Touchette Regional Hospital

Community Health Needs Assessment 2016

Introduction

Touchette Regional Hospital is located in Centreville, Illinois. Since its opening in 1957, the hospital has continued to provide healthcare services to metro-east communities, including Alorton, Cahokia, Centreville, East St. Louis, and Washington Park, as well as surrounding areas. For nearly 60 years, Touchette has delivered services in cardiopulmonary, laboratory, radiology, physical therapy, obstetrical services, 24-hour emergency services, medical and surgical, and intensive care. Progressively, several ancillary departments have been added to meet the health needs of the community, including behavioral wellness, pediatric dental services, and medical stabilization and withdrawal management.

In addition to hospital services, Touchette delivers home health care in St. Clair, Madison, and Monroe counties through Southern Illinois Home Care. These services are offered to disabled, chronically ill, and terminally ill patients. Physical and occupational therapies, as well as nursing and aide services are also provided in-home. Transportation services are also available to and from the hospital and local health centers and physician's offices.

In recent years, the healthcare landscape has continued to promote the idea of integration. In support of this and Touchette's mission to best serve the population, Archview Medical Center is home to the hospital's multi-specialty group. Archview Medical Specialists is a group of physicians' dedicated to the provision of quality specialty healthcare to Touchette's patient population. Specialty services offered include cardiology, gastroenterology, nephrology, neurology, orthopedics, otolaryngology, ophthalmology, pulmonology, and urology.

Touchette also addresses priority needs through several community programs that aim to educate the population served on awareness and prevention health strategies. Touchette's breast cancer awareness program, START NOW, targets women 40+ to provide education and individual case management for screenings, treatment, and follow-up care. Seniors I.Q. uses a community-based approach to enhance independence for individuals 65+ through free aftercare services. Complete Care was developed by Touchette and added to its services in 2009. The program aims to increase education on prevention and care management of chronic diseases impacting the community. While the focus of the program is on Diabetes, the complete care model is also effective in addressing other significant chronic illnesses such as congestive heart failure, kidney disease and hypertension.

COMMUNITY SERVED

Touchette Regional Hospital's primary service area is composed of Centreville, East St. Louis, and surrounding Illinois communities. The designated areas are identified by the specific zip codes: 62201, 62203, 62204, 62205, 62206, and 62207. The secondary service area includes the communities of Granite City, Collinsville, Belleville, Fairview Heights, O'Fallon, and other communities. Ninety-two (92) percent of the patients come from the primary service area, and eight (8) percent from the secondary area.

BACKGROUND

Once an industrious area, East St. Louis and surrounding communities prospered in steel, railroading, meatpacking, and other large manufacturing industries. During the mid-20th century, freeway construction spiked and weakened the steel and railroading market. Factories moved or closed. Changes in the industry had a devastating impact on other community business as well. The economic change resulted in high poverty in the area which has traversed multiple generations.

The area continues to be plagued by poverty and associated social issues including increased crime, adverse social determinants, and decreased health status. Today, the entire community is a designated Health Provider Shortage Area (HPSA) with shortages in primary care, dental, and mental health providers.

Generally, Touchette Regional Hospital's primary and secondary medical service areas consist of the following communities and zip codes:

Primary Service Area (PSA)
62201 East Saint Louis
62203 East Saint Louis
62204 East Saint Louis
62205 East Saint Louis
62206 East Saint Louis
62207 East Saint Louis

Secondary Service Area (SSA)
62040 Granite City
62060 Madison
62208 Fairview Heights
62220 Belleville
62221 Belleville
62223 Belleville
62226 Belleville
62232 Caseyville
62234 Collinsville
62239 Dupo
62269 O' Fallon

DEMOGRAPHIC ANALYSIS

The demographics of Touchette's primary service area contrasts significantly with that of the secondary service area. However, individuals residing in the secondary service area whom are utilizing TRH services often share characteristics of the primary service area residents. Thus, a Touchette patient living in the secondary service area is more likely to have characteristics comparable to the primary service area population.

The following diagrams and charts present an overview of primary and secondary service areas demographics:

	Primary Service Area	Secondary Service Area
Total Population	58405	237439
Race		
% African American	82%	16%
% Caucasian	15%	79%
% Other	3%	5%
Ethnicity		
Hispanic	4%	4%
Not Hispanic	96%	96%
Income		
Below Poverty (<100%)	42%	14%
100-200% of poverty	28%	17%
Over 200% of poverty	30%	70%
Education		
Below High School	42%	
High School Graduate	37%	
College Graduate	7%	
Age		
0-19	32%	24%
20-59	51%	56%
60 +	18%	20%
Unemployment		
Total rate of unemployment	17%	8%
Housing		
Vacancies	22%	11%

COMMUNITY HEALTH STATUS

One effective tool used for comparative analysis is the annual County Health Rankings and Roadmaps report. The program is an alliance between the University of Wisconsin's Population Health Institute and the Robert Wood Johnson Foundation. Health rankings are determined by assessing health factors and outcomes in a community. Health factors are measured using rates of morbidity and mortality characterized as length of life and quality of life. Health outcomes are determined by measuring multiple health indicators including healthy behaviors, access to clinical care, social and environmental factors, and physical environment. The goal is to provide a snapshot of how the population's health status is influenced by societal conditions of the community.

The East Side Aligned Roadmap, East Side Health District Needs Assessment, and St. Clair County information was used to perform this Community Health Needs Assessment. East Side Health District's population served is virtually synonymous with the primary service area of Touchette Regional Hospital. This makes up nearly a quarter of St. Clair County. However, for the purpose of defining the community by a health rank St. Clair County provides the most comprehensive and applicable information available to Touchette Regional's primary population. Thus, St. Clair County ranks near the bottom, 93rd out of 102 Illinois counties for both health outcomes and health factors.

It is important to note that some information provided for various communities that make up the entire service area is skewed and fragmented. Much of the health related data provide for 2016 cannot be compared to previous years due to the modification in data collection and analysis. For example, statistics on obesity, physical inactivity, and diabetes are matchless to years' prior because evaluation methodology applied by the Behavioral Risk Factor Surveillance Survey (BFRSS) changed from 2015 to 2016. Therefore, this data is also somewhat delayed. Additionally, the sexually transmitted infections (STI) report heavily relies on rates of chlamydia because it is the most common form of STI. However, this could be considered a misrepresentation of conclusive STI frequency.

Nonetheless, the County Health Rankings and Roadmaps assessment does provide the most accurate representation of health behaviors and outcomes in the area.

Below is an inclusive list of health measures, descriptions, and the associated health ranking for each.

Measure	Description	Ranking
Health Outcomes		93
Length of Life	Premature death	87
Quality of Life	Poor/fair health, poor physical health days, poor mental health days, low birth weight	97
Health Factors		93
Health Behaviors	Adult smoking, adult obesity, food environment index, physical inactivity, access to exercise opportunities, excessive drinking, alcohol-impaired driving deaths, sexually transmitted infections, teen births	97
Access to Clinical Care	Uninsured rates, primary care physicians, dentists, mental health providers, preventable hospitals stays, diabetic monitoring, mammography screenings	44
Social And Economic Factors	High school graduation rates, some college attendance, unemployment, children in poverty, income equality, children in single-parent households, social associations, violent crime, injury deaths	93
Physical Environment	Air pollution (particulate matter), drinking water violations, severe housing problems, driving alone to work, long commute (driving alone)	85

Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings 2016.

Another document that was utilized and relied upon for a unique perspective of the community is "THE ROADMAP" created by East Side Aligned. East Side Aligned is a wide ranging group of local representatives from education, social services agencies, citizens groups, municipal departments, health care, the faith community, law enforcement who have come together to create a collective impact for children and youth within the greater East St. Louis area. The approach is that all of these entities will work together in a coordinated fashion to make lasting improvements in the community. Furthermore, by working "collectively" a greater impact can be created than individual entities affecting their individual sector. With estimates ranging between 15% to 40% http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_123.pdf of an individual's health is determined by their zip code, education level, income, housing, employment status, i.e. their social determinants of health, it was only logical for Touchette Regional Hospital's needs assessment and priorities to be "Aligned" to the extent practical with this approach. East Side Aligned conducted extensive citizen input in the creation of their "ROADMAP" holding citizen input meetings in the evenings and on weekends. Their ROADMAP "is a living document that seeks to clarify and prioritize what the community desires and is committed to with regard to the readiness and well-being of our children and youth". The most recent draft of this living document was completed in November 2015. This document provided significant impact on the priorities of the hospital's Community Needs Assessment and Implementation Plan because of its emphasis on the social determinants of health and its recent completion. Paula Brodie, VP of Communications and Support Services is an active leader in East Side Aligned and provides liaison between Southern Illinois Healthcare Foundation, Touchette Regional Hospital, and East Side Aligned.

COMMUNITY INPUT

Touchette Regional Hospital has implemented a collaborative approach to ensure the Community Health Needs Assessment was completed thoroughly. Thus, we requested community input from multiple key stakeholders in the area. Stakeholder involvement along with quantitative data was used to identify primary community health needs and prioritize these issues. Given this information, several health needs were selected based on level of significance in the area.

Data analysis was provided by the local Federally Qualified Health Center's (FQHC) planning and development staff. The FQHC is recognized for their proficiency of conducting such assessments. For over twenty years, the planning and development department has aligned themselves with several local organizations, assisting in the performance of needs assessments within the community. They are also noted for their success in using such evaluations to secure competitive grant funding for ongoing and upcoming projects.

Every three years Touchette Regional Hospital hosts a Community Partners Round Table to obtain input for the Community Needs Assessment. Representatives from organizations and agencies that provide health and social services to the East St. Louis area are invited to participate. The work done by individuals within the community often reveals significant needs not clearly observed by the hospital. The primary goal of the meeting is to gather insight from some of these outside resources, a community "Round Table". This is done by assembling external supports working with community residents firsthand. During the forum, key informants and hospital personnel explore and identify community health needs for the hospital to address. Many times, this can be accomplished through the hospital strategic initiatives. However, more often this requires partnerships and collaboration. Thus, stakeholders are vital to implementing successful change.

Stakeholders

Participants in the 2016 Community Partners Round Table included a variety of groups dedicated to serving the East St. Louis population. They provide services in areas of healthcare, social services, education, faith-based services, and more. For the East St. Louis community, these are important determinants contributing to overall quality of life. Thus, an assembly of groups and organizations were solicited for discussion and recommendations on community needs that must be addressed.

