Memorial Hospital Belleville

2018 Community Health Needs Assessment

MEMORIAL HOSPITAL

BJC HealthCare

Table of Contents

I. Executive Summary……..3

II. Community Description..……4

A. Geography…….. 4

B. Population Trend …… 5

C. Age.…..……7

D. Race and Ethnicity Profile…….....8

E. Social-Economic Indicators……..8

F. Education..……9

G. Income……..……11

III. Previous CHNA Measurement and Outcomes Results……..……12

IV. Conducting the 2018 CHNA…….……....13

A. Primary Data Collection……...……..13

B. Secondary Data Analyses. ……...……... .18

C. Internal Work Group Prioritization Meetings.……..74

V. Appendices.…….....81

A. About Memorial Hospital Belleville ……..81

B. Focus Group Members……..…….....82

C. Internal Work Group Members.....……..... 84

D. Focus Group Report.…….....85

VI. Implementation Plan…...…….....95

A. Needs to be Addressed……...95

B. Community Health Needs Identified that will not be Addressed.....95

I. Executive Summary

Memorial Hospital Belleville has provided comprehensive health care services to meet the needs of residents throughout St. Clair County since 1958. The hospital has established effective partnerships toward the goal of improving the health of their communities.

In the Patient Protection and Affordable Care Act (PPACA) passed in March 2010, nonprofit hospitals are mandated to conduct a community health needs assessment (CHNA) every three years. As 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 public health and underserved populations.

Memorial Hospital Belleville and HSHS St. Elizabeth's Hospital conducted their first stakeholder assessment in 2012, followed by a subsequent assessment in 2015. With the opening of Memorial Hospital East in April 2016, the three hospitals agreed to work together to complete the 2018 assessment. The hospitals conducted the 2018 assessment in two phases.

First, a focus group discussion was held with key leaders and stakeholders representing the community. The group reviewed the primary data and community health need findings from 2015 CHNA's with discussion focused on these objectives:

1) Determine whether needs identified in the 2015 CHNA remain the correct focus areas
2) Discuss if needs on the list are no longer a priority
3) Determine where gaps exist in the plan to address the prioritized needs
4) Identify other organizations for collaboration
5) Discuss what has changed since 2015 when these needs were prioritized and whether there are new issues to consider
6) Understand what other organizations are doing to impact the health of the community and how those activities might complement the hospitals' initiatives
7) Evaluate what issues the stakeholders anticipate becoming a greater concern in the future

Memorial Hospital Belleville and Memorial Hospital East worked together to complete the second phase of the CHNA process. The hospitals assembled an internal work group of clinical and nonclinical staff. This group reviewed focus group results as well as findings from a secondary data analysis to further assess identified needs. The secondary analysis used data from multiple sources, including Conduent Healthy Communities Institute and Centers for Disease Control and Prevention (CDC)/State Cancer Profiles. This analysis identified unique health disparities and trends evident in St. Clair County when compared against state and U.S. data.

After completion of the comprehensive assessment process, Memorial Hospital Belleville and Memorial Hospital East identified three health needs where focus is most needed to improve the future health of the community they serve: Substance Abuse, Nutrition Education and Stroke. The hospitals selected the same health needs in order to work together to improve the county as one team.

The analysis and conclusions were presented, reviewed and approved by the Board of Directors at Memorial Hospital Belleville and Memorial Hospital East.

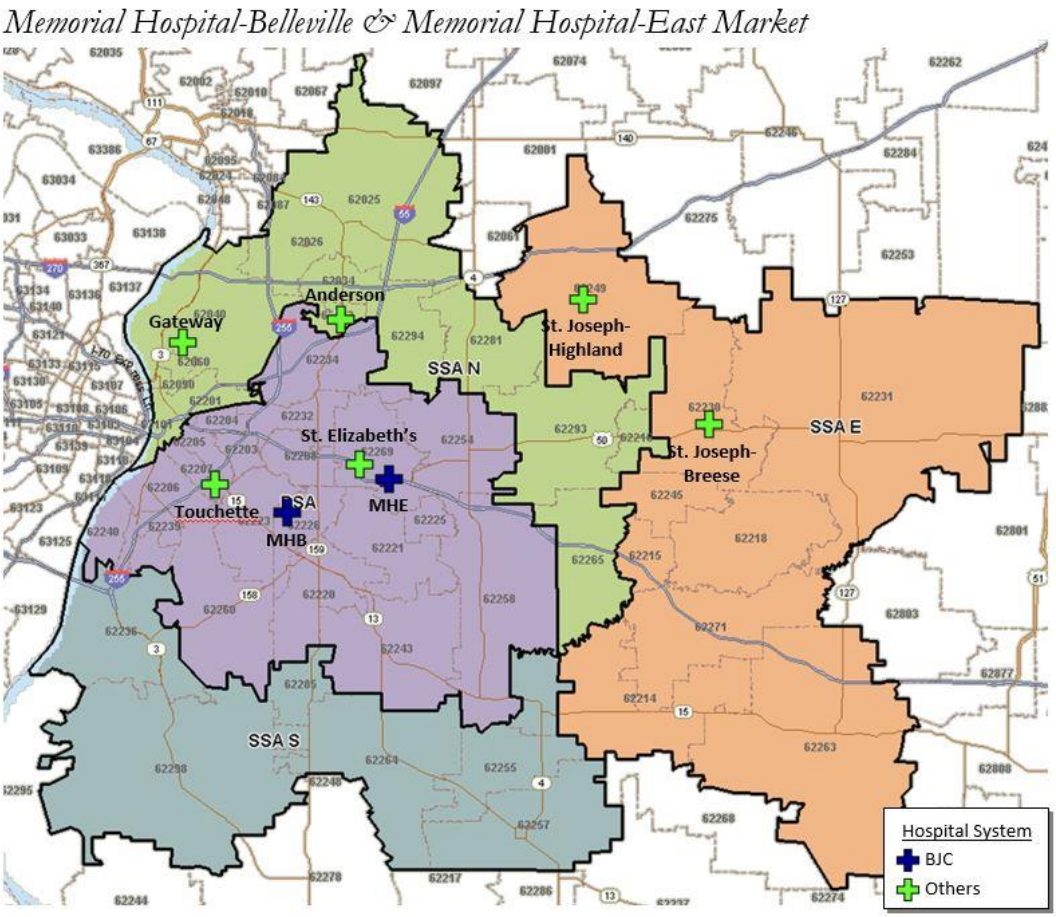
II. Community Description

A: Geography

Memorial Hospital Belleville 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.

Memorial Hospital Belleville is located in Belleville, Illinois. The hospital is in St. Clair County and considered part of the greater St. Louis metropolitan area.

For the CHNA, the hospital defined St. Clair County as its community.



Memorial Hospital Belleville's primary service area is represented by the zip codes in the purple shaded area of the map. The zip codes in the blue, peach and green shaded areas indicate the hospital's secondary service area.

B: Population Trend

Population and demographic data are necessary to understand the health of the community and plan for future needs. In 2016, St. Clair County reported a total population estimate of 262,759 compared to the state population of 12,801,539. St. Clair County comprised 2.1 percent of the state of Illinois' total population.

The population of the county and state decreased since the 2010 census. From 2010-2016, the county population decreased 2.7 percent and the state experienced a 0.2 percent decrease in its population. Table 1 details county demographics compared to the state.

Table 1: St. Clair County vs. Illinois Demographic		
GEOGRAPHY	**St. Clair County**	**Illinois**
Land area in square miles, 2010	65,776	55,518.93
Persons per square mile, 2010	410.60	231.1
POPULATION		
Population, July 1, 2016 estimate	262,759	12,801,539
Population, percent change - April 1, 2010 to July 1, 2016	-2.7%	-0.2%
Population, 2010	270,056	12,830,632
RACE / ETHNICITY / Language Spoken		
White alone, percent, 2016	65.4%	77.2%
White alone, not Hispanic or Latino, percent, 2016	62.1%	61.7%
African American alone, percent, 2016	30.4%	14.7%
Hispanic or Latino, percent, 2016	4.0%	17.0%
Two or More Races, percent, 2016	2.4%	1.9%
Asian alone, percent, 2016	1.4%	5.5%
American Indian and Alaska Native alone, percent, 2016	0.3%	0.6%
Native Hawaiian and Other Pacific Islander alone, percent, 2016	0.1%	0.1%
Foreign born persons, percent, 2011-2015	2.7%	14.0%
Language		
Language other than English spoken at home, percent 5+, 2011-2015	4.6%	22.7%
AGE		
Persons under 5 years, percent, 2016	6.3%	6.0%
Persons under 18 years, percent, 2016	23.8%	22.9%
Persons 65 years and over, percent, 2016	14.6%	14.6%
GENDER		
Female persons, percent, 2016	51.7%	50.9%
Male persons, percent, 2016	48.3%	49.1%

Conduent Healthy Communities Institute

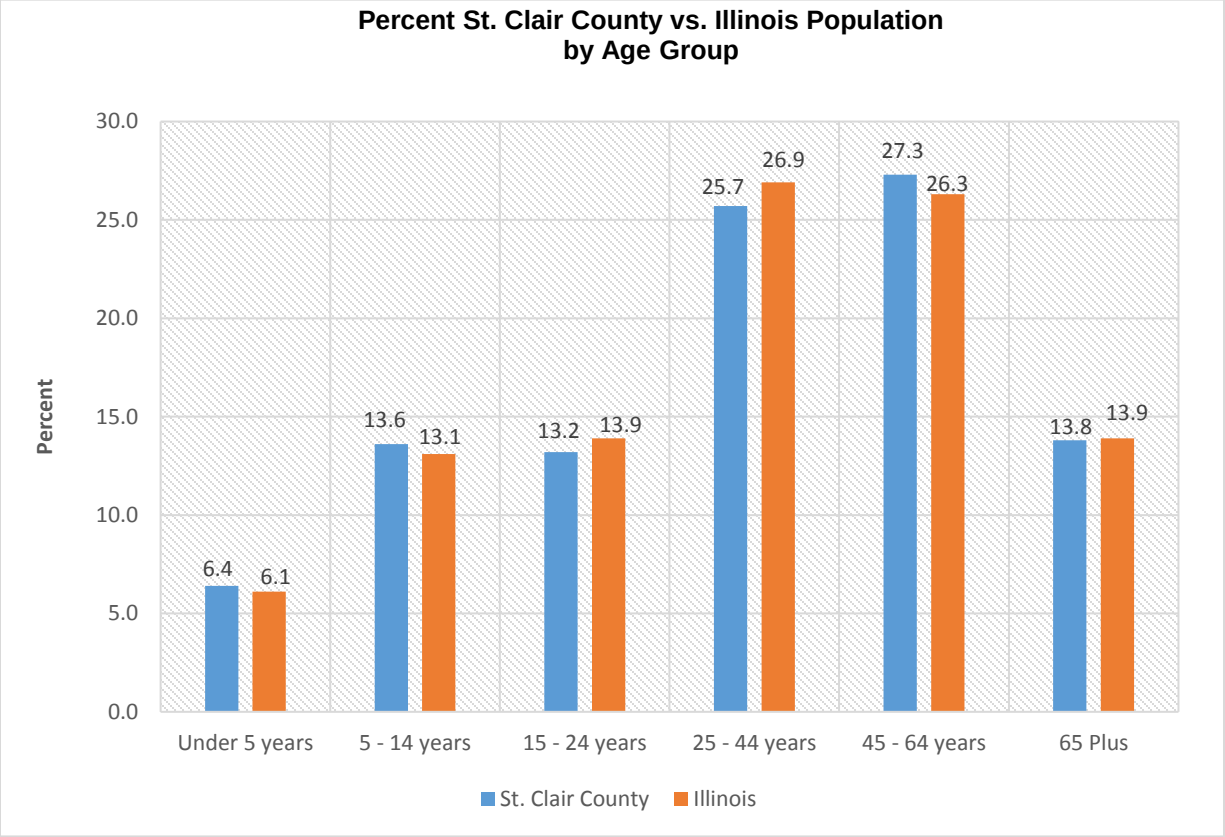
Table 2: St. Clair County vs. Illinois Demographic including Education, Income & Housing		
	St. Clair County	**Illinois**
EDUCATION		
High school graduate or higher, percent of persons age 25+, 2011-2015	90.3%	87.9%
Bachelor's Degree or higher, percent of persons age 25+, 2011-2015	26.0%	32.3%
INCOME		
Per capita money income in the past 12 months (2015 dollars), 2011-2015	$26,738	$30,494
Median household income (in 2015 dollars), 2011-2015	$49,895	$57,574
Persons below poverty level, percent, 2011-2015	16.4%	13.0%
HOUSING		
Housing units, July 1, 2016	119,195	5,326,970
Owner-occupied housing unit rate, 2011-2015	66.3%	66.4%
Median value of owner-occupied housing units, 2011-2015	120,400	173,800
Households, 2011-2015	102,267	4,786,388
Persons per household, 2011-2015	2.45	2.63

Conduent Healthy Communities Institute

St. Clair County's median household income for the five-year period ending in 2015 was 13.3 percent lower than the state overall. Persons living below the poverty level in St. Clair County totaled 16.4 percent compared to 13.0 percent in the state. Home ownership was the same in the county (66.3 percent) and the state (66.4 percent).

C: Age

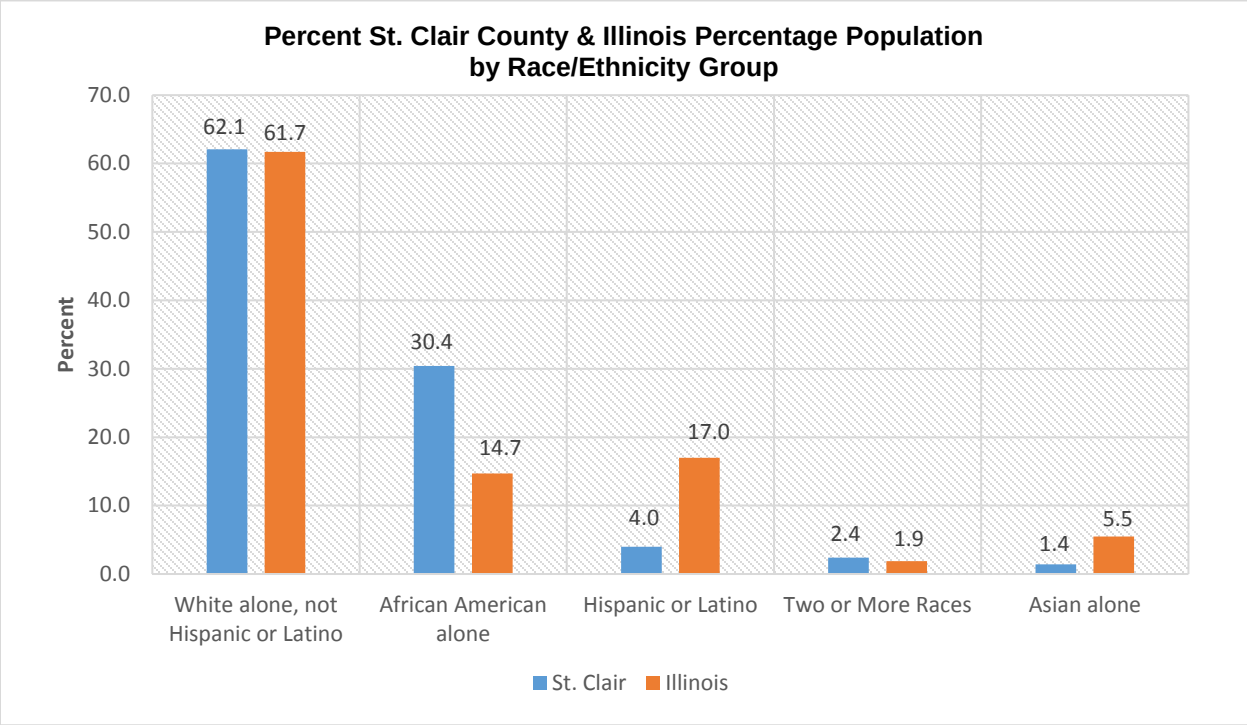
The age structure of a community is an important determinant of the health and health services it will need.



U.S. Census Bureau

The distribution of the population across age groups in the county was similar to the state with the highest population found in the 25-44-year age group and the 45-64-year age group. When combined, 53 percent of the county's population comprised these age groups.

D. Race and Ethnicity Profile



Source: Conduent Healthy Communities Institute

Those who identified as White were the largest population group by race in the county (62.1 percent) and state (61.7 percent). African American was the second highest population group by race. Those who identified as African American in the county (30.4 percent) were double the percent of the state (14.7 percent). The county reported 4 percent of the population who identified as Hispanic when compared to 17 percent in the state.

E: Social-Economic Indicators

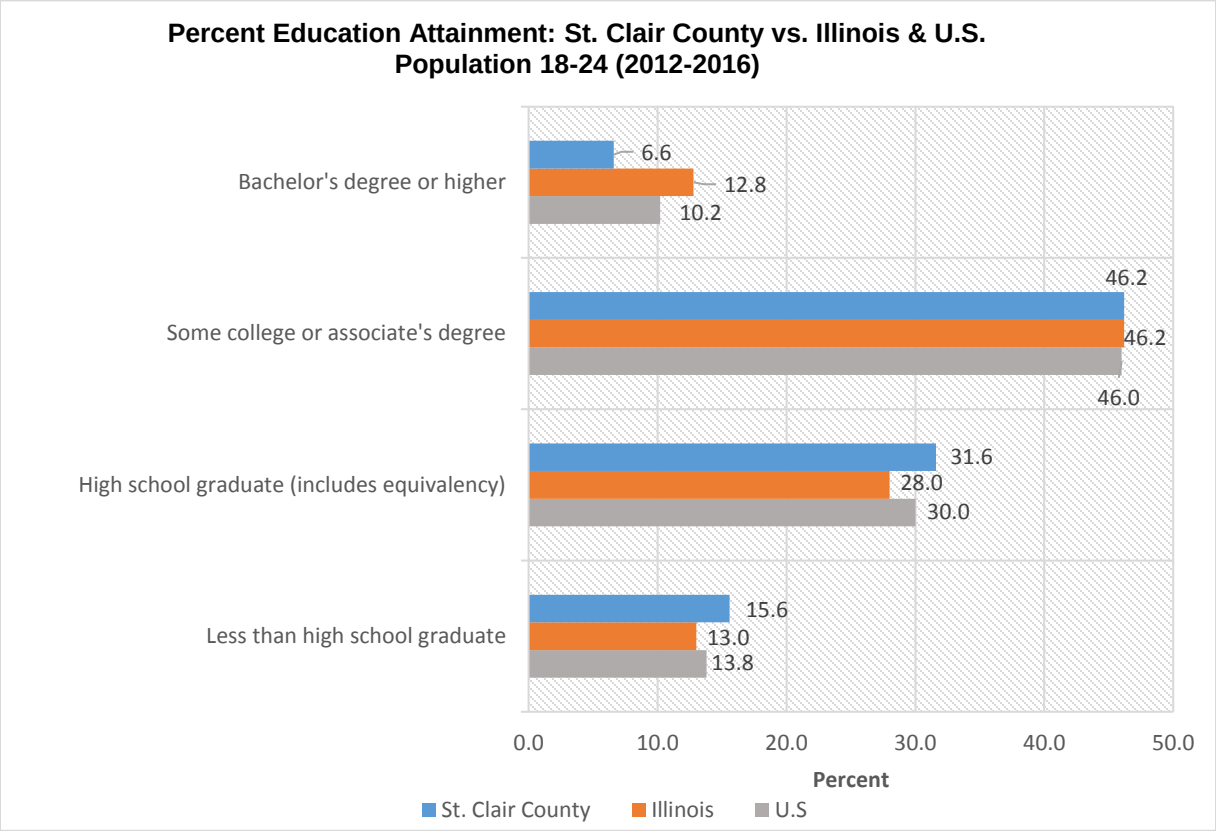
Table 3: St. Clair County vs. Illinois & U.S. Social-Economic Indicators

Indicators	St. Clair County	Illinois	U.S.
Students Eligible for Free Lunch Program (2015-2016)	46.7%	46.6%	42.60%
Children Living Below Poverty Level (2012-2016)	28.3%	19.5%	21.2%
Families Living Below Poverty Level (2012-2016)	13.9%	10.2%	11.0%
Renters spending >30% of Household Income on Rent (2012-2016)	48.7%	49.6%	47.3%
Households With Cash Public Assistance (2012-2016)	2.6%	2.5%	2.7%
Homeownership (2012-2016)	56.7%	59.6%	55.9%
Unemployment (April 2018)	3.7%	3.6%	3.7%

Conduent Healthy Communities Institute

The percentage of children (28.3 percent) and families (13.9 percent) living below the poverty level was higher in the county when compared to the state (19.5 percent; 10.2 percent) and the U.S. (21.2 percent; 11.0 percent).

F. Education



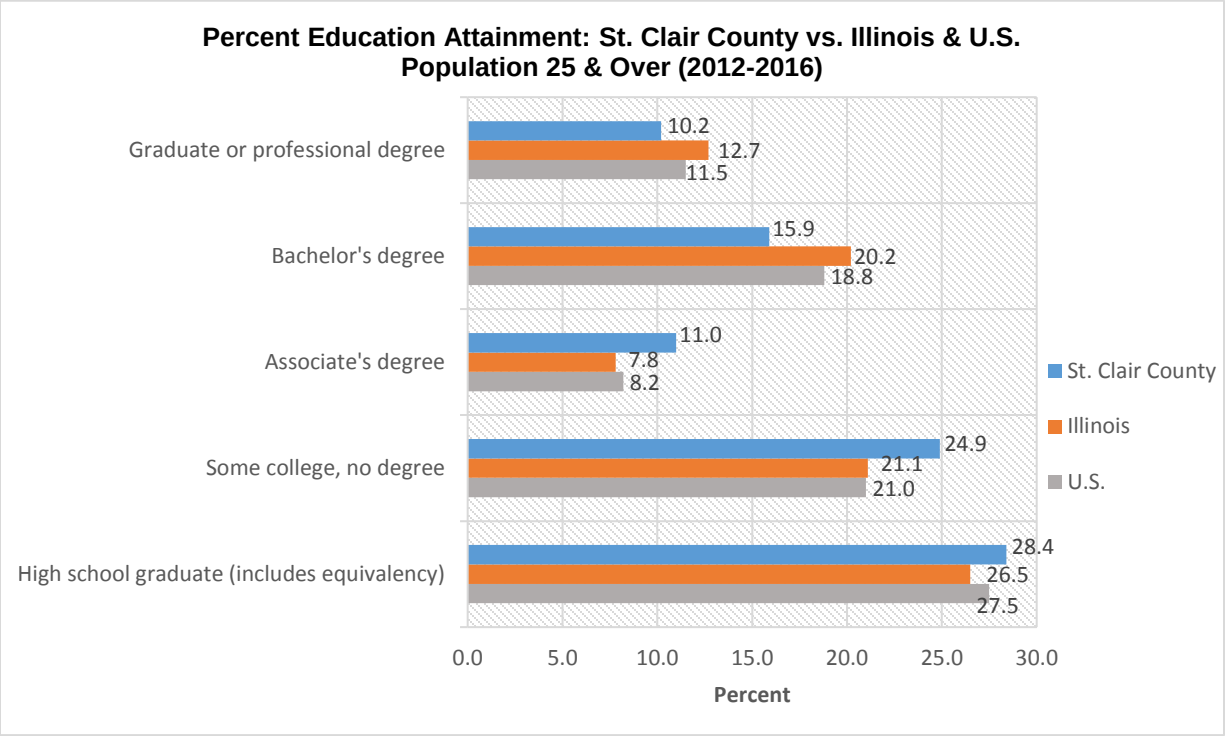
Conduent Healthy Communities Institute & U.S. Census

In St. Clair County, nearly 7 percent of the population age 18-24 years attained a bachelor's degree or higher when compared to 13 percent in the state and 10 percent in the U.S.

For many, having a bachelor's degree is the key to a better life. The college experience develops cognitive skills, and allows learning about a wide range of subjects, people, cultures and communities. Having a degree also opens career opportunities in a variety of fields, and is often the prerequisite to a higher-paying job. It is estimated that college graduates earn about $1 million more per lifetime than their non-graduate peers. (Conduent Healthy Communities Institute).

In the county, 16 percent of this age group did not have a high school diploma compared to 13 percent in the state and 14 percent in the U.S.

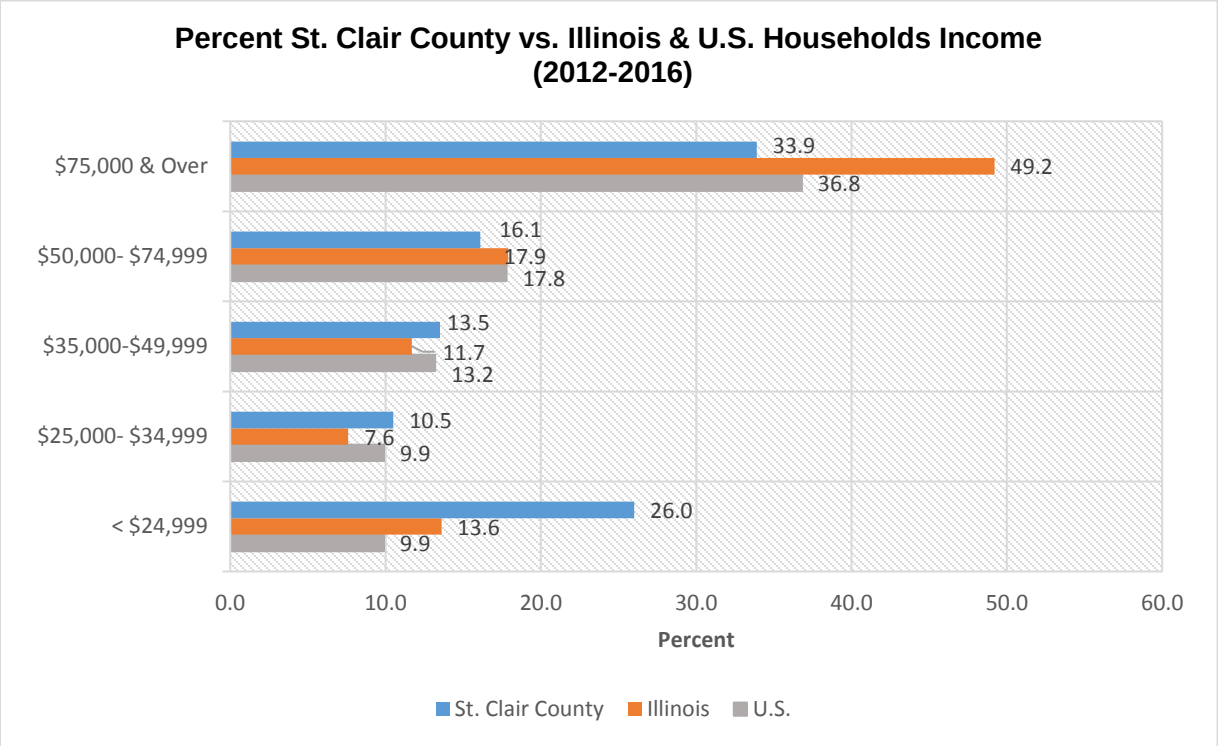
Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance or involved in crime. (Conduent Healthy Communities Institute)
The Healthy People 2020 national health target is to increase the proportion of students who graduate high school within four years of their first enrollment in ninth grade to 82.4 percent.



Conduent Healthy Communities Institute & U.S. Census

In St. Clair County, 10 percent of the population 25 years and older attained a graduate or professional degree compared to 13 percent in the state and 12 percent in the U.S. In the county, 16 percent of this age group received a bachelor's degree compared to 20 percent in the state and 19 percent in the U.S.

G. Income



Conduent Healthy Communities Institute & U.S. Census

In St. Clair County, 34 percent of households reported an income of $75,000 or more compared to 49 percent in the state and 37 percent in the U.S.

Households that reported < $24,999 in the county totaled 26 percent compared to 14 percent in the state and 10 percent in the U.S.

III. Previous CHNA Measurement and Outcomes Results

At the completion of the 2015 CHNA, Memorial Hospital Belleville identified Chronic Obstructive Pulmonary Disease (COPD); Diabetes; Heart and Vascular Disease; and Lung Cancer where focus was most needed to improve the health of the community served by the hospital. This section of the report details goals and status of these community health needs.

Table 4: Memorial Hospital Belleville 2015 CHNA Outcomes

Chronic Obstructive Pulmonary Diseases (COPD)	Diabetes	Heart/Vascular Disease	Lung Cancer
Goals	**Goals**	**Goals**	**Goals**
Enhance programs/services to address COPD prevention and maintenance. Reduce the mortality rate to 19.5 (per 100k) by 2020.	Enhance services to address diabetes prevention and maintenance. Support diabetes self-management.	Enhance programs/services to address heart disease prevention and maintenance. Support heart disease self-management.	Enhance programs/services to address lung cancer prevention and maintenance. Reduce the mortality rate to 45.5 (per 100k) by 2020.
Encourage participation in pulmonary rehabilitation support groups and Lively Lungs, in collaboration with the O'Fallon Y.	Offer community health screenings, including blood sugar at health fairs. Provide educational materials through "Dominate Your Diabetes" program as well as a Diabetes Support Group and the Center for Diabetes Education.	Offer community health screenings and events, during heart month, and throughout the year. Provide 911 education (Time Is Muscle) about importance of calling 911 when experiencing symptoms.	Use CT technology and endobronchial ultrasound for early detection of lung cancer. Offer smoking cessation programs / consultations.
Current Status	**Current Status**	**Current Status**	**Current Status**
Results in 2016: • 115 free pulmonary clinic visits • 108 Lively Lung participants **Results in 2017:** • 920 free pulmonary clinic visits • 176 Lively Lungs participants **Results in 2018 (to date)**: • 126 Lively Lungs participants	**Results in 2016:** • 218 diabetes clinic patients • 166 diabetes support group participants • 2 diabetes-specific educational programs • 55 mothers learned about prenatal diabetes **Results in 2017:** • 210 diabetes clinic patients • 146 diabetes support group participants • 2 diabetes-specific educational programs • 21 mothers learned about prenatal diabetes **Results in 2018** (to date): • 101 diabetes clinic patients • 118 diabetes support group participants • 7 mothers learned about prenatal diabetes	**Results in 2016:** • 188 free heart failure clinic visits • 50 community members trained in CPR **Results in 2017:** • 327 free heart failure clinic visits • 33 community members trained in CPR	**Results in 2016:** • 2 smoking cessation classes/events Class discountinued due to lack of participation

IV. Conducting the 2018 CHNA

A. Primary Data Collection: Focus Group

Memorial Hospital Belleville partnered with Memorial Hospital East and HSHS St. Elizabeth's Hospital to conduct a focus group to solicit feedback from community stakeholders, public health experts and those with a special interest in the health needs of residents located in St. Clair County. (See Appendix D for complete Focus Group Report).

Nineteen of 21 invited participants representing various St. Clair County organizations participated in the focus group. (See Appendix B). The focus group was held Jan. 30, 2018, at Enjoy Church in O'Fallon, Illinois, with the following objectives identified:

1) Determine whether needs identified in the 2015 CHNA remain the correct focus areas
2) Determine where gaps exist in the plan to address the prioritized needs
3) Identify potential organizations for collaboration and understand how their activities might complement the hospitals' initiatives
4) Discuss how the world has changed since 2015 when these hospitals first identified these needs and whether there are new issues to consider
5) Evaluate what issues the participants anticipate becoming a greater concern in the future

2018 Focus Group Summary

A consensus was reached that needs identified in the previous assessment should remain as focus areas for the hospital.

Considerations for Adding to List of Priorities

After reviewing the hospitals' key issues/priorities, nothing was identified to remove from the list. Many expressed the desire to re-evaluate the priorities and integrate additional needs to the list of those being addressed, including:

Access to transportation was identified as a major issue for many individuals in this community as it affects their ability to get to doctors' appointments as well as pick up prescriptions.

Opioid epidemic concerns were raised, including its impact on the declining life expectancy of men and women.

Prevention and education for a younger population, such as teenage pregnancy, tobacco use and STIs, as one participant observed the needs being addressed appear to be more related to an older population.

Mental Health is a priority for many community stakeholders as well as the lack of available mental health professionals.

Violent crime was perceived as having the largest impact on the health of the county. It causes social isolation, as people are afraid to leave their homes, which affects their willingness to seek medical care when it may be needed.

Gaps in Implementation Strategies

The group noted that the St. Clair County I-Plan addresses many of the needs identified by focus group participants, including infant mortality, mental health, substance abuse and violent crime.

Gaps were identified in the ways in which needs are being addressed, including:

- Life skills development
- Limited resources to ensure continuity of care following discharge and potential homelessness
- Access to transportation
- Limited access to medical specialists
- Health needs of rural communities, including mental health resources
- Fall prevention for older adults
- Disease prevention and health education of active duty military and military reservists, including suicide prevention

Changes since 2015

- Obesity, including childhood obesity
- Illinois state budget crisis was also believed to have had a major impact on a health care providers' ability to address the needs of the community. The state's inability to pay health care providers for the services they render can create cash flow challenges impacting the provision of services in the future.

