - The process of scheduling “ride services” also create challenges, such as having to schedule five days in advance, or long wait times either before or after service delivery.
- There is a lack of affordable dental care.
- The cost of co-pays and deductibles often creates obstacles that prevent individuals from seeking health services.
- The cost of medications can often be a barrier for those who need them.
- The Affordable Care Act does not provide insurance for medical devices (hearing aids, dentures, glasses).

## **Health Literacy/Education**

- Obstacles exist in accessing health services that often require the assistance of someone to help navigate the system.
  - These include language barriers of several types, including the inability to understand English, as well as difficulty understanding medical terminology and insurance coverage.
- Low levels of health literacy – the ability to process information about medical diagnosis and treatment, and ask pertinent questions – also creates challenges to receiving quality healthcare
- There is a need for making information about good health practices more accessible.
- There is a lack of information about how patients should care for themselves after being discharged from the hospital, as evidenced by the great number of hospital readmissions. Because patients are discharged so quickly, more information and resources are needed.

## **Cultural Competence – South St. Louis County residents**

- Cultural barriers may affect St. Louis County residents' access to healthcare services. These barriers exist for those who are native to our country, as well as those who are foreign-born.
- Cultural competence was described as “being sensitive and understanding the context within which the person is operating: their belief system, their family context, their religious context and their health behaviors...understanding that, being sensitive to it, and being linguistically appropriate when beginning to address those issues, and having an attitude of acceptance of that individual.”
- The Bosnian population in South St. Louis County was specifically identified as one whose healthcare needs should be considered in the context of cultural competence. Several examples were given of how awareness of their cultural values will influence the way in which their healthcare needs must be approached.
- Because cigarettes are more expensive in their homeland, smoking is viewed as an indicator of higher social status and not as a negative health risk.
- Their lack of familiarity with the English language creates barriers to communication with EMS professionals when trying to address a medical issue.

## ***C. Secondary Data***

Data sources used to identify community health needs included:

- Missouri Information for Community Assessment (MICA)
- Healthy Communities Institute (HCI)
- 2011 *St. Louis County Health Needs Assessment*
- *Health People 2020* (HP2020)

When reviewing the data from the four secondary data sources, the steering committee found similar health concerns in the top 10 for each source. It should be noted that because the *St. Louis County Health Needs Assessment* targeted both West and South St. Louis County, trends and comparisons, were for the most part, taken from this secondary data source. HCI also was used as a comparison data source and *Health People 2020* was used as a benchmark.

In some instances, West St. Louis County and South St. Louis County reported lower percentages when compared to St. Louis County and the state, while falling below the *Health People 2020* goal.

## **Behavioral and Health Risk Factors**

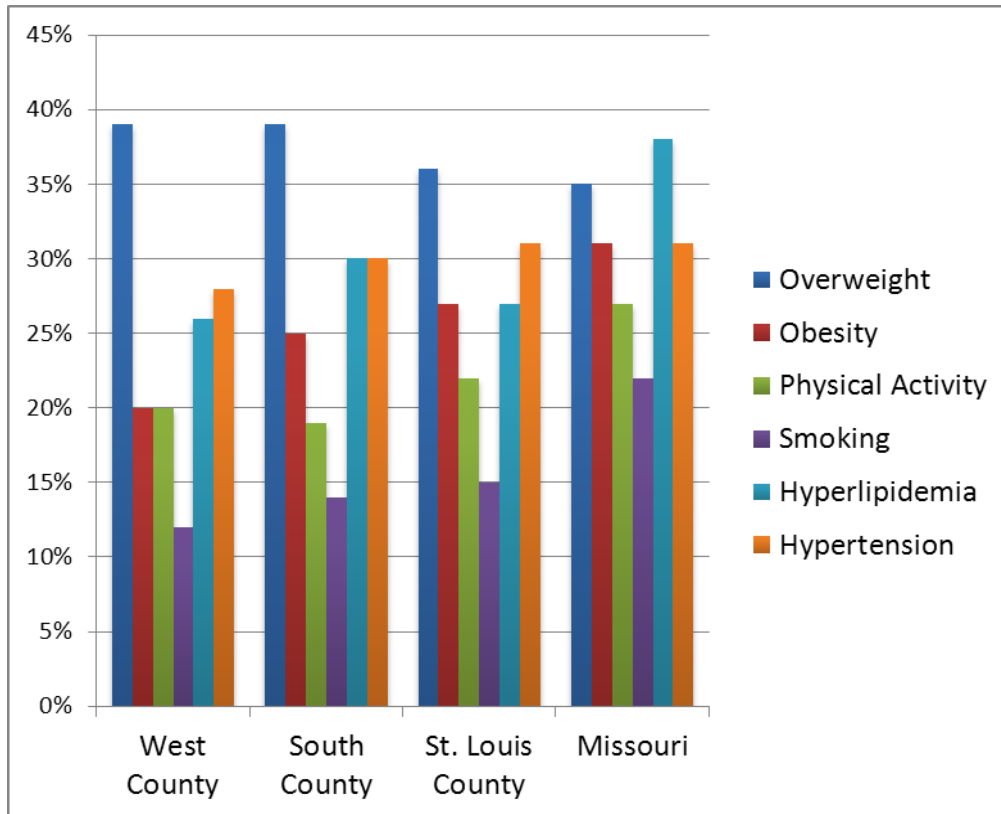
Smoking, obesity, sedentary lifestyle are behavioral risk factors while hypertension and hyperlipidemia are major medical risk factors for several chronic diseases including cardiovascular disease, stroke, lung disease, diabetes and cancer.

Risk factors often occur in clusters and can build on one another, such as obesity which can lead to diabetes and high blood pressure. When grouped together, certain risk factors may put people at an even greater risk for some chronic diseases. Because we continue to see an increase in the prevalence of chronic disease, especially Type-2 diabetes, there may be a ‘disconnect’ between patients and providers in being able to effectively manage their behavioral risk factors.

Given the fact that our population is aging and the prevalence of chronic disease is increasing, attention to lifestyle change and medical and behavioral risk factor management will prevail as an important health initiative.

Through community screening/education programs and improved access to healthcare providers, members of our community can lower their risk factors, decrease chronic diseases and live richer and more fulfilling lifestyles.

## Behavioral and Health Risk Factors



St. Louis County Community Health Needs Assessment

## Smoking

Smoking is regarded as the single most preventable cause of disease and death in the U.S., increasing the risk for cardiovascular disease, stroke, respiratory disease and cancer. The smoking rate for St. Louis County (15%) is much lower than the state (22%). Smoking rates in South St. Louis County (14%) and West St. Louis County (12%) are lower than the county and currently meet the nation's *Health People 2020* goal.

## Overweight and Obesity

Being overweight (body mass index 25-29.9) or obese (body mass index 30 and over) is a major contributor to chronic disease, including cardiovascular disease, Type-2 diabetes, multiple cancers, hypertension, hyperlipidemia, stroke, liver disease, sleep apnea, osteoarthritis and gynecological issues.