Among the stakeholders, there was a general consensus of agreement regarding socioeconomic demographic information and established health data. They also offered additional concerns, raising awareness around several problem areas likely contributing to poor health status of the population. The Round Table also examined methods for effectively addressing these health problems as a team. Those in attendance at the 2016 Community Partners Round Table include:

- Catholic Urban Programs
- Griffin Center
- Hoyleton Ministries/Puentes de Esperanza
- Opal's House
- Southern Illinois Healthcare Foundation & East Side Aligned Liaison
- Straightway Baptist Church
- Windsor Health Center

Agency	Description
Catholic Urban Programs (input obtained over the phone due to last minute conflict)	Catholic Urban Programs is one of the best-known providers of food, rent subsidies, clothing and financial support for individuals that fall between the cracks of service providers.
Griffin Center	Griffin Center provides social services and educational programs to individuals living in six public housing developments throughout Touchette Regional's primary service area. Four additional centers are set up to provide these programs. Each of them is located in the East St. Louis area. Programs and services are delivered free of charge to families residing in the designated public housing units.
Hoyleton Ministries and Puentes de Esperanza	Initially a provider of residential services, Hoyleton Ministries' proactive approach has enabled their expansion into several service lines including: child welfare services, behavioral health, and preventive care services focused on teen pregnancy, substance abuse, and more. These services are also offered for Spanish-speaking clients through the Puentes de Esperanza program.
Opal's House	Opal's House is a domestic violence shelter dedicated to protecting women and children located in East St. Louis. To preserve classified status and safeguard the patrons, the home's specified location remains confidential. Opal's House also has a contract with the VA to provide these services for veterans.
Southern Illinois Healthcare Foundation	A Federally Qualified Health Center (FQHC) operating 29 health centers in Southern Illinois regions offering healthcare services in obstetrics, internal medicine, primary care, behavioral health, pediatrics, and pediatric dental. The organization is responsible for community programs including Healthy Start, Ryan White HIV AIDs programs, Start Now, fatherhood initiatives, family planning, and victims of violence. SIHF also directs community programs focused on special populations such as Healthcare for the Homeless, Public Housing Primary Care, and Migrant and Seasonal Farmworkers Program.
Straightway Baptist Church	Straightway Baptist Church focuses on serving individuals and the community at large through faith-based learning and services. They are dedicated to improving quality of life through their religious efforts. This is clear by their openness to collaboration, sharing of resources and ideas, and ongoing leadership training sessions which prepare staff to aid each member in living a full life.
Windsor Health Center	One of SIHF's 30+ health centers providing healthcare services to the greater Southern Illinois area. Services offered include behavioral health, family health, women's health, and primary care.

PRIORITY HEALTH NEEDS

Extensive data was gathered and analyzed in preparation of the needs assessment. This data is included in this document so that it can be a widely distributed community resource for the most recent health status indicators available. This information was summarized and prepared for the Round Table meeting. Members had several questions to increase their understanding of data presented. One member brought and presented a document related to a recent class action settlement impacting children's mental health services in Illinois for use by the Round Table. This and several other health issues were brought up by the fully engaged members. Group consensus readily identified mental health as their priority. The health issues were categorized into an area of focus for the hospital to address.

In summary, Touchette Regional Hospital's health priorities for the 2017 Community Health Needs Assessment are:

1. Mental Health
2. Chronic Disease Health Education
3. Access to Services

Mental Health

What is mental illness?

A mental illness is a condition that affects a person's thinking, feeling or mood. Such conditions may affect someone's ability to relate to others and function each day. Each person will have different experiences, even people with the same diagnosis. https://www.nami.org/Learn-More/Mental-Health-Conditions . In terms of lost income mental illness can be one of the most costly diseases.

Understanding the Impact of Mental Health and Mental Disorders

Although Touchette Regional Hospital has gained meaningful headway in the way of behavioral wellness within our community, mental health still has a significant impact on today's society. According to the National Alliance of Mental Illness (NAMI), every year about 1 in 5 (18.5%) of the U.S. adult population suffer from a mental disorder. Likewise, 1 in 5 (or 21.4%) of the nation's youth, ages 13-18, experience a severe mental disorder. To perpetuate this issue, the hospital's primary population served and similar individuals are more frequently subject to mental illness and disorders and are higher risk to delay or forgo mental health care. For example, African Americans and Hispanic American are only half as likely to seek and receive mental health services compared to Caucasian Americans (2016).

Mental health is also a critical driver to an individual's physical health. On average, adults with undiagnosed or lack of treatment for a mental disorder expire 25 years earlier due to remediable physical conditions. Specifically, there is an increased risk for chronic disease associated with mental disorders and illness. Lastly, suicide is the 10th leading cause of death in the US, 3rd for individuals' ages 10-24, and 2nd for individuals ages 15-24 (NAMI, 2016).

It is important to note the interconnection between trauma, mental illness and substance abuse, as well. The Round Table indicated that both need consideration together. Of the approximated 20.2 billion adults suffering from substance abuse disorders, more than half are considered dual diagnosis patients. This means they are simultaneously experiencing mental illness or disorders (NAMI, 2016) and substance abuse problems. Additionally, as discussed in the 2016 Community Health Partners Round Table, the link between mental illness and experiences of distress are common among the hospital's primary population served. For example, relating to population characteristics such as high rates of homelessness and the domestic violence survivors' community, individuals seeking treatment for mental health are more likely to have histories of trauma (National Committee on Trauma-Informed Care [SAMHSA], 2016).

Mental Health as a Priority Need

For the purpose of this Community Health Needs Assessment, Touchette Regional Hospital will address mental health / substance abuse activities regarding adult and youth services. Additionally, a focus on trauma-informed care will be applied due to the high need for education, training, and specified services related to this topic.

Chronic Disease Health Education

What is a chronic disease?

According to the University of Michigan's Center for Managing Chronic Disease, chronic diseases are defined as prolonged medically diagnosable conditions that are manageable through daily treatment, but not altogether curable. Chronic conditions may reduce life expectancy for individuals who do not manage the condition daily. Chronic diseases include, but are not limited to:

- Cardiovascular Disease
- Depression/substance abuse disorders
- Diabetes
- Hypertension
- Obesity
- Stroke

(CMCD, 2016)

Understanding the Impact of Chronic Disease Management

Left untreated, chronic diseases can have a negative influence on one's quality of life. Individuals who do not manage their chronic disease are at a significantly higher risk to suffer from critical health issues and difficulties that often lead to premature death. These diseases represent proximate cause for 70% of all deaths in the United States. Decreased productivity and increased healthcare costs are also some of the residual effects cause by chronic conditions. CMCD also projects that 81 million Americans will suffer from multiple chronic diseases by the year 2020 (2016).

Chronic Disease Health Education as a Health Priority

Chronic diseases can be successfully controlled through daily management activities such as medication management, steady monitoring of appropriate measures (i.e. glucose levels for diabetes patients), and behavioral modifications (i.e. benefits of altering food consumption choices by obese individuals). Individuals, caregivers, and family members are generally the most effective means by which these ends can be met. However, the information collected through the Round

Table and data analysis indicates the hospital's population served requires more guidance with regard to their diagnoses. As a part of the 2017 Community Health Needs Assessment, Touchette Regional Hospital recognizes that further education on chronic diseases is necessary if it is expected of patients to understand and apply disease management in their daily lives. It was the consensus that the Hospital should focus on education on the common factors of chronic disease described above. This action would lead to an impact on several diseases.

Access to Services

What is meant by "access to services"?

Access to health care services refers to an individual's ability to seek and receive quality treatment in an appropriate timeframe to achieve adequate health outcomes. According to Healthy People 2020, access to services considers four components of care that are coverage, services, timeliness, and workforce (2010). In addition to accessible health services, the availability of community resources that seek to address social determinants of health is also crucial. Social determinants include, but are not limited to:

- Availability of resources to meet daily needs (i.e. safe housing and local food markets)
- Residential segregation
- Educational and occupational opportunities and quality of training/education
- Language/literacy services
- Public housing

Fortunately for the Hospital's primary service area there is an effort underway to address the broad social determinants of health. While the primary emphasis is on education and early childhood development the plan created by East Side Aligned covers many social determinants. The goal of the plan is "All children and youth within Greater East St. Louis being:

- Healthy and safe in their environments
- Socially connected and emotionally secure
- Successful in school, college and work
- Positively engaged in their community"

Understanding the Impact of Access to Services as a concept

Access to health care services and community resources are main drivers for successful health outcomes. Based on the data provided in this document, it is apparent that a substantial amount of healthcare services required are a direct result of social determinants of the community. Social determinants of health refer to societal conditions of a population that can have a significant impact on health status and life quality outcomes and risks. Addressing these elements can act as prevention methods and supplemental services for the population served.

Access to Services as a Priority Health Needs

An extensive part of the discussion among community partners has revolved around patient access to community resources. As part of Touchette Regional Hospital's strategy, the access to services priority will primarily pertain to the availability and usage of external resources that can aid in proving lifestyle changes to promote healthy living. Strategic alignment and partnerships with community partners will serve as a primary objective to achieve this health need.

Implementation Plan

Based upon the priority community needs identified during the assessment, the Implementation Plan identifies the actions that Touchette Regional Hospital will undertake in the next three years to address these community priorities. The material brought by one of the members of the Round Table provided the basis for much of the mental health portion of the Implementation Plan. Community education evolved as a crosscutting theme for action across the three priorities. Community input noted that even though mental health was a priority in the previous needs assessment there remain several areas yet to develop. There was extensive discussion around the need for people to be informed of chronic diseases. Especially noted was the disparity in stroke survival rates. Members thought it would be very useful if more people knew that taking two aspirin immediately after a stroke could have such a positive impact. As other chronic diseases were discussed the group realized that education around similar lifestyle improvements could impact multiple chronic diseases. Therefore, it was decided to utilize similar information approaches that would impact multiple chronic diseases. A third area was another broad category covering a wide range of topics addressing access to care and access to support services.

1. Mental Health

Adult Mental Health

Objective: Explore the feasibility to add additional support services for patients after they are discharged.

Actions:

- Increase follow up with patients after discharge from inpatient services to assure that the patients are obtaining psychiatric care in an outpatient setting.
- Explore the feasibility (with partnerships) of the development of supportive housing services for patients who have a dual diagnosis of mental illness and substance abuse.
- Collaborate to improve an integrated physical and psychiatric continuum of care.
- Develop partnerships to increase behavioral health service capacity (such as working with primary care physicians, faith community, or other entities)

Objective: Train community resources in appropriate interventions with individuals experiencing mental health crises.

Actions:
Fulfill the need for appropriate interventions for residents experiencing mental health crises by increasing the number of community individuals with training to conduct appropriate interventions.

- Hospital staff arranges crisis intervention trainings for local law enforcement.
- Conduct trainings with the faith community and other community groups.