New Issues of Concern

- Education and prevention in the areas of chronic diseases, focusing on smoking prevention/cessation and obesity would help to reduce incidence of lung cancer and diabetes in the future.
- Increasing the coordination and collaboration among organizations
- Availability of memory care for older adults

Potential Partner Organizations

Understanding that hospitals alone cannot address these issues, several organizations were identified as potential partners for collaboration:

- The Drug-Free Partnership and the ambulance district were identified as a potential source of more current data on the issue of the opioid epidemic and its impact on the health of the community.

- The St. Clair County Department of Health's Collective Impact group was also noted, whose goal is to bring together different organizations to collaborate and share information to produce a better outcome than any one organization could do on its own. This group is also considering social determinants of health as part of its scope, and has surveyed the community to understand what they view as their priority health needs.

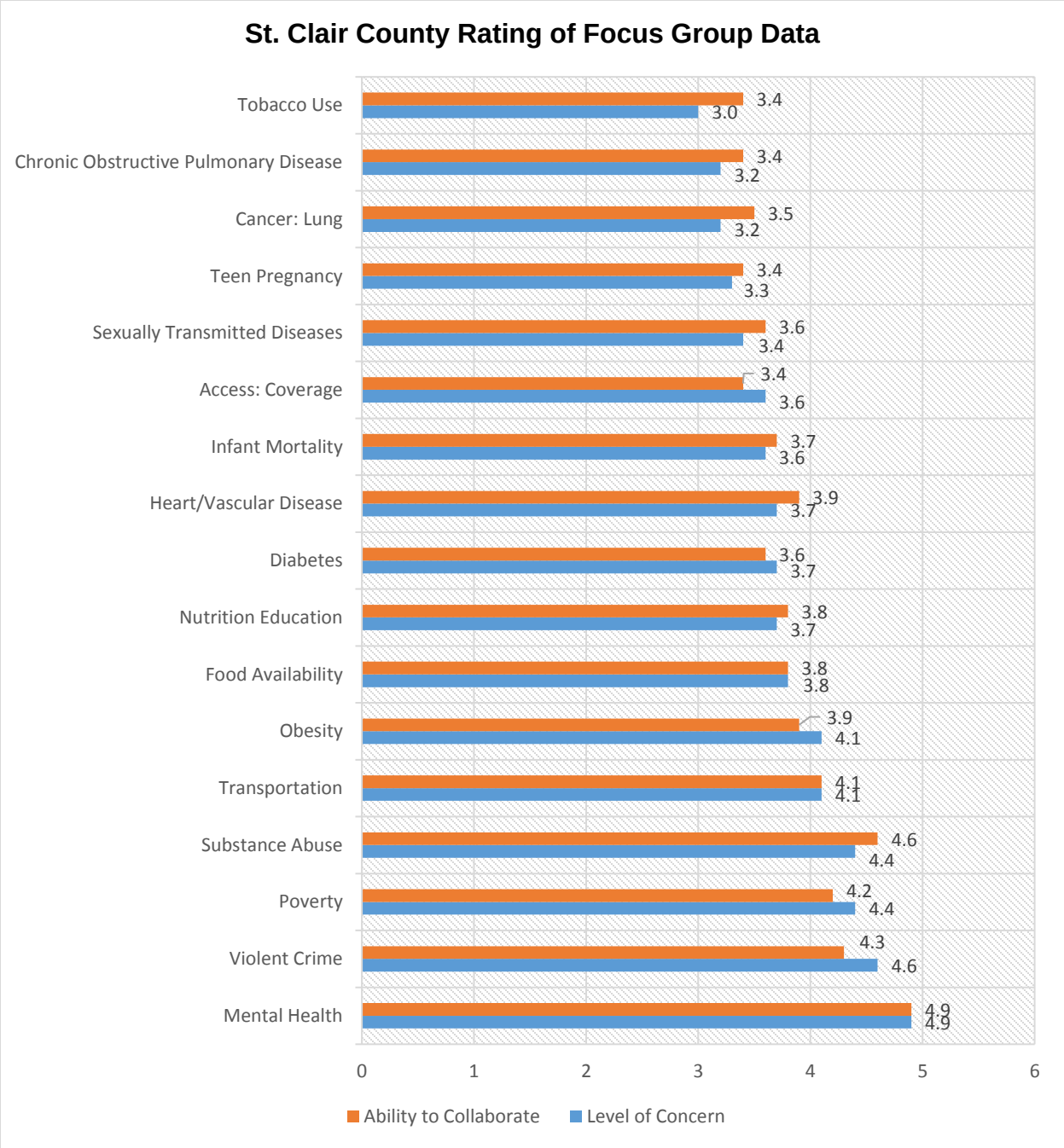
- The Karla Smith Foundation is focusing on suicide prevention by training emergency department personnel on how to address the situation when they encounter it.

- The St. Clair County Mental Health Board is also conducting suicide prevention training within the community, including QPR training (question, persuade and refer). In addition, the board recently received a violence prevention grant to train 45 teachers and parents in trauma-informed care in the East St. Louis/Cahokia area.

- Age Smart has a grant for the Savvy Caregiver program, to support caregivers of individuals who have Alzheimer's. Programs and Services for Older People (PSOP) also has a mental health counselor who is working with the Alzheimer's Association to support caregivers as well as families of those with Parkinson's disease.

Rating of Needs

After a thorough discussion, participants agreed to add transportation and childhood obesity to the identified health needs from 2015 assessment. Participants rated all the needs identified on a scale of 1 (low) to 5 (high) based on their perceived level of community concern and the ability of community organizations to collaborate around them.



Mental Health rated highest in terms of level of concern and ability to collaborate. Violent Crime, Poverty and Substance Abuse ranked next in terms of community concern as well as ability to collaborate, followed by Transportation and Obesity.

B. Secondary Data Analysis

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:

Conduent Healthy Communities Institute, an online dashboard of health indicators for St. Clair 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. https://healthycities.zendesk.com

Centers for Disease Control and Prevention (CDC)/State Cancer Profiles is a website that provides 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

Much of the analysis was completed comparing St. Clair County, Illinois, and the U.S. To provide a comprehensive and up-to-date view (analysis of disparity and trend), secondary data was included on the following needs:

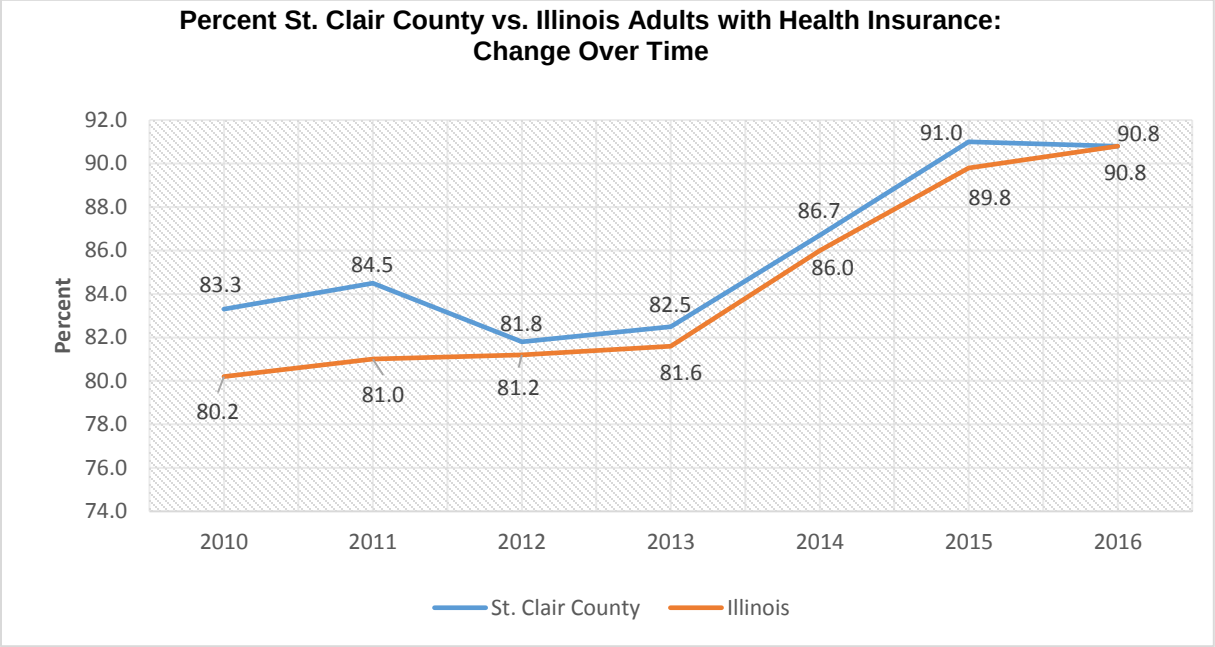
- Access to Care
- Maternal Health
- Sexually Transmitted Infections
- Chronic Obstructive Pulmonary Disease
- Asthma
- Chronic Kidney Disease
- Diabetes
- Hypertension
- Access to Food
- Obesity
- Cardiovascular Disease
- Lung Cancer
- Premature Death
- Mental Health
- Substance Abuse
- Violent Crime

Following the secondary data analysis, a summary is provided that outlines observations noted in the disparities and trends for each of the above needs (See Pages 18-73). While Memorial Hospital Belleville identified three needs as their primary focus, the following needs will continue to be appropriately addressed by the hospital and other organizations in St. Clair County.

Access to Health Care Services: Coverage

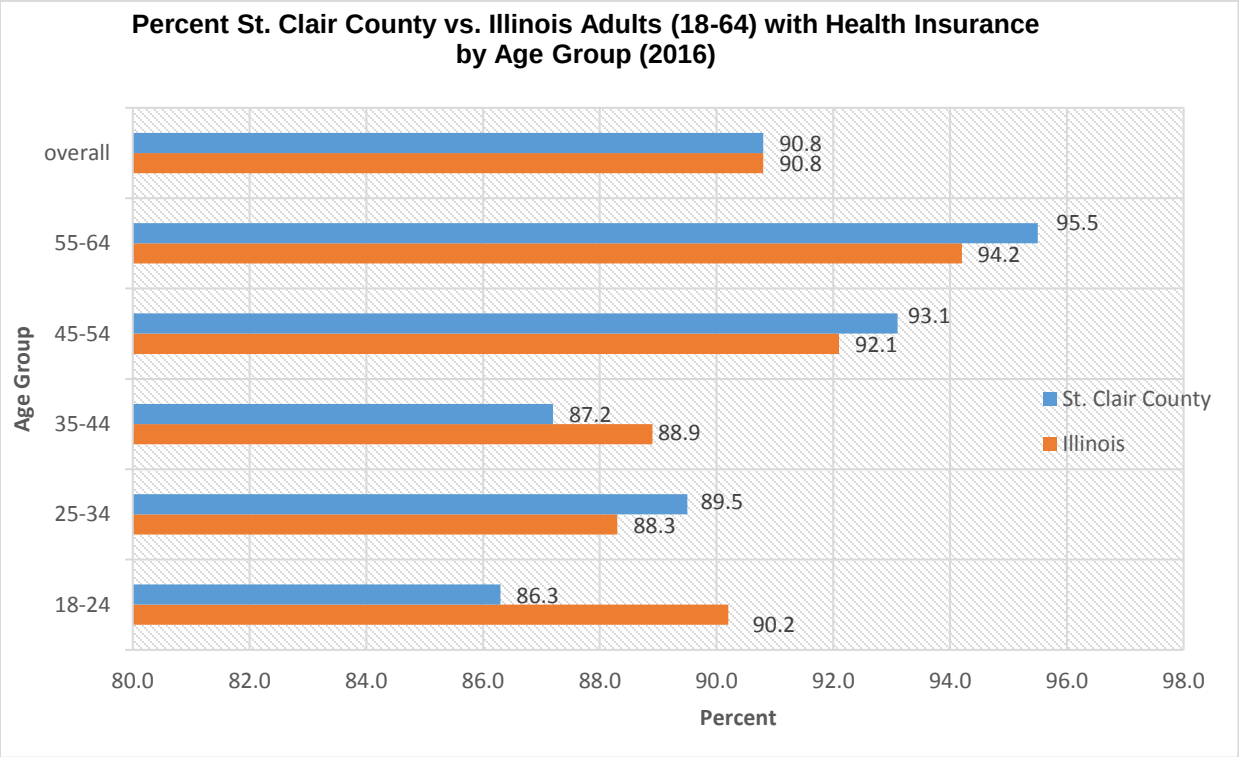
Access to comprehensive, quality health care services is important for promoting and maintaining health; preventing and managing disease; reducing unnecessary disability and premature death; and achieving health equity for all Americans. (Healthy People 2020)

Over the first half of this decade, 20 million adults have gained health insurance coverage because of the Patient Protection and Affordable Care Act of 2010. Yet even as the number of uninsured has been significantly reduced, millions of Americans still lack coverage. In addition, data from the Healthy People Midcourse Review demonstrate significant disparities in access to care by sex, age, race, ethnicity, education and family income. These disparities exist with all levels of access to care, including health and dental insurance having an ongoing source of care and access to primary care. Disparities also exist by geography, as millions of Americans living in rural areas lack access to primary care services due to workforce shortages. Future efforts will need to focus on the deployment of a primary care workforce that is better geographically distributed and trained to provide culturally-competent care to diverse populations. (Healthy People 2020)



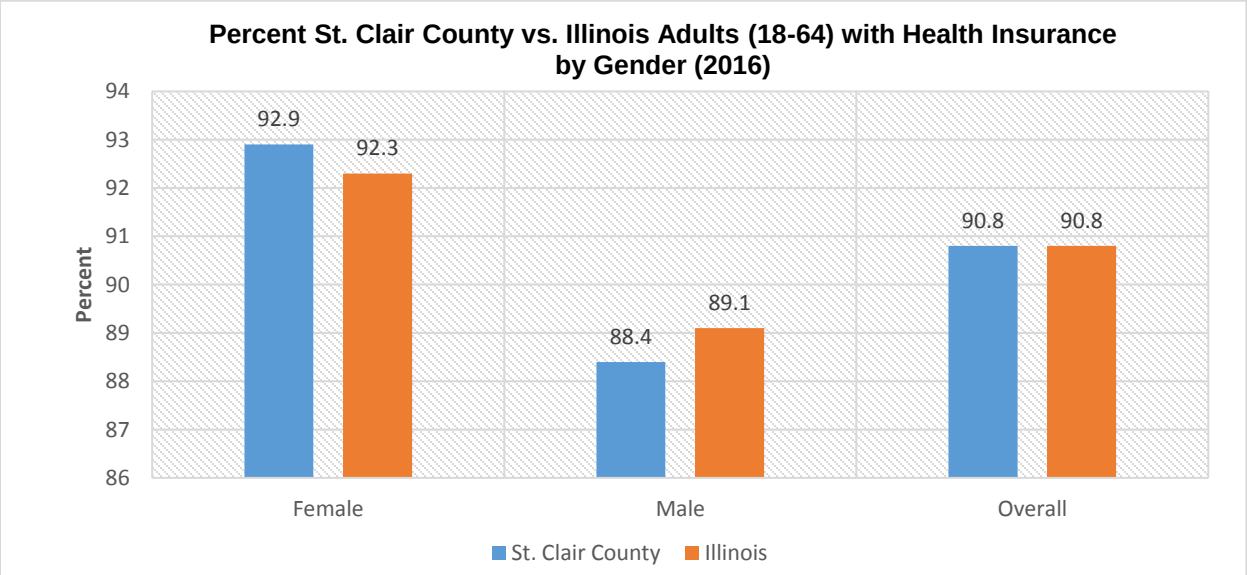
Conduent Healthy Communities Institute

Since 2010, the percent of adults with health insurance in St. Clair County was slightly higher than the state. From 2013-2014, both the county (5.09 percent) and the state (5.4 percent) experienced a jump in adults with health insurance. Both the county and the state reported the same percentage in 2016.



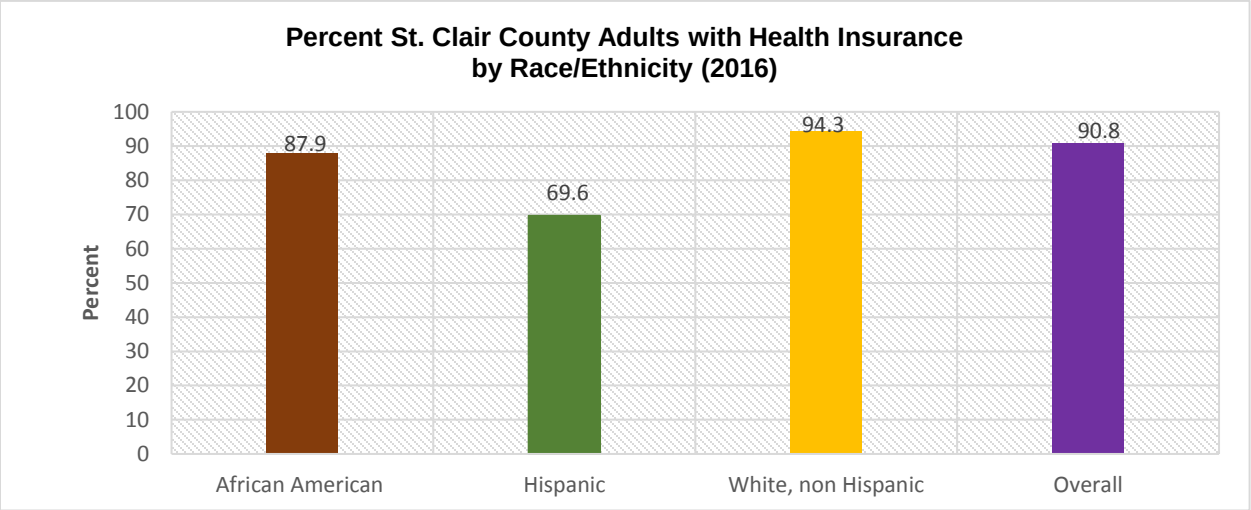
Conduent Healthy Communities Institute

The 55-64 age group had the highest rate of health insurance in both the county and state followed by the 45-54 age group.



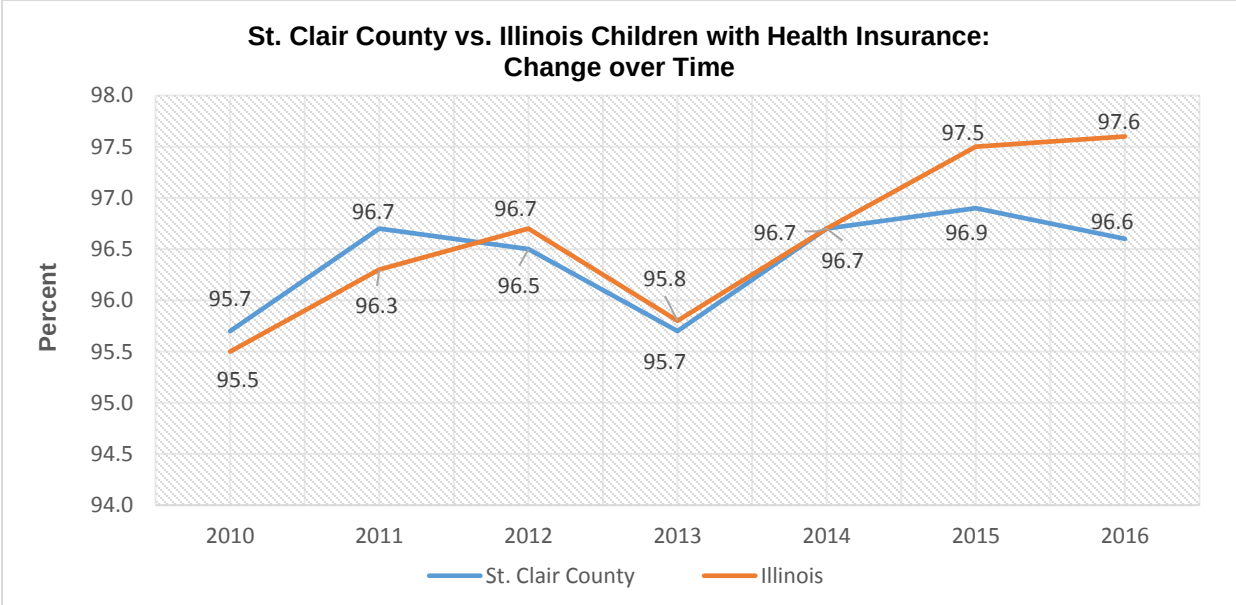
Conduent Healthy Communities Institute

Females in both the county and state had higher rates of health insurance when compared to males as well as the overall rate.



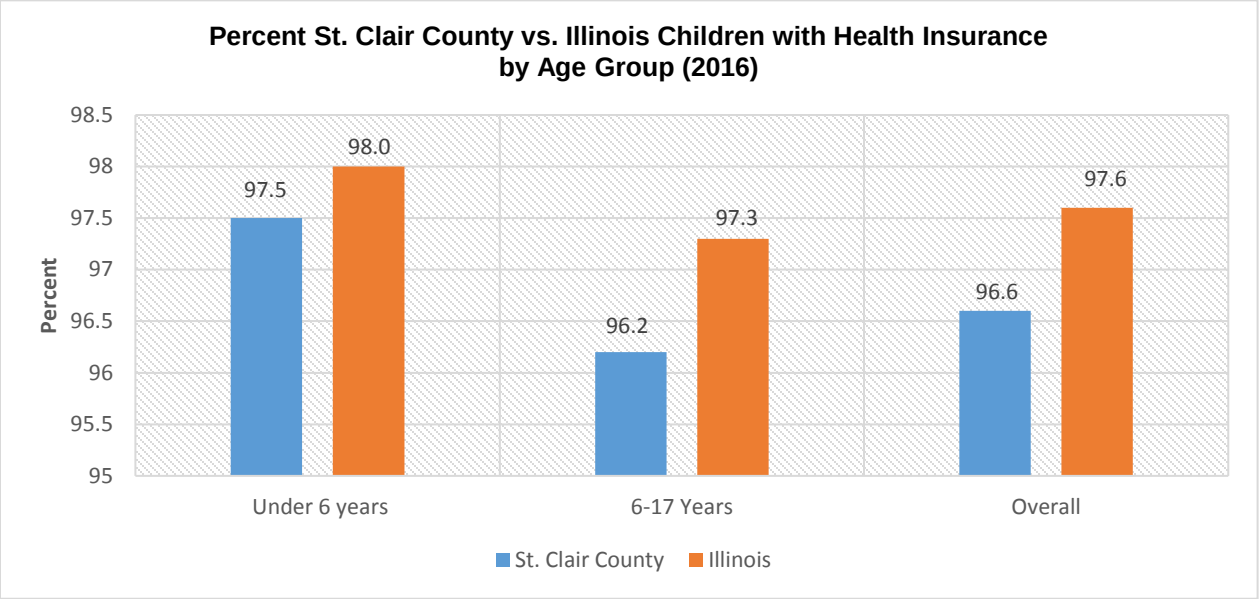
Conduent Healthy Communities Institute

The percent of White, non-Hispanic adults with health insurance was 7.28 percent higher than the percent of African American adults and 35.49 percent higher than Hispanic adults. African American adults with health insurance was 26.29 percent higher than the percent of Hispanic adults.



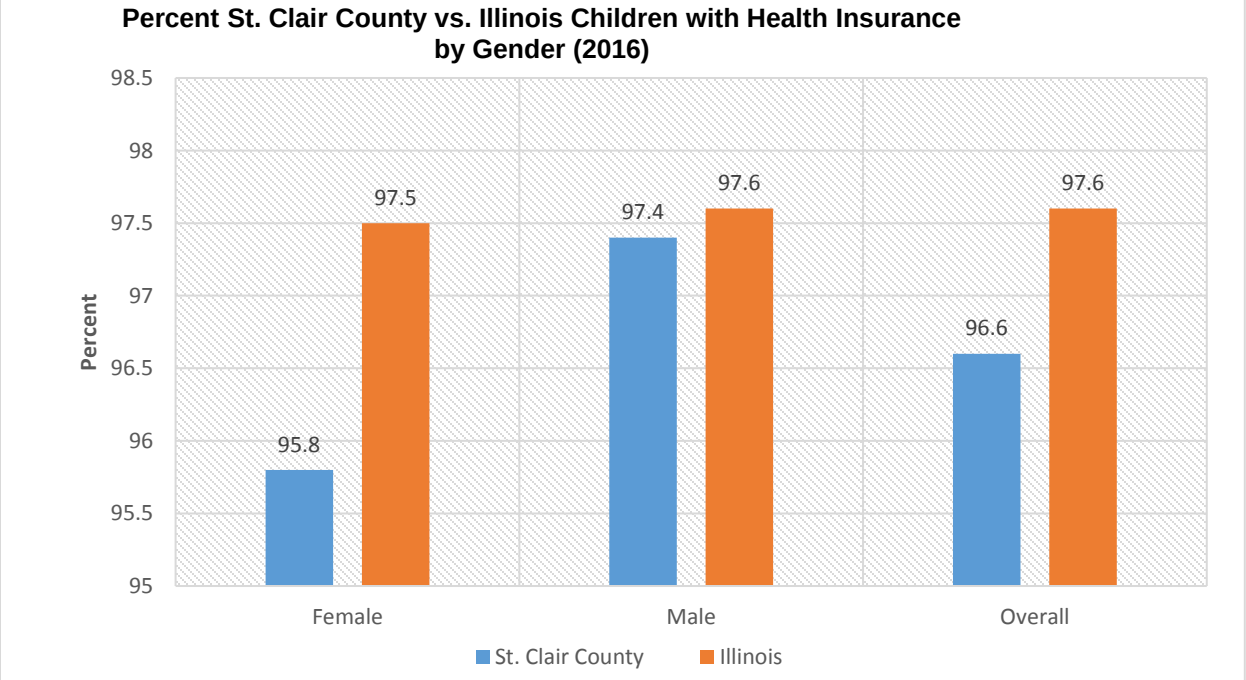
Conduent Healthy Communities Institute

The rate of children with health insurance was consistent between the county and the state since 2010 except the past two years when the county experienced a slight decline.



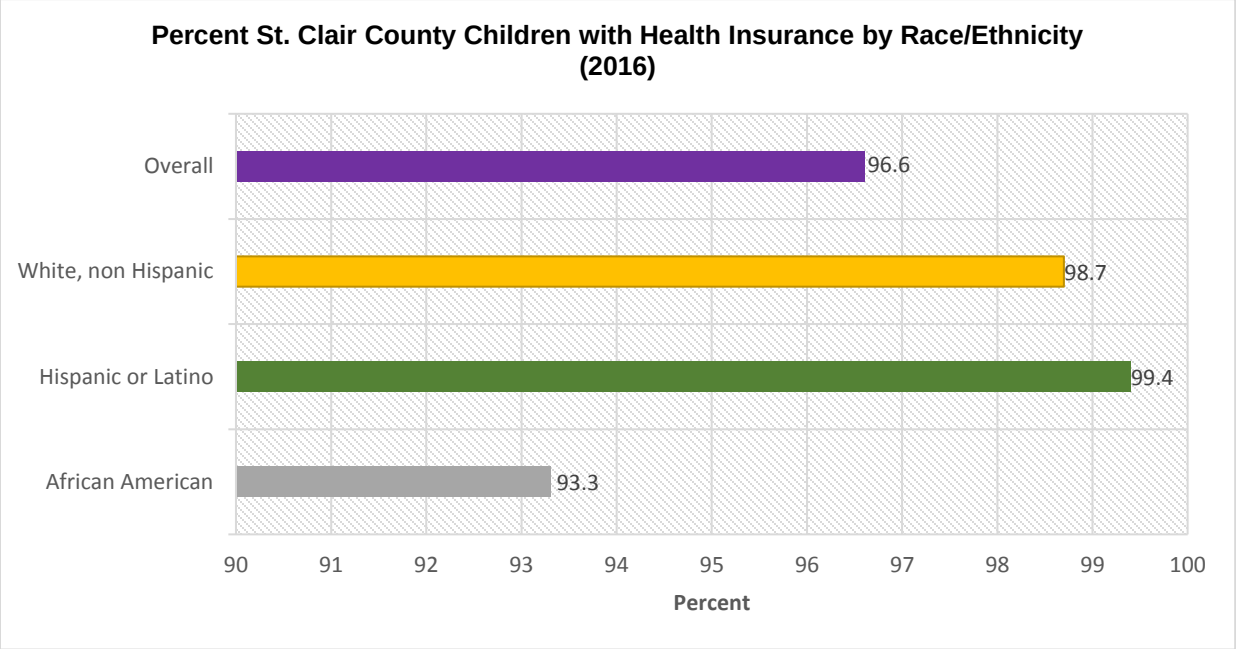
Conduent Healthy Communities Institute

Both in the county and the state, those under 6 had a higher rate with health insurance than those in the 6-17 age group.



Conduent Healthy Communities Institute

When comparing female and male children with health insurance, both genders had similar rates in the county and the state.



Conduent Healthy Communities Institute

While white, non-Hispanic children had a higher rate of health insurance than other races, Hispanic children had a higher rate (0.71 percent) than White children and 6.54 percent higher than African American children.

Table 5: St. Clair County vs. Illinois & U.S. Health Care Coverage & Providers Rates			
Indicator	**St. Clair County**	**Illinois**	**U.S.**
Adults with Usual Source of Health Care (2010-2014)	87.0%	82.1%	77.10%
Adults with Health Insurance (2016)	90.8%	90.8%	95.5%
Person with Private Health Insurance only (2016)	53.0%	59.5%	56.6%
Person with Public Health Insurance only (2016)	26.3%	23.1%	23.0%
Children with Health Insurance(2016)	96.6%	97.6%	95.5%
Dentist Rate /100,000 (2016)	70.0	75.0	67.0
Primary Care Provider Rate /100,000 (2015)	59.0	81.0	75.0
Mental Health Provider Rate /100,000 (2017)	92.0	190.0	214.0
Non-Physician Primary Care Provider Rate/100,000 (2017)	72.0	65.0	81.0
Preventable Hospital Stays: Medicare Population /1,000 (2014)	61.5	55.8	49.9

Conduent Healthy Communities Institute

When comparing the rate of health care coverage and providers between the county and the state, the most notable disparity was among primary care providers (27.16 percent lower in the county than the state) and mental health providers (51.6 percent lower in the county than the state).

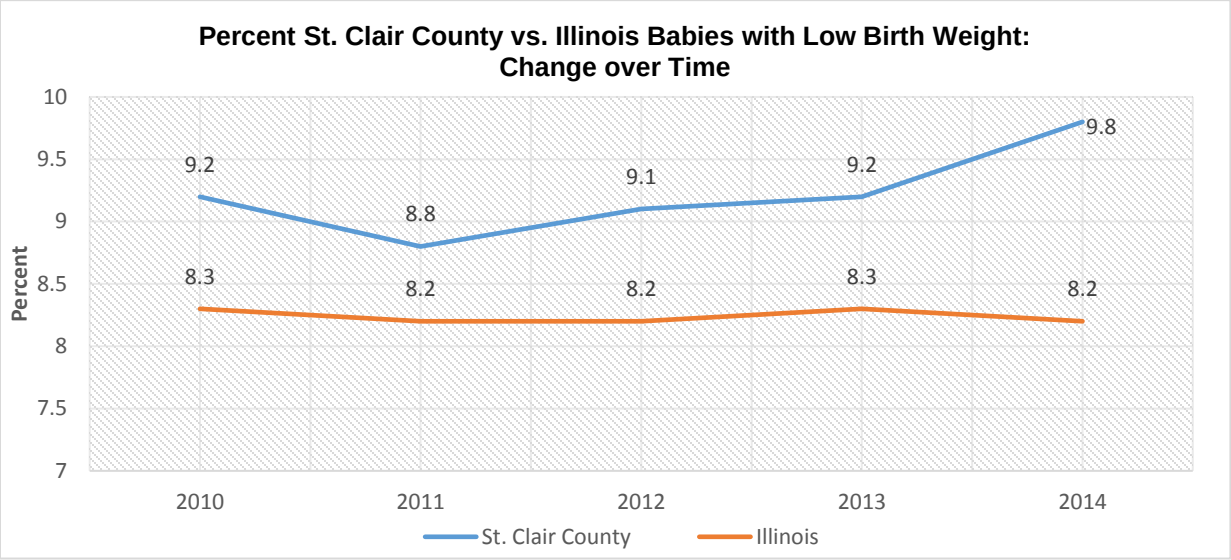
Table 6: Access: Transportation: St. Clair County vs. Illinois & U.S.			
Indicators	**St. Clair County**	**Illinois**	**U.S.**
Households without a Vehicle (2012-2016)	9.5%	10.8%	9.0%
Workers Commuting by Public Transportation (2012-2016)	4.2%	9.2%	5.1%
Mean Travel Time to Work; Age 16+ (2012-2016)	24.5 minutes	28.5 minutes	6.1 minutes

Conduent Healthy Communities Institute

Vehicle ownership is directly related to the ability to travel. In general, people living in a household without a car make fewer than half the number of journeys compared to those with a car. This limits their access to essential local services such as supermarkets, post offices, doctors' offices and hospitals. Most households with above-average incomes have a car while only half of low-income households do.