Prevalence of adult obesity in St. Louis County is 27% with West St. Louis County having the lowest incidence at 20%. However, the overweight population in West and South St. Louis County were both 39% compared to St. Louis County (36%) and the state (35%).

Access to fresh, healthy and affordable food contributes to the health of the community and to the prevalence of overweight and obesity. Frequent consumption of fast foods and an insufficient consumption of fresh fruits and vegetables increase risk for being overweight, as well as developing chronic health conditions.

It is important to note that in 2006, 4.4% of low income St. Louis County residents lived more than one mile from a grocery store, with Southeast St. Louis County having the least amount of fresh food available.

2008 data indicate that in St. Louis County, there were 0.18 grocery stores and 0.71 fast food restaurants per 1,000 people. St. Louis County does not currently meet the *Health People 2020* goal of 0.21 grocery stores and 0.57 fast food restaurants per 1,000 people.

## **Sedentary lifestyle**

Science indicates that physical activity can reduce your risk of dying young from chronic illnesses such as, cardiovascular disease and cancer. Physical activity also helps control your weight, reduce your risk for Type-2 diabetes and metabolic syndrome, strengthen bones and muscles and improve mental health. Exercise also prevents falls and improves ability to do daily activities - especially important for older adults.

The proportion of adults who reported they engaged in at least 30 minutes of physical activity five or more times a week is 24% in South St. Louis County and 20% in both West St. Louis County and St. Louis County overall. All areas are below the state rate of 28%

## **Hyperlipidemia (High Blood Cholesterol)**

High cholesterol levels may partly be due to an unhealthy lifestyle, such as eating a diet that is high in fat. High cholesterol is often associated with obesity as well.

High cholesterol is one of the major medical risk factors for heart disease and stroke. Research shows that the higher your cholesterol, the greater your risk for both. Less than three in 10 adults in St. Louis County (27%) have been diagnosed with high cholesterol. All regions of St. Louis County have rates much lower than the state average (38%).

## **Hypertension (High Blood Pressure)**

High blood pressure is a major medical risk factor for stroke and heart disease. Since there are no symptoms, it is important to have regular blood pressure screenings. The combined effect of behavioral and medical risk factors can put people with high blood pressure at risk for additional problems and disease.

The prevalence of high blood pressure is similar throughout St. Louis County with the exception of North County, which is higher. Approximately 31% of St. Louis County and the Missouri adult population report having been diagnosed with high blood pressure by a medical provider.

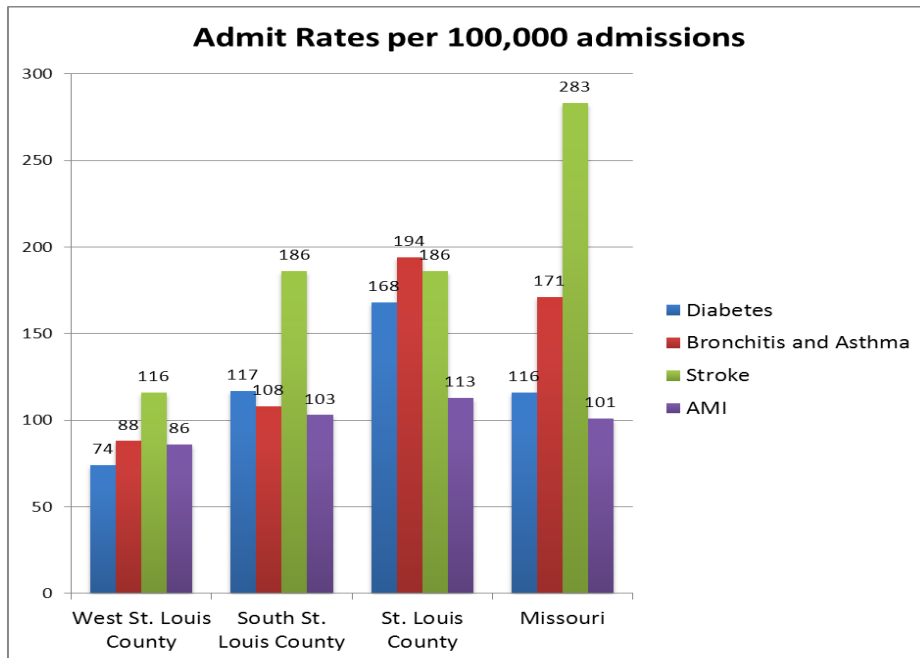
The *Health People 2020* target for High Blood Pressure Prevalence is 26.9%. St. Louis County misses the goal by having a rate of 31%, with West St. Louis County at 28% and South St. Louis County at 30%.

## Chronic Conditions

Chronic disease places an enormous financial and societal burden on the United States. According to the Center for Disease Control, chronic disease today accounts for 70% of the deaths of all Americans and 75% of healthcare cost. Obesity (particularly among adolescents), tobacco addiction and the aging population are serious contributing risk factors.

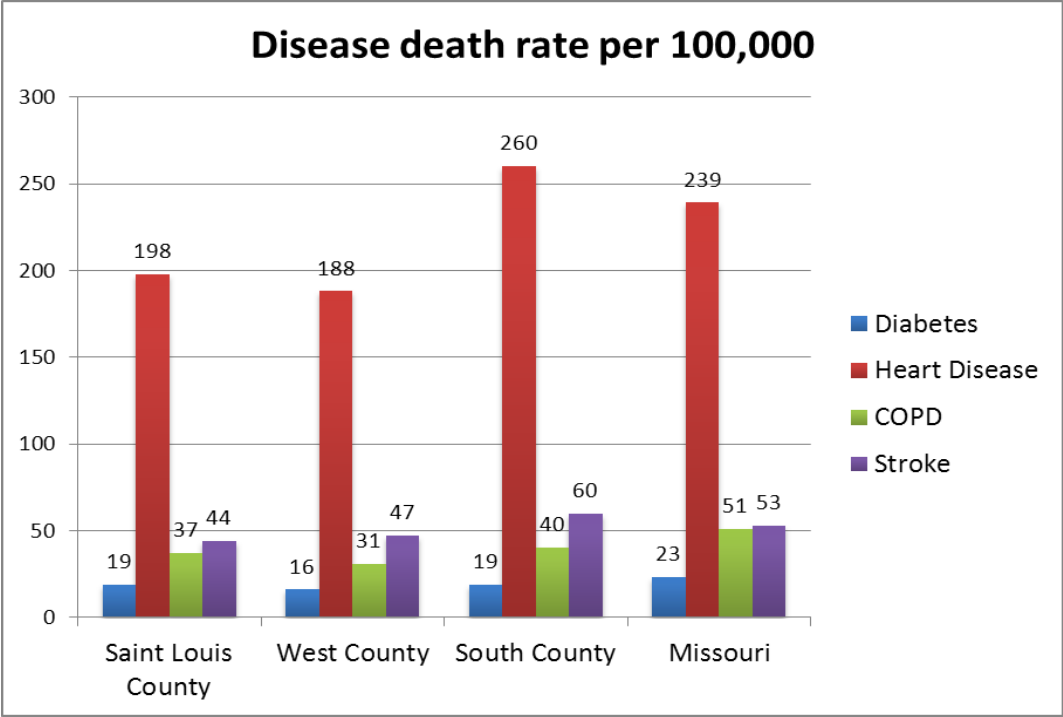
In St. Louis County, 5.6% of residents report having been told by their primary care provider that they have three or more chronic diseases, such as diabetes, heart disease, hypertension, hyperlipidemia and/or asthma. West St. Louis County had the lowest chronic disease burden at 3.6%, with South St. Louis County at 5%.