Children's services

Objective: Determine appropriate responses to address the recent settlement agreement between the Illinois Department of Healthcare and Family Services and Medicaid children under the age of 21 who have been diagnosed with a mental health or behavioral disorder.

Action:
Analyze the recent class action settlement agreement to determine implications for the community.

- Determine the appropriate role for the hospital in responding to the HFS Settlement agreement.
- Develop partnerships (as needed) with medical homes that integrate physical and mental health services for children.
- In collaboration with partners inform families and stakeholders how to gain access to children's behavior health services.

Objective: Promote the utilization of trauma informed care as a lens to understand behavior health problems of both children and adults.

Actions:

- Convene a team to implement trauma informed care training.
  - Train hospital staff in trauma informed care to increase their understanding of some of the patients' behaviors.
  - Train FQHC staff in trauma informed care.
  - Train the staff of community agencies in trauma informed care to promote their understanding of their clients and to provide a framework from which to address these needs.

2. Health Education on Chronic Diseases

Objective: Improve the community's knowledge and behavior related to chronic diseases such as cerebrovascular disease, diabetes, hypertension, heart disease, etc. (these diseases are grouped together due to the similarities of educational information and actions to impact the disease)

Actions:
Conduct the following activities in collaboration with the faith community and other partners through the Lunch and Learn program and other hospital initiatives.

- Provide nutritional information related to healthy eating and culturally competent recipes.
- Provide practical information about how to exercise when there are no safe public places for exercise.
- Develop culturally competent handout material related to chronic disease topics and their prevention, such as signs of a stroke.
- Promote the development of peer support groups of persons around specific diseases.
- Promote the utilization of the hospital's certified diabetes educator
- Utilize motivational interviewing or other techniques to encourage healthy behaviors.

Objective: In response to the high death rate from strokes, inform the community about the mitigation of damage from a stroke.

Action:
Promote innovative ways to "get out the message" about the benefit of two aspirins to be taken immediately after a stroke.

3. Access to Services

(Considerable discussion centered on improving the social determinants of health and access to social services which are generally outside of the hospital's direct ability to impact)

Objective: Develop a mechanism to inform the community about social services that are available.
Actions

- Develop a community services directory in partnership with the 708 Mental Health Board and other appropriate entities.
- Distribute the directory to agencies, the faith community, schools, East Side Aligned members and other entities.
- Explore the potential of keeping the directory updated through the hospital website.
- Participate with East Side Aligned to promote the development of improved social determinants of health such as public transit to stores and farmers markets with healthy foods, affordable day care, affordable housing, employment opportunities, and other community improvement activities.

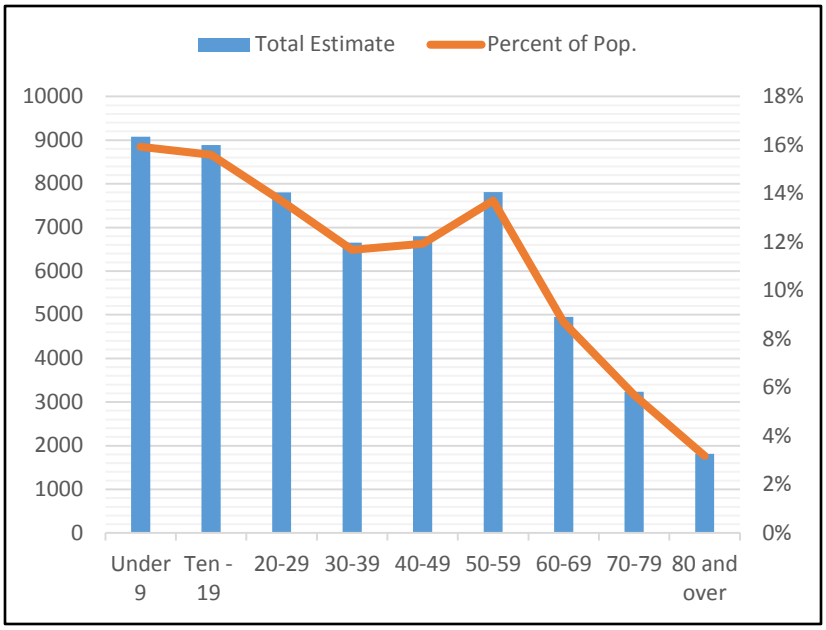
DEMOGRAPHICS

AGE

Figure 1 illustrates the distribution of age of East St. Louis residents. As shown, there is generally an inverse relationship between age and percent of population. In other words, older individuals make up a less overall percentage of the population (with the exception of a few outliers).

The age ranges with the most number of individuals per population are ≤ 9, 10 – 19, and 50-59. Figure 2 provides the numbers that are associated with each age range provided in Figure 1.

Figure 1: Distribution of Population by Age in East St. Louis Health District (2010-2014)



Source: U.S. Census Bureau, American Fact Finder: 2010-2014 American Community Survey 5-Year Estimates

Figure 2: Percent of Population Categorized by Age in East St. Louis Health District (2010-2014)

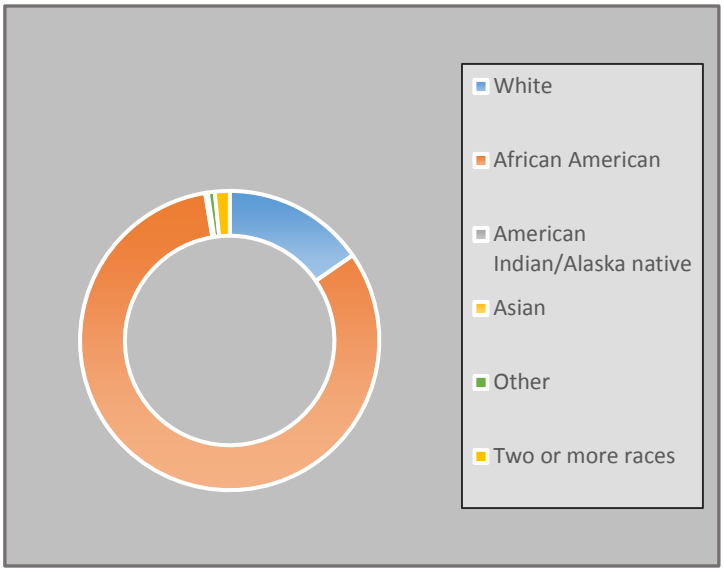
Age	Total Estimate	Percent of Population
Under 9	9075	15.9%
Ten - 19	8889	15.6%
20-29	7802	13.7%
30-39	6654	11.7%
40-49	6799	11.9%
50-59	7813	13.7%
60-69	4953	8.7%
70-79	3239	5.7%
80 and over	1811	3.2%
Total	56984	

Source: U.S. Census Bureau, American Fact Finder: 2010-2014 American Community Survey 5-Year Estimates
"Age and Sex" Table Identifier: S0101

RACE

The information provided in Figures 1 and 2 describe the distribution of East St. Louis Health District's population categorized by race. Based on the information from the United States Census Bureau, the majority of St. Clair County's population (82%) identify as African American (non-Hispanic). This is followed by White (non-Hispanic) at 15% and "Two or more races" at approximately 2%. Each of the other classifications falls under 1%.

Figure 1: Distribution of Population by Racial Classification in East St. Louis District (2010-2014)



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Figure 2 shows the approximated percentages of the population associated with each racial classification.

Figure 2: Percent of Population Categorized by Racial Classification in East St. Louis District (2010-2014)

Race	Percent of Population
White	15.37%
African American	82.02%
American Indian/Alaska native	0.10%
Asian	0.17%
Other	0.74%
Two or more races	1.61%

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Social Determinants

POVERTY

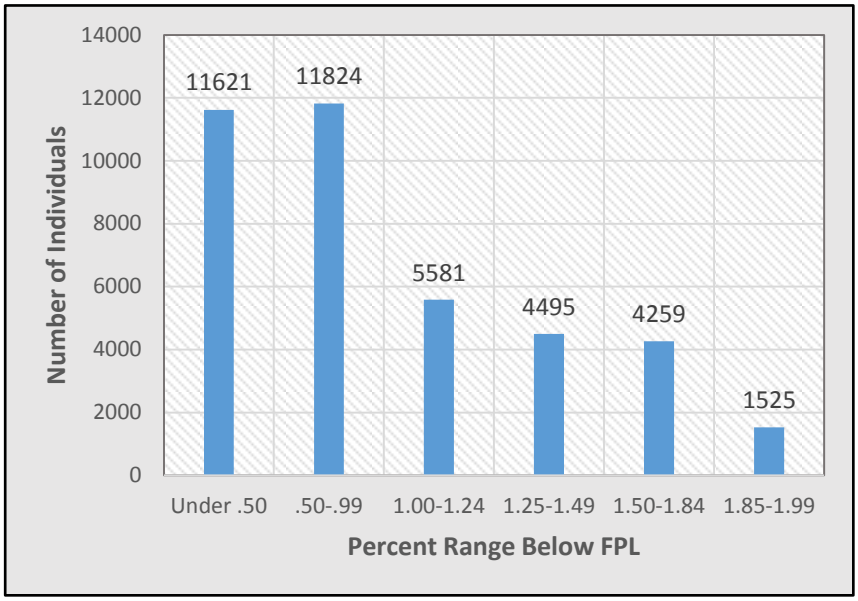
Social determinants, such as poverty status, have a major effect on adverse health outcomes. They play significant roles in access to and use of health services.

Figure 1 illustrates the number of individuals that experience poverty at different levels up to 200%. The 200% indicates low-income individuals, thus poverty status is broken up into increments below the standard low-income level. Overall, approximately 39,305 individuals in St. Clair County are living with low-income status. This number accounts for 70% of ESTL Health District's total population.

Individuals whose income is below 100% of the federal poverty line are considered to be living in poverty. In this case, the majority of individuals experiencing low-income are also considered poverty-stricken (23,445 total individuals).

Moreover, individuals whose income is below 150% of the federal poverty line (indicated on this graph as under .50) could double their income next year and still live in poverty.