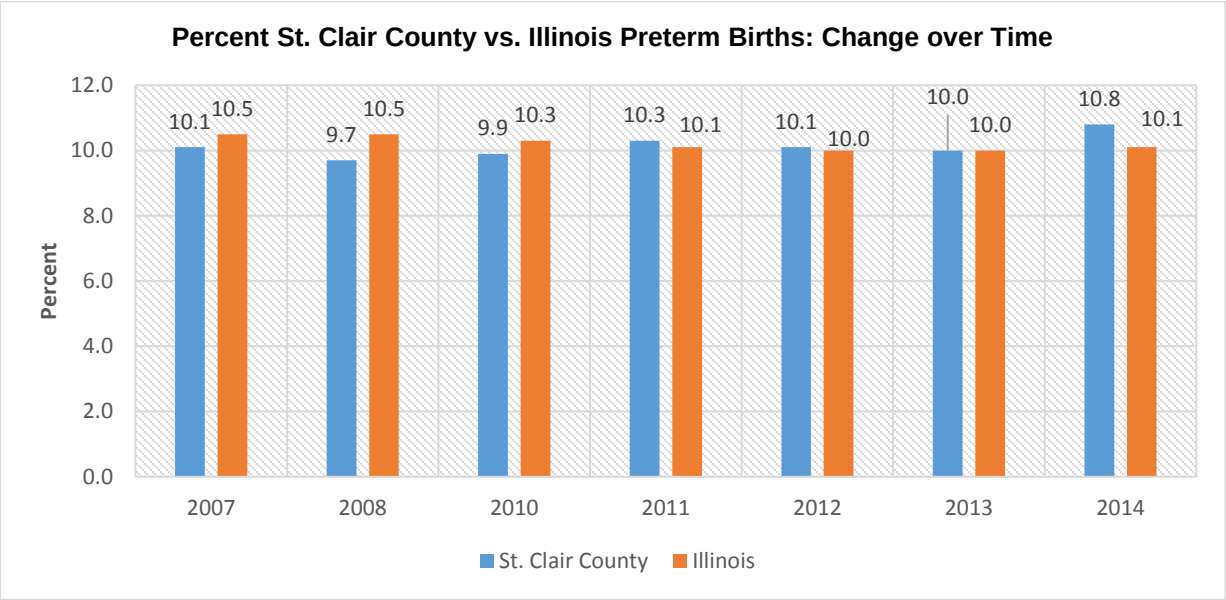
Maternal Health

Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. Low birth weight is typically caused by premature birth and fetal growth restriction, both of which are influenced by a mother's health and genetics. The most important things an expectant mother can do to prevent low birth weight are to seek prenatal care, take prenatal vitamins and stop smoking, drinking alcohol and using drugs.



Conduent Healthy Communities Institute

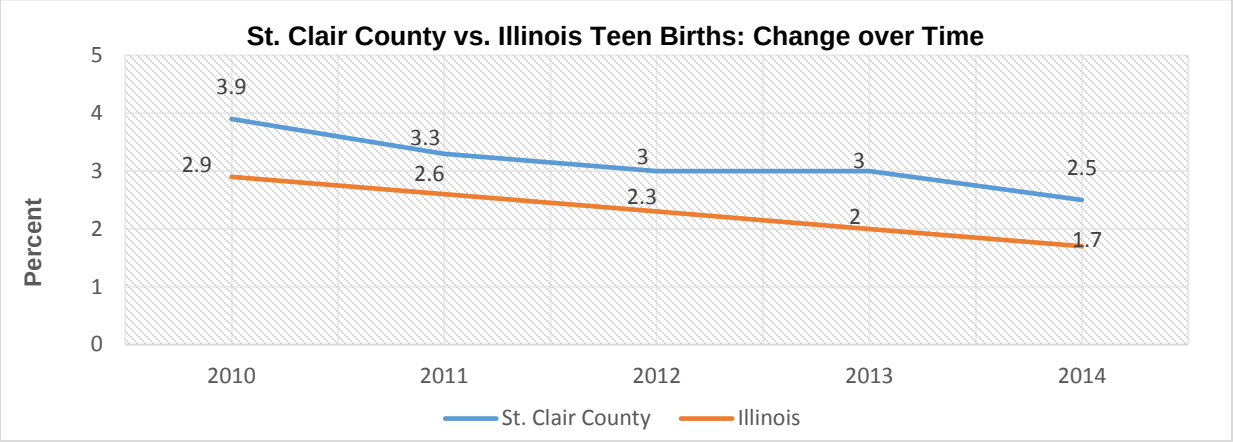
While the low birth weight in the state had been steady at 8.2 percent and 8.3 percent, the county experienced a 1-point increase in the rate from 2011 to 2014. Both the county and the state are above the Healthy People 2020 national target of 7.8 percent.



Conduent Healthy Communities Institute

Even though both the county and state met the Healthy People 2020 national health target to reduce the proportion of infants born preterm to 11.4 percent, the county's rate experienced fluctuation from 2007-2014 and had an increase of 8 percent from 2013 to 2014. The rate in the state remained approximately the same during this period.

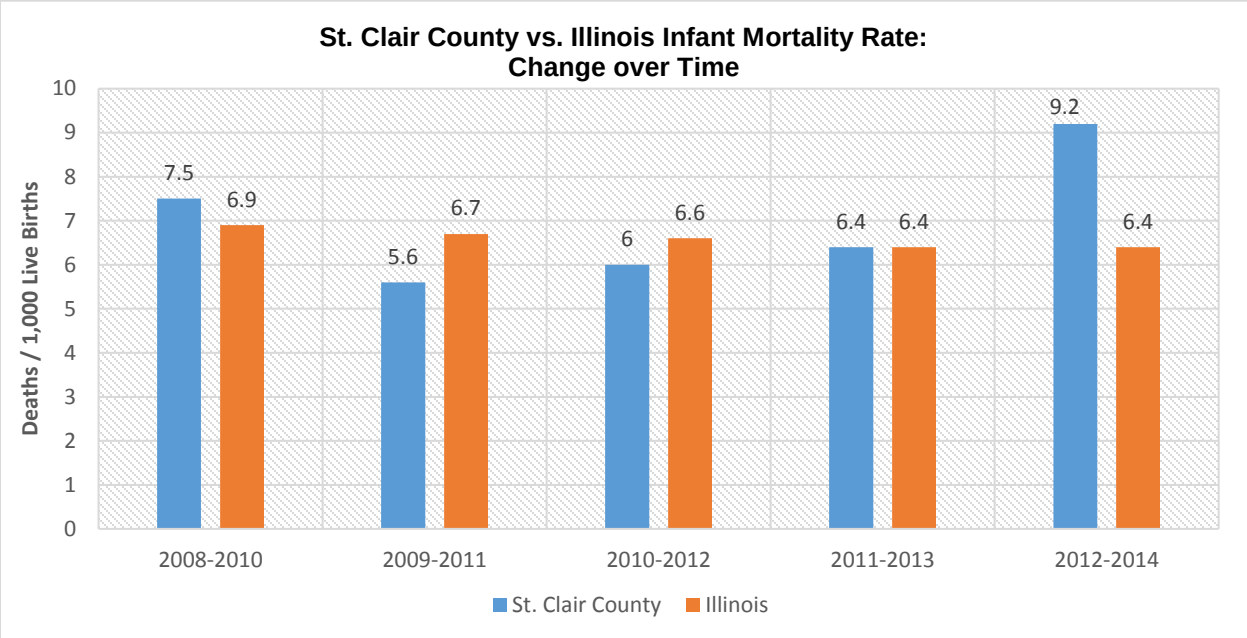
Teen birth is of concern for the health outcomes of both the mother and the child. Pregnancy and delivery can be harmful to a teenager's health, as well as social and educational development. Babies born to teen mothers are more likely to be born preterm and/or low birth weight. Responsible sexual behavior is one of the 10 leading health indicators of Healthy People 2020. Responsible sexual behavior reduces unintended pregnancies, thus, reducing the number of births to adolescent females.



Source: Conduent Healthy Communities Institute

The rate of teen births in the county and the state steadily declined from 2010-2014. A 35.9 percent decrease occurred from 2010 to 2014 in the county and a 41.38 percent decrease in the state.

The infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. The leading causes of death among infants are birth defects; preterm delivery; low birth weight; Sudden Infant Death Syndrome (SIDS); and maternal complications during pregnancy. (Conduent Healthy Communities Institute)

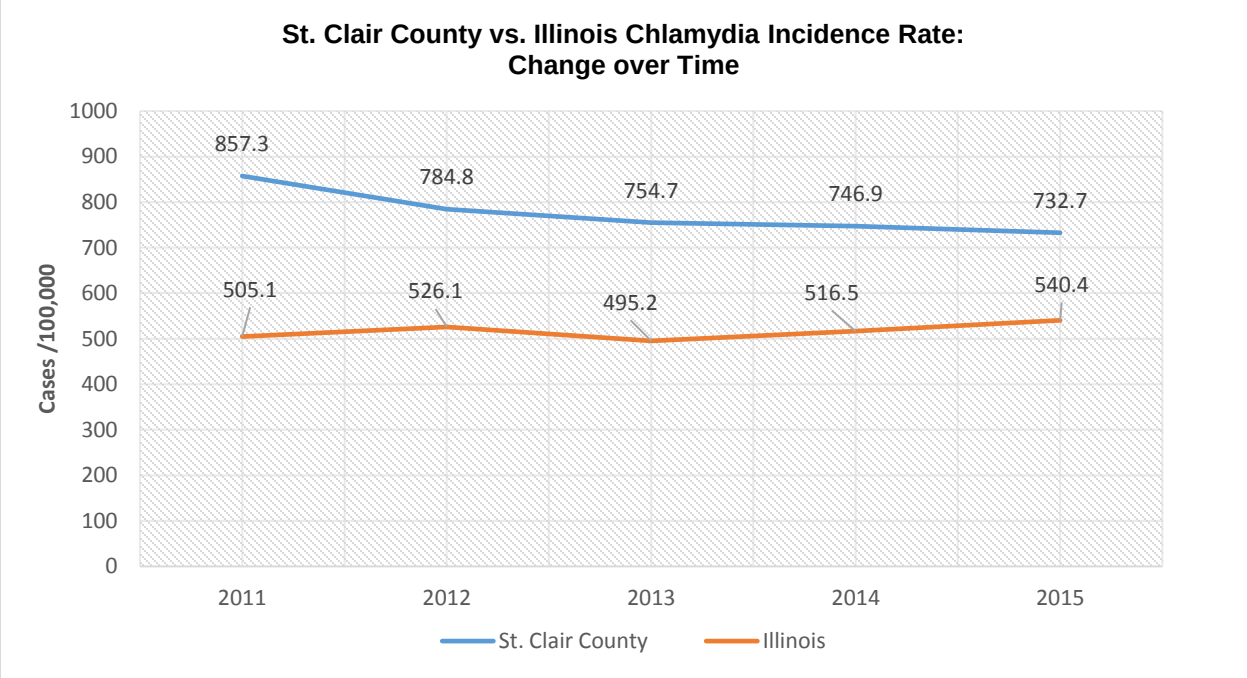


Source: Conduent Healthy Communities Institute

The infant mortality rate in the county dropped from 7.5 percent to 5.6 percent from 2008-2010 to 2009-2011, a decrease of 25.33 percent. A 43.75 percent increase occurred in the county from 2011-2013 to 2012-2014. Conversely, the rate in the state remained approximately the same. The Healthy People 2020 national health target is to reduce the infant mortality rate to 6 deaths per 1,000 live births.

Chlamydia

Chlamydia, one of the most frequently reported bacterial sexually transmitted infections (STI) in the United States, is caused by the bacterium, *Chlamydia trachomatis*. Although symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman ever recognizes an infection. Underreporting of chlamydia is substantial because most people with chlamydia are not aware of their infections and do not seek testing. (Conduent Healthy Communities Institute)

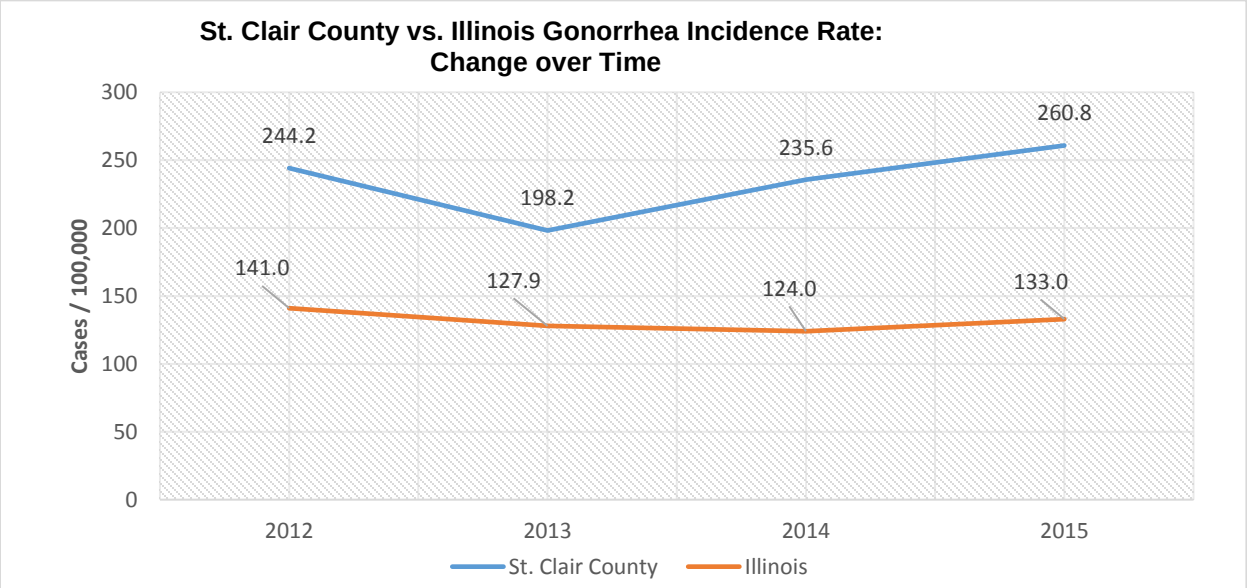


Conduent Healthy Communities Institute

While St. Clair County had a relatively flat incidence rate of chlamydia over the past three years ending in 2015, the rate was still nearly 36 percent higher than the state average.

Gonorrhea

Gonorrhea is a sexually transmitted infection (STI) caused by *Neisseria gonorrhoeae*. It is typically asymptomatic, but easy to treat. However, gonorrhea has developed resistance to antibiotics over the years, complicating treatment. Left untreated, gonorrhea can cause serious and permanent health problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease. In the United States, the highest reported rates of infection are among sexually active teenagers, young adults and the African American population. (Conduent Healthy Communities Institute)

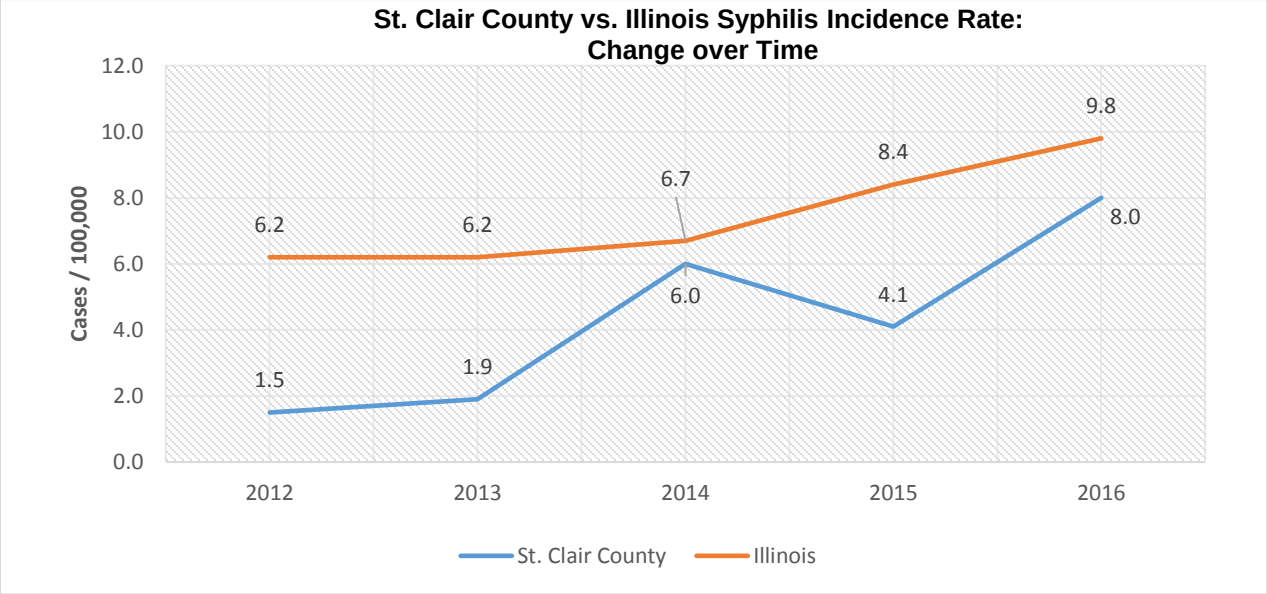


Conduent Healthy Communities Institute

From 2012-2013, St. Clair County reported a decrease of 18.84 percent in the gonorrhea rate. However since 2013, the county experienced a 31.6 percent increase in gonorrhea.

Syphilis

Syphilis is a sexually transmitted infection (STI) caused by a bacterium called *Treponema pallidum*. According to the CDC, after reaching an all-time low in 2000, cases of primary and secondary (infectious) syphilis are on the rise in the United States, particularly among men having sex with men. New cases of primary and secondary syphilis in men having sex with men are often characterized by co-infection with HIV. In addition, syphilis can also be passed from mother to infant during pregnancy causing a disease called congenital syphilis. Pregnant women with untreated early syphilis experience perinatal death in up to 40 percent of cases. (Conduent Healthy Communities Institute)



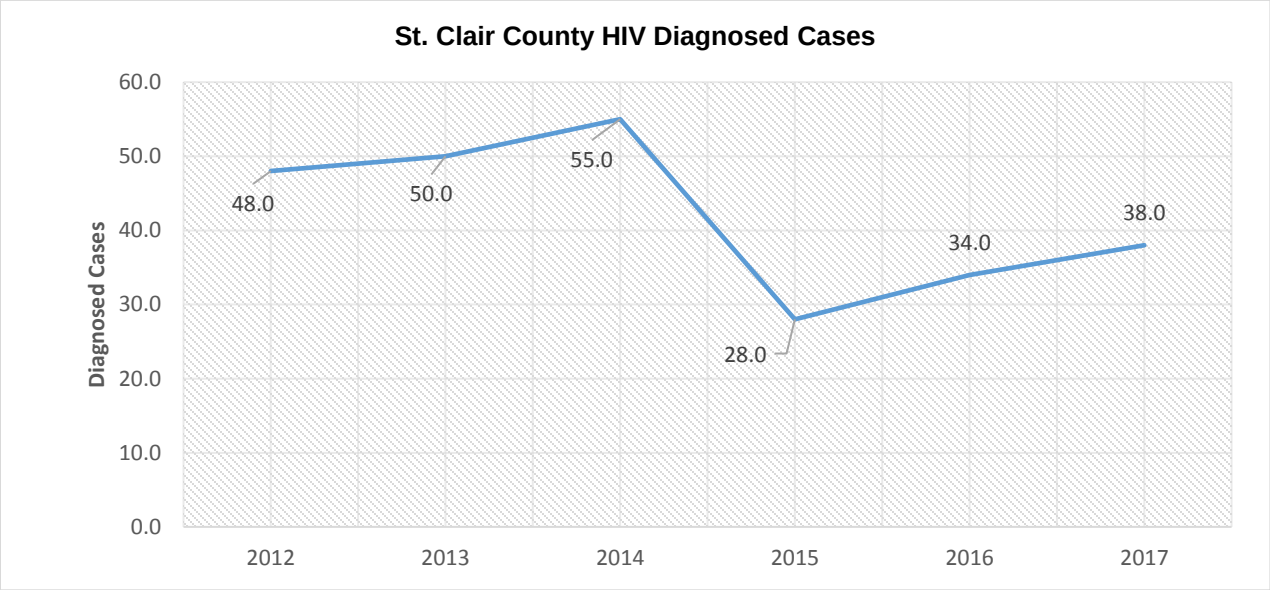
Conduent Healthy Communities Institute

The rate of syphilis in the county increased 26.67 percent from 2012-2013 and increased 68.33 percent from 2013-2014. The rate of syphilis then dropped 31.67 percent from 2014-2015 yet increased 95.12 percent from 2015-2016. In 2012, the county rate was four times lower than the rate in the state. However, in 2015 the rate in the state was double the rate in the county.

Human Immunodeficiency Virus (HIV)

The human immunodeficiency virus (HIV) damages the immune system, eventually leading infected individuals to develop acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition. People infected with HIV may develop mild infections or chronic symptoms like fever, fatigue, shortness of breath and weight loss. If left untreated, HIV typically progresses to AIDS in about 10 years, at which time the immune system is weakened to the point of being unable to fight infections. Men who have sex with men of all races, African-Americans and Hispanics/Latinos are disproportionately affected by HIV.

Today, more people than ever before are living with HIV/AIDS. People with HIV are living longer than in years past because of better treatments. Also, more people become infected with HIV than die from the disease each year. While the total number of people living with HIV in the U.S. is increasing, the number of annual new HIV infections has remained stable in recent years. (Conduent Healthy Communities Institute)



Conduent Healthy Communities Institute

The county experienced a significant decrease (49.1 percent) in the number of HIV diagnosed cases from 2014-2015. However, the county experienced an increase from 2016. In 2017, there was an increase of 10 more cases or almost 36 percent from 2015.

Table 7: St. Clair County vs. Ilinois & U.S. Rate of Sexually Transmitted Infections

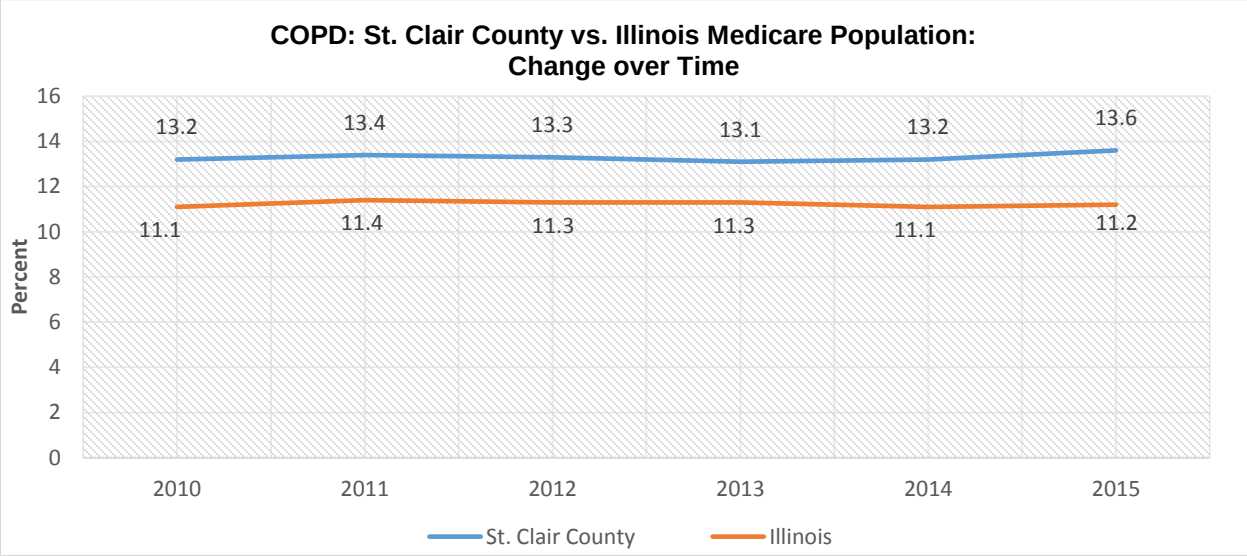
Indicators	St. Clair County	Illinois	U.S.
Chlamydia Incidence Rate/100,000 (2015)	732.7	540.4	478.8
Gonorrhea Incidence Rate/100,000 (2015)	260.8	133.0	123.9
HIV Newly Diagnosed Cases (2017)	38.0		
Syphilis Incidence Rate/100.000 (2016)	8.0	9.8	8.7
Tuberculosis Cases (2015)	6.0		

Conduent Healthy Communities Institute

Compared to the state, when available, the county had a higher rate of sexually transmitted infections. However, the syphilis incidence rate in the county was lower (18.37 percent) than the rate in the state.

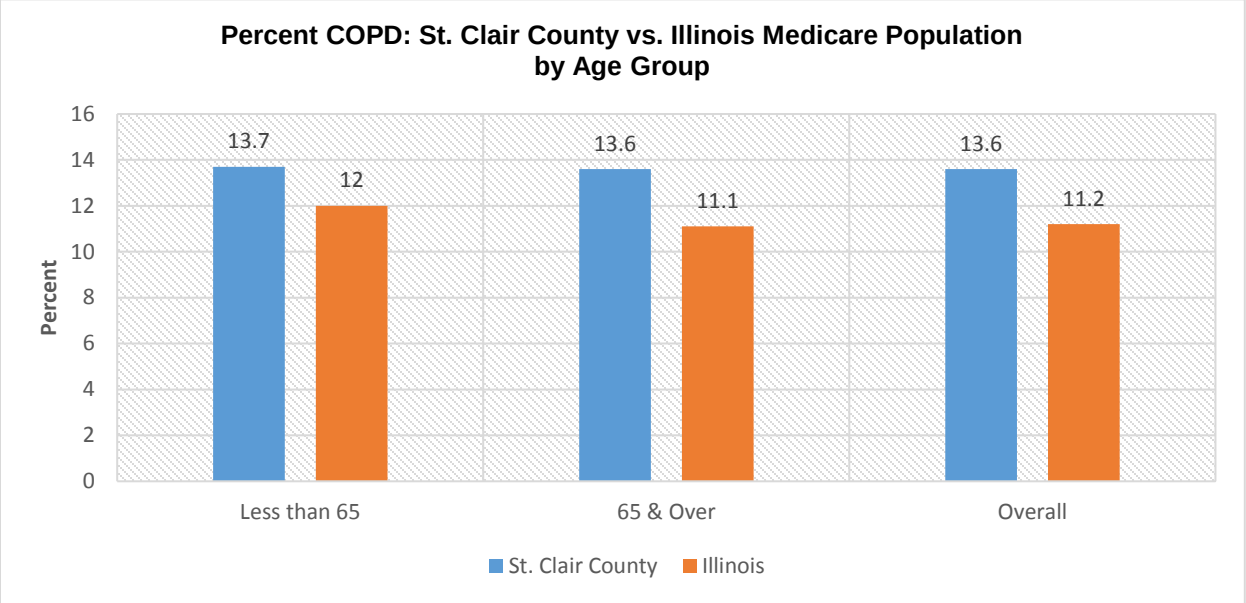
Chronic Obstructive Pulmonary Diseases (COPD)

Chronic Obstructive Pulmonary Disease (COPD) is a condition that restricts airflow into the lungs, making it difficult to breathe. COPD is most commonly a mix of chronic bronchitis and emphysema, and usually results from tobacco use, although it can also be a result of pollutants in the air, genetic factors and respiratory infections. Common symptoms include shortness of breath, wheezing and chronic cough. There is no cure for COPD, but smoking cessation, medications and therapy or surgery can help individuals manage their symptoms. (Conduent Healthy Communities Institute)



Conduent Healthy Communities Institute

The rate of COPD in both the county and the state remained steady during the past five years.

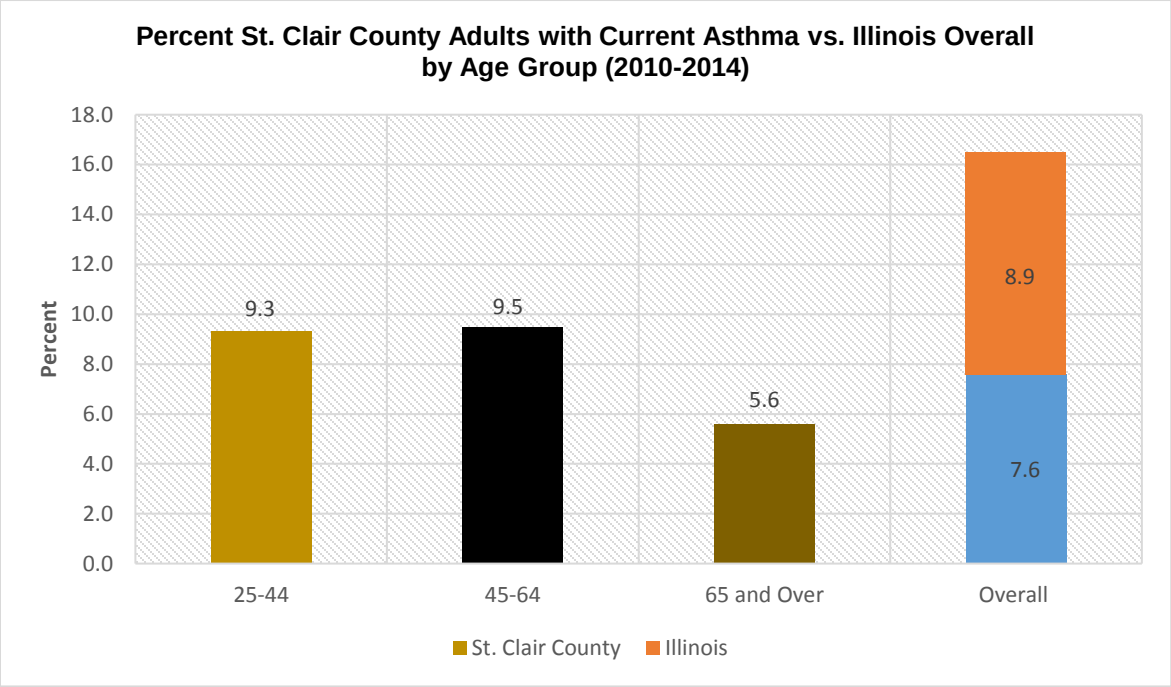


Conduent Healthy Communities Institute

Comparing those with COPD in the Medicare population, the Less than 65 age group and the 65 & over age group had similar rates in the county. However, in the state there was a 7.5 percent decrease between the 65 & over age group and the Less than 65 age group.