Given that our population is aging and we are seeing hospital admissions rise for chronic illnesses, we need to focus on helping our community manage behavioral and medical risk factors. The end goal is to not only help residents avoid hospital stays, but also to improve their quality of life.

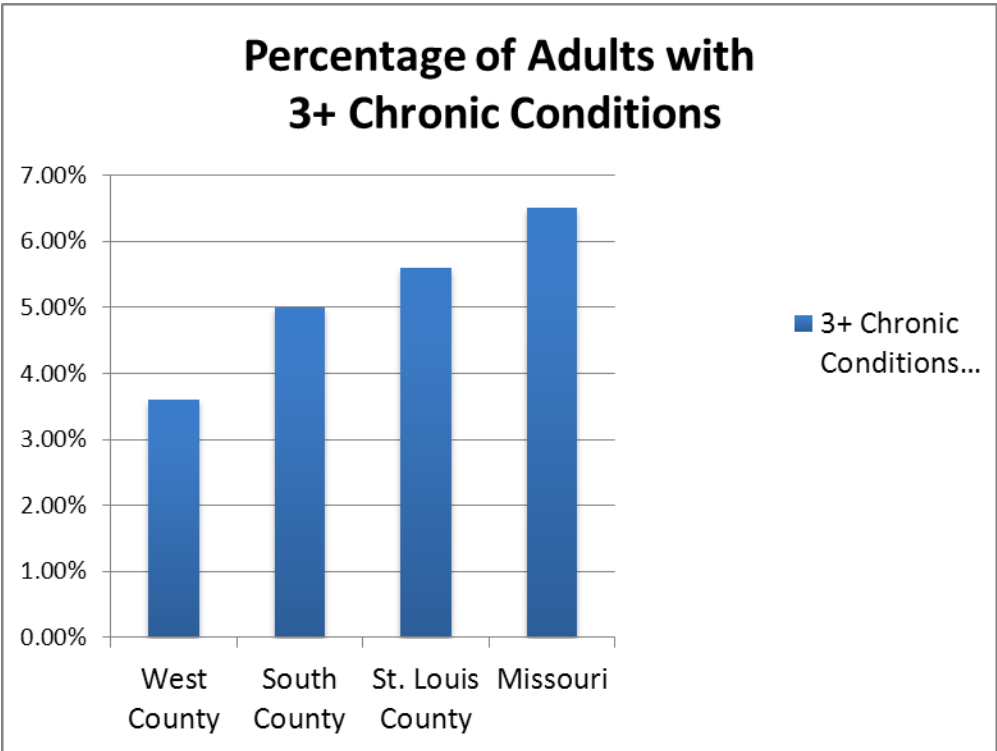


*St. Louis County Community Health Needs Assessment*





St. Louis County Community Health Needs Assessment



St. Louis County Community Health Needs Assessment

## Cancer

The incidence of cancer in a community can be lowered by prevention (such as early screening and detection), understanding risk factors, modifying behavior and having access to the appropriate diagnosis and treatment.

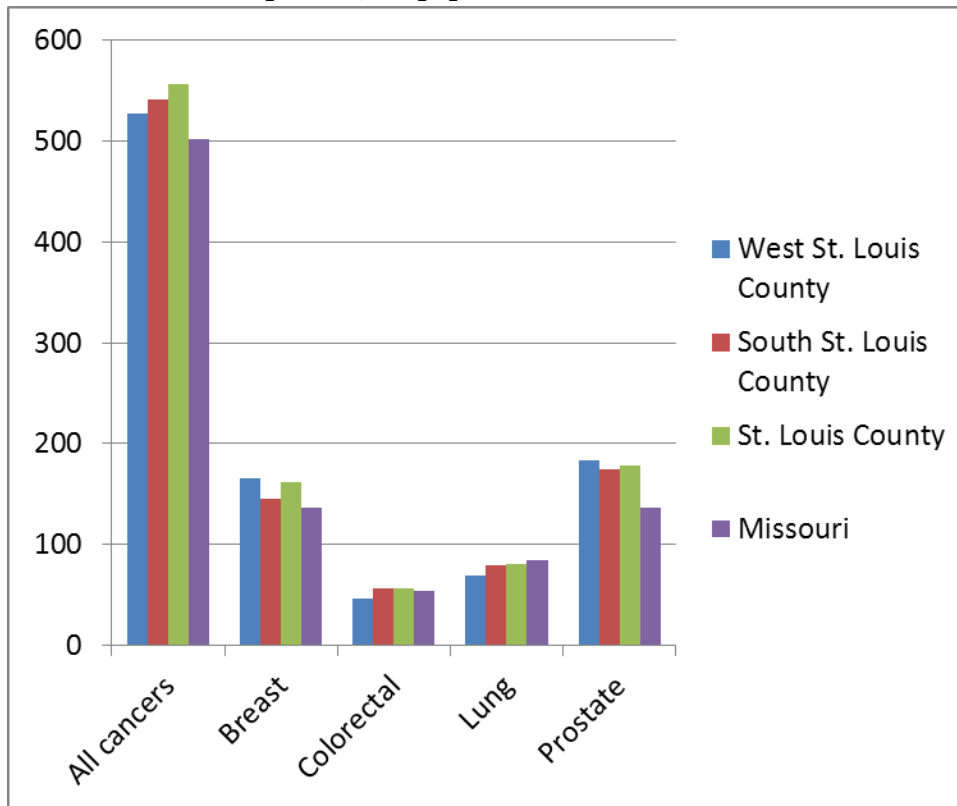
The three leading cancers with the greatest incidence among men in Missouri are prostate, lung and colorectal. Among women, they are breast, lung and colorectal. The incidence for both men and women is influenced by modifiable risk factors and can be treated successfully when detected early.

### All Cancers

Approximately 7.6% of adults living in St. Louis County have had a diagnosis of cancer. The all-cancer incidence rate in St. Louis County (556/100,000) is slightly higher than the state (502/100,000). West (541/100,000) and South St. Louis County (527/100,000) are slightly lower than St. Louis County. Of the four leading cancers (breast, prostate, lung and colorectal), female breast and male prostate incidences drive the higher overall rate.