Figure 1: Poverty Status Below 200% Federal Poverty Level for ESTL Health District (2010-2014)



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates
"Poverty Status in The Past 12 Months by Sex and Age" Table identifier: C17002

Figure 2: Poverty Status for ESTL Health District (2010-2014)

Indicator	Total Estimated Percentage
Total Individuals Below 200% FPL	39,305
Low income individuals	69.98%

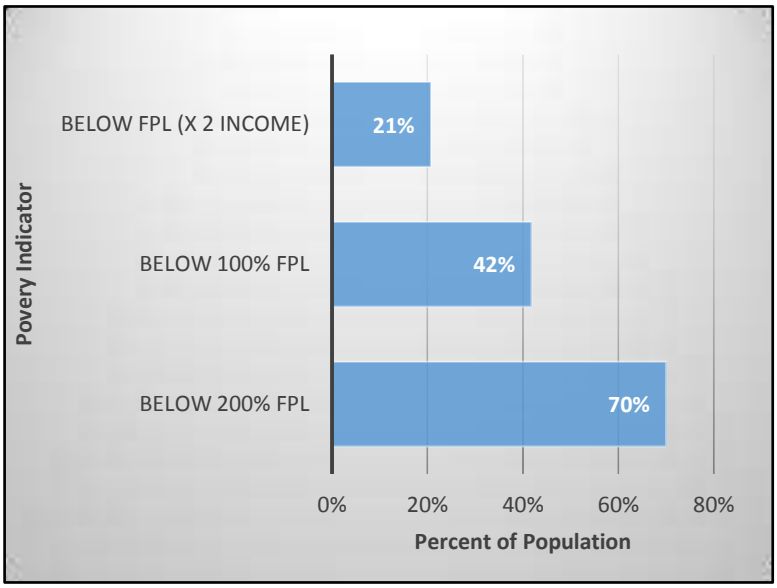
Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Figure 3: Poverty Characteristics for ESTL Health District (2010-2014)

Poverty Indicator	Percent
Below 200% FPL	69.98%
Below 100% FPL	41.74%
Below FPL (x 2 Income)	20.69%

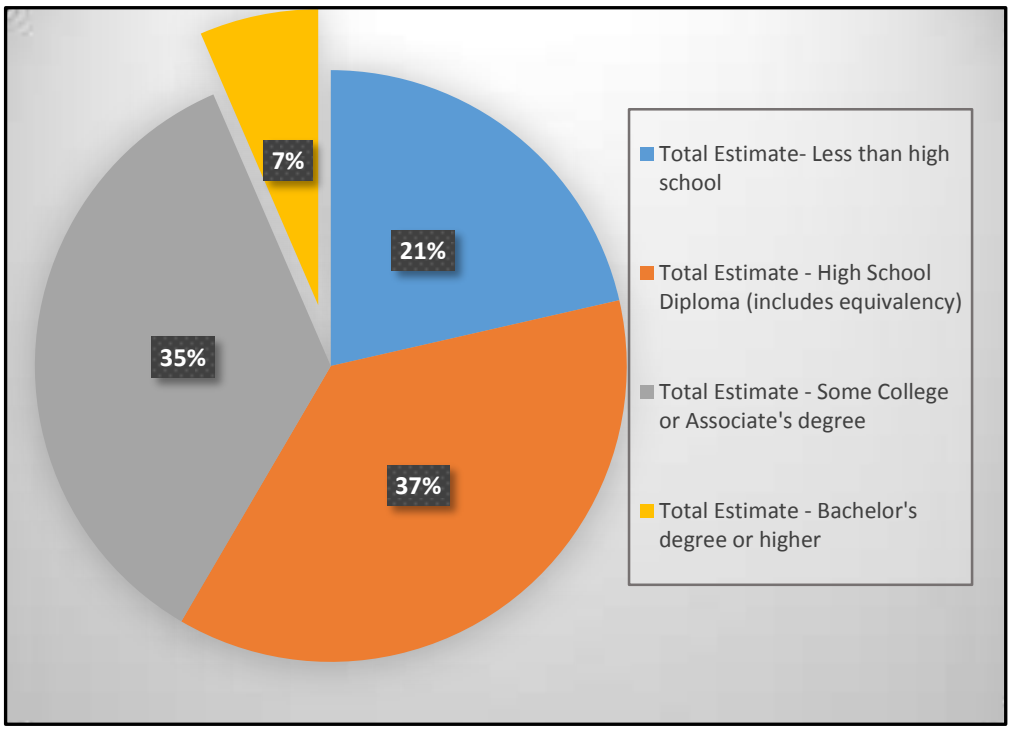
Figures 3 and 4 depict the percent of population that identify as either "low income" or "living in poverty". More than half (42%) of the previously mentioned 70% low income population are considered to be living in poverty. Additionally, about 21% of the population could double their income next year and still qualify as individuals living in poverty.

Figure 4: Poverty Characteristics for ESTL Health District (2010-2014)



EDUCATION

Figure 1: Percentage of Population with Achieved Education Attainment in East St. Louis Health District (2010-2014)



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Figures 1 and 2 illustrate the percentage of East St. Louis Health District's population that has completed various levels of education. Overall, a majority of individuals have acquired a high school diplomacy or general education development (GED) equivalency (37%). Thirty-five percent of the population has obtained an Associate's Degree or completed some college courses.

Figure 2 provides the total number of individuals for each of the categories introduced in Figure 1.

Figure 2: Total Estimate of Population and Highest Level of Completed Education in East St. Louis Health District (2010-2014)

Level of Education	Total Estimate- ESTL Population
Less than high school graduate	85,22
High school graduate (including equivalency)	14,713
Partial college degree	13,948
Bachelor's degree or higher	2,583

Source: U.S. Census Bureau, 2010-2014 American Community

Figure 3: Total Estimate of Population and Highest Level of Completed Education (Ages 18-24) in East St. Louis Health District (2010-2014)

Level of Education	Total Estimate- ESTL Population
Less than high school graduate	1,703
High school graduate (including equivalency)	2,121
Partial college degree	1,941
Bachelor's degree or higher	88

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Figure 3 categorizes level of education by for individuals after 18 to 24. For this age range, most individuals are high school graduates, including equivalency test completions. Similar to the total population, this number is closely followed by estimated individuals that have completed a partial college degree.

Likewise, Figure 4 represents the same categories for individuals in East St. Louis Health District ages 25 and greater. The majority of this population has either received a high school (or equivalent) diploma or completed a partial college degree.

It is also worth noting that for each of the populations under review (total population, ages 18-24, and ages 25 and greater) in East St. Louis Health District the minority have completed Bachelor's Degree or higher. In fact, only 7% of East St. Louis Health District residents have a bachelor's degree or higher. This is illustrated in Figure 1.

Level of Education	Total Estimate- ESTL Population
Less than high school graduate	68,19
High school graduate (including equivalency)	12,592
Partial college degree	12,007
Bachelor's degree or higher	2,495

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Figure 4: Total Estimate of Population and Highest Level of Completed Education (Ages 25 <) in East St. Louis Health District (2010-2014)

UNEMPLOYMENT

Figure 1 depicts the percent of unemployed individuals in East St. Louis Heath District. The population is separated into each region by designated zip code. According to the United State Census Bureau, nearly 17% of the East St. Louis Health District population is unemployed.

Figure 1: Unemployment Status Ages 16 < in East. St Louis Health District (2010-2014)

ZIP	Total estimated population	Unemployed	Total Estimated Unemployed
62201	4758	4.9%	233
62203	6177	16.3%	1007
62204	6318	19.3%	1219
62205	7123	19.9%	1417
62206	12244	16.7%	2045
62207	5953	21.2%	1262
Total:	42,573	16.87%	7,184

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates "Employment Status" Table Identifier: S2301

HOUSING

Housing is a significant problem occurring in East St. Louis Health District. Often during discharge planning, Touchette Regional Hospital is unable to make adequate arrangement for patients because they are homeless. The information provided considers the vacancy and occupancy status of the homes accounted for in the health district.

Figure 1 depicts the total amount of homes available; as well how many of them are currently not being lived in (vacant). According to the United State Census Bureau, 22% of homes in East St. Louis Health District are vacant.

Figure 1: Occupancy and Vacancy Status of Current Residencies in East. St Louis Health District (2010-2014)

ZIP	Occupied	Vacant	Total
62201	2,602	457	3,059
62203	2,684	597	3,281
62204	3,378	1223	4,601
62205	3,485	1165	4,650
62206	5,469	1697	7,166
62207	3,344	700	4,044
Total:	20,962	5,839	26,801

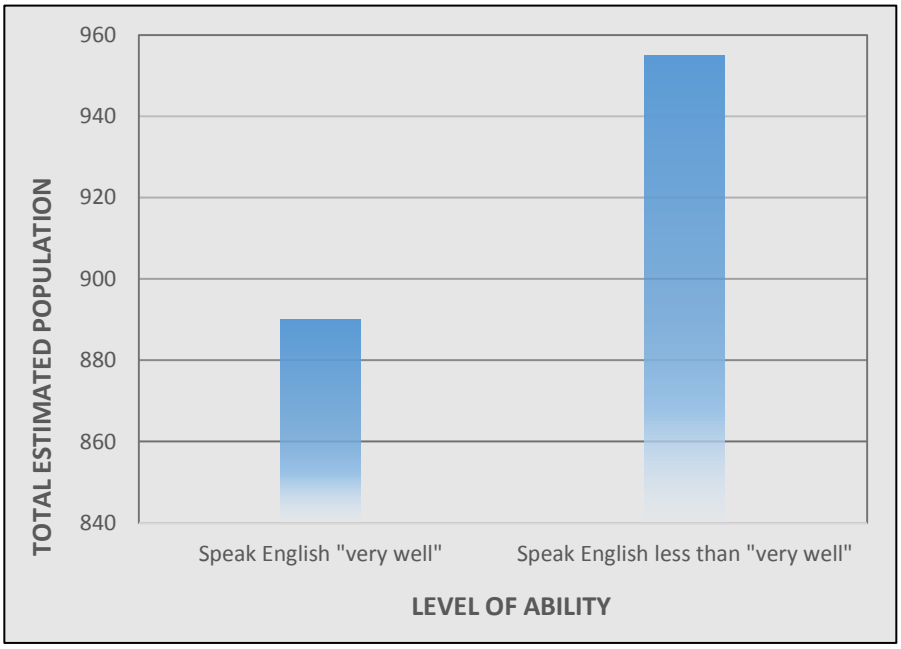
Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

LANGUAGE BARRIERS

This information provided is self - reported from individuals whose first language is Spanish. Language barriers can make it very difficult for patients to understand how to effectively treat conditions and diseases following discharge. Touchette Regional Hospital's primary service area falls into a Health Provider Shortage Area (HPSA). The gap between number of patients who cannot speak English and providers who can speak other languages is even greater on average.

Based on the information from the United States Census Bureau, Figure 1 shows that significantly more individuals living in East St. Louis with a primary language of Spanish are unable to speak English "very well" compared to those who can speak English "very well".