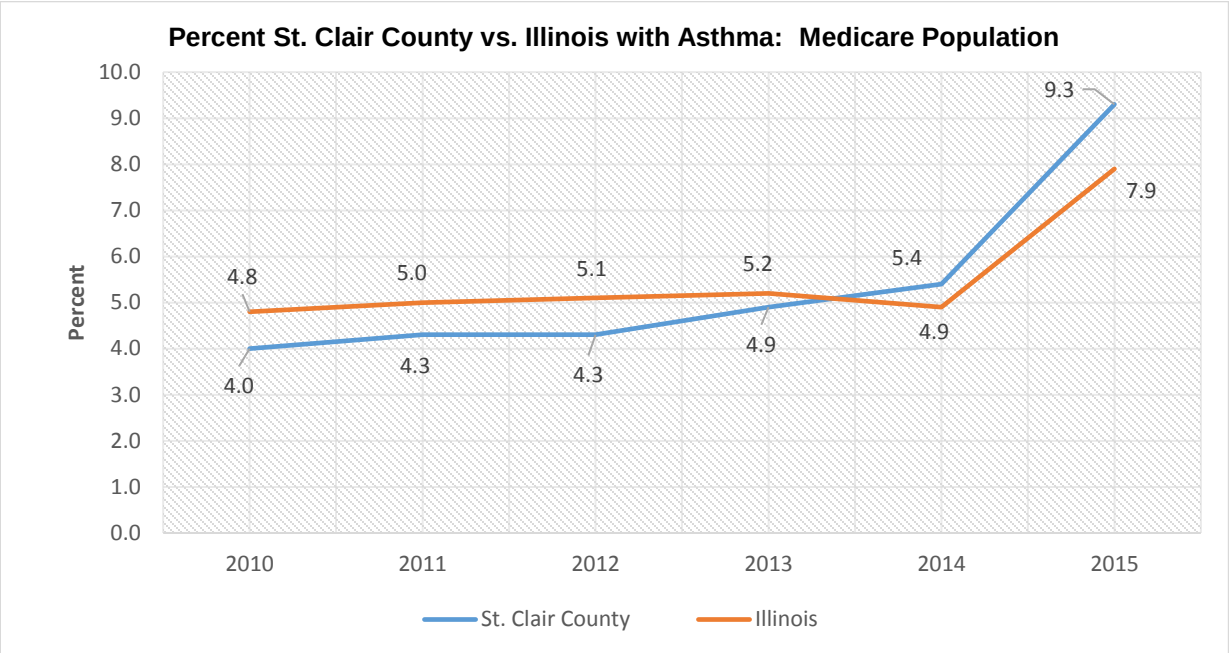
Asthma

Asthma is one of the most common long-term diseases of children, but it also affects millions of adults nationwide. Symptoms can include tightness in the chest, coughing and wheezing. These symptoms are often brought on by exposure to inhaled allergens, such as dust, pollen, mold, cigarette smoke and animal dander, or by exertion and stress. Reducing exposure to poor housing conditions, traffic pollution, secondhand smoke and other factors impacting air quality can help prevent asthma and asthma attacks. There is no cure for asthma, but for most people, the symptoms can be managed through a combination of long-term medication prevention strategies and short-term quick relievers. In some cases, however, asthma symptoms are severe enough to warrant hospitalization, and can result in death. (Conduent Healthy Communities Institute)



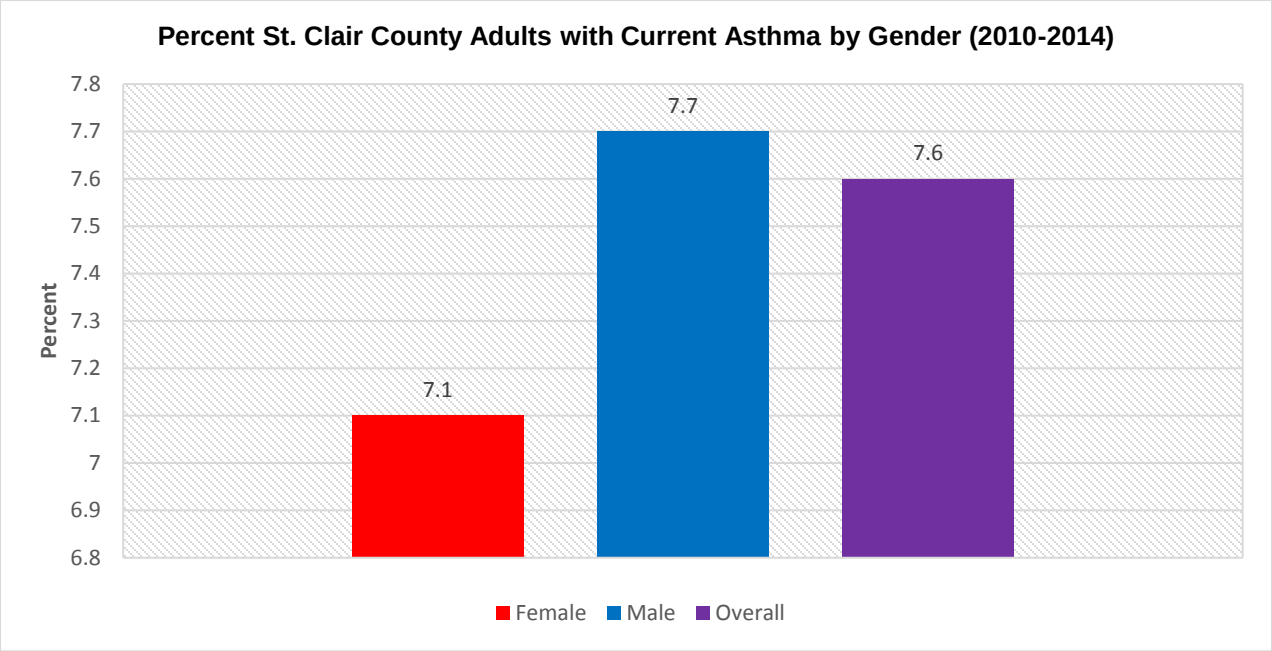
Conduent Healthy Communities Institute

The overall rate of asthma in Illinois was higher than the rate of the county. Asthma among the 65 and over age group was lower than the rate of the 25-64 age group. However, the rate among the 25-44 age group was slightly lower than the rate of 45-64 age group.



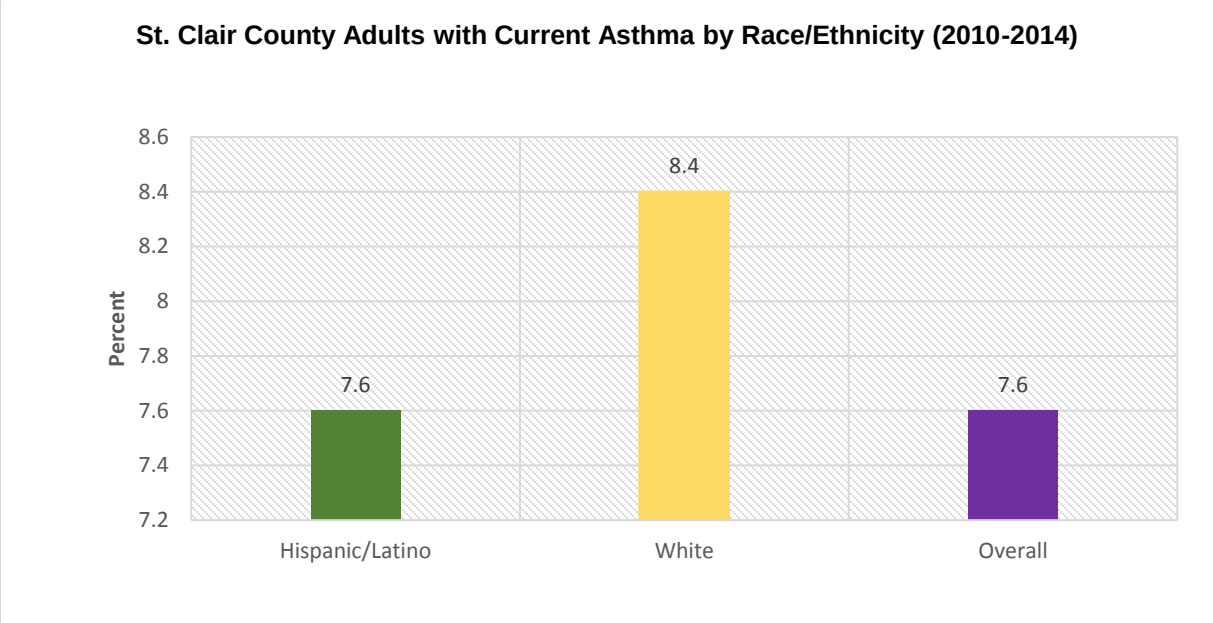
Conduent Healthy Communities Institute

For the prior four years, while the rate in the state remained relatively flat, the county rate increased 35 percent. In 2015, the county experienced a significant increase of 72 percent and the state also saw an increase of 61 percent.



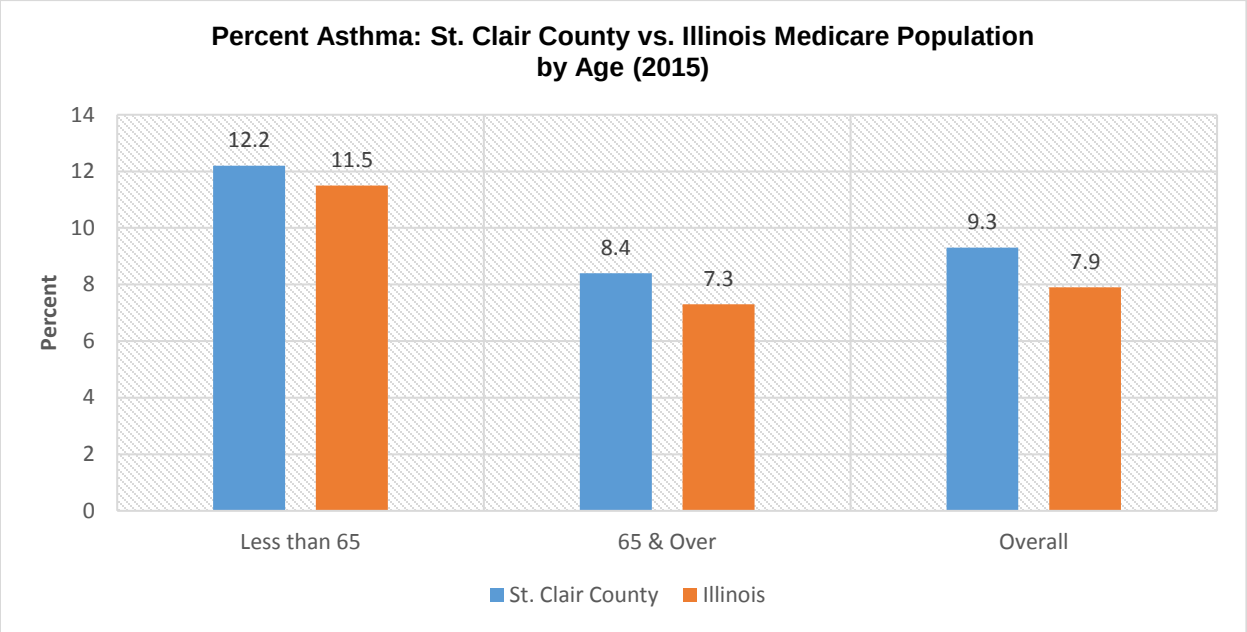
Conduent Healthy Communities Institute

Females in the county had a lower rate of asthma compared to males.



Conduent Healthy Communities Institute

The population of Whites in the county had a higher rate of asthma than those who were Hispanic.

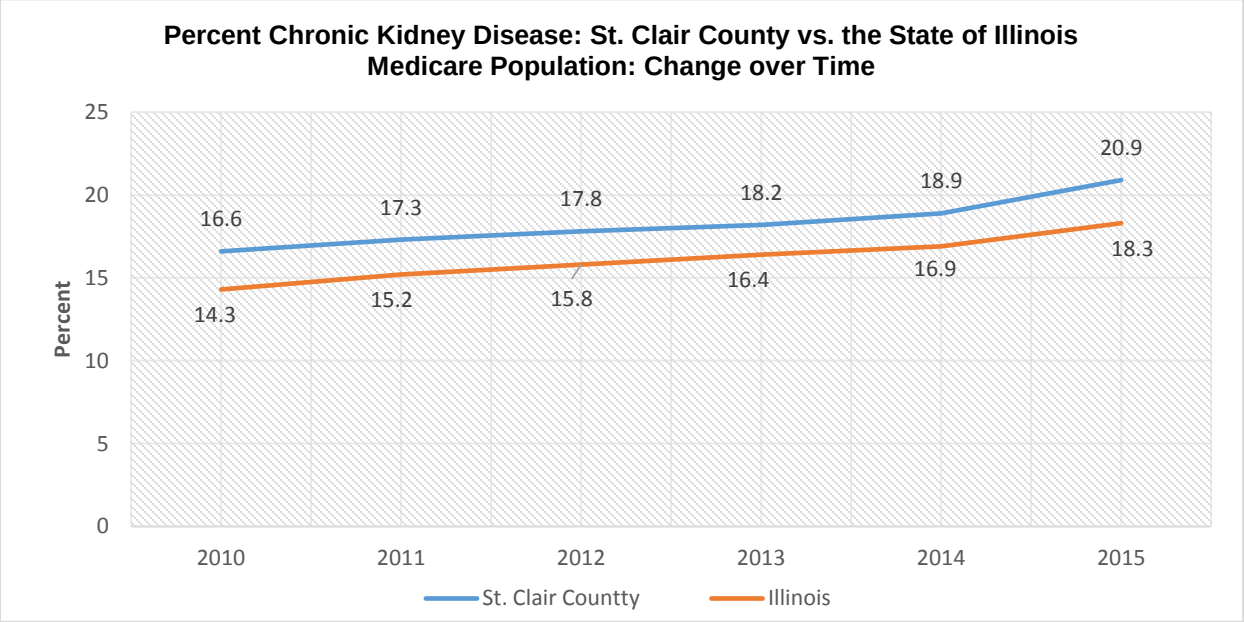


Conduent Healthy Communities Institute

The rate of asthma in the Medicare population was higher in the county than the rate in the state. Asthma was higher in the Less than 65 age group and lower than 65 & over age group in both the county and the state.

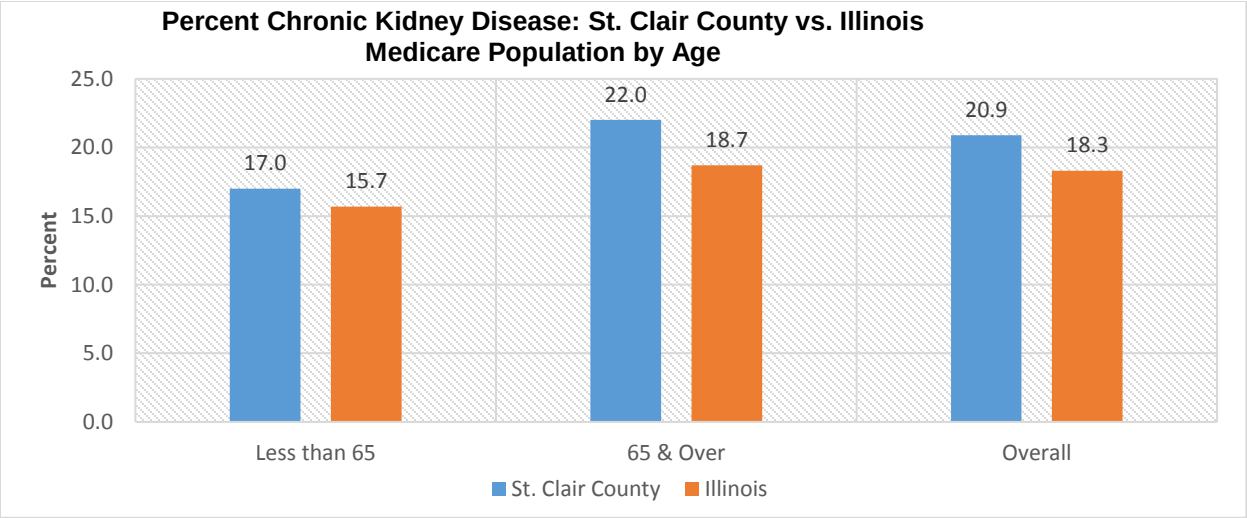
Chronic Kidney Disease (CKD)

The primary function of the kidneys is to remove wastes and excess water from the body. Chronic kidney disease (CKD), also known as chronic renal disease, is a progressive loss of this function over time. The symptoms of declining kidney function are nonspecific, and may include feeling generally unwell and a reduction of appetite. The primary causes of CKD are diabetes and high blood pressure. As kidney disease progresses, it can lead to kidney failure, which requires dialysis or a kidney transplant. The National Kidney Foundation reports that 26 million adults have chronic kidney disease and many others are at increased risk of developing the disease. (Conduent Healthy Communities Institute)



Conduent Healthy Communities Institute

From 2010-2015, the rate of kidney disease increased 25.9 percent in the county and 27.97 percent in the state.



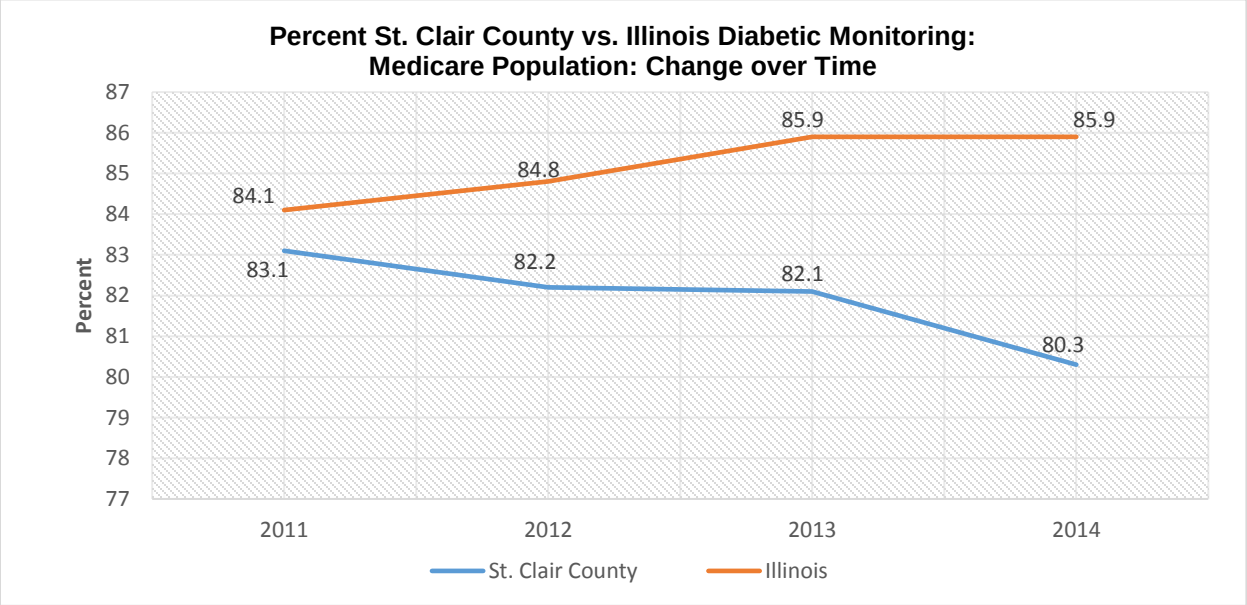
Conduent Healthy Communities Institute

The rate of chronic kidney disease was higher among the 65 & older age group in both the county and the state when compared to the Less than 65 age group.

Diabetes

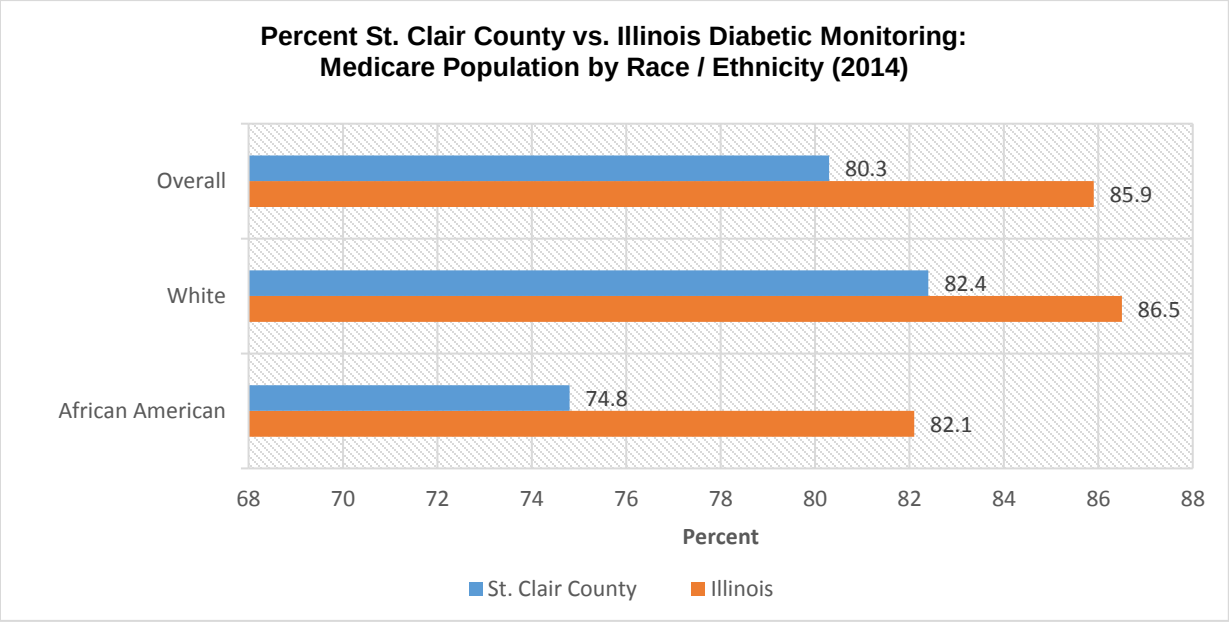
Diabetes is a leading cause of death in the United States. According to the Centers for Disease Control and Prevention (CDC), more than 25 million people have diabetes, including both diagnosed and undiagnosed cases. This disease can have a harmful effect on most of the organ systems in the human body; 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 ischemic 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 ages.

Regular HbA1c screening among diabetics helps assess if the patient is properly managing their disease and is considered the gold standard of care.



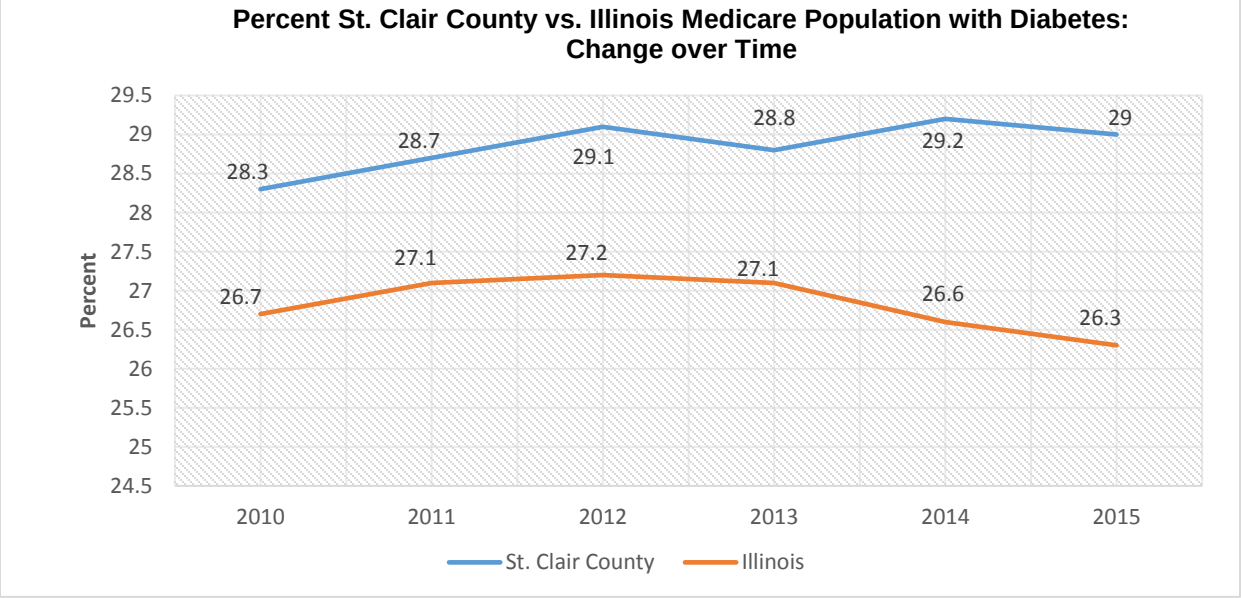
Conduent Healthy Communities Institute

From 2011-2014, the rate of diabetes in the state increased while the rate in the county decreased.



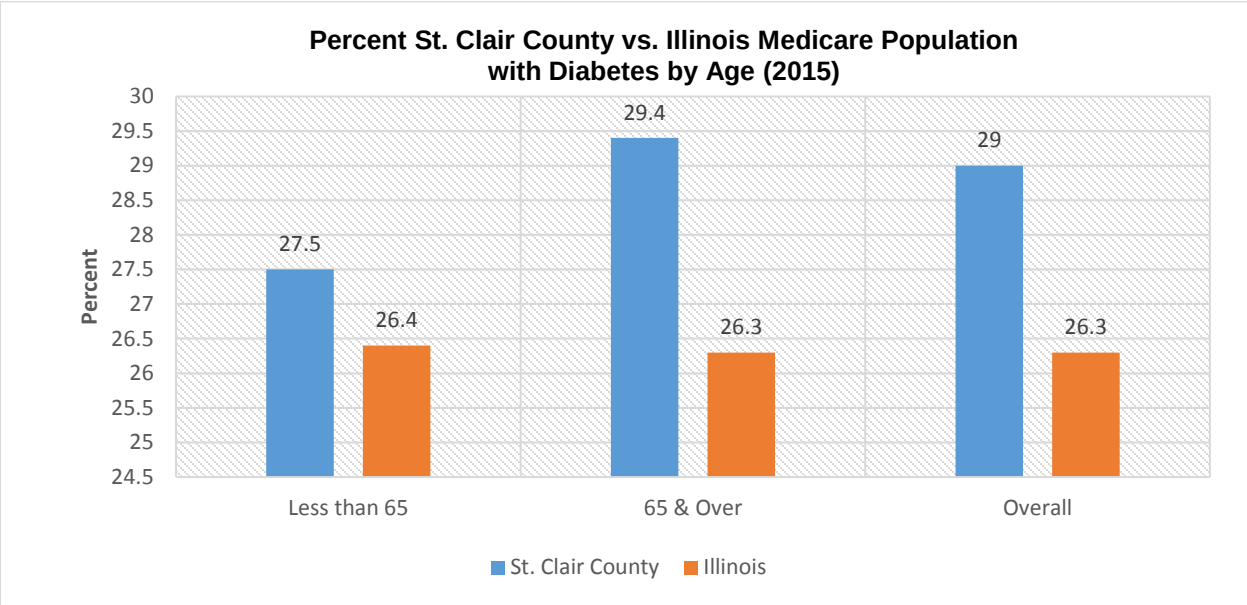
Conduent Healthy Communities Institute

The rate of diabetic monitoring among the Medicare population was higher among Whites than the rate among African Americans in both the county and the state.



Conduent Healthy Communities Institute

From 2010-2015, the rate of the Medicare population with diabetes in the county fluctuated compared to the state while the rate of the state declined from 2014-2015.

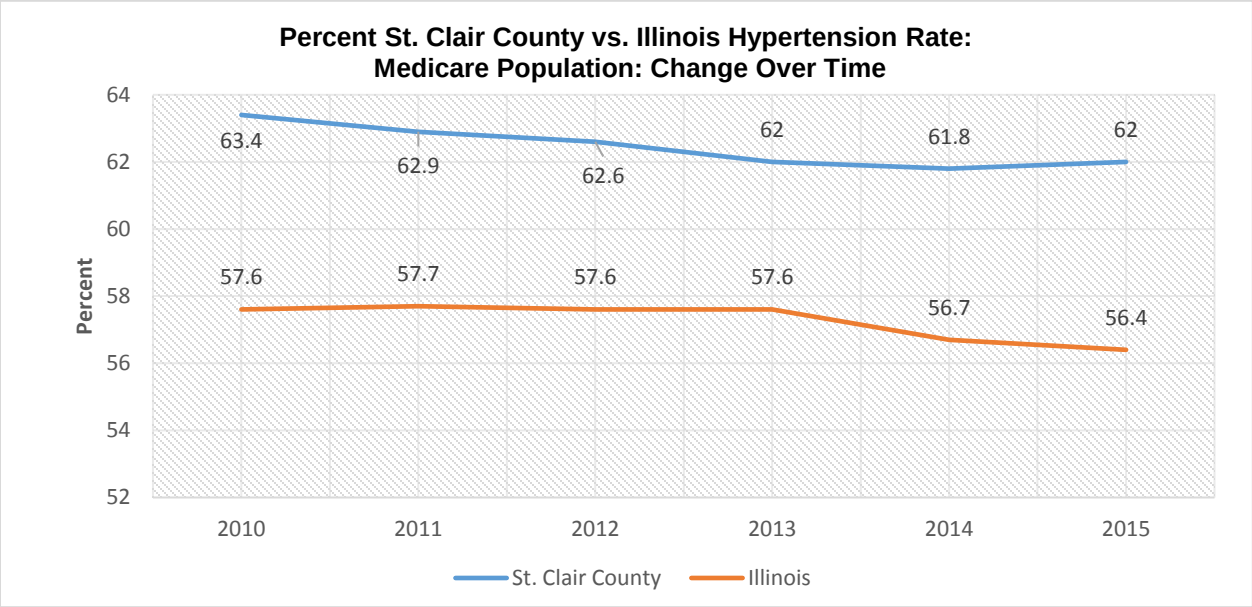


Conduent Healthy Communities Institute

The 65 & older age group had a higher rate of the population with diabetes than the Less than 65 age group of the population with diabetes in the county while the rate remained the same in the state among the same age groups.

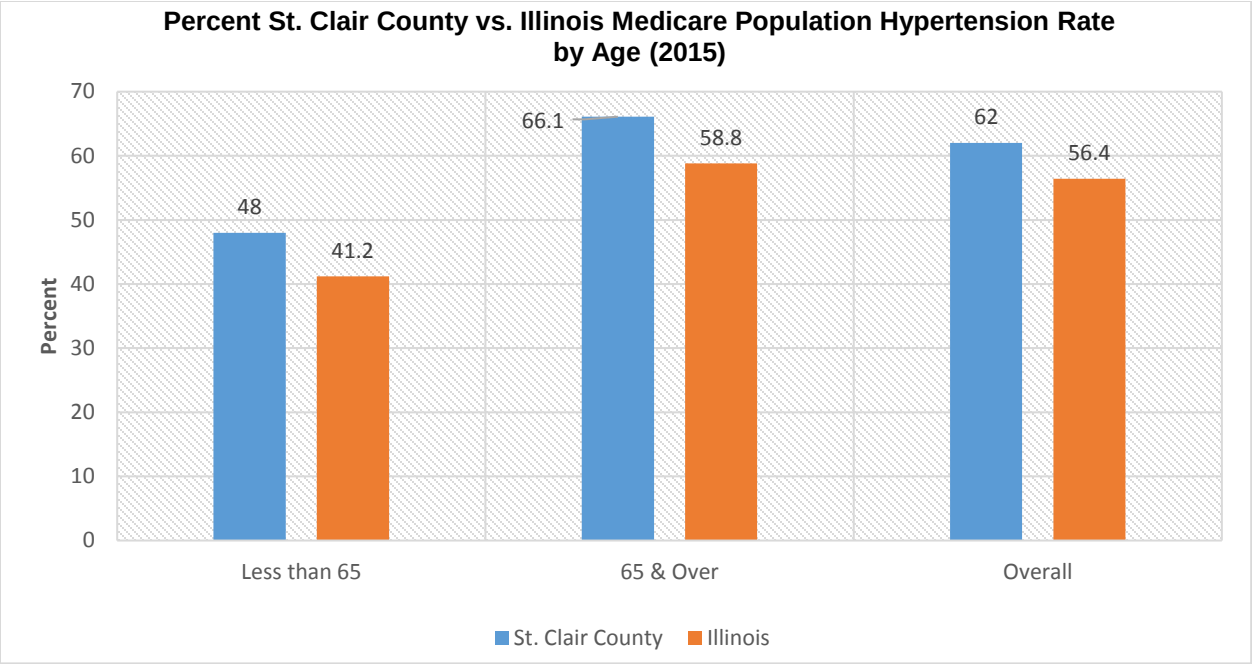
Hypertension

Hypertension, also known as high blood pressure, is a significant increase in blood pressure in the arteries. Many people with hypertension may not experience symptoms, even if their blood pressure is dangerously high. However, a few might experience severe headaches, dizziness, irregular heartbeats and other symptoms. Hypertension is the leading cause of stroke and a major cause of heart attacks, and if left untreated, can lead to damage of the blood vessels and kidneys, vision loss and angina. Many factors affect blood pressure, including salt intake, kidney health and hormone levels. The risk for high blood pressure increases with obesity, diabetes, high salt intake, high stress levels, high alcohol intake and tobacco use. According to the CDC, nearly 1 in 3 adults have hypertension with only half of these individuals having their condition under control. (Conduent Healthy Communities Institute)



Conduent Healthy Communities Institute

St. Clair County had a higher rate among the Medicare population with hypertension from the period beginning in 2010 and ending in 2015 compared to the state. However, both the state and the county rates remained steady during this time period.

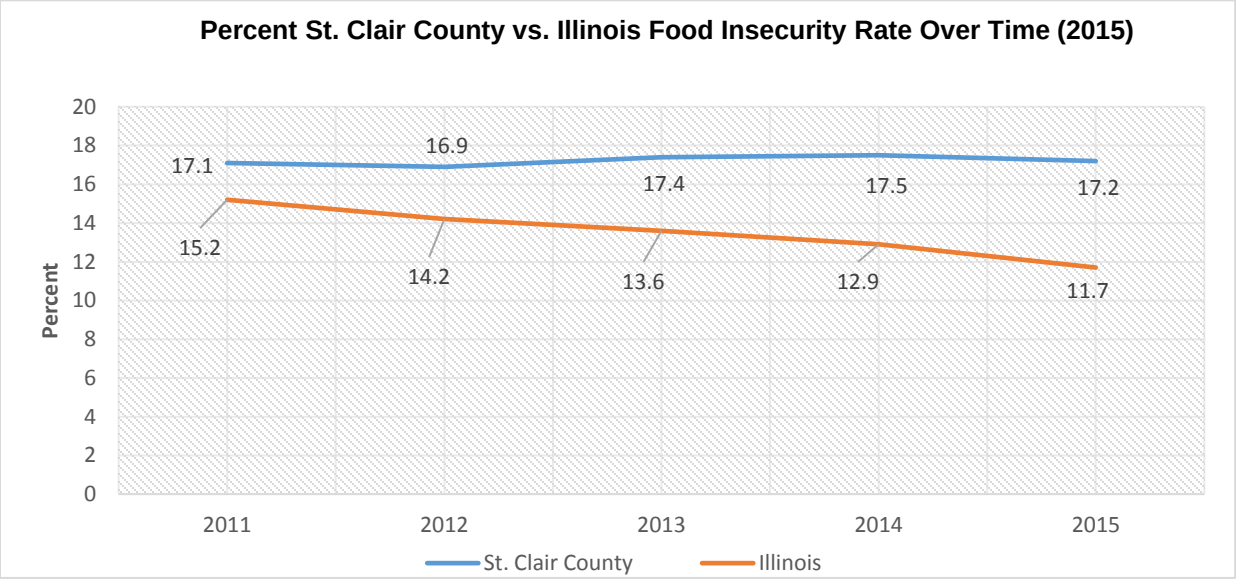


Conduent Healthy Communities Institute

The overall rate of hypertension among the Medicare population was higher in the county than the state. The Less than 65 age group population in the county was 16.5 percent higher than the rate in the state and the 65 & older age group population in the county was 12.41 percent higher than the rate in the state.