The *Health People 2020* target for all cancer deaths is 160.6 deaths/100,000 people. Currently, St. Louis County is 210 (according to HCI) and does not meet the goal.

### Incidence of Cancer per 100,000 population



St. Louis County Community Health Needs Assessment

## **Colorectal Cancer**

In St. Louis County, only 34% of all colorectal cancer is diagnosed in the early stage – compared to 37% in the state. 60% of men aged 50+ in St. Louis County report being screened for colorectal cancer in the past five years via a colonoscopy or sigmoidoscopy. West St. Louis County had the highest rate at 65%.

In St. Louis County, there is access to free screenings for breast cancer and cervical cancer through resources such as Show Me Healthy Woman and the Komen Foundation.

The *Health People 2020* national health target is to reduce the colorectal cancer death rate to 14.5 deaths per 100,000/population. Currently, St. Louis County is slightly higher at 20 deaths/100,000 people.

## **Lung Cancer**

Smoking is the most significant risk factor associated with lung cancer. Modifying this risk factor can greatly reduce the incidence of lung cancer and its impact on the community.

Incidence of lung cancer (per 100,000 population)

- West St. Louis County: 69
- South St. Louis County: 79
- St. Louis County: 81
- Missouri: 84

Mortality rate for lung cancer (per 100,000)

- West St. Louis County: 46
- South St. Louis County: 59
- St. Louis County: 59
- Missouri: 65

The *Health People 2020* Target for Age-Adjusted Death Rate due to Lung Cancer has not been met. The current value for St. Louis County is 59 deaths/100,000 population (HCI) and *Health People 2020* target is 45.5 deaths/100,000 population.

## **Breast Cancer**

Breast cancer is the most commonly diagnosed cancer among women in St. Louis County – and the incidence is high compared to the state overall. The county rate is being driven by very high rates in Mid, North and West Counties (167,171 and 166 respectively – all three being higher than the state rate). At the same time, mortality rates are not as high in any area of St. Louis County compared to the statewide rates.

The *Health People 2020* Target for Age-Adjusted Death Rate due to Breast Cancer has not been met. The current value is 26.9 deaths/100,000 females and the target value is 20.6 deaths/100,000 females (HCI).

## **Prostate Cancer**

Prostate cancer incidence rates are 30% higher in St. Louis County compared to the state rates. There is very little difference in incidence across St. Louis County. Mid and West St. Louis County have the highest incidence (187 and 184 respectively) compared to North and South St. Louis County at 174 each and the state at 137.

Until 2011, nearly all hospitals provided some type of FREE prostate screening (appendix 8).

## **Cardiovascular**

Cardiovascular disease continues to be the leading cause of death in the U.S. Congestive heart failure, followed by Acute Myocardial Infarction (AMI or heart attack) and stroke are responsible for the most hospitalizations (Appendix 9).

Hospital admission rates for AMI are generally a good indicator of the incidence of heart attack in a community. Based on that assumption, St. Louis County has a higher incidence of heart attack than the state overall – with West St. Louis County and South St. Louis County the lowest sections in the county.

Approximately 5.7 million people in the United States have congestive heart failure and about half of the people who have heart failure die within 5 years. An increase in the prevalence, hospitalizations and deaths has made congestive heart failure a major chronic condition in the United States. Congestive heart failure is the first-listed diagnosis in 875,000 hospitalizations, and the most common diagnosis in hospital patients age 65 years and older. In that age group, one fifth of all hospitalizations have a primary or secondary diagnosis of heart failure (National Institute of Health).

Early diagnosis and treatment can improve the quality of life and life expectancy for people who have heart failure (source: Center for Disease Control).

## **Cerebrovascular Disease (Stroke)**

Cerebrovascular disease ranks third among the leading causes of death in the U.S. The mortality rates for cerebrovascular disease in South St. Louis County (60) are higher than in West St. Louis County (47), St. Louis County (57) and the state (53). Hospital admission rates for stroke report South St. Louis County and St. Louis County the same (186). West St. Louis County reports the lowest rate at 116 and the state is the highest at 263.

The *Health People 2020* Target for Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke) has not been met. The current value is 57 deaths/100,000 population and the *Health People 2020* target value is 33.8 deaths/100,000 population (appendix 7).

## **Health Literacy – Health Education**

Health literacy refers to the ability to make educated and good healthcare decisions. To do that, an individual needs to have access to and understand the basic health information and services that are needed and available to maintain their health.

Today, more than 90 million people in the United States have a difficult time understanding and using health information. People who do not understand their health information are more likely to be hospitalized, use the emergency room, make medication and treatment errors, less likely to follow through with their treatment plan, less likely to obtain preventive services and more likely to die earlier.

For Missouri, the costs due to low health literacy range from \$3.3 billion to \$7.5 billion annually.

## **Maternal/Newborn/Pediatric**

**(Pre-term birth (gestation < 37 weeks), low birth weight, infant mortality, mother smoked during pregnancy, pregnancy complication (high risk), infant health problems)**

Overall infant mortality rate for St. Louis County (8.0 per 1,000 live births) is slightly higher than the state rate (7.4) the U.S. rate (6.7). The *Health People 2020* target rate 5.6 has not been met.

Rates of inadequate prenatal care (% of live births) are 11% (state), 8.5% (St. Louis County), 3.9% (South St. Louis County) and 3.7% (West St. Louis County).

The *Health People 2020* Target for Babies with Low Birth Weight (less than 2500 grams) of 7.8% has not been met. The current value is 9.1% for the state. In addition, The *Health People 2020* Target for Preterm Births (<37 weeks) has not been met. The current value is 14% for St. Louis County and the target value is 11.4%.

## **Social Support for Elderly**

**(Elder Care, Senior Services, Transportation to Appointments, Home Care Services, Support for Caregivers)**

In 2009, falls were the cause of 63% of the total unintentional deaths in Missouri. Missouri's death rate from falling is 31% higher than the national average. According to *Health People 2020*, 29.3% of 65+ people are living alone. They may be at risk for social isolation, limited access to support, or inadequate assistance in emergency situations.

The Commonwealth Fund Commission on the Elderly Living Alone indicated that one-third of older Americans live alone, and that one-fourth of those living alone live in poverty and report poor health. Rates of living alone are typically higher in urban areas and among women.

Older people living alone may lack social support and are at high risk for institutionalization or losing their independent life style. Living alone should not be equated with being lonely or isolated, but many older people who live alone are vulnerable due to social isolation, poverty, disabilities, lack of access to care, or inadequate housing.

Older adults who do not live alone are most likely to live with a spouse, but they also may live with a child or other relative, a non-relative, or in group quarters.

## Mental Health

In the United States, depression and other mental health disorders are major causes of illness and death. They also are associated with increased levels of disability, reduced quality of life, and lower levels of social functioning. The percentage of adults who reported that they have been diagnosed with depression at some point in their lives were highest in Mid County (19%) and South St. Louis County (18%), although the percentages in the other two counties were not much lower West St. Louis County (14%) and North County (15%). The overall county reported a rate of 17%.