Figure 1: Self-Reported English Speaking Ability in East St. Louis Health District (2010-2014)



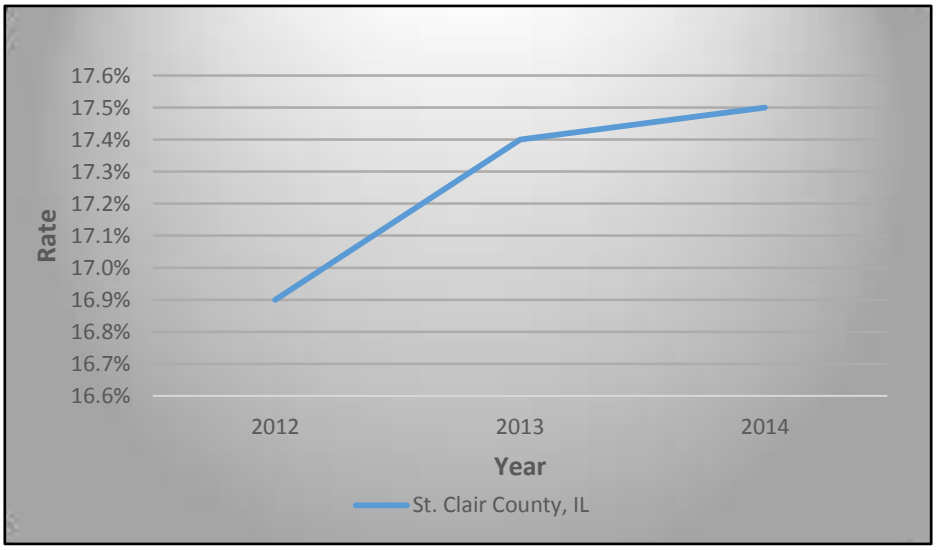
Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Resource Access

FOOD INSECURITY

Food security is a household-level measure of economic and social conditions that limit or restrict access to adequate food, including amount of food and nutritional food options. Likewise, food insecurity refers to a household that has inadequate accessibility to sufficient amounts and choices of foods. The figure is assessed using the food security survey represented in the USDA food security reports. When households are deemed inadequate it does not signify indefinite food insecurity. It is important to note that the survey takes into account the exchange of other daily living necessities in order to purchase satisfactory foods. For example, a mother might forgo medical treatment or paying a medical bill to ensure the family has enough resources to purchase food (Feeding America, 2016).

Figure 1: Food Insecurity Rates in St. Clair County

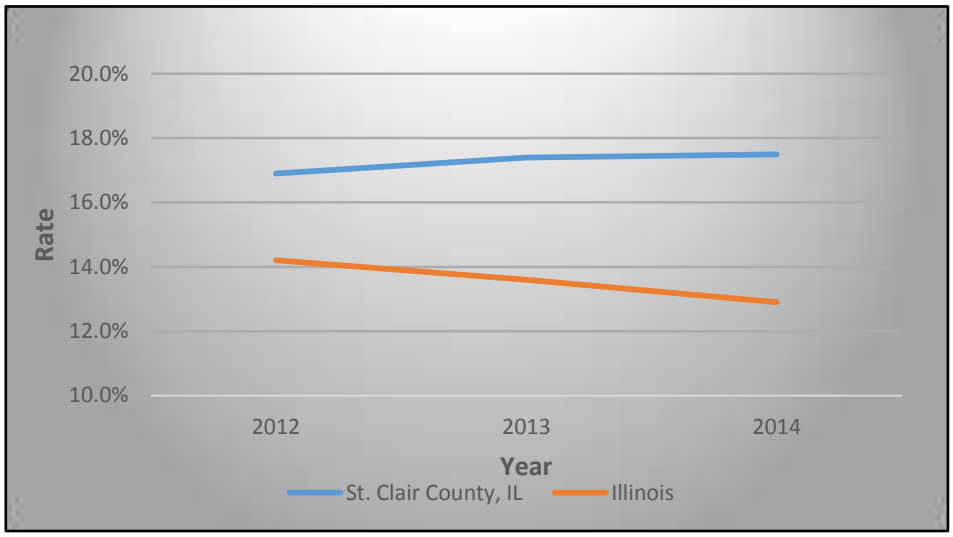


Source: Feeding America Network Interactive County-Level Map, 2016

Most recent data from the Feeding America Network reveals approximately 46,990 individuals in St. Clair County experienced food insecurity in 2014. As shown in Figure 1, food insecurity rates in St. Clair County have increased from 16.9% in 2012 to 17.5% in 2014.

Figure 2 reveals in 2012, Illinois households experienced 14.2% of food insecurity. This number has since decreased to 12.9% in 2014. In comparison, overall food insecurity for the state of Illinois is decreasing while St. Clair County continues to increase. This suggests that when compared to the state more households in St. Clair County experienced circumstances in which they were unable to obtain sufficient amounts food or nutritionally adequate food options were not readily accessible.

Figure 2: Food Insecurity Rates in St. Clair County vs. Illinois



Source: Feeding America Network Interactive County-Level Map, 2016

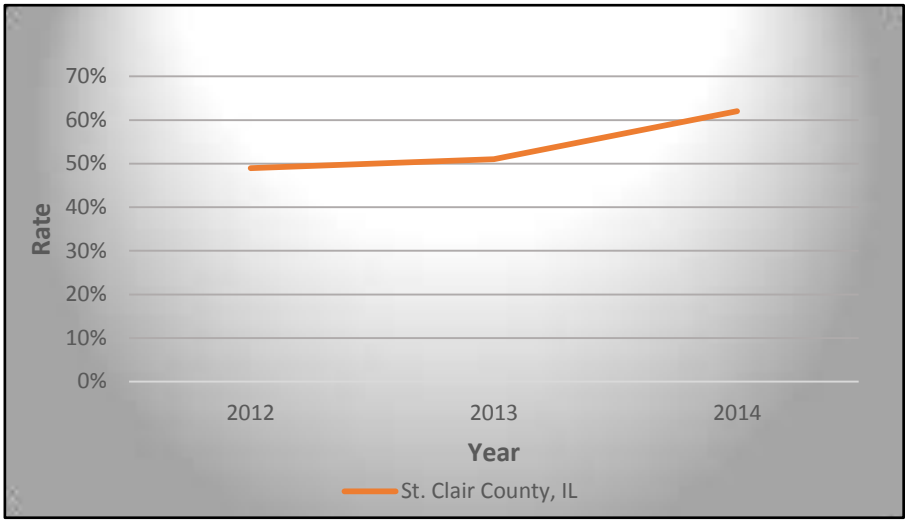
What is Supplemental Nutrition Assistance Program (SNAP)?

The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, is a national program providing assistance to low-income individuals and families to acquiring adequate food amounts and nutritional options. The program is offered through the United States Department of Agriculture Eligibility is based on income, employment requirements, immigration status, and other resources generally specified by

the state (USDA, n.d.). The program partners with state agencies and nutrition educators, as well as community- and faith-based organizations to provide their services through local food banks. More than 88 percent of individuals suffering from food insecurity are qualified to receive SNAP benefits. However, less than half of those report obtaining assistance (Feeding America, 2016).

Figure 3 shows a significant increase in percent of individuals and families in St. Clair County who eligible for SNAP benefits. This supports the previous report of increased food insecurity. It also reinforces the indication of significant poverty levels in the area because eligibility for the program is largely dependent on income and resource level.

Figure 3: Rate of Individuals below SNAP Threshold



Source: Feeding America Network Interactive County-Level Map, 2016

PROVIDER ACCESS

Provider access refers to the number of providers available within a given area. The information provided can help county officials to identify if the population qualifies as a Health Provider Shortage Area (HPSA).

As shown in Figure 1, there is limited access to health resources and in this case, specifically health providers, in St. Clair County, IL. Using the Area Health Resource File (AHRF) Health Resources Comparison Tool, St. Clair County statistics were compared to 12 counties with similar population characteristics. Based on this information, St. Clair County falls below the median number of providers in all of the noted categories, with the exception of General/Family Practice and General/Family Practice physicians per 100 thousand individuals.

Figure 1: Access to Health Care Providers in St. Clair County

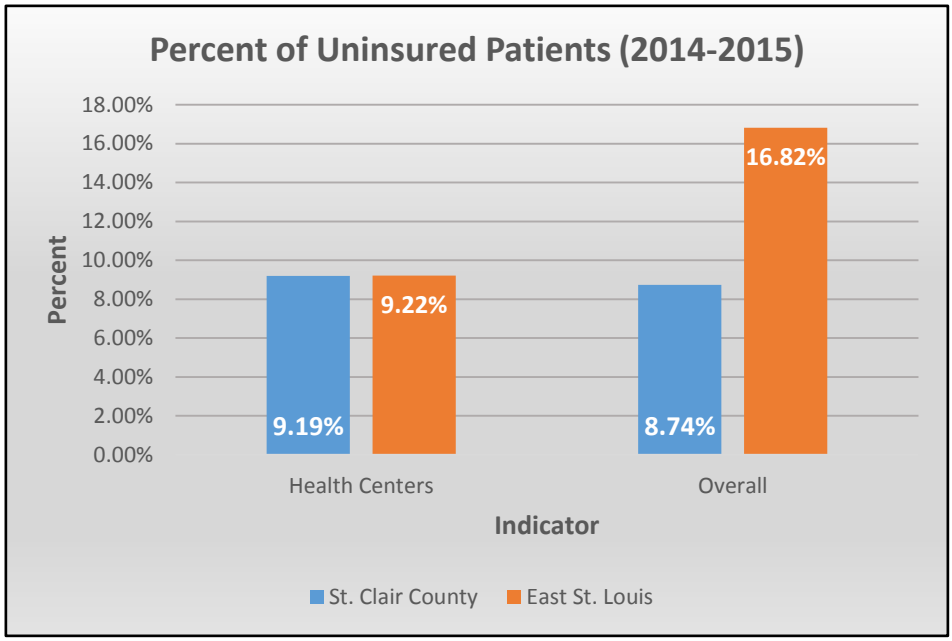
Health Resource	Median	St. Clair , IL
Primary Care Physicians	183	155
PCP Phys/100K Pop	66.9	58.3
General/Family Practice	89	91
Gen/Fam/100K Pop	34.2	34.2
Internal Medicine	62	39
Internal Medicine/100K Pop	23.2	14.7
Pediatricians	34	25
Pediatricians/100K Pop	52.5	35.5

Source: Health Resources and Services Administration (HRSA)

INSURANCE STATUS

To determine the significance of uninsurance in the area, East St. Louis Health District (Touchette's primary population served) was compared against St. Clair County, IL as a whole. Two measures were reported. The first was overall percent of uninsured individuals in the designated areas. The second was the percent of individuals who were uninsured at the time health services were acquired in a health center within the respective areas. This information was collected from payer mix data and provided by participating health centers. According to Figure 1, the overall percent of individuals who make up the uninsured population is two times as great for East St. Louis Health District residents (16.82%) than St. Clair County, IL residents (8.74%). Similarly, health center patients in ESTL Health District are more likely to be uninsured than those in St. Clair County.