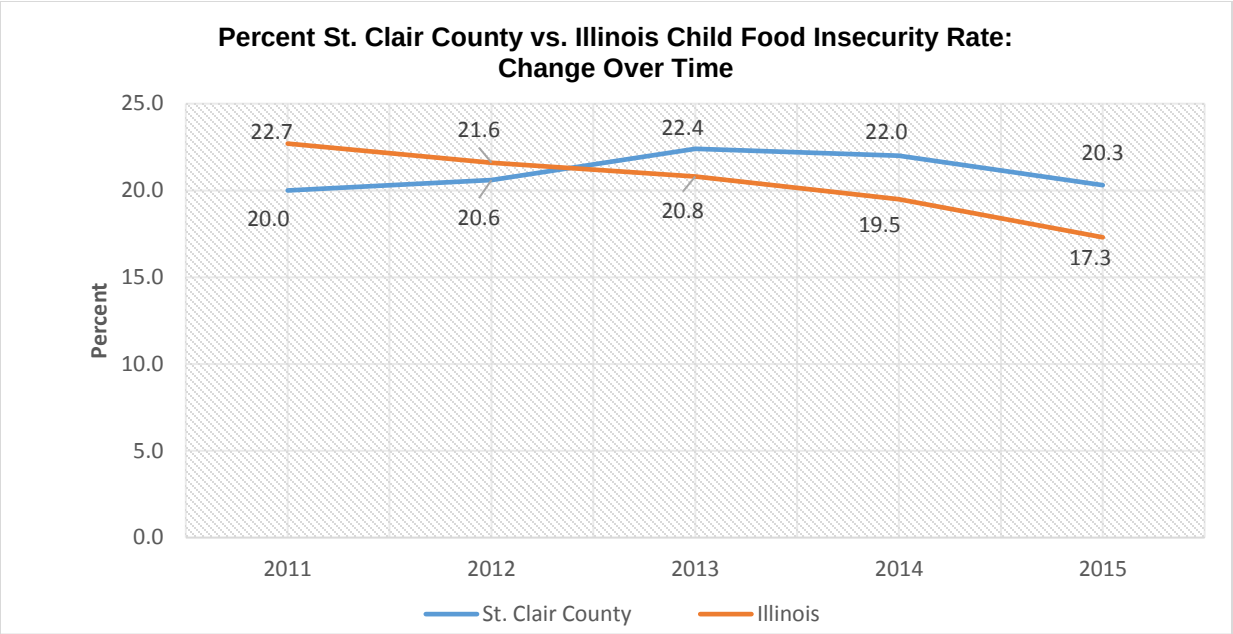
Access to Food

Food insecurity is an economic and social indicator of the health of a community. A lack of access to healthy foods is often a significant barrier to healthy eating habits. Low-income and underserved areas often have limited numbers of stores that sell healthy foods. Poverty and unemployment are frequently predictors of food insecurity in the United States. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast food outlets. Food insecurity, defined by the U.S. Department of Agriculture (USDA), as limited availability or uncertain ability to access nutritionally adequate foods in socially acceptable ways, is associated with chronic health problems including diabetes, heart disease, high blood pressure, hyperlipidemia, obesity and mental health issues including major depression.



Conduent Healthy Communities Institute

This indicator shows the percentage of the population that experienced food insecurity at some point during the year. The county had a higher rate than the state over the last five years. The rate in the state decreased while the county's rate continued to be somewhat consistent. The overall rate in the county was 47.01 percent higher than the rate in the state. (Conduent Healthy Communities Institute)

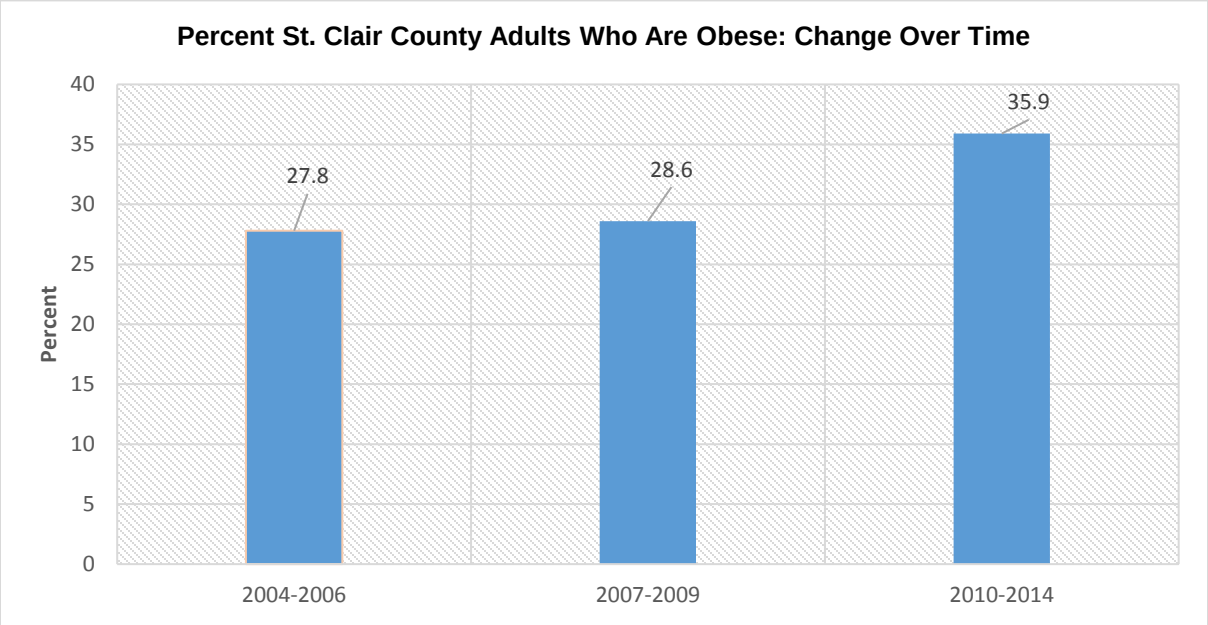


Conduent Healthy Communities Institute

Even though the rate of child food insecurity in both the county and state fluctuated from the time period beginning in 2011 and ending in 2015, the county rate among children was higher than the rate in the state. The overall rate in the county was 17.34 percent higher than the overall rate in the state.

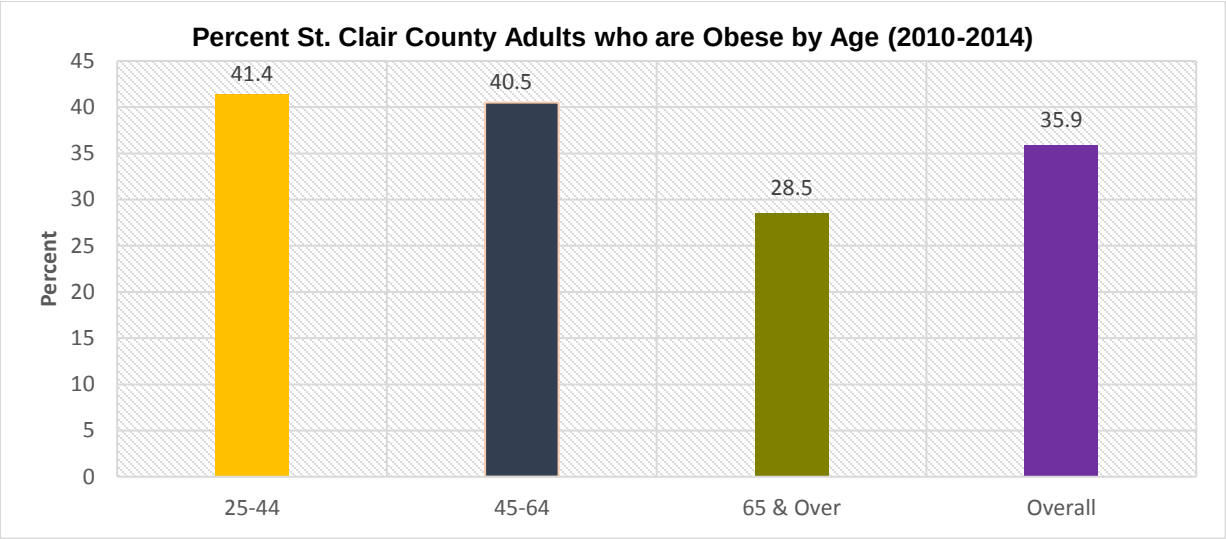
Obesity

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 health care spending and lost earnings.



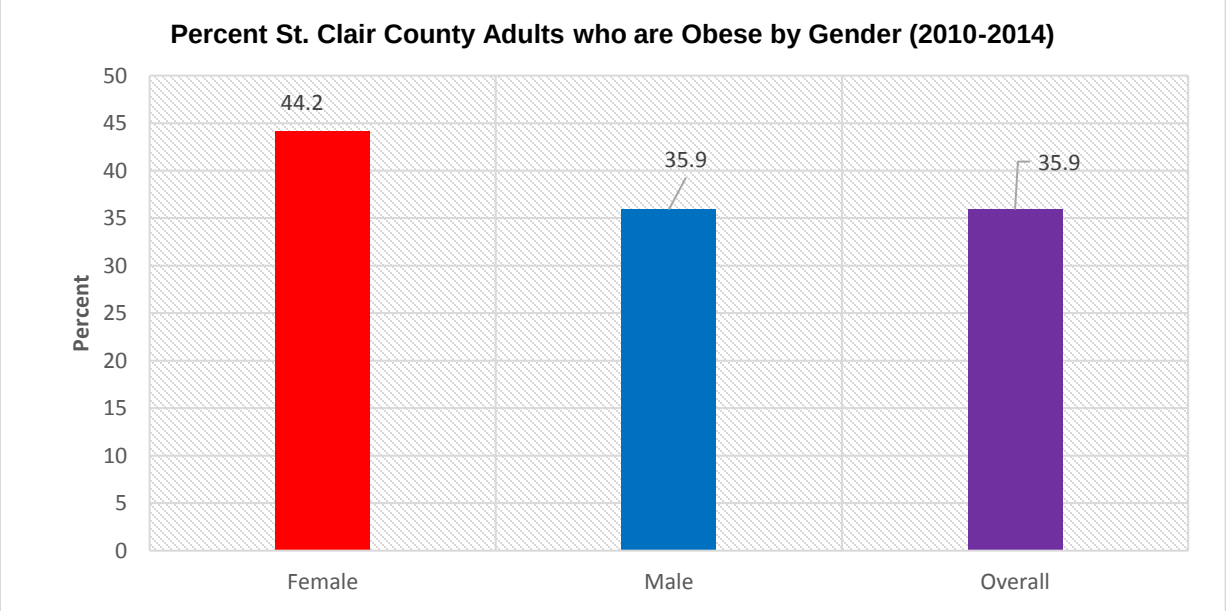
Conduent Healthy Communities Institute

For the five-year-period ending in 2014, St. Clair County saw a jump of 25.5 percent (or 7.3 percentage points) in the rate of obesity among adults when compared to the five -year-period ending in 2009.



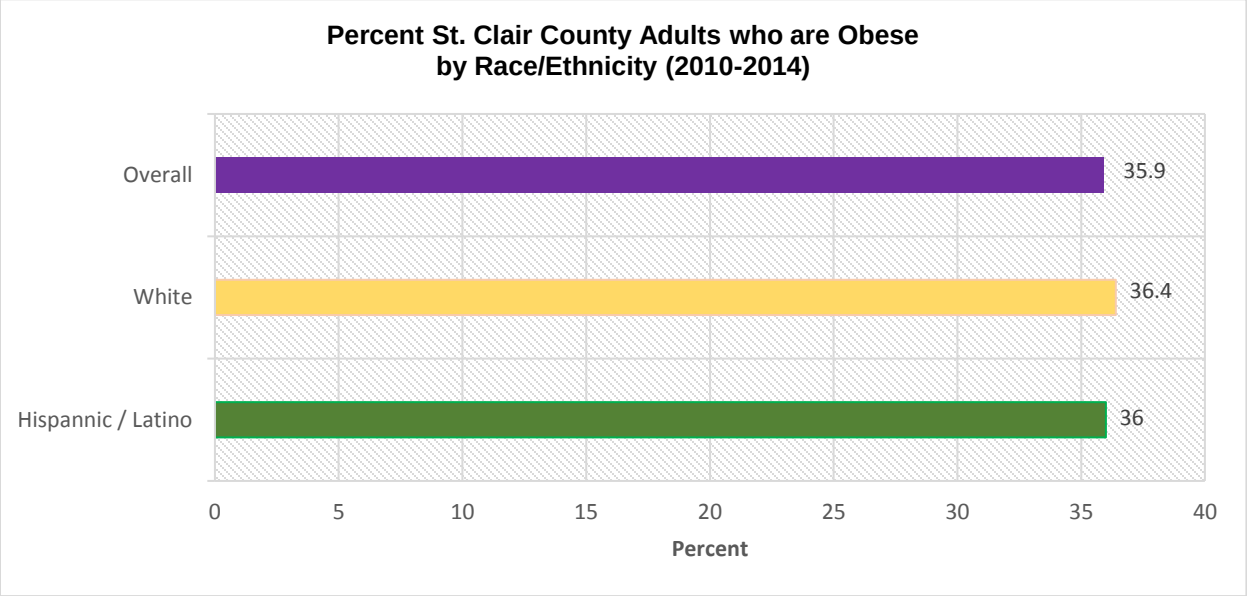
Conduent Healthy Communities Institute

Based on the age group, obesity was higher among the 25-44 age group in the county followed by the 45-64 age group.



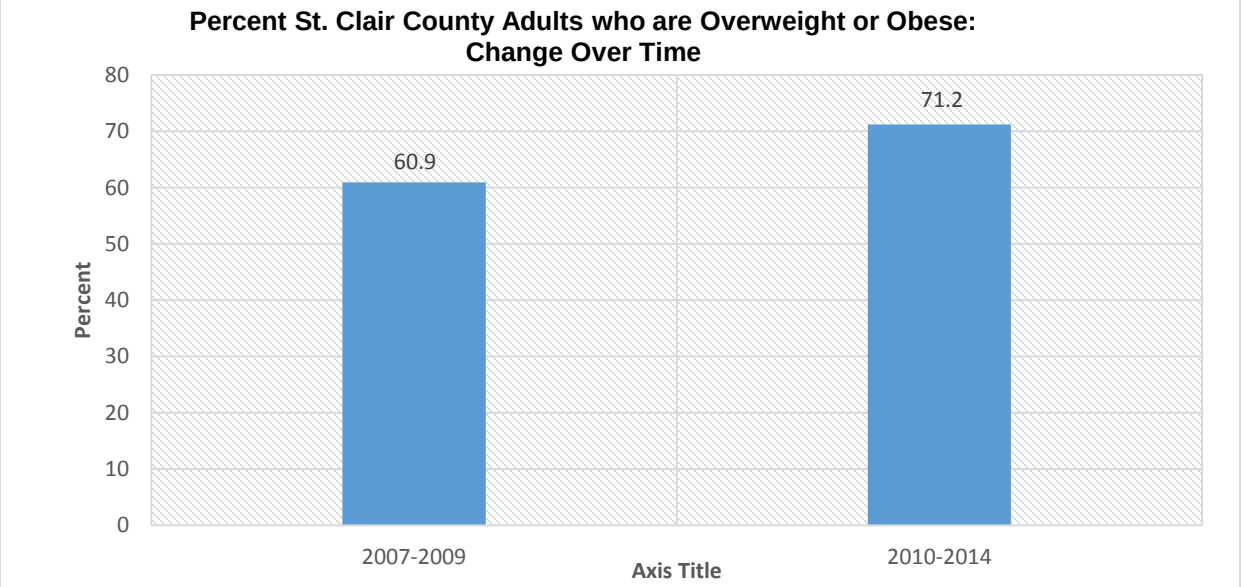
Conduent Healthy Communities Institute

Females in the county had a 23.1 percent higher rate of obesity than males.



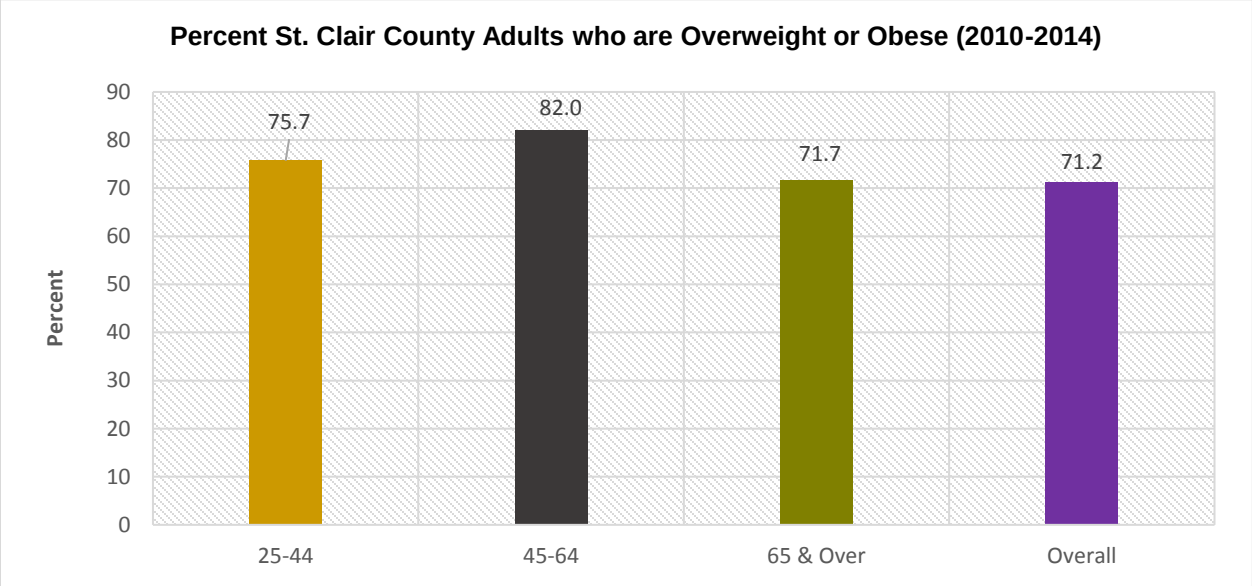
Conduent Healthy Communities Institute

The rate of obesity among the adult White population and the adult Hispanic population in the county was approximately the same.



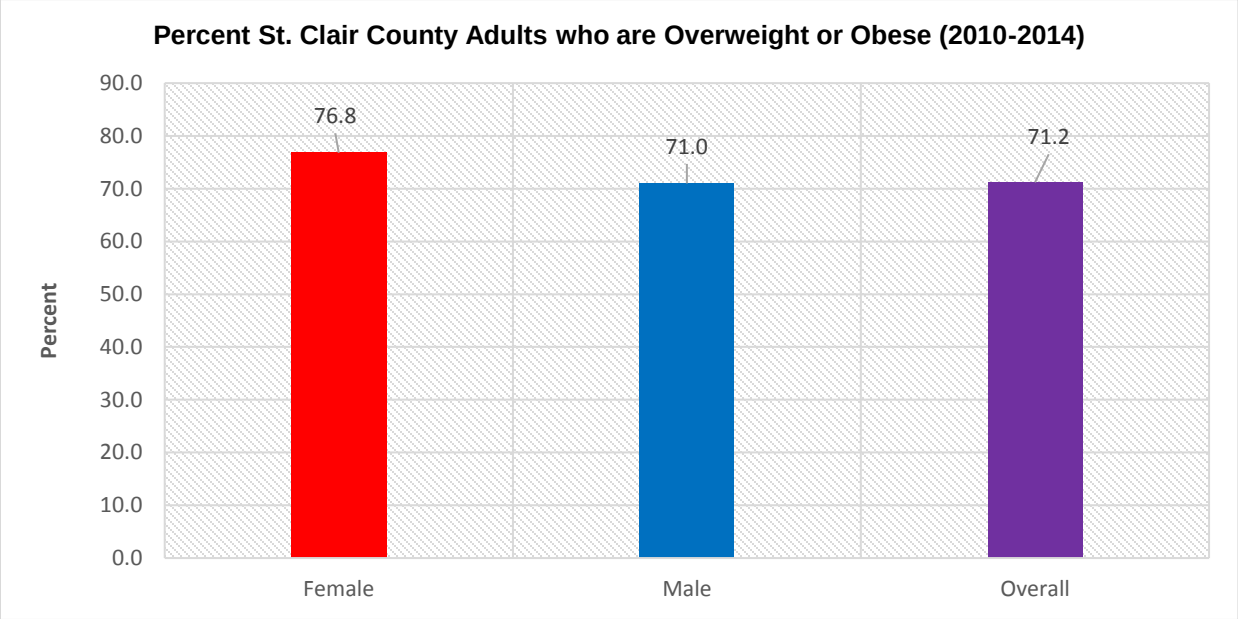
Conduent Healthy Communities Institute

For the five-year-period ending in 2014, the obesity rate of adults increased 16.9 percent compared to the five-year-period ending in 2009.



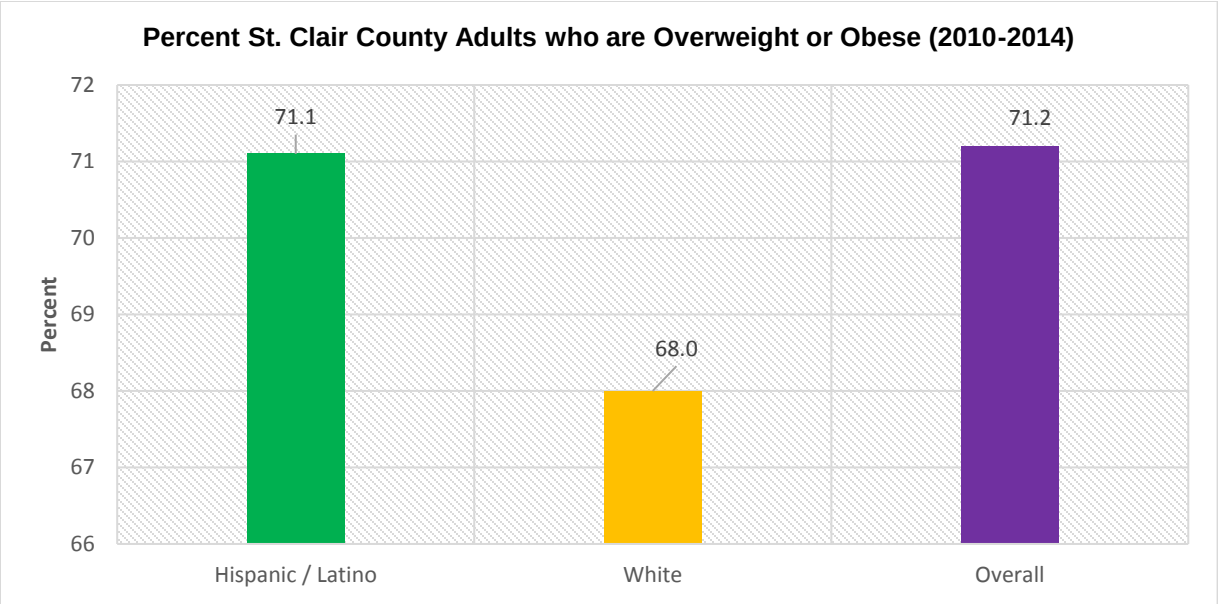
Conduent Healthy Communities Institute

Comparing age groups of overweight or obese adults in the county from 2010-2014, the 45-64 age group was 8.32 percent higher than the 25-44 age group and 14.37 percent higher than the 65 & over age group. Those 65 & older were 5.28 percent lower than the 25-44 age group.



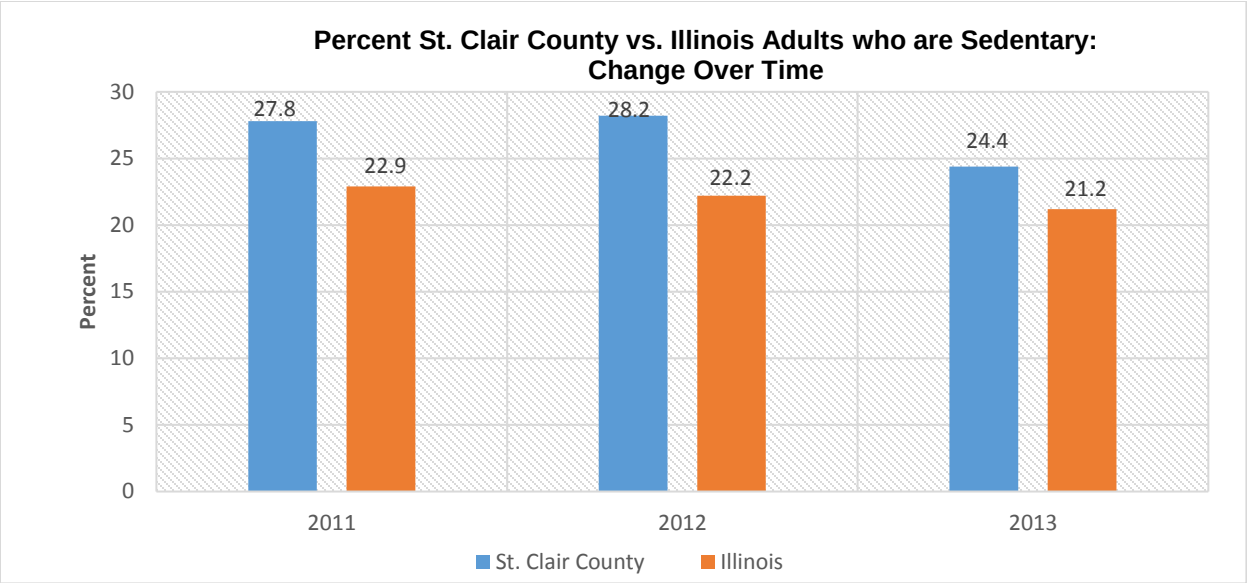
Conduent Healthy Communities Institute

The overall rate of overweight or obese adults in the county was similar to the rate of males. The male rate was 7.55 percent lower than the rate of females.



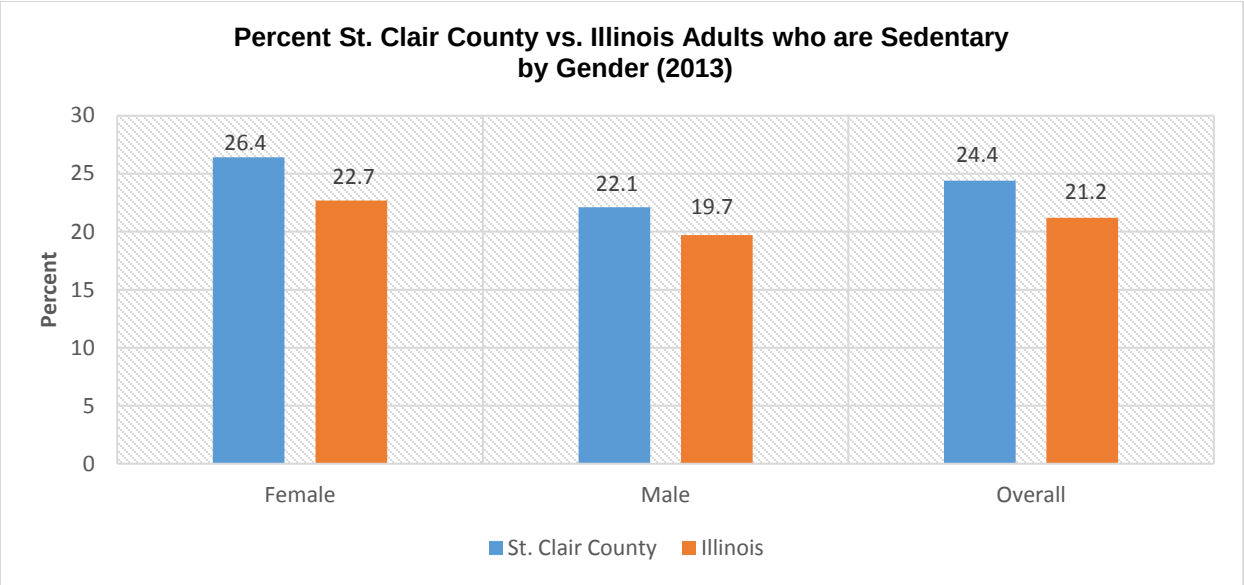
Conduent Healthy Communities Institute

The overall rate of overweight or obese adults in the county was equal to the rate of the Hispanic/ Latino population in the county. The rate of Hispanic/Latino was 4.36 percent higher than the rate of the White population.



Conduent Healthy Communities Institute

From the period 2011-2013, there was a 12.23 percent decrease in the rate in the county of sedentary adults. From 2011 to 2012, there was an increase of 1.44 percent and a decrease of 13.48 percent from 2012-2013. Compared to state, the county rate was higher in the same period. In 2011, the state had a 17.63 percent lower rate than the county. In 2012, the rate in the state was 21.28 percent lower than the county and 13.11 percent lower in 2013.

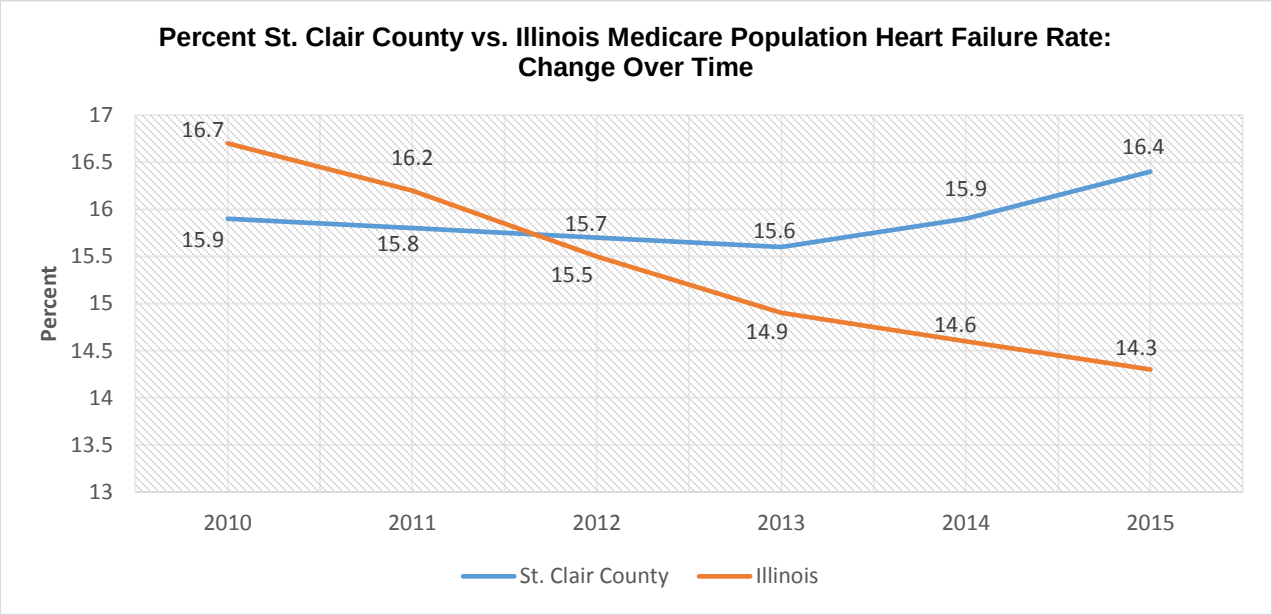


Conduent Healthy Communities Institute

Females in the county had a higher rate of sedentary behavior (16.3 percent) than females in the state. Males in the county had a higher rate of sedentary behavior (12.18 percent) than males in the state. Overall, the county rate was 15.09 percent higher than the rate in the state.

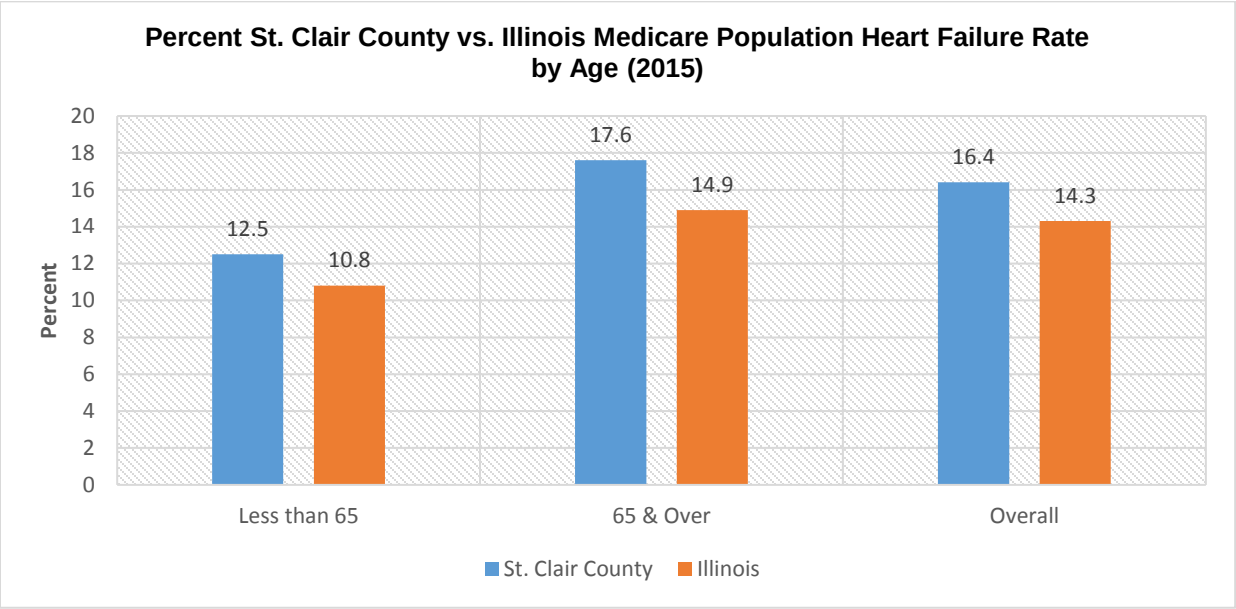
Cardiovascular Disease

Heart failure is caused by a variety of conditions that weaken the heart, including coronary artery disease, diabetes, heart attack, high blood pressure and congenital heart defects. Treatment for heart failure begins with a combination of medication, lifestyle changes and maintaining a low blood pressure to prevent heart failure from advancing. According to the Centers for Disease Control and Prevention, approximately 5.7 million people in the United States have heart failure. The National Institutes of Health states that heart failure is most common in people age 65 and older and it is the main reason older individuals are hospitalized.