## Access to Care

Even though adults in West and South St. Louis County are more likely to have a regular source of care than adults in the county and state, there are still challenges due to lack of insurance, high deductibles and a shortage of federally-funded clinics. Insurance has a significant impact on whether individuals have a regular source of care.

In St. Louis County, 64% of uninsured adults do not have a usual source of care – compared with 10% of those with insurance. The national target for *Health People 2020* is the 84% of adults have a usual source of primary care by 2020. We are close to meeting that goal, with those reporting no regular source of care in St. Louis County at 16%, 14% in South St. Louis County and 11% in West St. Louis County.

The *Health People 2020* reported 84% of the population had access to care, the target remains at 100% access. While West and South St. Louis County provide numerous hospitals and hundreds of physicians; support of those who are uninsured or underinsured has not been addressed. West and South St. Louis County report rates of uninsured residents at 4.5% and 8.8%, respectively. Focus group stakeholder members were only able to identify two resources for care in these counties for those with no insurance.

## Increased Demand for Health Services

For St. Louis County, the 65+ population is anticipated to grow substantially over the coming two decades, compared to current levels.

### Anticipated 65+ Population Growth

	2015	2020	2030
St. Louis County	+8%	+19%	+42%
Missouri	+13%	+30%	+71%

The increased demand for health services will be significant, because this group is more likely to have an increase in chronic medical conditions and require more medical care.

## ***D. Prioritization of Health Needs***

To help prioritize the health needs and conditions of West and South Counties, the steering committee compared qualitative data from our focus groups (Appendix 4) with the following secondary data sources:

- Missouri Information for Community Assessment (MICA)
- Healthy Communities Institute (HCI)
- 2011 *St. Louis County Health Needs Assessment*
- *Health People 2020*.

The steering committee also grouped the common health risks, diseases and needs into 10 broad categories. This enabled the committee to group similar diseases together (for example, acute versus chronic disease). Doing so made it easier to analyze and prioritize secondary and primary data for trends and comparisons. The committee then analyzed availability of services, severity/impact and prevalence of each disease. From this analysis, the committee identified the top 10 health needs for West and South Counties (Appendix 5).

Next, steering committee members identified and scored each disease on a 1-5 scale (1 being the lowest and 5 being the highest) based on the following criteria:

- Availability of services
- Severity/impact of disease
- Prevalence

Total scores for each disease determined its level of priority. Those with scores above 75 were placed on a decision matrix (Appendix 6). Heart disease, behavioral and medical risk factors and chronic disease scored the highest.

According to the St. Louis County Community Health Assessment, some of the primary health issues for St. Louis County are:

- Management of chronic diseases, including heart disease, diabetes and cancer
- Obesity and overweight in adults
- Management of behavioral and medical risk factors

Since our fast paced society continues to challenge individuals to live healthy lifestyles and as our population ages, helping people manage their behavioral and medical risk factors will be necessary to reduce the prevalence of chronic disease, improve quality of life and lower healthcare cost.

The steering committee identified the following as high-priority needs:

- Management of Chronic Disease with focus on congestive heart failure
- Cardiovascular and Health Risk Factor Management
- Cancer – Early Detection and Risk Factor Education
- Prevention of Seasonal Flu

## ***IV. Implementation Plan***

### **A. Community Health Needs To Be Addressed**

#### ***Management of Chronic Disease***

##### **Goal**

- Help people with chronic diseases, such as congestive heart failure and diabetes, better manage their disease and improve the health and quality of their lives.

##### **Rationale**

- Data indicates that population 65+ is fastest growing segment of the population in St. Louis County.
- Congestive heart failure is the most common diagnosis in hospital patients over age 65 – one-fifth of the hospitalizations in this age group have a primary or secondary diagnosis of heart failure.
- Despite access to care, the county is experiencing a higher hospital usage for 65+ populations with chronic disease.
- Treatment and group support can help individuals manage their symptoms, reduce hospitalizations and improve the quality of life and life expectancy.

##### **Objective**

- Achieve an attendance of 15 individuals with congestive heart failure or diabetes at the pilot program.
- Decrease hospital readmissions for 2 of the 15 participants.
- Through responses on pre- and post-test, improve the quality of life for people diagnosed with diabetes and congestive heart failure.

##### **Action Plan**

- Develop a six-week Congestive Heart Failure Pilot Program with the focus on the management of congestive heart failure, including diet management, medication management, activity management and stress management.
- Educate patients about the steps needed to manage their congestive heart failure.
- Offer the program at a community site such as the county library or Longview Farm.
- Begin program in the third quarter 2014 with anticipated attendance of 15 for first class; success of first class will determine frequency of program.
- Continue to partner with OASIS to provide evidence-based programs that help manage diabetes, blood pressure and healthy living for 55+ population at various community locations, such as Kirkwood Community Center and Longview Farms.



- Develop partnership with primary care providers, healthcare providers at Missouri Baptist, BJC Medical Group and OASIS.

### **Evaluate/Outcome Measures**

Through a pre- and post-test, this program will evaluate participants' levels of knowledge about their disease and steps they need to take to better manage their weight, diet, activity levels and medication compliance. Measurements used will include data on readmissions, emergency room visits, compliance with keeping a daily log to better track their weight, diet and activity level.

### **Partners**

- Missouri Baptist Heart Center
- St. Louis OASIS (promotes healthy aging through learning, healthy living and social engagement)
- Missouri Baptist Physical Medicine Department (Rehabilitation Therapies)
- Morrison Food Service

## ***Cardiovascular and Health Risk-Factor Management***

### **Goal**

- Through community-based screenings and education, identify and help individuals, especially underinsured or uninsured who are at risk for heart disease, stroke and diabetes lower their risk.
- Encourage them to make healthy lifestyle changes and connect them to medical care/treatment.

### **Rationale**

- Heart disease is the leading contributor to poor health and is ranked the number one cause of death nationwide.
- In 2010, 27% of all deaths in St. Louis City and County were attributable to heart disease.
- Despite access to care, 30% of the population in West and South St. Louis County are at risk for heart disease due to high cholesterol and hypertension. In addition, 39% of the population is overweight and 25% are obese.
- Despite the economic affluence and education levels for West and South St. Louis County, an increasing number of families find themselves delaying healthcare due to high deductibles or lack of insurance.
- Given the fact that our population is aging, which increases the prevalence of chronic disease, attention to lifestyle change and risk-factor management must be as an important health initiative for people of all ages.
- Obesity can have a harmful effect on the body and contribute to high blood pressure, high cholesterol and diabetes.
- Missouri Baptist is one of the only hospitals in West and South St. Louis County that provides free cardiovascular screenings on a regular basis throughout the county.

### **Objective**

- Screen 1,800 from the general adult population for cholesterol, blood pressure and glucose in West and South St. Louis County in 2014 and 2015.
- Increase attendance at cardiovascular and healthy lifestyle educational programs offered at various community locations in West and South St. Louis County in 2014 and 2015.