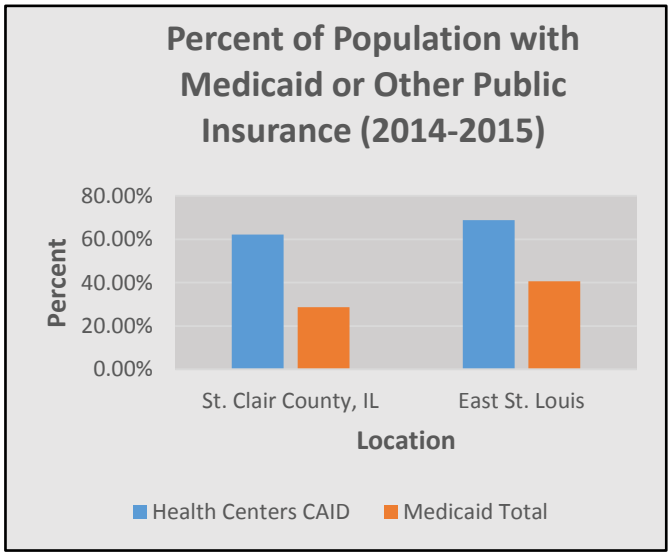
Figure 1: Health Insurnace Status of St. Clair County vs. East St. Louis Health District Residents



Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

It is important to note that in the ESTL Health District the overall percent of the population without health coverage is considerably greater than the number of individuals who have been treated at a health center in the area. This suggests that there are more individuals in the area that are forgoing medical treatment due to their uninsured status, social and cultural barriers (i.e. paid time lost at work). Transportation and cost are likely to be two limitations to arise when individuals without coverage are considering seeking treatment.

Figure 2: Medicaid Population in East St. Louis Health District and St. Clair County

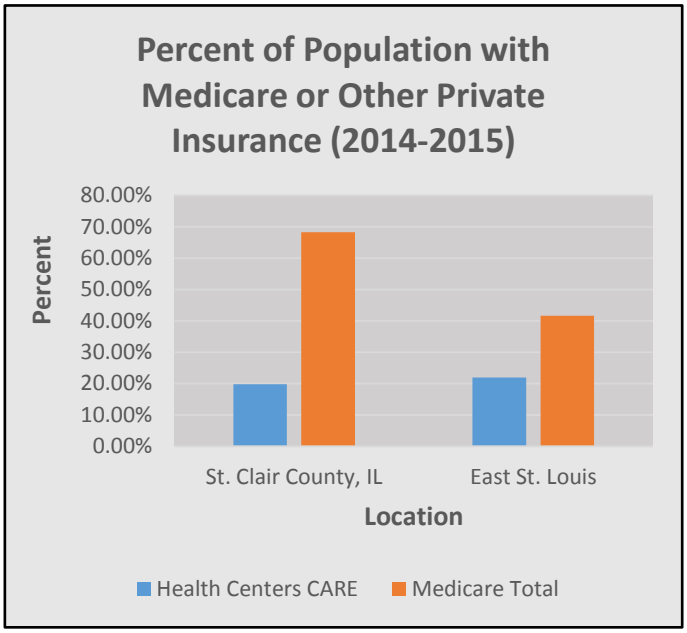


Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

Public Insurance

Figure 2 and 3 represent the percent of individuals in ESTL Health District and St. Clair County that are covered by governmental health insurance programs, Medicare and Medicaid. The blue bar labeled "Health Centers CAID" and "Medicare Total" denotes the percent of health center patients represented by Medicare and Medicaid.

Figure 3: Medicaid Population in East St. Louis Health District and St. Clair County



Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

With the exception of total Medicare population, East St. Louis Health District has a higher proportion of their population covered by public health insurance programs than St. Clair County, IL. The most significant discrepancy is between total ESTL Health District Medicaid population (40.56%) and St. Clair County (28.72%). Likewise, health patients seen at health centers in ESTL Health District are more likely to be covered by Medicaid, at 68.84%, than are patients seen at St. Clair County health centers, 62.08%.

One limitation to consider is that zip codes that comprise ESTL Health District are also sectors in St. Clair County. This will create some overlap between the percentages. However, it is unlikely that, for example, the 12% difference in Medicaid populations is attributable solely to the correspondence. The information provided also supports the disproportionate poverty levels experienced by Touchette Regional Hospital's primary service area.

Medicaid and Medicare Insurance Status by Percent of Population

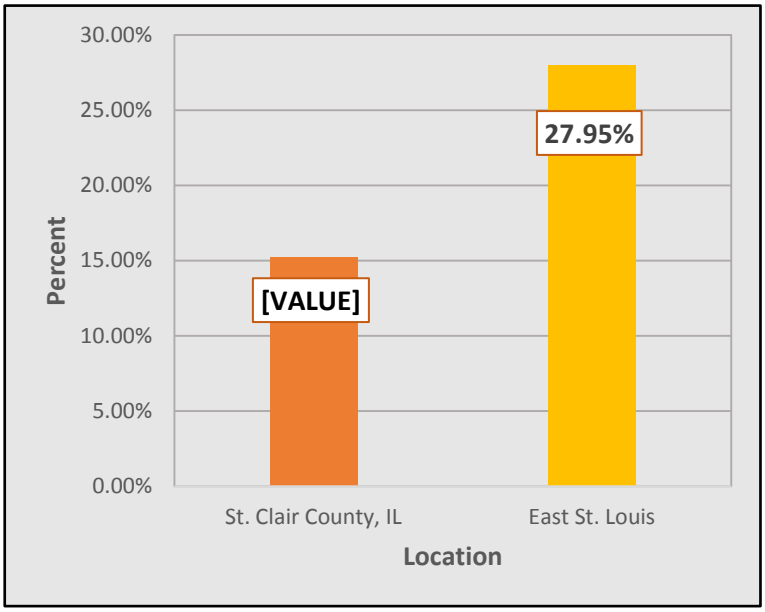
Location	Health Centers CAID	Total Medicaid	Health Centers CARE	Total Medicare
St. Clair County, IL	62.08%	28.72%	19.74%	68.28%
East St. Louis	68.84%	40.56%	21.92%	41.63%

Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

UTILIZATION

Utilization of health services is commonly defined as a population's use of the health services that are available to them. Generally, this includes (but is not limited to): hospital services, physician services, and home care.

Figure 1: Utilization of Health Services Delayed or Forgone Due to High Cost

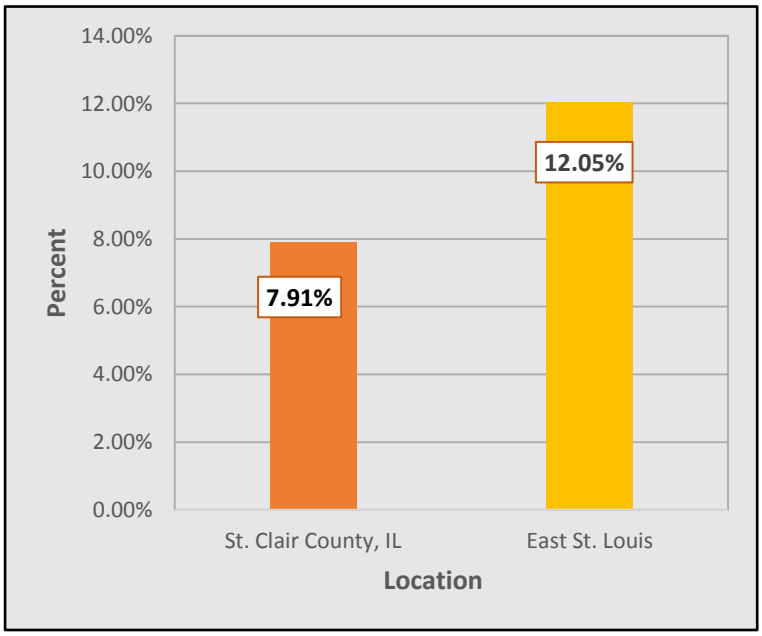


Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

Figure 1 provides information on the percent of adults who choose to neglect health services by either delaying or forgoing care. The graph reveals that more residents of East St. Louis Health District compared to St. Clair County do not seek necessary healthcare services at an appropriate time, at 25.95% and 15.24% respectively.

Figure 2 describes the utilization of a usual source of care by individuals. *Usual source of care* refers to a specific physician, physicians' office, health center or clinic, or other residence of medical care that an individual makes routine visits for healthcare advice or treatment. According to information provided from the HRSA's Uniform Data System (UDS) Mapper, ESTL Health District has a higher percent of the population (12.05%) without a usual source of care than St. Clair County (7.91%).

Figure 2: Utilization of Health Services Based on Usual Source of Care

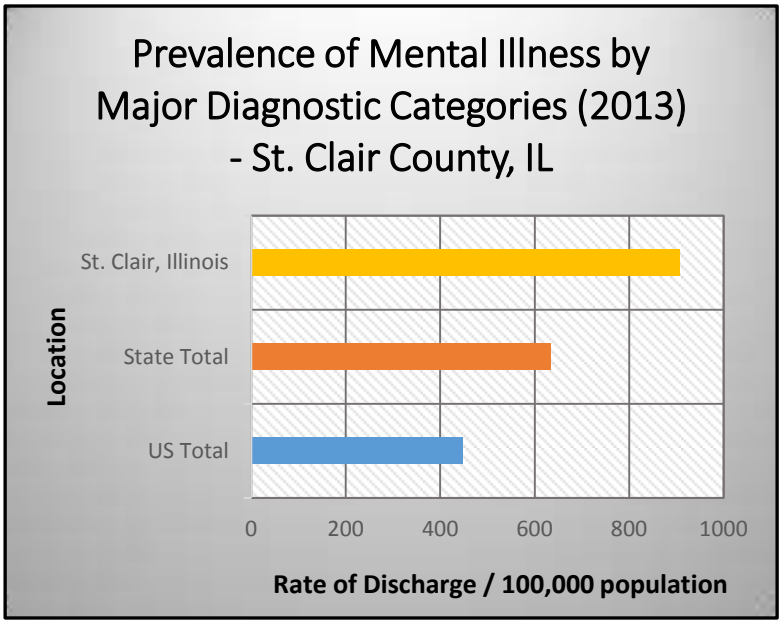


Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

Behavioral Wellness

MENTAL ILLNESS

What is mental health?