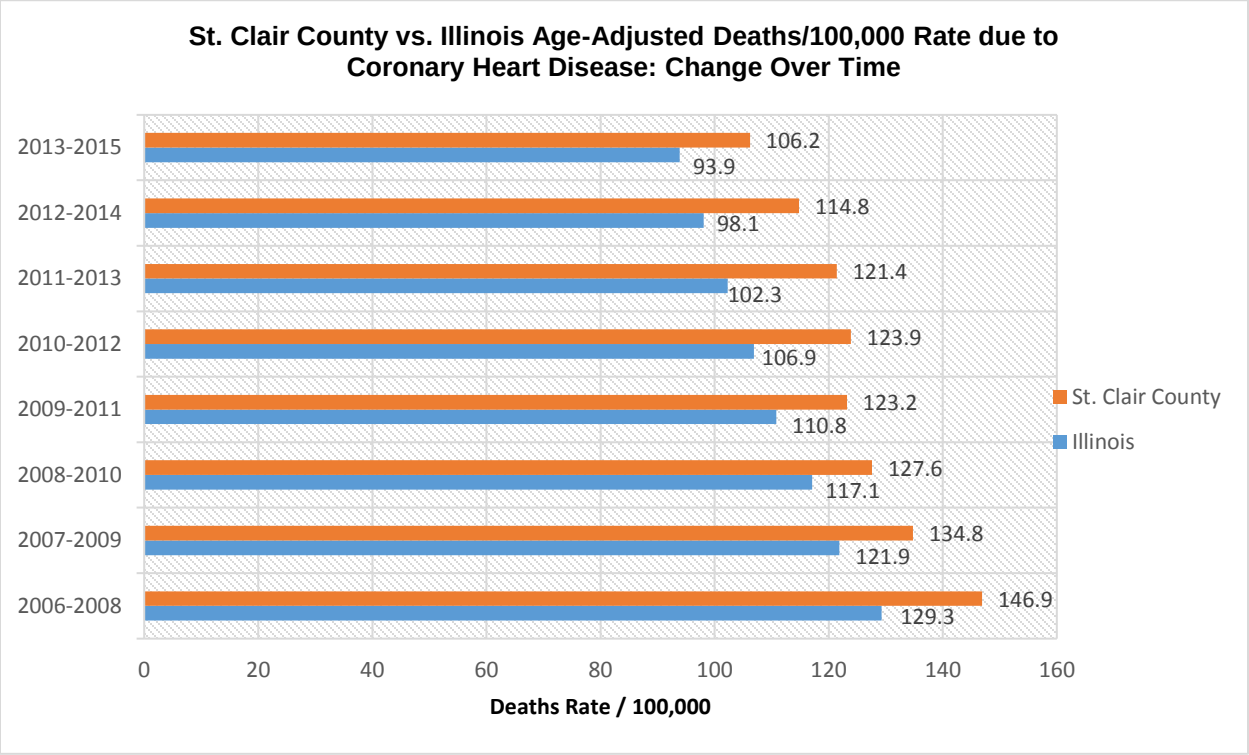
Conduent Healthy Communities Institute

The heart failure rate experienced a decline in both the state and county from 2010 to 2013 until the county experienced a 5.1 percent increase from 2013-2015. From 2010 to 2011, the rate in the county was lower than the rate in the state. From 2012-2015, the rate in the county was higher than the rate in the state. The rate in the county in 2015 was 14.7 percent higher than the rate in the state.



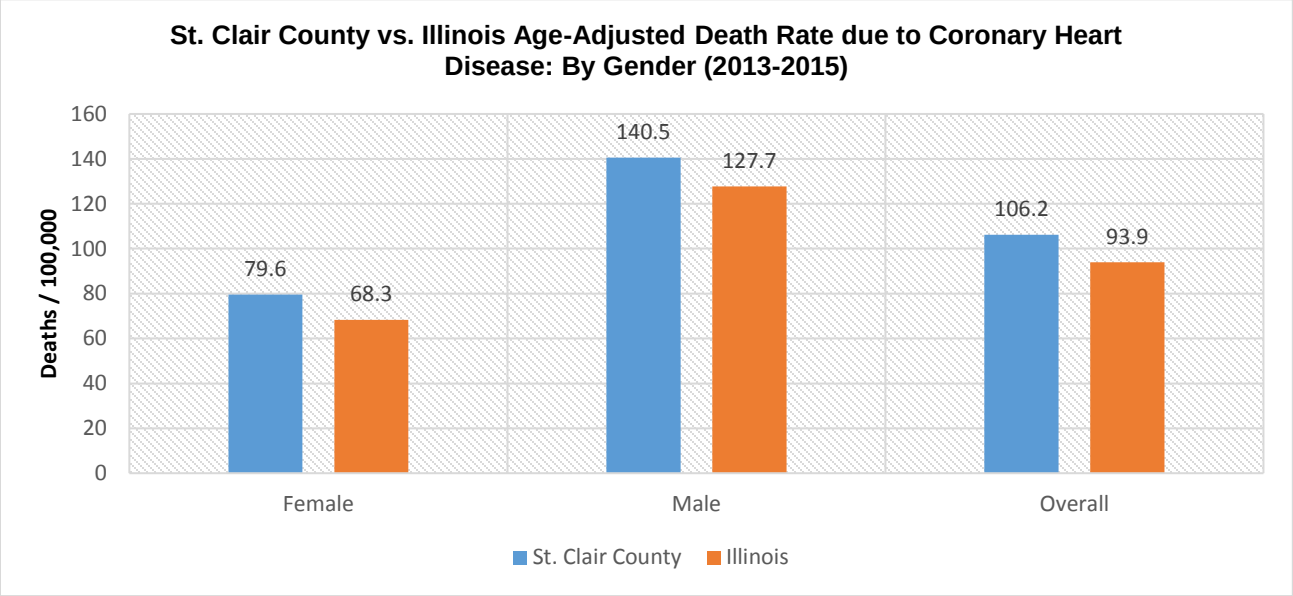
Conduent Healthy Communities Institute

In 2015, the rate of heart failure in the 65 & older age group was higher (18.1 percent) in the county than the state. Overall, the rate in the state was lower than the county when comparing the rate among the Medicare population.



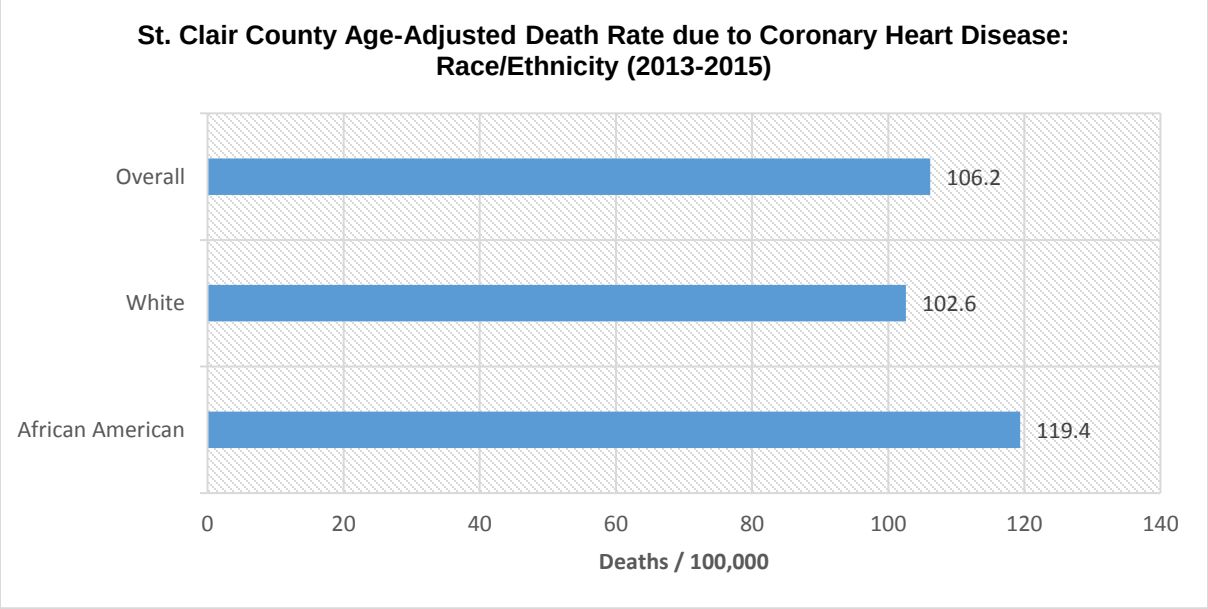
Conduent Healthy Communities Institute

Both the county and state showed a decline in the age adjusted death rate due to coronary heart disease from the three-year period ending in 2008 compared to the three-year period ending in 2015. Comparing the 2006-2008 period to the 2013-2015 period, the county rate decreased by 27.71 percent and the state by 27.38 percent. The rate of decline in both the county and state was nearly the same time period.



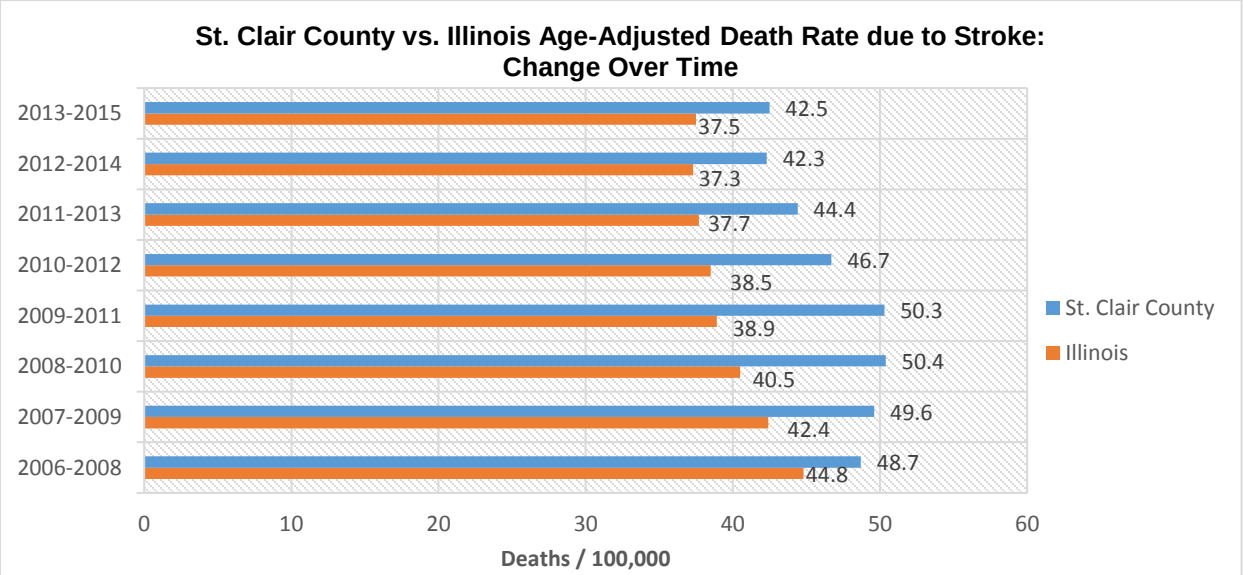
Conduent Healthy Communities Institute

The female rate in the county was higher (16.54 percent) than the rate in the state. Males in the county had a 10.02 percent higher rate than the rate in the state.



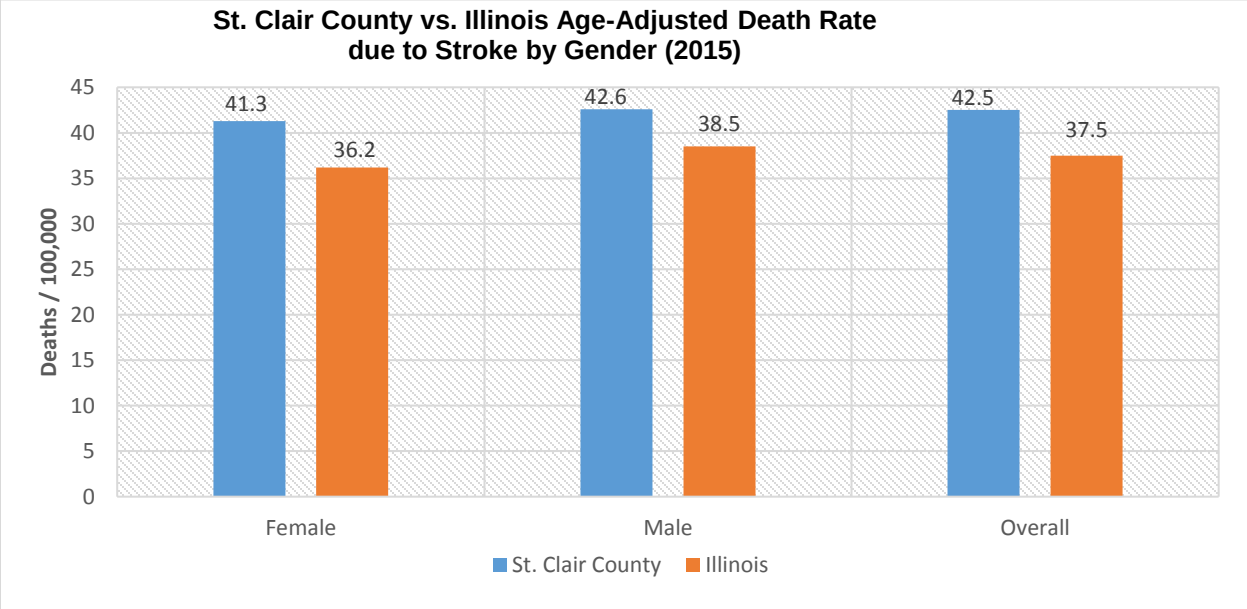
Conduent Healthy Communities Institute

In the county, the African American population had a 16.37 percent higher age-adjusted death rate than the White population.



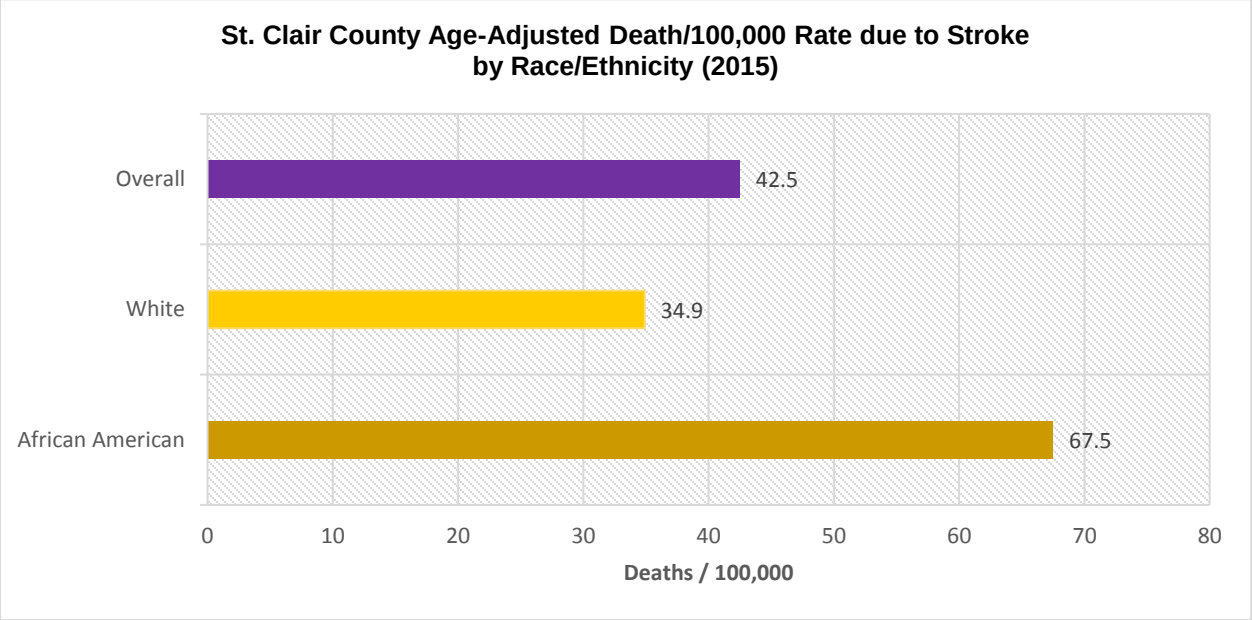
Conduent Healthy Communities Institute

During this time period, the age-adjusted rate of death due to stroke was higher in the county than the state. Since 2006, the state experienced a steady decline. However, the rate in the county increased from 2006 until 2011 then showed a decline.



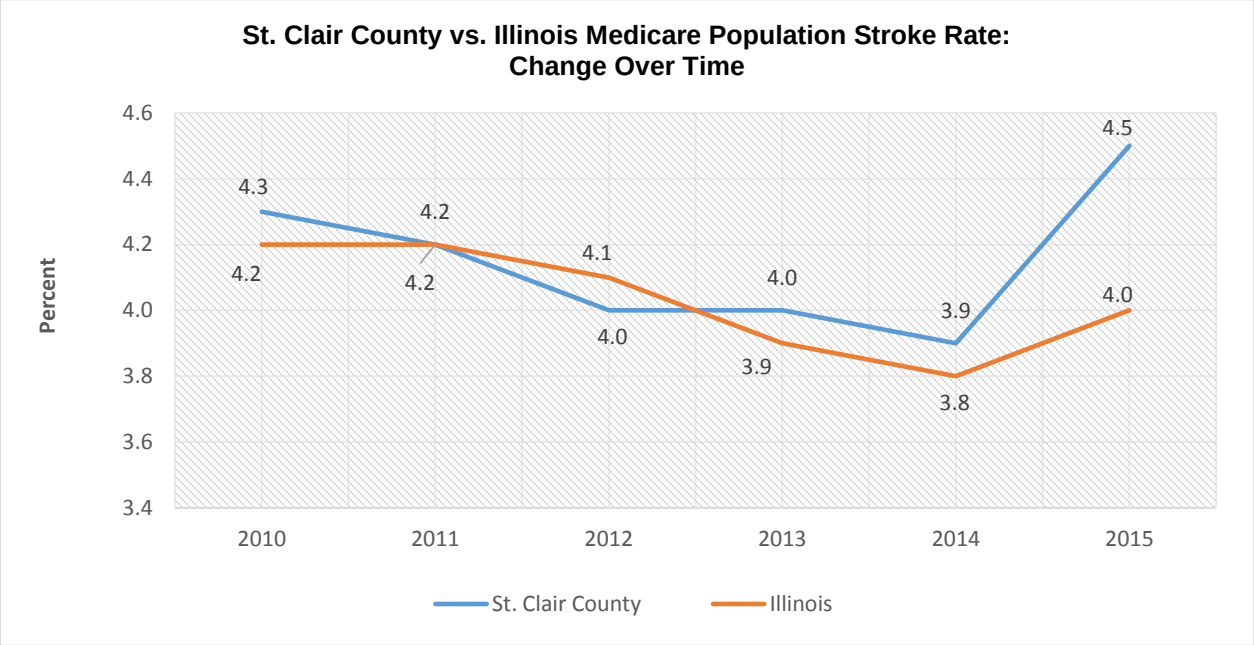
Conduent Healthy Communities Institute

Females had a lower age-adjusted death rate due to stroke when compared to males in both the county and the state. The rate of females in the county was 14.1 percent higher than the rate in the state and males were 10.7 percent higher in the county than the state.



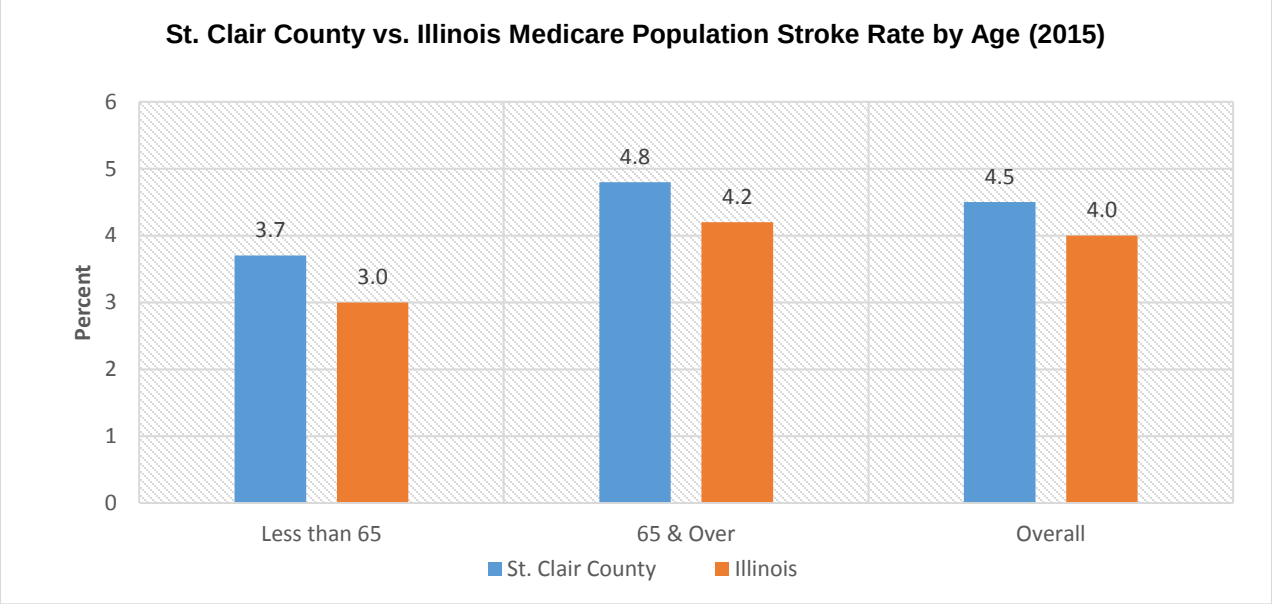
Conduent Healthy Communities Institute

In the county, the White population had a 48.3 percent lower rate of stroke than the African American population rate.



Conduent Healthy Communities Institute

After four years of steady decline, 2015 saw a 15.4 percent jump in the Medicare population stroke rate in the county compared a 5.3 percent increase in the state.

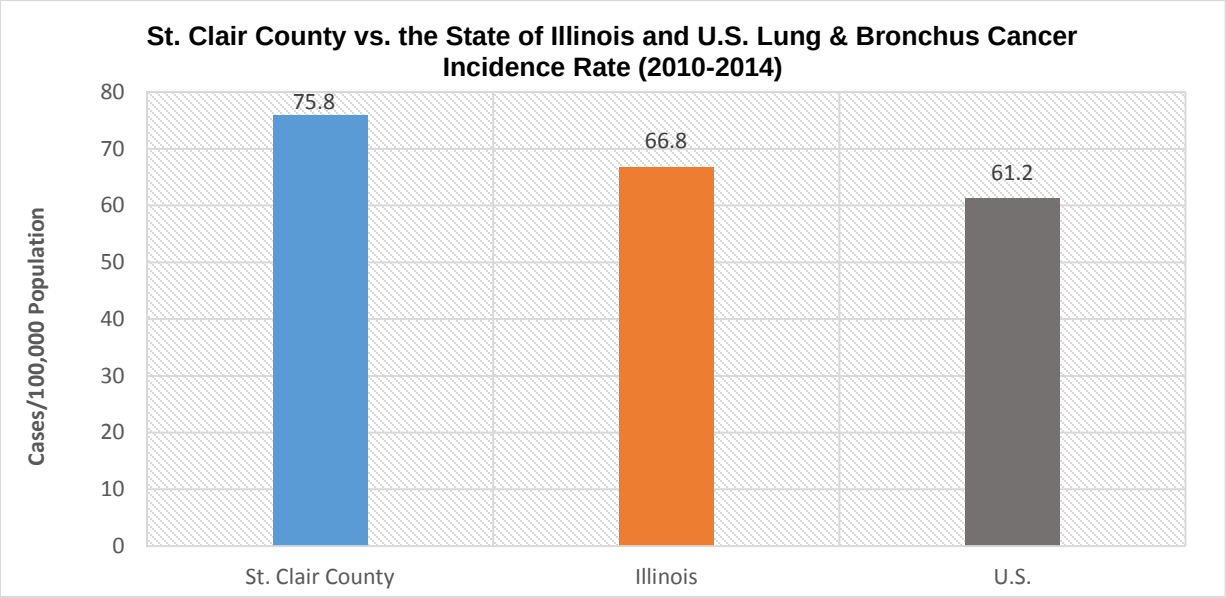


Conduent Healthy Communities Institute

The 65 & over age group had a 14.29 percent higher rate in the county when compared to the state. The overall rate in the county was 12.5 percent higher than the overall rate in the state.

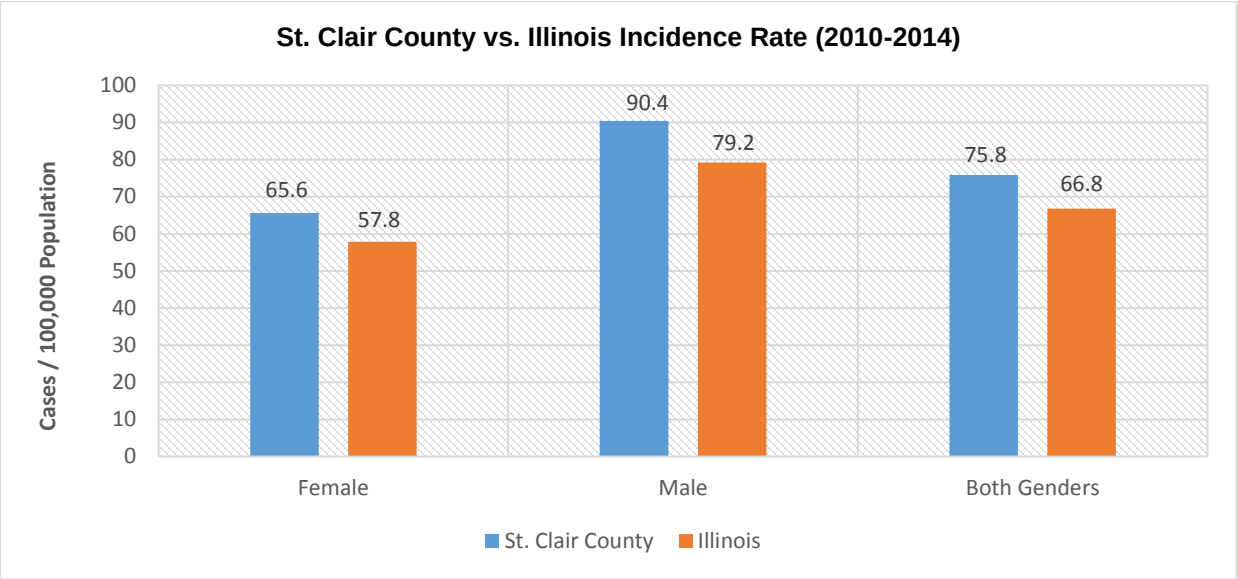
Cancer: Lung Cancer

According to the American Lung Association, more people die from lung cancer annually than any other type of cancer, exceeding the total deaths caused by breast cancer, colorectal cancer and prostate cancer combined. The greatest risk factor for lung cancer is duration and quantity of smoking. While the mortality rate due to lung cancer among men has reached a plateau, the mortality rate due to lung cancer among women continues to increase. African Americans have the highest risk of developing lung cancer.



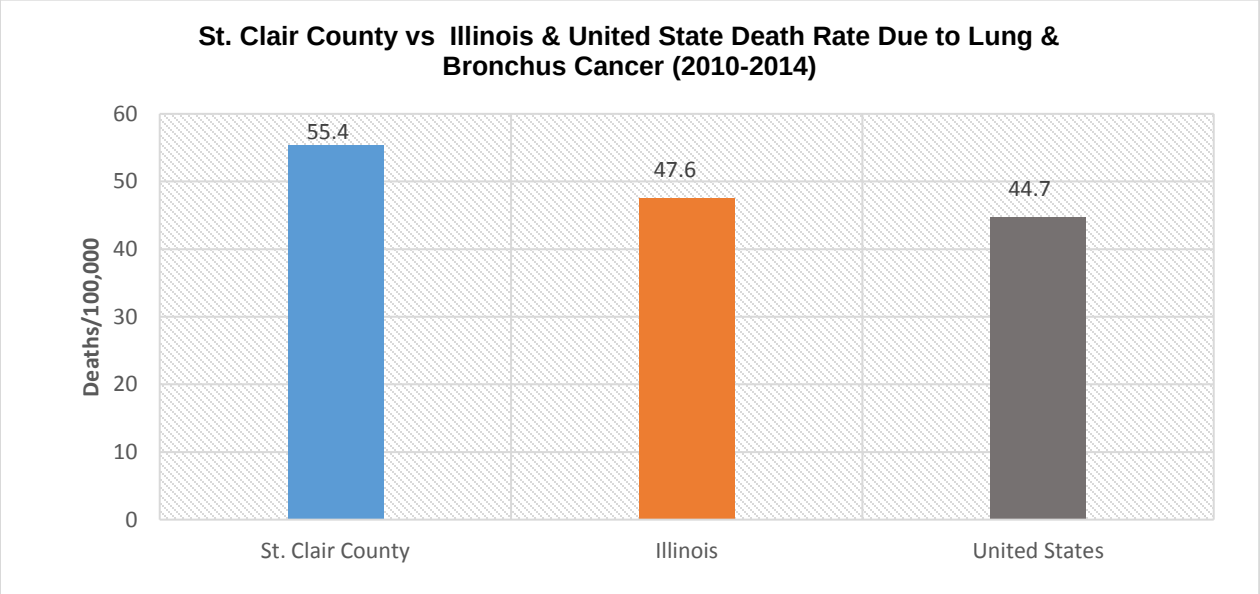
Conduent Healthy Communities Institute / CDC State Cancer Profiles

The Healthy People 2020 national health target is to reduce the lung cancer death rate to 45.5 deaths per 100,000 population. Both the county and the state did not meet the target and the county's incidence rate was 13.47 percent higher when compared to the state.



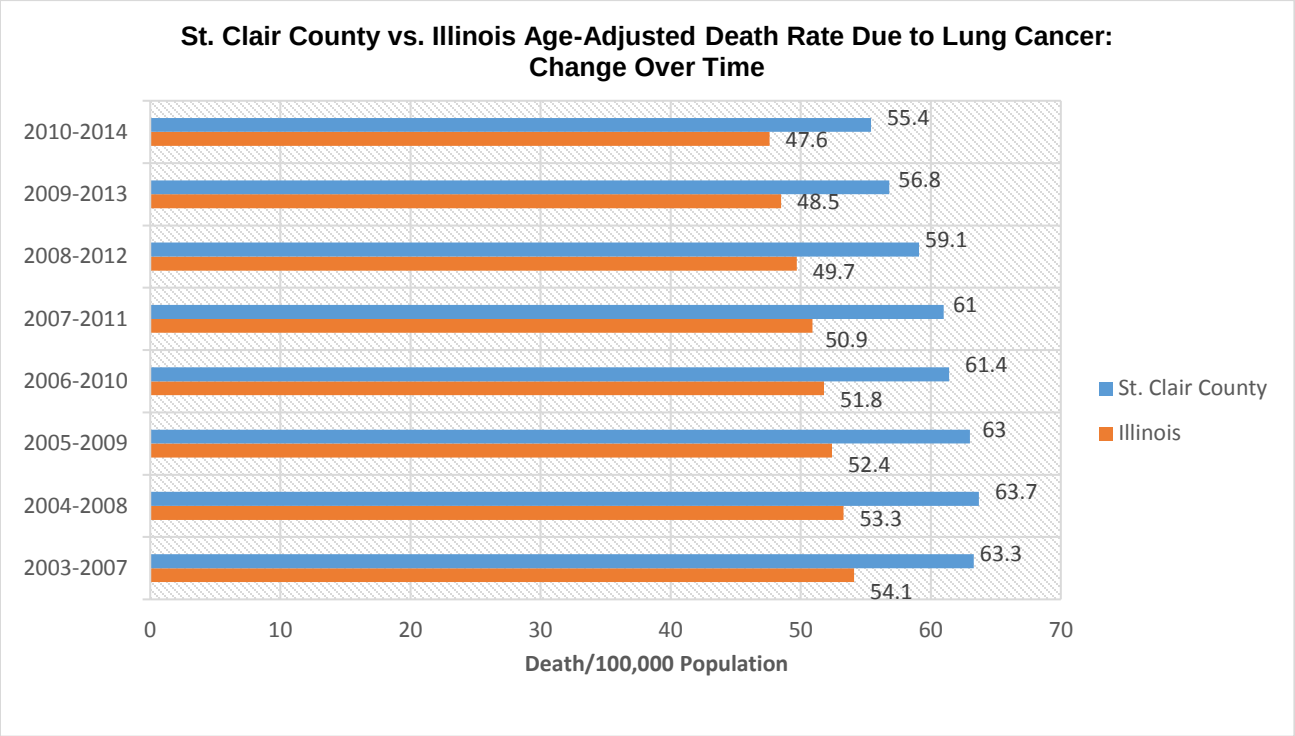
Conduent Healthy Communities Institute

The overall incidence rate of lung cancer was 13.47 percent higher in the county than the state from 2010-2014. Males in the county were 14.14 percent higher and females were 13.49 percent higher when compared to the state.