### **Action Plan**

- Provide cardiovascular screenings including blood pressure, cholesterol (total and high-density lipoprotein), blood glucose and individualized risk-factor counseling at South St. Louis County Mall in March, June and September 2014 and 2015.

- Continue to provide cholesterol, blood glucose screenings and individualized risk-factor counseling at West and South St. Louis County Dierbergs Market and other strategic locations.
- Continue to provide cardiovascular and healthy lifestyle educational programs at various community locations, including community centers, Missouri Baptist and other venues in West and South St. Louis County.
- Continue to inform the uninsured and underinsured members of our community of these free health screenings through timely direct mail cards and the Missouri Baptist quarterly educational newsletter.
- Registered nurses and dietitians will provide the cardiovascular screenings and individualized interpretation of screening results to help clients identify and learn their risk factors and the steps to take to lower them.
- A physician referral specialist will be available to make referrals and appointments to healthcare providers for all high risk clients who do not have a physician.
- Registered nurses and dietitians will make two follow-up phone calls to high risk clients – one at six weeks and one at three months following the screening to see if the client has taken any steps to lower their risk and followed up with a physician.

#### **Evaluate and Outcome Measures**

- Identify individuals in South St. Louis County at risk for cardiovascular disease.
- Through follow-up phone calls provide access to medical care for 5 participants.
- Through follow-up email, MoBap will provide lifestyle risk factor education and encourage rescreening at 6 months and 1 year, and consequently lower the number of at risk participants.

#### **Partners**

- South St. Louis County Mall
- BJC Medical Group

## ***Cancer—Early Detection and Risk-Factor Education***

### **Goal**

- To increase participation in community-based prostate, breast and skin cancer screening for men and women living in St. Louis County, as well as the rural Missouri communities.

### **Rationale**

- In the United States, 50% of men and 33% of women are estimated to develop a form of cancer during their lifetime.
- The cancers with the greatest incidence in men are prostate, lung and colorectal.
- The cancers with the greatest incidence in women are breast, lung and colorectal.
- Despite numerous facilities for screening and early detection, West and South St. Louis County have higher than expected levels of breast and prostate cancers.
- The incidence of cancer can be lowered by risk-factor education, lifestyle modification and early detection through screening. Education can improve remission rates

### **Objective**

- In 2014, partner with the Missouri Baptist Breast HealthCare Center to provide mammography screening and breast health education to 800 uninsured or underinsured women by bringing the Missouri Baptist mammography van to strategic locations in St. Louis County and rural communities.
- Provide prostate cancer screening and education to 75 men, especially African American men who have not yet been screened for prostate cancer or are at high risk. Achieve this by hosting a prostate cancer screening in Sept. 2014 and 2015.
- Provide Skin Cancer screenings to 125 individuals in May 2014 and 2015.

### **Action Plan**

- Missouri Baptist Breast HealthCare Center, under a grant funded by Susan G. Komen St. Louis Affiliate, will continue to provide screening mammograms at various locations for uninsured and underinsured in St. Louis County and rural Missouri.
- All women will receive a letter and/or phone call with the results of their screening mammogram and, if positive, will be referred to a physician for follow-up testing. If necessary, the cost of this testing may be covered by Susan G. Komen St. Louis Affiliate and/or Show Me Healthy Women Missouri.
- Missouri Baptist will continue to partner with the American Dermatologic Association (ADA) to provide free skin cancer screenings in May 2014. The ADA will conduct follow-up phone calls for all positive results.

- Missouri Baptist radiation oncologists and on-staff urologists will provide a prostate cancer screening in Sept. 2014 and 2015 for men in St. Louis County who request this service and meet screening guidelines.
- We will follow the American Urologic Association's guidelines, which support screening men at high risk or who are 55-69 (especially African-American men), and have not previously been screened for prostate cancer.
- Participants will be notified of their results by mail and, if positive, will be called by a nurse to make sure that they have followed-up with their physician or to make a referral to a physician.

**Evaluate and Outcome Measures:**

- Women participating in the mammography screening program will be followed from year to year to see if they are adhering to the screening guidelines and having a mammogram every year.
- Women identified as high risk or with having a positive mammogram will be followed to ensure they have seen a physician or contacted Show Me Healthy Women.
- Prostate cancer screening program will seek to increase number of African American men screened by 10%.

**Partners**

- Missouri Baptist Breast HealthCare Center
- Missouri Baptist Cancer Center
- Designated rural community centers
- Komen St. Louis
- American Dermatologic Associations

## ***Prevention of Seasonal Flu***

### **Goal**

- Decrease the prevalence of and spread of flu by making available free influenza vaccinations and prevention education materials. Target adult residents living in West and South St. Louis County.

### **Rationale**

- During a regular flu season, about 90% of deaths occur in people 65+.
- Influenza is a serious disease that can lead to pneumonia, hospitalization and sometimes death.
- Widespread inoculation against annual seasonal flu is the best way to reduce the incidence of seasonal flu and lessen its impact on the community.
- People with certain chronic disease such as heart disease, diabetes or cancer are at an increased risk of developing serious complications from the flu.

### **Objective**

- Vaccinate 1,400 individuals for the seasonal flu in 2014 and 2015.
- Provide educational information to every person who is vaccinated, focusing on importance of good hand washing and what to do to prevent the spread of flu.

### **Action Plan**

- Hold four to five flu clinics at various community centers in St. Louis County so that registered nurses can distribute seasonal flu vaccine, as well as educational information, to all participants.
- Include an article focusing on “why get a flu vaccine and how to prevent the spread of the flu” in our fall quarterly newsletter.

### **Evaluate and Outcome Measure**

- Distribute flu vaccines and flu prevention education to 1,400 individuals October 2014 and 2015

### **Partners**

- St. Louis OASIS
- Town and Country
- Missouri Baptist Outpatient-Sunset Hills
- Missouri Baptist Pharmacy

## **B. Community Health Needs Not to Address**

- **Mental Health**

At present, Missouri Baptist does not have an inpatient mental health unit and is not directly involved with community education focusing on mental health and depression. Although Missouri Baptist does not have the resources to provide this service, several area hospitals including Mercy, St. Mary's Health Center and St. Clair Health Center offer these services.

- **Social Support Services for Seniors**

At present, Missouri Baptist partners with OASIS to provide community education programs focusing on seniors. As a member of BJC HealthCare, we have access to BJC Home Care, which provides in-home services for seniors. We do not have the financial resources to provide any additional support services for seniors or the disabled.

- **Maternal/Newborns/Pediatrics**

Overall, Missouri Baptist experiences a low infant mortality rate, as well as a low percentage of babies born with a low birth weight. Because Mercy, a neighboring hospital, provides a clinic for teen mothers, we do not see many teen mothers deliver at Missouri Baptist. Most mothers who deliver at Missouri Baptist are seen regularly by their OB/GYN and receive excellent prenatal care by their staff.