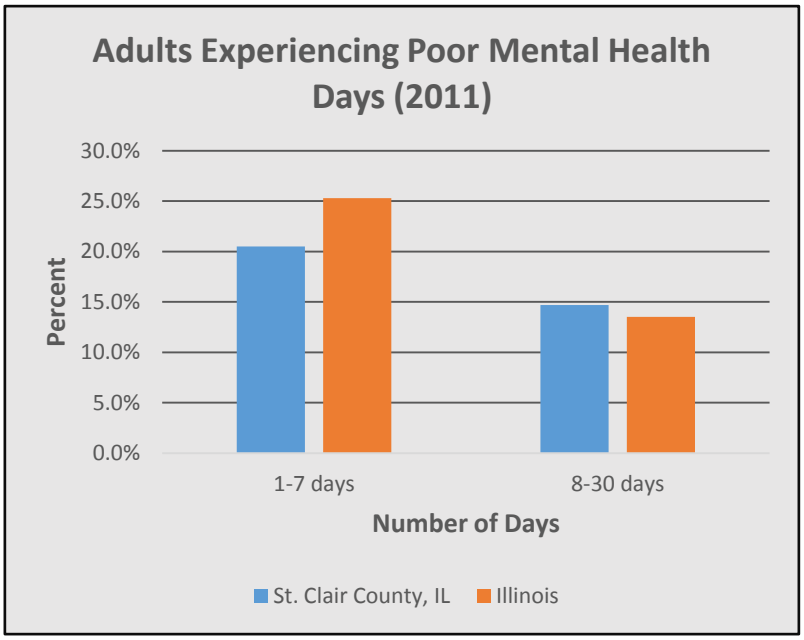
Mental health is defined by the World Health Organization (WHO) as a condition of stability in which an individual has the ability to recognize his or her potential, employs healthy coping mechanisms, works productively, and contributes to his or her community (2016). The state of one's mental health is vital as it affects interpersonal relationships, ability to make good decisions, and adaptability. It takes into account an individual's emotional, psychological, and social well-being (National Alliance of Mental Illness, 2016).

Mental disorders occur when one's rationale for thinking, emotions, or mood become distorted. In general, this does not transpire following a single event. Studies show that it is the effect of several relating causes including genetics, lifestyle choices, and environmental factors. Worsening mental disorders can be a primary causal factor that furthers complications with mental, emotional, and physical disability, chronic pain, and high risk of mortality (NAMI, 2016).

Serious Mental Illness is defined as an individual, ages 18 or older, experiencing a diagnosable mental, emotional, or behavioral condition. This condition is the primary basis for task or emotive impairment which seriously interferes with or restricts major life activities. These individuals are more likely to experience homelessness, unemployment, and/or arrest and detainment (Substance Abuse and Mental Health Services Administration, 2014).

The Illinois Behavioral Risk Factor Surveillance Survey is a monthly evaluation of risk factors associated with behavioral, emotional, and mental disorders. Figure 1 reveals the percent of surveyed adults (18+) who reported experiencing 1-30 days of inadequate mental health within the last month.

Figure 1: Mental Health Status of Individuals in St. Clair County and Illinois



Source: Healthcare Cost and Utilization Project (HCUP) Data

In St. Clair County, more adults reported having experienced poor mental health for prolonged periods of time (8-30 days) compared to Illinois. This suggests that people are either delaying or forgoing mental health treatment or individuals in St. Clair County are suffering from more serious mental disorders or illnesses.

Figure 2: Number of Discharges Primarily Related to Mental Illness

Adults Experiencing Poor Mental Health Days (2011)

Timeframe	St. Clair County	Illinois
1-7 days	20.5%	25.3%
8-30 days	14.7%	13.5%

Source: Illinois Behavioral Risk Factor Surveillance Survey

Major Diagnostic Categories (MDC) are comprised of subdivided diagnoses, or Diagnostic Related Groups (DRGs), related to a more general diagnosis. The information provided in Figures 2 and 3 uses hospital inpatient data to determine how many discharged patients had a primary diagnosis related to mental illness.

According to the Agency for Healthcare Research and Quality's HCUP data, St. Clair County has a significantly higher rate of discharges largely associated with mental illness (906.8/100,000 population) compared to Illinois (634.5/100,000 population). Likewise, the United States discharge rate per mental illness MDC is equal to 448.4/100,000 population. That is two times *less* than St. Clair County.

Location	Rate of discharges per 100,000 population
US Total	448.4
State Total	634.5
St. Clair County	906.8

Source: Healthcare Cost and Utilization Project (HCUP) Data

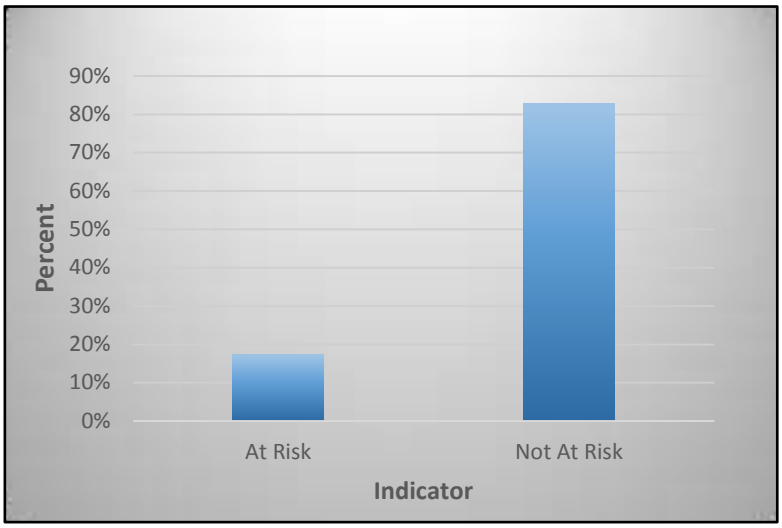
Figure 3: Prevalence of Mental Illness Comparison Table

SUBSTANCE ABUSE

Substance abuse disorders refer to impairments caused by significant and frequent use of alcohol and/or drugs, either prescription or non-prescription. Incapacitation is relevant both clinically and with regard to daily activities. Substance abuse can cause health problems, physical and mental disability, and inability to participate in core responsibilities in daily life (SAMHSA, 2016).

Figure 1 shows the percent of individuals in St. Clair County who are at-risk for acute drinking episode to occur. According to the IBRFSS, less individuals report being at risk for severe alcohol binging. One limitation to consider is the survey is comprised of self-reported information. This could produce skewed results from people withholding information or unknowingly providing false information.

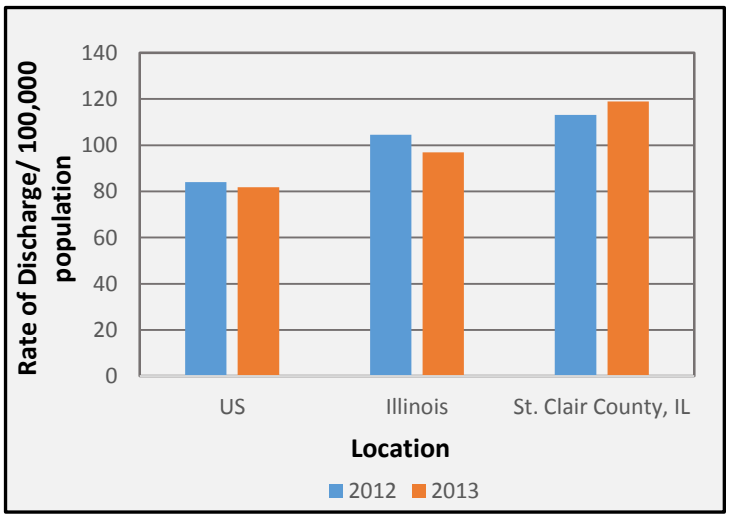
Figure 1: Percent of Individuals At-Risk for Acute Drinking Episodes In St. Clair County (2011)



Source: Illinois Behavioral Risk Factor Surveillance Survey

Figures 2 and 3 uses HCUP data to show the percent of inpatient discharges primarily related to alcohol-induced disorder. The graph compares years 2012 and 2013 for St. Clair County, Illinois, and the United States. First, the given results show St. Clair County consistently has a higher rate of people discharged with health conditions related to alcohol abuse (113 per 100,000 population in 2012), compared to Illinois (104.5 per 100,000 population in 2012) and the United States (84 per 100,000 in 2012). Additionally, from 2012 and 2013 in Illinois and the United States, the number of individuals discharged with an alcohol-related disorder decreased to approximately 97 and 81 per 100,000 populations respectively. Conversely, St. Clair County numbers increased to 119 per 100,000.

Figure 2: Number of Discharges Primarily Related to Alcohol Abuse and Disorders (2012-2013)



Source: Healthcare Cost and Utilization Project (HCUP) Data

Figure 3: Alcohol-Related Disorder Prevalence Trend

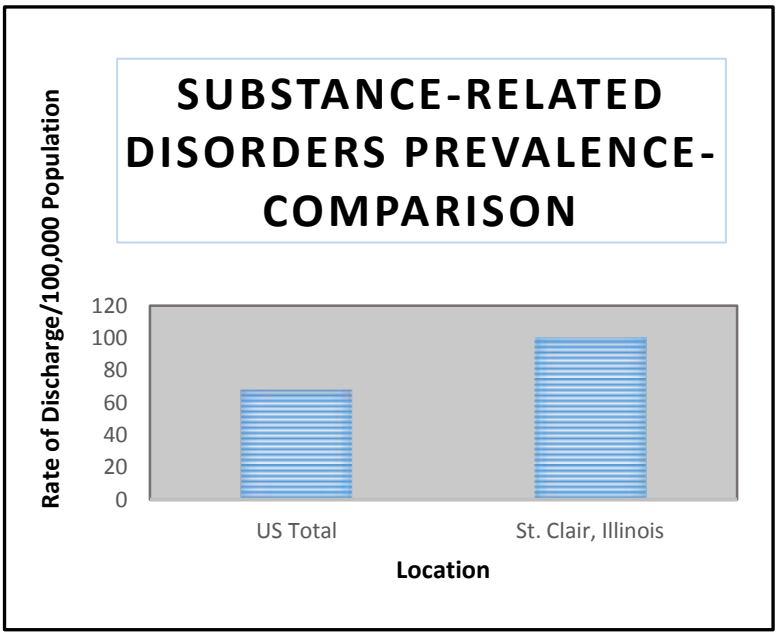
Location	2012	2013
U.S.	84	81.8
Illinois	104.5	96.9
St. Clair County	113.1	119

Source: Healthcare Cost and Utilization Project (HCUP) Data

The information provided in Figures 4 and 5 refers to the prevalence of substance-related disorders shown by rate of discharge per 100,000 population. The diagnoses in these examples are related to controlled or non-controlled substances as they relate to drugs and other pharmaceuticals, thereby excluding alcohol-related diseases.