Conduent Healthy Communities Institute / CDC State Cancer Profiles

The county death rate due to lung and bronchus cancer from 2010-2014 was 16.39 percent higher than the rate in the state. The county was 24 percent higher than the U.S. rate while the state was 6.5 percent higher than the U.S. rate.

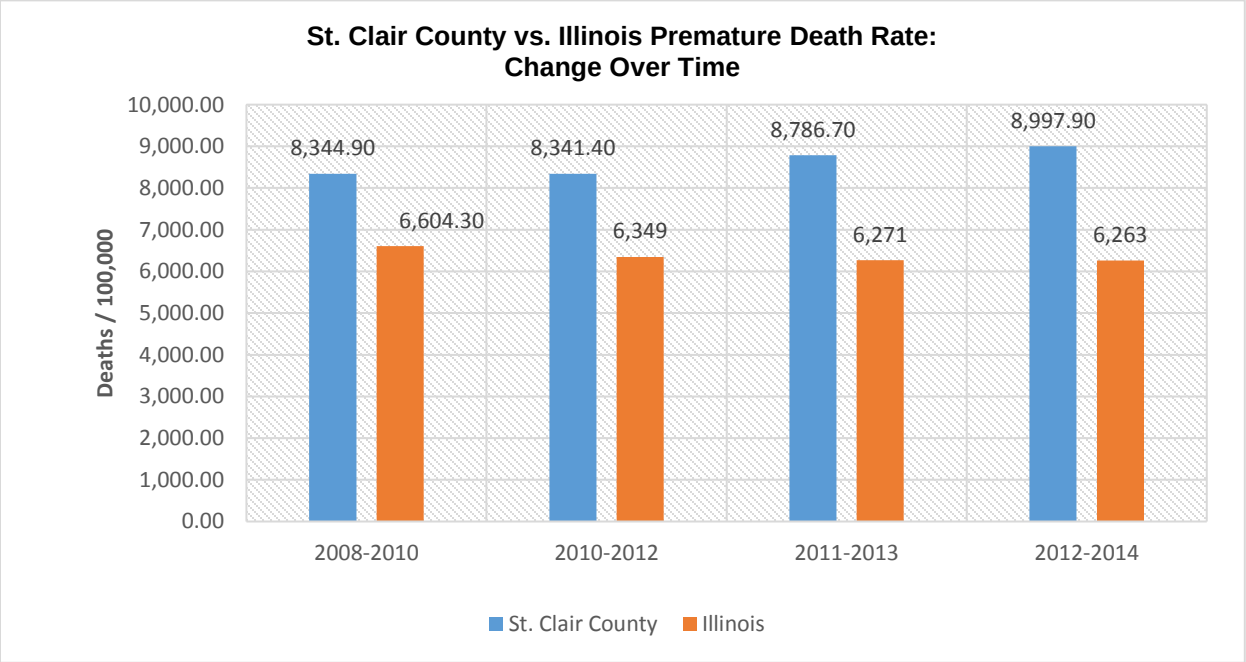


Conduent Healthy Communities Institute

During the last decade, the age-adjusted death rate due to lung cancer in both county and state declined. From the five-year period ending in 2007 compared to the five-year period ending in 2014, there was a decrease of 12.48 percent in the county and 12.01 percent in the state. The state experienced a 14.08 percent decrease during the same period when compared to the county.

Premature Death

Years of Potential Life Lost (YPLL) is an estimate of premature mortality. It represents the number of years a person would have lived if he or she had not died before the predetermined age of 75 years. On a population level, the measurement gives more weight to deaths occurring among younger people and therefore YPLL is an alternative measure to death rates. When applied to different specific causes of death, YPLL can measure the relative impact of various diseases on the population and can be used to emphasize specific causes of death affecting younger age groups. YPLL is frequently used to quantify social and economic losses due to premature death.

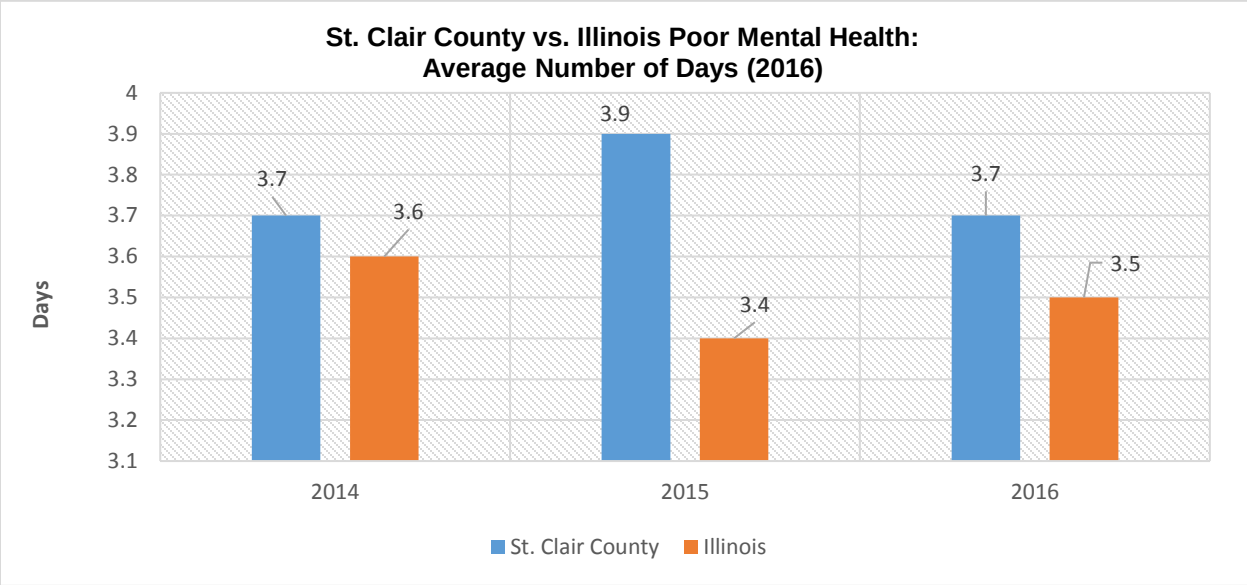


Conduent Healthy Communities Institute

From the three-year period ending in 2010 compared to the three-year period ending in 2014, the state experienced a decrease in premature deaths per 100,000 of 341.3 (an increase of 8 percent) while premature deaths per 100,000 in the county increased by 653. The overall rate in 2014 was 2,735 more deaths in the county than the state.

Mental Health

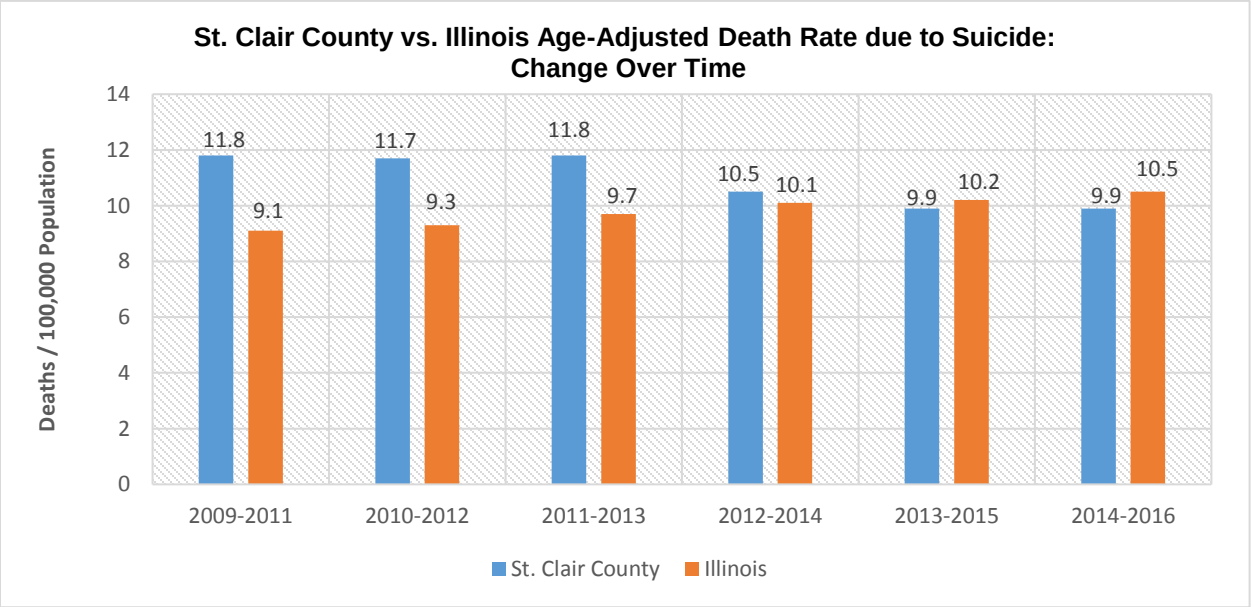
Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Occasional down days are normal, but persistent mental/emotional health problems should be evaluated and treated by a qualified professional.



Conduent Healthy Communities Institute

When the average number of days of poor mental health were compared, only a minor variance was noted between the county and the state. Overall, the state reported slightly fewer number of days of poor mental health than the county.

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.

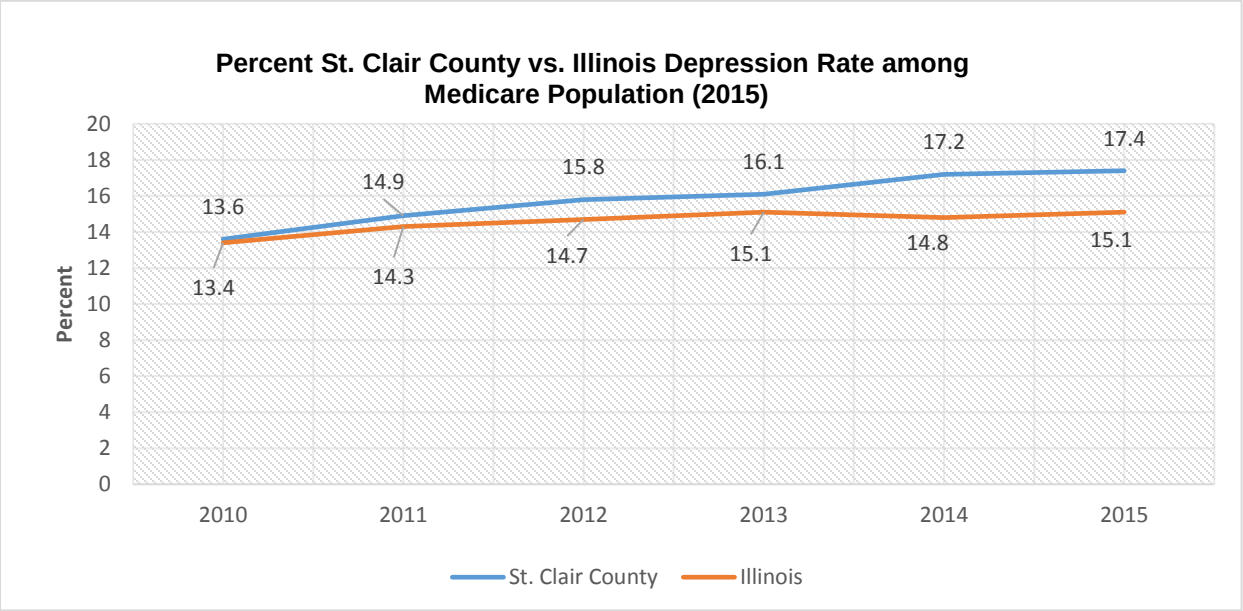


Conduent Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the suicide rate to 10.2 deaths per 100,000 population. The rate of suicide in the county was higher than the rate in the state from 2009-2014. However, a shift occurred from 2014-2016. The overall rate in the state was 6.06 percent higher in 2016 while in 2011, the rate in the state was 22.88 percent lower than the rate in the county.

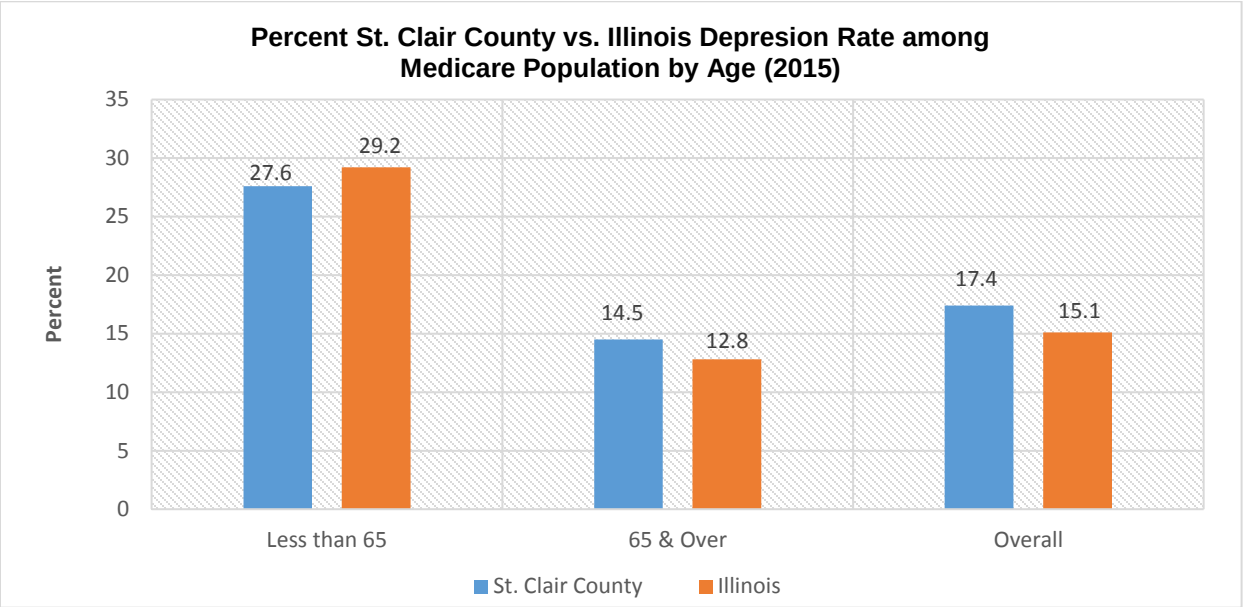
Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue and a marked loss of interest in activities that used to be pleasurable. Many people with depression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

According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7 percent in people over the age of 60 compared to 16.9 percent overall. The 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.



Conduent Healthy Communities Institute

From 2010, the difference between the rate in the county and the state remained statistically the same. However, in 2014, the difference in the rate from 2013 more than doubled from 6.62 percent to 16.22 percent. The overall rate in 2015 was higher (15.23 percent) in the county than the state.

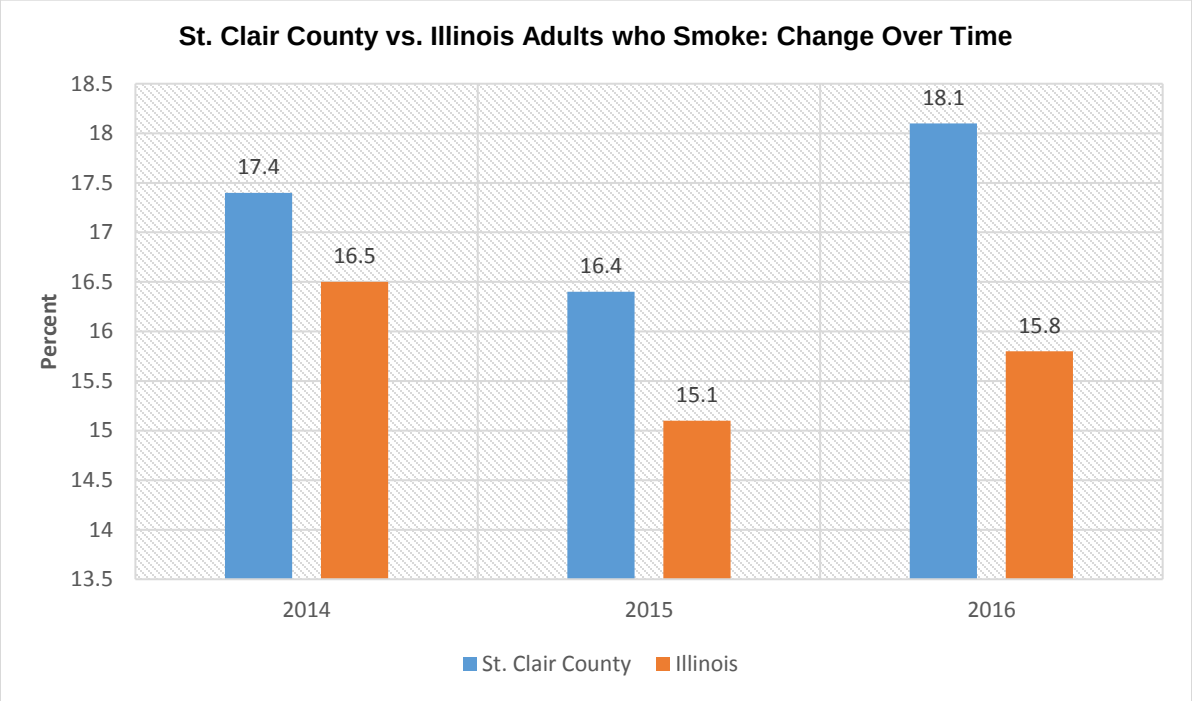


Conduent Healthy Communities Institute

As previously mentioned, depression among the 65 & over Medicare age group was lower than the overall Medicare population. The Less than 65 age group had a rate that almost doubled the rate of 65 & over age group in the county. In the state, the rate of the Less than 65 age group was more than double the rate of the 65 & over age group.

Mental Health: Substance Abuse

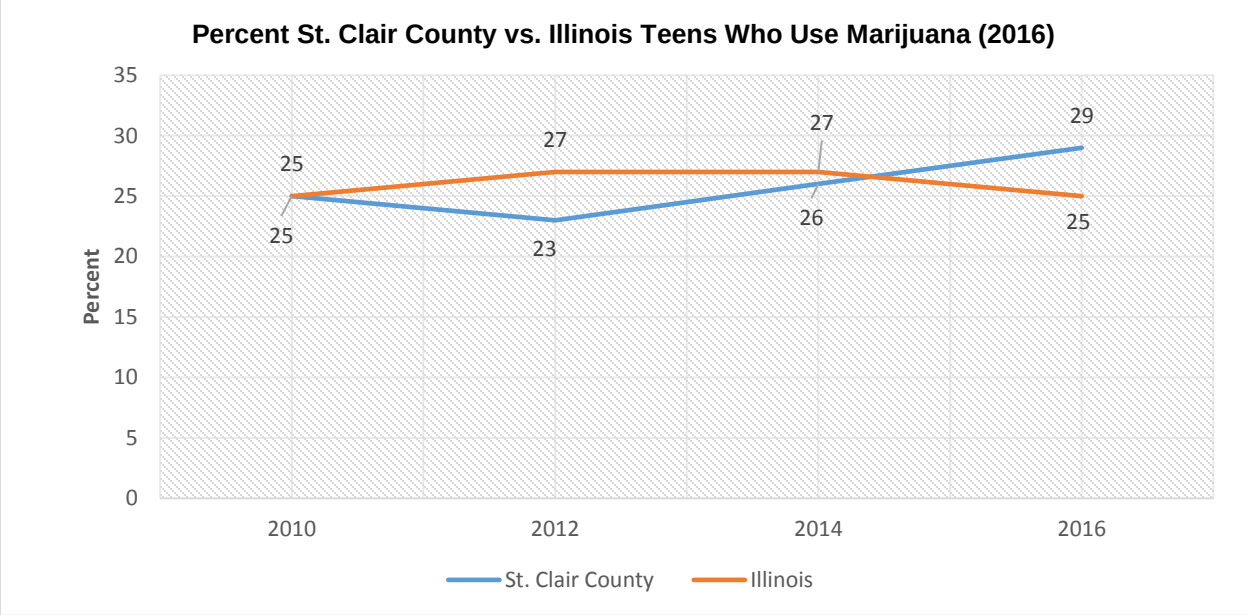
Tobacco is the agent most responsible for avoidable illness and death in America. According to the Centers for Disease Control and Prevention, tobacco use brings premature death to almost half a million Americans each year, and it contributes to profound disability and pain in many others. The World Health Organization states that approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for nonsmokers, which can cause or exacerbate a wide range of adverse health effects such as cancer, respiratory infections and asthma.



Conduent Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the rate of adults aged 18 years and older who smoke cigarettes to 12.0 percent. The percentage increase of adults who smoked from 2014-2016 in the county was 4.02 percent. However, in the same period, there was a decrease of 4.24 percent in the state. In 2016, the overall rate in the county was 14.56 percent higher than the rate of the state. In 2014, the rate in the county was 5.45 percent higher compared to the state. In 2015, both the county and state saw a decrease from 2014, 5.75 percent and 8.48 percent respectively. Both the county and the state failed to meet Healthy People 2020 target.

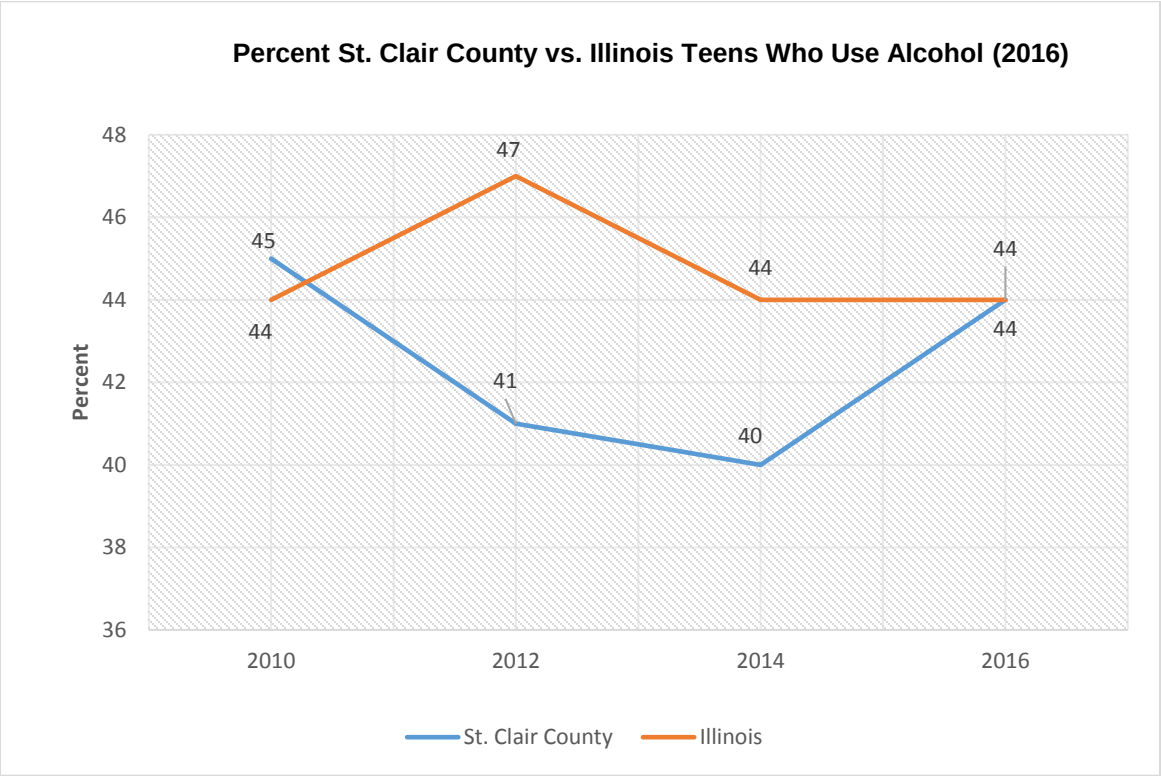
Among youth, illicit drug use is associated with heavy alcohol use, tobacco use, delinquency, violence and suicide. Marijuana is the most commonly abused illicit drug in the United States. Marijuana intoxication can cause distorted perceptions, impaired coordination, difficulty thinking and problem-solving and difficulties with learning and memory. Many research studies have shown that marijuana's adverse effects on learning and memory can last for days or weeks after the acute effects of the drug have worn off. Chronic marijuana use can lead to addiction. Addictive behaviors may result in harmful effects on social functioning in the context of family, school, work and recreational activities.



Conduent Healthy Communities Institute

The 2016 rate of teens who use marijuana in the county was 4 points higher than the rate in the state. However, the county rate in 2012 was 14.81 percent lower than the rate in the state.

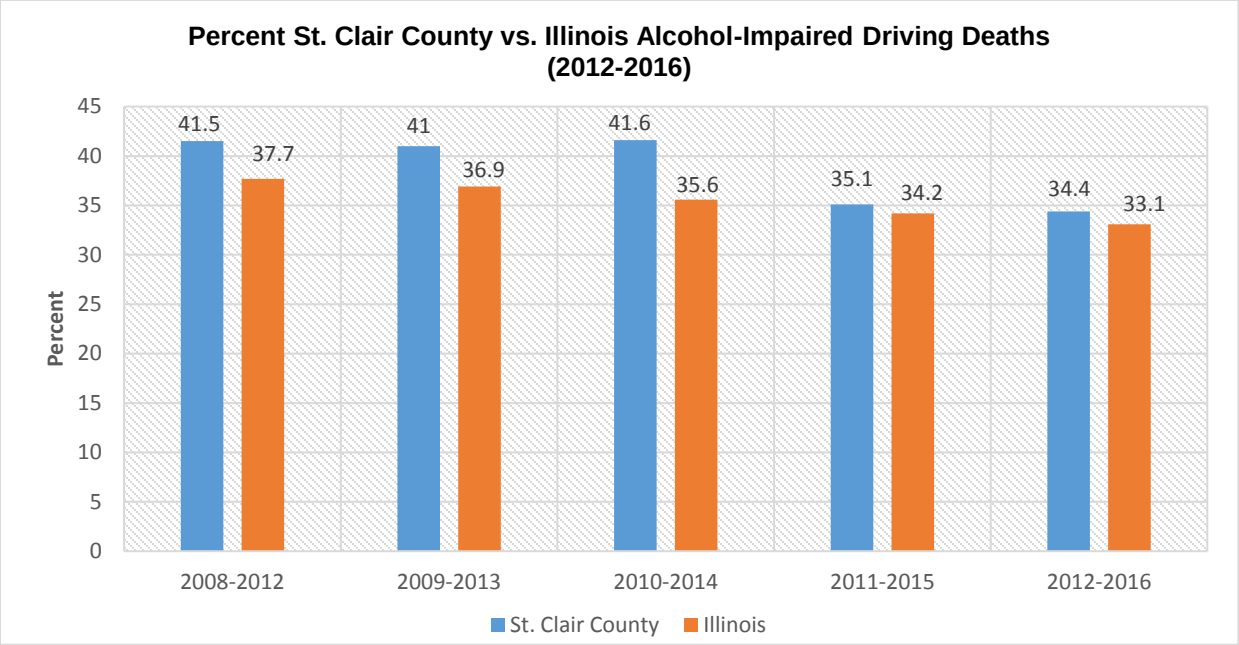
According to research by the National Institute on Alcohol Abuse and Alcoholism, adolescents who begin drinking at a young age are more likely to develop alcohol dependence than those who begin drinking at age 21. Patterns formed during adolescence play a critical role in health throughout adulthood. Alcohol use also impairs judgment and can lead to other high-risk behaviors such as drunken driving and irresponsible sexual activity.



Conduent Healthy Communities Institute

The 2016 rate of teens who used alcohol in the county and state was identical. In 2012, the rate in the county was 12.77 percent lower than the rate in the state. The rate in the state remained the same from 2014-2015 and the county increased 10 percent from 2014-2016.

According to the National Highway Traffic Safety Administration, motor vehicle crashes that involve an alcohol-impaired driver kill 28 people in the United States every day, which amounts to one death every 53 minutes. There is strong evidence supporting the effectiveness of sobriety checkpoints as a public health intervention to reduce the harms associated with impaired driving. According to the Centers for Disease Control and Prevention, these checkpoints reduce alcohol-related motor vehicle crashes by 9 percent.

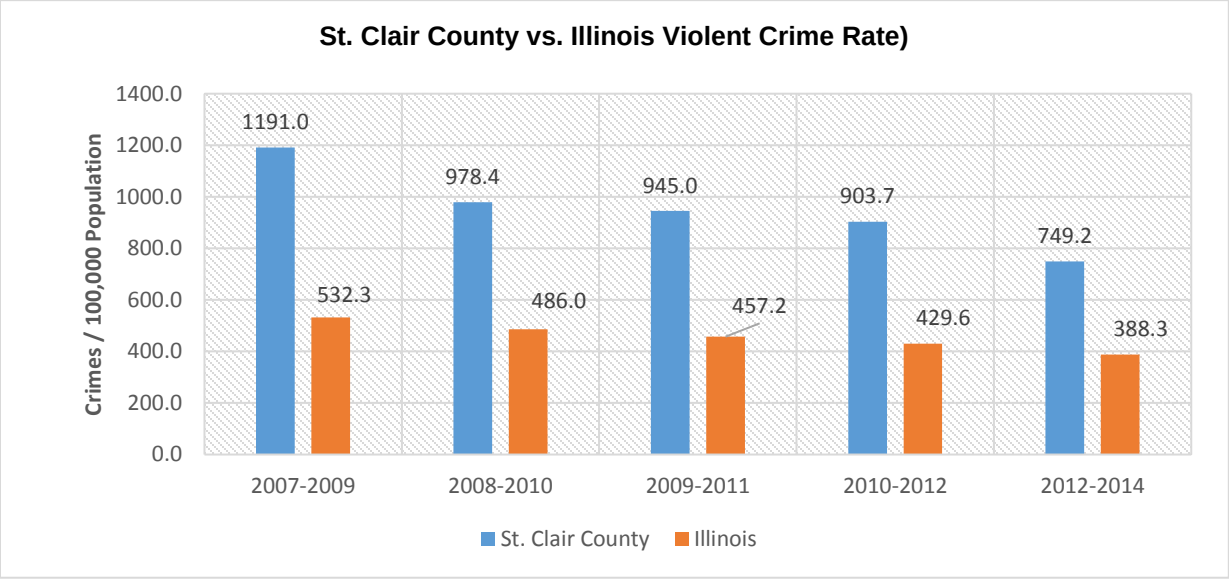


Conduent Healthy Communities Institute

For the five-year-period ending in 2016, alcohol-impaired driving deaths were down slightly in the county (2 percent) and in the state (3.2 percent) compared to the five-year-period ending in 2015. This continued the decline in the state and the county rate from the 2014 five-year ending period.

Violent Crime

A violent crime is a crime in which the offender uses or threatens to use violent force upon the victim. According to the FBI's Uniform Crime Reporting Program, violent crime includes four offenses: murder and non-negligent manslaughter, rape, robbery and aggravated assault. Violence negatively impacts communities by reducing productivity, decreasing property values and disrupting social services.



Conduent Healthy Communities Institute

The overall rate of violent crime in the county was very high when compared to the state. For the three-year-period ending in 2014, the county's violent crime rate was 361 violent crimes per 100,000 people higher than the state.

C. Internal Work Group Meetings

Memorial Hospital Belleville and Memorial Hospital East chose 10 employees and 1 board member to participate on an internal CHNA work group representing various hospital departments including, Public Relations; Diabetes Education; Cardio/Pulmonary Rehabilitation; Pastoral Care; Center for Performance Excellence; Social Services; Nursing Administration; Emergency Preparedness; and Emergency Room. (See Appendix C).

The work group met three times to analyze the primary and secondary data and to complete the priority ranking for the hospital's CHNA. Members reviewed data provided by the external focus group as well as information collected through secondary data analyses.

Meeting 1

The work group met March 12, 2018, to review the purpose for the CHNA, role of the work group and goals for the project. The team reviewed the key findings from the 2015 report and the 2018 focus group. The 2018 focus group perceptions were then reviewed and discussed.