## **C. Specific Input from the St. Louis County Health Department**

**Health Department Representative:** Karen Zeff

**Title/Department Name:** Health Informatics Analyst, St. Louis County Health Department

**Source of Need Information:** St. Louis County 2011 Health Needs Assessment

**Public Health Department Identified Need #1:** Access to Care and Quality of Care

Missouri Baptist Medical Center will not address this need directly. However, through chronic disease prevention and management as well as cancer screenings (described below), it will provide services to those who are uninsured or underinsured with limited access to screening

**Public Health Department Identified Need #2:** Chronic Disease Prevention and Management

Missouri Baptist Medical Center offer programs to individuals with congestive health failure or diabetes to help them manage their disease and have an improved quality of life. They will also offer community-based screenings to identify those at risk for heart disease, stroke and diabetes.

The anticipated impact of these activities will be to reduce the impact of these chronic conditions by reducing some hospital readmissions, increasing awareness of these conditions, and offering education about their management.

The effectiveness of these programs will be measured by tracking hospital readmission rates of participants, and measuring their awareness of disease management issues before and after program participation. The number of screenings will also be tracked.

**Public Health Department Identified Need #3:** High Cancer Incidence, Particularly for Breast and Prostate Cancers

Missouri Baptist Medical Center will offer mammography screening to uninsured and underinsured women, as well as prostate cancer and skin cancer screenings.

The anticipated impact of this program is to increase early detection and treatment of these conditions.

The hospital will measure the impact of these programs by tracking the number of individuals screened as well as the number resulting in a positive diagnosis.

**Public Health Department Identified Need #4:** High Incidence of women at risk for poor birth outcomes

Missouri Baptist Medical Center will not address this need. Overall, Missouri Baptist experiences a low infant mortality rate, as well as a low percentage of babies born with a low



birth weight. Mercy, a neighboring hospital, is already addressing this need by providing a clinic for teen mothers.

## V. Appendix

### *Appendix 1: Key Stakeholders Focus Group Members*

Dr. Sajjad Baig	Volunteers in Medicine
Rachelle Bartnick	American Heart Association
Mindy Bielik	St. Louis Suburban School Nurses
Mark Bryant	EMS, Fire Protection District
Sr. Mary Carole Curran	Catholic Family Services
Beth Elders	Manchester United Methodist Church
Sandii Handrick	American Heart Association
Bonnie Hoerner	Chesterfield YMCA
Susan Kaplansky	Jewish Community Center
Berry Lane	Alderwoman, City of Glendale
Betsy Mack	United Way
June Schinners	American Cancer Society
Mary Schaeffer	Mid East Area on Aging
Jody Spiess	South St. Louis County Health Center
Ed Tasch	National Council on Alcohol and Drug Abuse
Colleen Wasinger	City Councilwoman, Town and County
Brian Whittle	City of Chesterfield
Karen Zeff	St. Louis County Department of Health

*Appendix 2: Attendees at Community Advisory Focus Group*

<u>Name</u>	<u>Board Position</u>
<b>Mr. Douglas A. Copeland*</b> <i>Chairman</i> <i>MBMC Board representative</i>	Chairman MBMC Board representative
<b>Deborah Bentel</b> <i>At-large member</i>	At-large member
<b>Glenna Brandt</b> <i>Auxiliary representative</i>	Auxiliary representative
<b>Harvey R. Fields, Ph.D.</b> <i>MBMC Board representative</i>	MBMC Board representative
<b>Beth Fitzgerald</b> <i>At-large member</i>	At-large member
<b>Aunita Hill, M.D.</b> <i>Member, physician representative</i>	Physician representative
<b>Richard Jensen</b> <i>At-large member</i>	At-large member
<b>Dale E. Kreienkamp</b> <i>At-large member</i>	At-large member
<b>Chuck Mannis, MD</b> <i>Member</i> <i>Retired physician</i>	At-large member Retired physician
<b>Jeniffer Rubenstein</b> <i>At-large member</i>	At-large member
<b>Gene Sherrill</b> <i>At-large member</i> <i>Baptist representative</i>	At-large member Missouri Baptist representative
<b>Palmer Reynolds</b>	At-large member
<b>Debra Victor</b> <i>Executive sponsor</i>	Executive sponsor

### *Appendix 3: Missouri Baptist Steering Committee*

Jennifer Marchal	Lean Six-Sigma
Joan Elkins, RN	Community Education
Mary Maranzana, PPT	Outpatient Rehab Services
Laura Kamp, RN	Nurse Educator
Crystal Crump	Emergency Room Outreach Coordinator
Amy Eilers	Social Worker Cancer Center
Sherri Hoyt, RD	Outpatient Nutrition Services
Melissa Emghe	Mother/Infant

### Appendix 4: Comparison of Primary and Secondary Data

Rank	MICA All criteria Ranked 1-10	HCI No Ranking	Healthy People 2020 No Ranking	St. Louis County Health Dept. No Ranking	Focus Group Ranked 1-10	MoBap Steering Committee 10/29/12
1	Heart Disease	All Cancers	All Cancers	Preventive Behaviors	Access to Care	Preventive Behaviors
2	Pulmonary	Preventive Behaviors	Preventive Behaviors	Chronic Conditions	Mental Health Drug and Alcohol Abuse	Chronic Conditions
3	Motor Vehicle Accidents	Stroke /Cerebrovascular Disease	Access to Care	Heart Disease	Preventive Behaviors	Health Education
4	Chronic Disease	Maternal/Newborn Pediatrics	Chronic Conditions	All Cancers	Social Support	Heart Disease
5	Cancers	Chronic Conditions	Pulmonary	Access to Care	Chronic Conditions	All Cancers
6	Stroke/ Cerebrovascular Disease	Mental Health	Stroke/ Cerebrovascular Disease	Mental Health	Cultural Competencies Health Advocacy	Stroke/ Cerebrovascular Disease
7	Mental Health	Access to Care	Maternal/Newborn Pediatrics	Stroke/ Cerebrovascular Disease	Maternal/Newborn Pediatrics	Maternal/Newborn Pediatrics
8	Maternal/Newborn Pediatrics	Pulmonary	Mental Health	Elder Care		Social Support
9						Mental Health
10						Access to Care

## Appendix 5: Classification of Health Concerns

High-Level Categories	Category Details	MBMC Programs & Resources
<b>Chronic Conditions</b>	Diabetes, Arthritis, Autoimmune Diseases (i.e. Lupus), Congestive Heart Failure, Osteoporosis, Neuromuscular, Cancer, Pain Management, Anemia	Cholesterol Screenings, Lipid Panel Screenings, Stroke Screenings, Glucose Screenings, Blood Pressure Screenings, Bone Density Screenings, Community Lectures, "Eat Hearty," "Carb-It Smart"
<b>Health Education</b>	Community Health Education, Knowledge of Services Available, Health Advocacy, Cultural Competencies	"Go Red," Pearls of Wisdom, Community Lectures, "Eat Hearty," "Carb-It Smart," "M" Magazine
<b>Heart Disease</b>	Heart Disease, Acute Myocardial Infarction, Hyperlipidemia (high cholesterol), Hypertension, Congestive Heart Failure	Cholesterol Screenings, Lipid Panel Screenings, Stroke Screenings, Glucose Screenings, Blood Pressure Screenings, Community Lectures, "Eat Hearty", "Carb-It Smart"
<b>Preventive Behaviors</b>	Smoking, Healthy Diet/Nutritional Counseling, Sedentary Lifestyle (lack of exercise), Blood Pressure, Cholesterol, Stress Management, Obesity, Overweight, Immunizations, Fall Prevention	Cholesterol Screenings, Lipid Panel Screenings, Stroke Screenings, Glucose Screenings, Blood Pressure Screenings, Community Lectures, "Eat Hearty," "Carb_it Smart"
<b>Stroke/Cerebrovascular Disease/</b>	Stroke, Cerebrovascular Disease, Hyperlipidemia (high cholesterol), Hypertension, Alzheimer's/Dementia/Senility	Cholesterol Screenings, Lipid Panel Screenings, Stroke Screenings, Glucose Screenings, Blood Pressure Screenings, Community Lectures, "Eat Hearty", "Carb_it Smart"
<b>Maternal/Newborn, Pediatrics</b>	Pre-term Birth (Gest. < 37 weeks), Low Birth Weight, Infant Mortality, Mother Smoked during pregnancy, Pregnancy Complications, Infant health problems,	
<b>Social Support</b>	Elder Care, Senior Services, Transportation to appointments, Home Care & Services, Support for Caregivers	Grief Support, Bear Essentials, Transportation for Rural Patients, numerous support groups including Chronic Pain, Infertility & Adoption, Special Needs, Parkinsons, Overeaters, A-Non, Narcotics Anonymous, Autism, AA, MACDG, DBSA, ACRP, Spasmodic Sysphonia, Family Enrichment, SOS Couples, Neurophy, SLSRC, OCD
<b>Mental Health</b>	Anxiety, Depression, Suicide/Self-Inflicted Injury, Alcohol/Drug Abuse, Motor Vehicle Accidents	A-Non, Narcoitics Anamyous, AA Support, Community Lectures (Safe Driving)
<b>Access to Care</b>	Lack of Insurance availability/coverage, Care too Expensive, High Deductibles, /Employer no lonher providing coverage	Flu Shots
<b>Pulmonary</b>	Asthma, Pneumonia & Influenza, Chronic Obstructive Pulmonary Disease (COPD)	flu shots
<b>Cancer</b>	Lung Cancer, Colorectal Cancer, Breast Cancer, Prostate Cancer, Skin Cancer, Cervical Cancer	Skin Cancer Screening, Prostate Cancer Screening, Mammagram Screenings, Support Services, Community Lectures, Transportation for Rural Patients, Bear Essentials

## Appendix 6: Decision Matrix

A) Each team member to score identified topics on a 1-5 scale for each of the 3 categories:

*Availability of Services*

*Severity/Impact of Disease*

*Prevalence*

B) Total scores for each category/per topic to determine final score.

C) For all topics with scores > 75, team decision of placement on decision matrix.

Goal: High Impact of Services & High MBMC Community Resources Available

Topic	Final Score
Obesity	92
Chronic Conditions	88
Health Education	85
Heart Disease	83
Preventive Behaviors	82
Stroke	77
Pre-term Births	74
Social Support	68
Mental Health	66

MBMC Steering Committee Decision Matrix (1st Pass) 10.29.12		
	Secondary Focus Area	Primary Focus Area
High	Preventive Behaviors (82) Obesity (92) Health Education (85)	Heart Disease (83) Chronic Conditions (88) Stroke (77)
Low	X	Pre-term Births (74)

*Appendix 7: Cancer Incidence and Mortality, St. Louis County, 2006-2008*

Indicator	West St. Louis County	South St. Louis County	St. Louis County	Missouri
All Cancers, Incidence Rate	541	527	556	502
All Cancers, Mortality Rate	174	205	210	209
Female Breast Cancer, Incidence Rate	166	146	162	137
Female Breast Cancer, Mortality Rate	17	16	17	15
Female Cervix Uteri, Incidence Rate	6	5.8	6.8	7.9
Female Cervix Uteri, Mortality Rate	0.8	1.6	1.5	1.4
Colorectal, Incidence Rate	47	57	56	53
Colorectal, Mortality Rate	17	18	20	20
Lung and Bronchus Cancer, Incidence Rate	69	79	81	84
Lung Cancer, Mortality Rate	46	59	59	65
Males	45	66	64	76
Females	47	52	55	55
Male Prostate, Incidence Rate	184	174	179	137
Male Prostate, Mortality Rate	15	19	20	19

*Appendix 8: Cancer Screening Indicators*

Indicator	West St. Louis County	South St. Louis County	St. Louis County	Missouri
% Reported Mammogram past year (40+)	64	58	60	58
% Reported Pap Smear past 2 years	61	61	62	66
% Reported Blood Stool Test past year (Age 50+)	9.8	10	10	9.1
% Reported Having Sigmoid/Colonoscopy past 5 years (Age 50+)	65	60	60	51
% Reported Prostate Exam (PSA test) past 2 years (males Age 50+)	74	80	75	67
% Reported Digital Rectal Exam past 2 years (males Age 50+)	73	69	66	57



## Appendix 9: Diabetes Indicators

Indicator	West St. Louis County	South St. Louis County	St. Louis County	Missouri
% Current Smokers (18+)	12	14	15	22
% Sedentary Lifestyle (measured by no physical activity)	20	19	22	27
% Physical Activity (150+ minutes per week)	20	24	20	28
% Obesity (Ages 18+)	20	25	27	31
% High Cholesterol	26	30	27	38
% High Blood Pressure	28	30	31	31
% Heart Disease	3.2	4	3.6	4.3
Heart Disease, Mortality Rate	188	260	258	239
Ages 45-64	65	86	119	157
Ages 65+	1,371	1,455	1,483	1,406
AMI, Mortality Rate	52	78	76	145
Ages 45-64	24	21	36	61
Ages 65+	363	448	440	389
AMI, Hospital Admission Rate	86	103	113	101
Ages 45-64	29	59	70	86
Ages 65+	631	533	600	560
Cerebrovascular Disease (stroke), Mortality Rate	47	60	57	53
Ages 45-64	10	13	19	22
Ages 65+	363	350	341	340
Cerebrovascular Disease (stroke), Hospital Admission Rate	116	186	186	263
Ages 45-64	47	110	146	263
Ages 65+	802	928	894	970
CABG, Hospital Admission Rate	60	74	65	75
Ages 45-64	76	105	89	125
Ages 65+	281	258	245	291