Through the discussion and consensus, the work group narrowed the list of the health needs from 17 to 15. The team made its decision by reviewing resources available including staffing, program availability and clinical service lines at the hospitals.

Meeting 2

The work group met again March 27, 2018. During this meeting, the group continued its assessment of the focus group data. The team reviewed all the community health needs and held a discussion about the importance of each need, effect on the community and resources to meet the needs. The group narrowed the list of health needs to 10, removing these needs from the list: Poverty; Violent Crime; Transportation; Food Availability; Mental Health; Access: Coverage; and Sexually Transmitted Infections. Results from the group discussion are included in the following table.

Table 8: St. Clair County List of Primary Data	
Stakeholders Focus Group: List of Community Health Needs	**MHB & MHE CHNA Work Group: Top 10 Community Health Needs**
Tobacco Use	Chronic Obstructive Pulmonary Disease (COPD)
Chronic Obstructive Pulmonary Disease (COPD)	Diabetes
Cancer: Lung	Infant Mortality
Teen Pregnancy	Heart/Vascular Disease
Sexually Transmitted Infections	Cancer: Lung
Access: Coverage	Obesity
Infant Mortality	Nutrition Education
Heart/Vascular Disease	Tobacco Use
Diabetes	Teen Pregnancy
Nutrition Education	Substance Abuse
Food Availability	
Obesity	
Transportation	
Substance Abuse	
Poverty	
Violent Crime	
Mental Health	

During its second meeting, the work group also reviewed the criteria to rank the top 10 health needs. The following criteria for prioritizing the needs identified by the focus group was agreed upon by the internal team.

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

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 1 (low need) to 5 (high need) for each criteria. The total score for each need was calculated by multiplying weights by rating. This process was done individually.

Meeting 3

The work group held its final meeting April 19, 2018. At this meeting, the results of the ranking of the top 10 community health needs were reviewed.

Table 10: Memorial Hospital Belleville & Memorial Hospital East Internal Work Group: Ranking of Top 10 Community Health Needs	
Highest to the Lowest Needs	**Total Scores**
Substance Abuse	583
Vascular Disease	505
Obesity	501
Diabetes	477
Nutrition Education	406
Tobacco Use	351
COPD	345
Cancer: Lung	284
Teen Pregnancy	232
Infant Mortality	179

There was much discussion around opioids with general agreement that opioid addiction is a serious public health problem at the hospital, county, region and nationally. A county collaborative effort around opioid addiction is in place as part of the St. Clair County Health Department (SCCHD) Plan for 2018-2023. Memorial Regional Health System (MRHS) is represented on this opioid workgroup and the group discussed adding another hospital staff member to the opioid workgroup.

There was a discussion on vascular disease, which is part of the MRHS strategic plan. The hospitals have the most resources and expertise to address this need with a Chest Pain Center, Cardiac Rehab, transitional care programs and certification by the Illinois Department of Public Health as Acute Stroke Ready.

Obesity/Diabetes/Nutrition Education needs were discussed. Consensus was reached that these needs are interrelated and can affect vascular disease and cancer as well. The team also determined that nutrition education should be a focus as it will have a downstream effect on the other needs. There was a review of possible resources to address the need, including diabetes counseling service, several dietitians on staff and the BJC School Outreach that provides nutrition education in schools.

Discussion about tobacco use, chronic obstructive pulmonary disease (COPD) and lung cancer was limited. Group members commented that no community benefit program attempted in the past has been successful in reaching a significant portion of smokers.

Teen Pregnancy and Infant Mortality were also discussed. The internal group scored these needs the lowest since the St. Clair County Health Department has an effort in place to address infant mortality and teen pregnancy. The group elected to let the health department lead this effort.

The focus group rankings were reviewed. The top 3 from these rankings (Mental Health, Violent Crime and Poverty) were not ranked as the hospital does not possess the resources to effectively address these issues, but the hospitals do participate in several county and regional initiatives seeking to address these issues. The hospitals are active in the St. Clair County workgroup on both mental health and substance abuse, which is sponsored by the St. Clair County Healthcare Commission and part of the St. Clair County Health Department. The hospitals also support a regional opioid initiative including St. Clair and Madison counties. The hospitals also participate on a maternal and child health committee, which is part of the St. Clair County Healthcare Commission's Violence and Safety workgroup.

Transportation and Food Availability were not ranked for the same reasons. After removing the above from the list, Substance Abuse, Obesity, Nutrition Education, Diabetes and Heart/Vascular remained.

The table below provides:

- primary data from the focus group ranking
- needs identified by the internal work group ranking based on the primary data
- results of the secondary data using Conduent Healthy Communities Institute scoring tools that compared data from similar communities in the nation

Rank	Table 11: Community Health Needs: Primary & Secondary Data Ranking Comparison		
1	**Top Needs by Focus Group**	**Top Needs By Memorial Hospital Belleville & Memorial Hospital East Internal Team**	**Healthy Communities Institute Scoring Based on all Available National Data**
2	Tobacco Use	Substance Abuse	Astma: Medicare Population
3	Chronic Obstructive Pulmonary Disease (COPD)	Vascular Disease	Chronic Kidney Disease: Medicare Population
4	Cancer: Lung	Obesity	Low Birth Weight Babies
5	Teen Pregnancy	Diabetes	Infant Mortality
6	Sexually Transmitted Infections	Nutrition Education	Food Environment Index
7	Access: Coverage	Tobacco Use	Food Insecurity Rate
8	Infant Mortality	COPD	Heart Failure: Medicare Population
9	Heart/Vascular Disease	Cancer: Lung	Stroke: Medicare Population
10	Diabetes	Teen Pregnancy	Diabetic Monitoring: Medicare Population
11	Nutrition Education	Infant Mortality	Premature Death
12	Food Availability		
13	Obesity		
14	Transportation		
15	Substance Abuse		
16	Poverty		
17	Violent Crime		
18	Mental Health		

- Heart/Vascular Disease; Diabetes; and Infant Mortality were listed by all three groups.
- Tobacco Use; Substance Abuse; Obesity; Nutrition Education; Chronic Obstructive Pulmonary Disease; Lung Cancer; and Teen Pregnancy were listed by the focus group and the internal work group.
- Food Insecurity was listed by the focus group and the Healthy Communities Institute.

Conclusion

After the comprehensive assessment process to determine the most critical needs in the St. Clair community, the group concluded that based on available resources and where results can be better measured, Memorial Hospital Belleville and Memorial Hospital East will work together to focus on:

1) Substance Abuse
2) Nutrition Education and
3) Stroke

V. Appendices

Appendix A

Memorial Regional Health Services (MRHS) is a nonprofit organization, which is part of BJC HealthCare. It is the parent organization of Memorial Hospital Belleville and Memorial Hospital East.

Memorial Hospital Belleville

Memorial Hospital Belleville is conveniently located in a well-established west Belleville neighborhood. The hospital also provides diagnostic centers in O'Fallon, Illinois, and an off-campus physical therapy center in east Belleville.

Memorial Hospital Belleville is a 222-bed facility serving the health care needs of area residents since 1958. The hospital has a medical staff of more than 400 members representing 42 specialties and employs approximately 2,300 full and part-time employees. Memorial Hospital Belleville is recognized as a:

- Designated Magnet™ facility by the American Nurses Credentialing Center
- Accredited Chest Pain Center with PCI by the Society for Chest Pain Centers
- IDPH designated Stroke-Ready Hospital
- IDPH designated Regional Hospital Coordination Center for the Edwardsville Public Health and Medical Response Region

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Appendix B: Focus Group Participants and Hospitals' Observants		
St. Clair County Focus Group Participants		
Last Name	**First name**	**Department**
Brookshire	Liz	Eastside Aligned
Brunsman	Cheryl	Programs and Services for Older People
Davenport	Greg	YMCA
Denton	Walter	City of O'Fallon
Meyer	Jenny	City of Belleville
Michael	Foppe	Interfaith Food Pantry
Hannon	Robin	St. Clair County Health Dept
Hogrebe	Pat	ESTL St. Vincent DePaul
Hood	Jessica	O'Fallon Chamber of Commerce
Humphrey	Debbie	St. Clair County 708 MH Board
Irby	Candace	932 nd Reserve Unit/ Southern Il Health Foundation
Gallerson	Steven	St. Clair County State's Attorney
Onstott	Karan	McKendree University
Owens	Jake	Abbot EMS
Pace	Jessica	Touchette Regional Hospital
Paeth	Joy	Age Smart
Sarfaty	Susan	St. Clair Regional Office of Education
Shifferdecker	Peggy	Belleville Chamber of Commerce
Smith	Tom	Karla Smith Foundation
Sparks	Melissa E.	Scott Air Force Base
Stidham	Mike	BEACON Ministries

Focus Group Hospitals' Observants		
Last Name	First Name	Hosptals
Ashbrook,	Emily	Memorial Hospital
Stewart	Doug	Memorial Hospital
Singsank,	Cheryl	Memorial Hospital
Thomure	Anne	Memorial Hospital
Turner	Mark	Memorial Hospital
Meyers	Donna J.	HSHS St. Elizabeth's
Sebastian	Peg	HSHS St. Elizabeth's
Schrader	Sydney	HSHS St. Elizabeth's
Amy	Balance	HSHS Southern IL Division
Barbeau	Kelly	HSHS St. Elizabeth's
Miller,	Mike	HSHS St. Elizabeth's
Tindall,	Allison	HSHS St. Elizabeth's
King,	Karley	BJC HealthCare
Washington	Brian	BJC HealthCare

Appendix C: Memorial Belleville & Memorial East Hospitals Internal Work Group Members		
Last Name	First Name	Department
Thomure	Anne	Public Relations
Weeks	Angela	Diabetic Education
Masters	Barbara	Cardio / Pulmonary / Rehabilitation
Singsank	Cheryl	Public Relations
Stewart	Doug	Pastoral Care
Hoering	Ed	Board Member
Connors	Kim	Center for Practice Excellence
Otten	Lacy	Social Services
Sancho	Marcella	Nursing Administration
Luechtefeld	Mimi	General Administration
Pugh	Phillip	Emergency Preparedness
Hayes	Todd	Emergency Room
King	Karley	BJC Communication & Marketing

Appendix D

PERCEPTIONS OF THE HEALTH NEEDS OF ST. CLAIR COUNTY RESIDENTS FROM THE PERSPECTIVES OF COMMUNITY LEADERS

PREPARED BY:

Angela Ferris Chambers
Director, Market Research & CRM
BJC HealthCare

FEBRUARY 13, 2018

TABLE OF CONTENTS

BACKGROUND **2**

RESEARCH OBJECTIVES **2**

METHODOLOGY **3**

KEY FINDINGS **5**

RATING OF NEEDS **8**

NEXT STEPS **9**

APPENDIX

PARTICIPANT LIST **10**

OBSERVER LIST **11**

BACKGROUND

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

Memorial Hospital Belleville and HSHS St. Elizabeth's Hospital conducted their first stakeholder assessments in 2012, followed by a second iteration in 2015. With the since-opened Memorial Hospital East, they have agreed to work together on this latest stakeholder assessment, which is due in 2018.

RESEARCH OBJECTIVES

The main objective of this research is to solicit feedback on the health needs of the community from experts and those with special interest in the health of the community served by the hospitals of St. Clair County.

Specifically, the discussion focused around the following ideas:

1) Determine whether the needs identified in the 2015 CHNAs 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 plans to address the prioritized needs

4) Identify other organizations with whom these hospitals should consider collaborating

5) Discuss what has changed since 2015 when these needs were prioritized, and whether there are there new issues which should be considered

6) Understand what other organizations are doing to impact the health of the community and how those activities might complement the hospitals' initiatives

7) 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, Memorial Hospital Belleville, Memorial Hospital East and HSHS St. Elizabeth's conducted a single focus group with public health experts and those with a special interest in the health needs of St. Clair County residents. It was held on January 30, 2018 at Enjoy Church in O'Fallon, Illinois. The group was facilitated by Angela Ferris Chambers of BJC HealthCare. The discussion lasted about 90 minutes.

Nineteen individuals representing various St. Clair County organizations participated in the discussion. Two others were invited, but were unable to attend (See Appendix).

Peg Sebastian, President and CEO of HSHS St. Elizabeth's Hospital, welcomed participants at the beginning of the meeting. Those who were observing on behalf of the participating hospitals were also introduced. At the conclusion of the meeting, Mark Turner, President and CEO of Memorial Belleville and Memorial East, thanked everyone for taking time to share their perspectives.

During the group, the moderator reminded the community leaders why they were invited - that their input on the health priorities for the community is needed to help the hospitals move forward in this next phase of the needs assessment process.

The moderator shared the demographic and socioeconomic profile of St. Clair County, the needs prioritized by the hospitals in their most recent assessments, and the highlights of each hospital's implementation plan.

Because St. Elizabeth's and Memorial referred to the same needs differently, some changes were made in the nomenclature to ensure that the same health need was being referenced. This was based on work that BJC HealthCare conducted in 2015 and 2016 to develop a common nomenclature to use among all of its hospitals.

The following needs (based on the revised nomenclature) were identified in the 2015 hospital CHNAs and implementation plans.

Needs Being Addressed	HSHS St. Elizabeth's	Memorial
Access to insurance coverage	X	
COPD		X
Diabetes	X*	X
Food availability	X*	
Heart and vascular disease	X	X
Lung cancer		X
Nutrition education	X*	

* Identified in 2015 plan as Nutrition and Wellness

Other health needs were identified in the 2015 plans, but not addressed, due to factors such as lack of expertise and limitations in resources. These included:

Needs Not Being Addressed	HSHS St. Elizabeth's	Memorial
Infant mortality	X	
Lung cancer	X	
Mental health	X	X
Poverty	X	
STDs	X	
Substance abuse	X	X
Teen pregnancy	X	
Tobacco use	X	
Violent crime	X	

Before engaging in the group discussion, the moderator shared the top 10 health indicators for St. Clair County as defined by Conduent Healthy Communities Institute. These were based on comparisons between publically available St. Clair County health data and state/national measures. Those indicators with the greatest differences were identified, and defined as follows:

Top Ten Health Indicators for St. Clair County	Measure
Asthma: Medicare	Percent of Medicare beneficiaries treated for asthma
Chronic kidney disease: Medicare	Percent of Medicare beneficiaries treated for chronic kidney disease
Babies with low birth weight	Percentage of births in which newborn weighed ≤ 5 ½ lbs.
Infant mortality rate	Deaths per 1000 live births
Food environment index	Combination of low income individuals with low access to a grocery store & a reliable source of food in past year
Food insecurity rate	Percent of population who experienced food insecurity in last year
Heart failure: Medicare	Percent of Medicare beneficiaries treated for heart failure
Stroke: Medicare	Percent of Medicare beneficiaries treated for stroke
Diabetic monitoring: Medicare	Percent of Medicare beneficiaries ages 65 – 75 with A1c screening in past year
Premature death	Years of potential life lost before age 75

Other health indicators were shared that described issues including access to health insurance, access to health care providers, infectious disease rates (including STDs), public safety and mental/behavioral health.

At the end of the presentation, the community stakeholders were asked to rate the identified needs based on their perceived level of concern in the community, and the ability of the community to collaborate around them.

KEY FINDINGS

FEEDBACK ON THE NEEDS BEING ADDRESSED:

Although stakeholders did not dismiss the importance of the needs that the hospitals chose to tackle, there was some initial surprise that there was not greater alignment between the needs identified by each hospital, given that the hospitals are assessing the same population.

Although access to insurance was considered a priority, **access to transportation** was identified as a major issue for many individuals in this community. It affects their ability to get to doctors' appointments as well as pick up prescriptions.

Concerns about the **opioid epidemic** were also raised, and mention was made about its impact on the declining life expectancy of men and women.

One participant observed that the needs being addressed appear to be more related to an older population (for example, heart and vascular disease, diabetes) while the needs not being addressed have a greater impact on a younger audience (like teenage pregnancy, tobacco use, STDs). Emphasis on **prevention and education** might keep some of these chronic conditions from ever evolving into major health concerns in the community.

Mental health is a priority for many community stakeholders. Along with other needs that are not being addressed, like **poverty, substance abuse and violent crime**, it will continue to impact area hospitals' ability to care for community residents, both clinically and financially. Specifically, in District 189 in East St. Louis and St. Clair County, there is a **lack of available mental health professionals,** although the need has not diminished.

Community stakeholders expressed dismay that **violent crime** is not being addressed. It was perceived as having the largest impact on the health of the county. It causes social isolation, as people are afraid to leave their homes. This impacts their willingness to seek medical care when it may be needed.

NEEDS THAT SHOULD COME Off THE LIST:

Nothing was identified to come off the list.

GAPS BETWEEN DEFINED NEEDS AND OUR ABILITY TO ADDRESS THEM:

The group noted that the **St. Clair County I-Plan** addresses many of the needs not being addressed by the hospitals, including infant mortality, mental health, substance abuse and violent crime. So although the hospital may not be focusing on these issues, other organizations in the community are.

The group also recognized that as long as we can **work together and collaborate** on what each community organization is addressing, we can avoid duplicating efforts and partner collectively, where it makes sense, to have a greater impact.

One stakeholder was distressed that by identifying the health needs of St. Clair County, as shared in the top 10 health indicators, it will discourage community engagement and consideration of St. Clair County as a great place to live. He felt that we should **include some of the positive attributes** of the community in our assessments.

Several members felt that the hospital should include **life skills** development as part of their educational curricula as it can also have a positive impact on how individuals access health services.

Another concern is that there are limited resources to ensure **continuity of care** after a patient is discharged from the hospital and returns to the community. **Homelessness** can also be an issue if the patient has nowhere to go after leaving the hospital. Even if the patient does have a home to return to, **access to transportation** can be a limiting factor as well.

As hospitals have moved away from urban centers, this has created some gaps in **access to services**, especially in conjunction with the limited **access to transportation**.

The limited **access to medical specialists** was also identified as gap in the current array of services. Although an individual may be diagnosed with certain chronic conditions, getting a referral to a local specialist can be very challenging, due to both insurance issues and issues of transportation.

The Needs of Specific Populations: The **health needs of rural communities** should be recognized as there are limited health resources available, affecting residents' ability to access services in a timely manner. **Mental health** resources, in particular, were called out as a specific type of service that is lacking in rural communities.

Among **older adults**, fall prevention is a major issue as it can lead to institutionalization if falls are not avoided.

Because **Scott Air Force Base** is located within St. Clair County, there is particular concern about the health needs of active duty military and military reservists. **Suicide prevention** has been a major area of focus due to rising suicide rates among active military and veteran populations. **Bystander intervention training** is mandated every year, educating base personnel on warning signs and ways to intervene, while maintaining their own safety and that of those around them. Military reservists have also been trained in these techniques (referred to as a Green Dot Environment) and as active members of our community, will know how to respond when confronted with a situation.

Among those active military who live on the air force base, there is a concerted effort to focus on **disease prevention and health education,** to teach them healthy habits while they are young and keep them in good health as they age.

For civilian employees and reservists, because they do not live on the base, they often have limited access to those same health resources.

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE:
There is a need to recognize that as healthcare providers, we must look beyond our "silos" and educate those from other areas (including the political, educational and law-enforcement arenas) about the health of the community. There seems to be a disjointedness among all of the different groups who tend to look out for their own interests, whereas a more coordinated effort could benefit the entire community.

To find more current data on the issue of the opioid epidemic and its impact on the health of the community, the **Drug-Free Partnership** was identified as a potential source of current information as is the **ambulance district**.

The **St. Clair County Health Department** should be considered as a centralized resource for knowing what is going on in the community, and whether specific collaborations have been organized to address targeted health issues.

In Cooperation with St. Clair County Department of Health, there is **Collective Impact** group called **Healthier Together** whose goal is to bring together different organizations, including the area hospitals, to collaborate and share information to produce a better outcome than any one organization could do on its own. This group is considering **social determinants of health** as part of their scope, and has surveyed the community to understand what they view as their priority health needs.

The **Karla Smith Foundation** is focusing on suicide prevention by training emergency department personnel on how to address the situation when they encounter it. They would welcome an opportunity to collaborate with local hospitals on this process.

The **St. Clair County Mental Health Board** is also conducting suicide prevention training within the community, including QPR training (question, persuade, refer). In addition, they recently received a violence prevention grant to train 45 teachers and parents in trauma-informed care in the East St. Louis/Cahokia area.

Age Smart has a grant for the Savvy Caregiver program, to support caregivers of individuals who have Alzheimer's. **Programs and Services for Older People (PSOP)** also has a mental health counselor who is working with the Alzheimer's Association to support caregivers as well as families of Parkinson's patients.

CHANGES SINCE THE 2015 CHNA:
Obesity, including **childhood obesity**, was mentioned as an issue that impacts many different chronic disease conditions but which was not specifically identified as a health need in the most recent CHNA.

The ongoing **Illinois state budget crisis** is also believed to have had a major impact on healthcare providers' ability to address the needs of the community. The state's inability

to pay health care providers for the services they render can create cash flow challenges impacting the provision of services in the future.

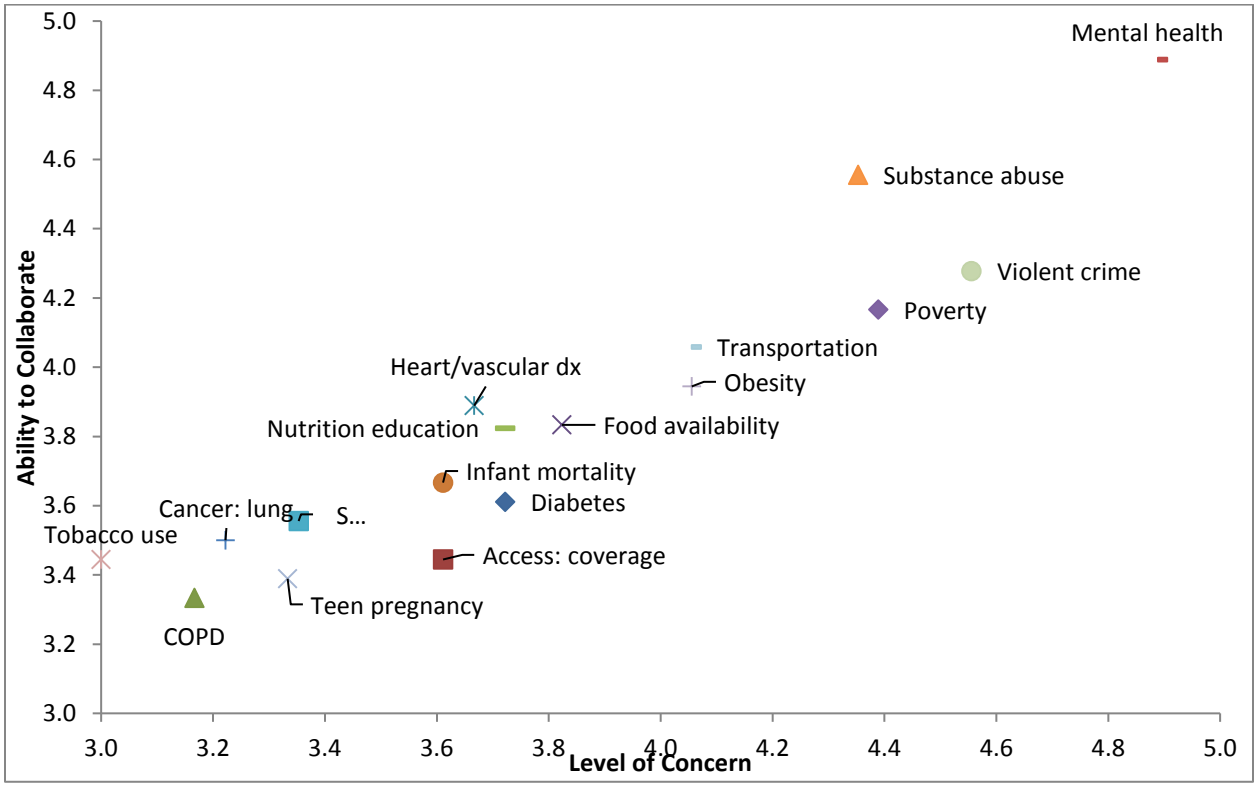
ISSUES THAT MAY BECOME MORE IMPORTANT IN THE FUTURE:
Many of the community stakeholders feel that continued emphasis should be placed on education and prevention in the areas of chronic diseases. Focusing on **smoking prevention/cessation** and **obesity** would help to reduce incidence of lung cancer and diabetes in the future.

Increasing the **coordination and collaboration among organizations** addressing similar health issues will enhance the impact of any single agency alone and reduce the duplication of efforts and resources.

The availability of **memory care for older adults** should be considered as dementia is on the rise, and the incidence will continue to increase as the population ages.

RATING OF NEEDS

Participants rerated the needs identified in the 2015 assessment on a scale of 1 (low) to 5 (high), based on their **perceived level of community concern** and the **ability of community organizations to collaborate around them**. The issues of **access to transportation** and **obesity** were added to the list based on the preceding discussion.



Mental health rated highest in terms of level of concern and ability to collaborate. **Violent crime, poverty** and **substance abuse** ranked next in terms of community concern as well as ability to collaborate, followed by access to **transportation** and **obesity**.

The table on the next page shows the actual ratings for each need that was evaluated.

Average Scores

	Level of Concern	Ability to Collaborate
Mental health	4.9	4.9
Violent crime	4.6	4.3
Poverty	4.4	4.2
Substance abuse	4.4	4.6
Transportation	4.1	4.1
Obesity	4.1	3.9
Food availability	3.8	3.8
Nutrition education	3.7	3.8
Diabetes	3.7	3.6
Heart/vascular dx	3.7	3.9
Infant mortality	3.6	3.7
Access: coverage	3.6	3.4
STDs	3.4	3.6
Teen pregnancy	3.3	3.4
Cancer: lung	3.2	3.5
COPD	3.2	3.3
Tobacco use	3.0	3.4

NEXT STEPS

Using the input the hospitals received from community stakeholders, Memorial Hospital Belleville, Memorial Hospital East and HSHS St. Elizabeth's will consult with their internal workgroups to evaluate this feedback. They will consider it in conjunction with other secondary data they may review, and determine whether their priorities should change.

The needs assessments and associated implementation plans must be completed by June 30, 2018 for St. Elizabeth's and by December 31, 2018 for the Memorial Hospitals.

IMPLEMENTATION PLAN

A. NEED TO BE ADDRESSED

I. HEART & VASCULAR: STROKE

RATIONALE: Stroke is the fifth leading cause of death in the United States, and is a major cause of serious disability for adults. About 795,000 people in the United States have a stroke each year; about 140,000 Americans die each year of stroke; that is 1 of every 20 deaths**.** About 610,000 of these are first or new strokes; 185,000 are recurrent strokes. Stroke costs the United States an estimated $34 billion each year. (Center for diseases Control (CDC) 2013-2015 Adults, Age 35+). Up to 80 percent of strokes are preventable. Therefore, Memorial Belleville and East Hospitals will educate the general population during health screening and community events on how to recognize stroke symptoms.

GOAL: To increase awareness of the signs and symptoms of Stroke among an at risk population within the St. Claire County.

OBJECTIVE Increase overall knowledge level of stroke-related symptoms by 10% from pre-to- post-test assessment.

ACTION PLAN: Educate the general population during local community events. Focusing on the signs and symptoms of Stroke and to call 911 when symptoms are present. Provide education material on the signs and symptoms of stroke.

OUTCOME: Decrease time from “Last know Well” (LKW) to ED arrival. The decrease in time from LKW to arrival in an emergency department for a stoke patient will increase the likelihood of improved treatment outcomes for a patient and thus less physical deficit as a result of the stroke.

OUTCOMES MEASUREMENT: Have the participant voice understand of the signs and symptoms of Stroke and to call 911. Have them perform pre and post-test on the signs of stroke.

II. MENTAL/BEHAVIORAL HEALTH: SUBSTANCE ABUSE

RATIONALE: Each year, over 20 million individuals living in the United States will visit an Emergency Department (ED) for an illness or injuries they have sustained. It has been estimated that 15–20 % of these individuals would test positive for having a substance abuse disorder. When trauma related visits are included, the number jumps between 25–50 % of these individuals testing positive for either alcohol or illicit drugs.

With ED's often being a point of contact for many individuals needing healthcare services, it makes sense to provide screening for substance misuse within this setting. Therefore, Memorial Belleville Hospital (MBH) will screen individual age of 18 years, without life threatening injuries or illness and who are deemed mentally competent, presenting with a substance abuse problem whom come to the E.D. during the time period of 10a to 6p for the next six months using a tool called SBIRT (Screening, Brief Intervention, and Referral and Treatment).

GOAL: Intervene and educate patients in the emergency room to decrease Substance abuse in the community

OBJECTIVES:

I. Screen 100% of individuals who presented to the emergency room with substances abuse related diseases or have substance abuse issues between the hours of 10:00 A.M.-6:00 P.M.
II. Refer those with substance abuse issue or related substance abuse diseases to a treatment center.
III. Follow-up with at least 10 percent of those referred to see if they have enrolled themselves to a treatment.

ACTION PLAN: Each participant will be screened by a Licensed Social Worker in the Emergency Room when presenting with a substance abuse related admission. Patients will be screened using the SBIRT tool (attached) and provided local resources to follow up in an outpatient basis. This will be happening during the time period of 10a to 6p. Once an appointment has been scheduled follow up with patient one week later to see if patient has enrolled themselves into treatment.

OUTCOMES: Change personal behaviors to discontinue substance use or use at a moderate range.

OUTCOMES MEASUREMENT: Patient's that are screened will be tracked without any identifying information. Upon completion of the SBIRT screening, patients that qualify will be provided support, treatment, and recovery information directly from SAMSHA. Information regarding Opiate abuse from SAMSHA will be given out to individuals with any Opiate related substance use. Ten percent of screened individuals will be contacted within a month to follow up in regards to any support groups or treatment completed.

III. NUTRITION EDUCATION

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, socioemotional difficulties and musculoskeletal problems. To address this community health need, Memorial Belleville Hospital and Memorial Hospital East partner with BJC School Outreach and Youth Development to implement three programs focusing on educating students on healthy eating in the following schools district:

- Belleville 118 School District,
- Harmony-Emge School District 175,
- Signal Hill District (Pre-K-8th).

PROGRAM I: "Fun"tastic"

PROGRAM DESCRIPTION: "Fun"tastic Nutrition is a classroom-based program that teaches students in grades 2 - 5 the importance of healthy eating habits and a healthy lifestyle.

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

OBJECTIVE: Improve overall knowledge of healthy eating and nutritional habits of students by 10% 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.

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

OUTCOME MEASUREMENT: 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.

PROGRAM II: EXPLORE HEALTH

PROGRAM DESCRIPTION: Explore Health is a classroom-based program that teaches students in grades 6 -12 the importance of healthy eating habits and a healthy lifestyle.

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

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

ACTION PLAN: Explore Health consists of four one-hour sessions taught by a Registered Dietitian and includes the following topics:

- MyPlate and administer pre-test
- Assessing Health
- Food Label Reading
- Media Literacy and administer post-test and evaluations

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

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

OUTCOME MEASUREMNT: 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.

PROGRAM III: SNEAKERS

PROGRAM DESCRIPTION: SNEAKERS is a classroom-based program that teaches students in grades 3-6 the importance of cardiovascular health and understanding fitness principles.

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

OBJECTIVE: Improve overall knowledge of cardiovascular health and fitness principles of students by 10% 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.

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

OUTCOME MEASUREMNT: 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 NOT TO ADDRESS AND REASONS WHY THEY ARE NOT:

Access: Coverage: Memorial Hospitals partner with HCFS to help identify those who are eligible to financial assistance as well as any other government or private insurance.

COPD: Memorial Hospitals partner with the St. Clair county health department to help address smoking cessation as smoking is the primary cause of COPD. Memorial will continue to provide free pulmonary clinics and Lively Lungs Support group.

Diabetes: Memorial Hospitals have chosen to address a cause of diabetes in addressing nutrition education. The improvement in eating habits should reduce diabetes and the need for monitoring.

Food Availability: Memorial Hospitals lack the resources to address this need.

Infant Mortality: Memorial Hospitals lack the resources to address this need. Memorial Hospital, as part of the St. Clair County Healthcare coalition, is participating in efforts to address this need.

Lung Cancer: Memorial Hospitals partner with the St. Clair county health department to help address smoking cessation as smoking is the primary cause of lung cancer.

Obesity: Memorial Hospitals have chosen to address a cause of obesity in addressing nutrition education. The improvement in eating habits should reduce obesity.

Poverty: Memorial Hospitals lack the resources to address this need.

Teen Pregnancy: Memorial Hospitals lack the resources to address this need. There are other agencies better equipped to address this need. Hospital, primarily the St. Clair County Health Department.

Tobacco: Memorial Hospital partners with the St. Clair county health department to help address smoking cessation.

Transportation: Memorial Hospitals lack the resources to address this need. There are other agencies and insurance companies that are addressing this need.

Sexually Transmitted Infections: Memorial Hospitals lack the resources to address this need. There are other agencies better equipped to address this need. Primarily the St. Clair County Health Department.

Violent Crime: Memorial Hospitals lack the resources to address this need.

Mental Health: Memorial Hospitals lack the resources to address this need.