St. Clair County has a significantly higher discharge rate of substance-related health conditions at 100 per 100,000 versus the national average of 68 per 100,000 population.

Figure 4: Number of Discharges Primarily Related to Substance Abuse



Source: Healthcare Cost and Utilization Project (HCUP) Data

Figure 5: Substance-Related Disorder Prevalence – Comparison Table

Location	Rate of discharges per 100,000 population 2013
United States	68.1
St. Clair County	100.1

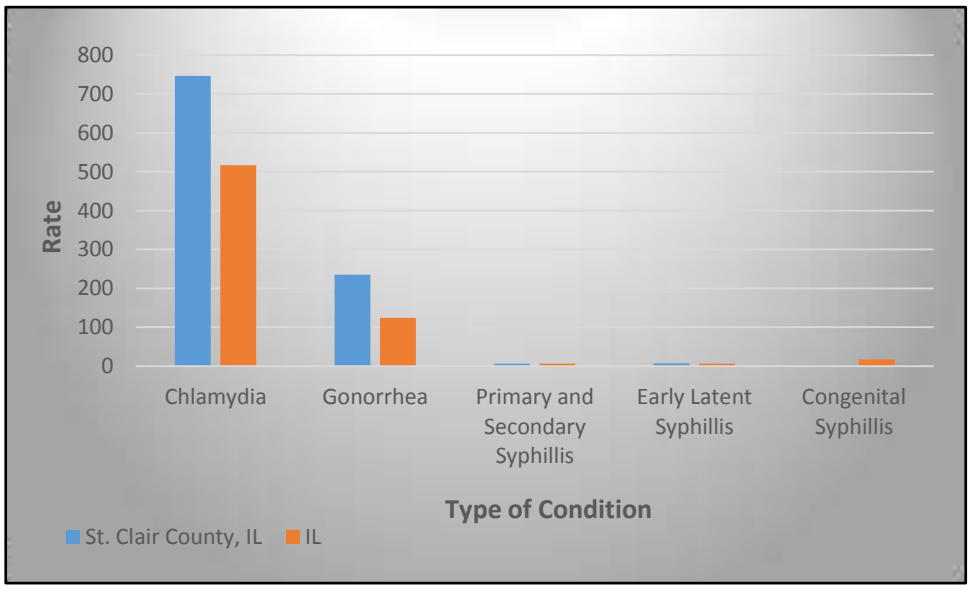
Source: Healthcare Cost and Utilization Project (HCUP) Data

Infectious Diseases

SEXUALLY TRANSMITTED INFECTIONS (STIs)

Figures 1 and 2 depict the prevalence of sexually transmitted infections in St. Clair County and Illinois. It is clear that St. Clair County shows higher rates of chlamydia and gonorrhea than Illinois. While the degree of intensity of syphilis is drastically reduced and has a significantly smaller effect on the state and local community, St. Clair County still shows higher rates of early latent syphilis and equal frequency of primary and secondary syphilis with the state.

Figure 1: Prevalence Comparison of Sexually Transmitted Infections (2014)



Source: Center for Disease Control and Prevention

Figure 2: St. Clair County and Illinois STI Comparison Table

Disease	St. Clair County, IL	IL
Chlamydia	746.9*	516.5*
Gonorrhea	235.6*	124*
Primary and Secondary Syphilis	6.6*	6.7*
Early Latent Syphilis	7.5*	6.4*
Congenital Syphilis	0*	17*

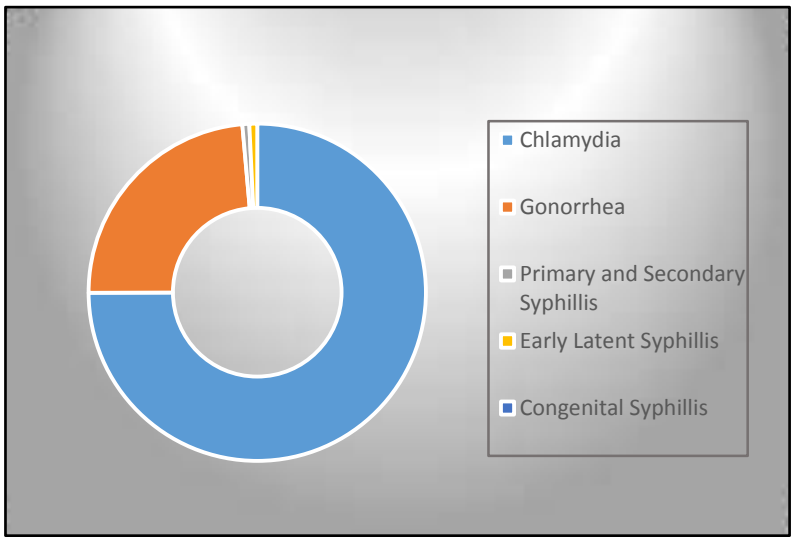
*Figures provided indicate a rate per 100,000 population

Source: Center for Disease Control and Prevention

Figure 3: Rate of STIs in St. Clair County (2014)

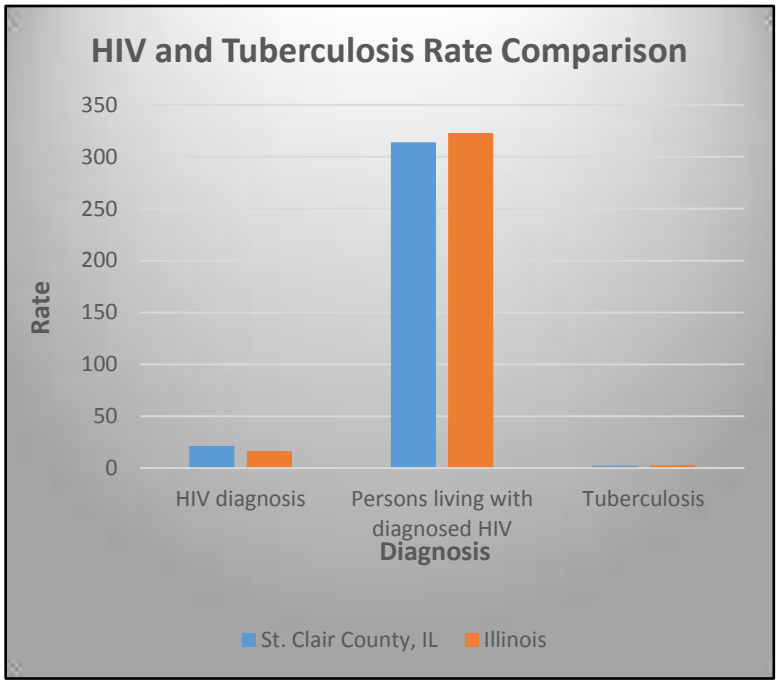
Figure 3 illustrates the rate of each STI previously reported in St. Clair County. The graph clearly shows that in 2014 chlamydia and gonorrhea were the comparatively dominant STIs in St. Clair County.

Figures 4 and 5 indicate the prevalence of Human Immunodeficiency Virus (HIV) in St. Clair County compared to Illinois. While St. Clair County has a higher rate of individuals with HIV diagnoses, Illinois has a slightly higher rate of persons living with diagnosed HIV. The county and state are about equal regarding individuals with tuberculosis.



Source: Center for Disease Control and Prevention

Figure 4: Prevalence Comparison of HIV and Tuberculosis in St. Clair County and Illinois



Source: Center for Disease Control and Prevention

Figure 5: St. Clair County and Illinois HIV and Tuberculosis Comparison Table

Condition	St. Clair County	Illinois
HIV diagnosis	21.3*	16.6*
Persons living with diagnosed HIV	313.9*	322.9*
Tuberculosis	2.3*	2.9*

*Figures provided indicate a rate per 100,000 population

Source: Center for Disease Control and Prevention

SEPTICEMIA

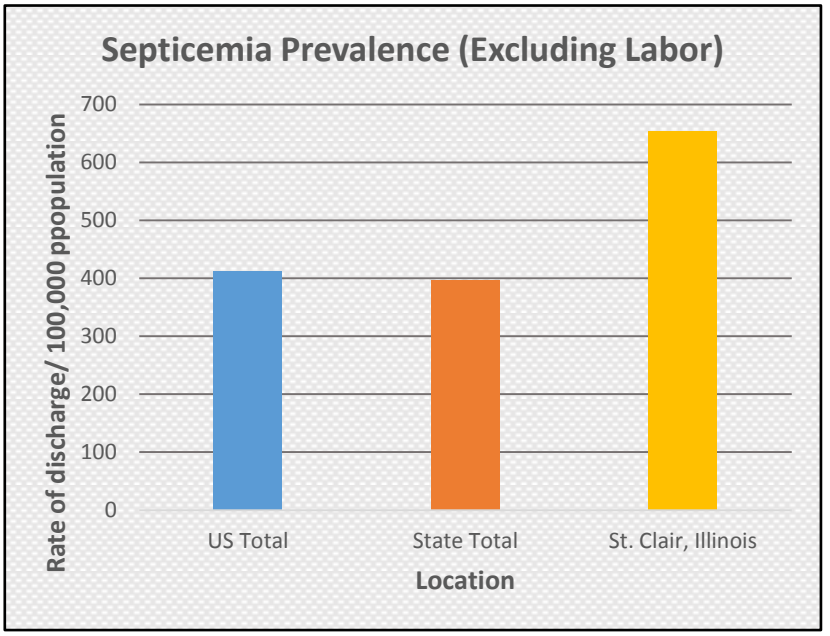
What is septicemia?

Septicemia or sepsis is an infection of the blood in response to infection elsewhere in the body such as skin, lungs (i.e. pneumonia), urinary tract, stomach (i.e. appendicitis), etc. It can cause significant organ and tissue damage, illness, and mortality. Individuals at higher risk for developing sepsis are:

- individuals with weak immunity
- babies and youth
- elderly individuals
- individuals suffering from chronic illness (i.e. diabetes, AIDS, cancer, kidney or liver disease)
- individuals suffering from significant burn wounds (CDC, 2016).

Figures 1 and 2 show the comparison between St. Clair County, Illinois, and the United States for prevalence of septicemia. The graph and table illustrate a significantly higher rate of septicemia among the St. Clair County population (653 per 100,000 population) versus Illinois (397/100,000) and the national incidence rate (412/100,000 population).

Figure 1: Comparison of Septicemia Prevalence (Excluding Labor-Induced) of St. Clair County,



Source: Healthcare Cost and Utilization Project (HCUP) Data

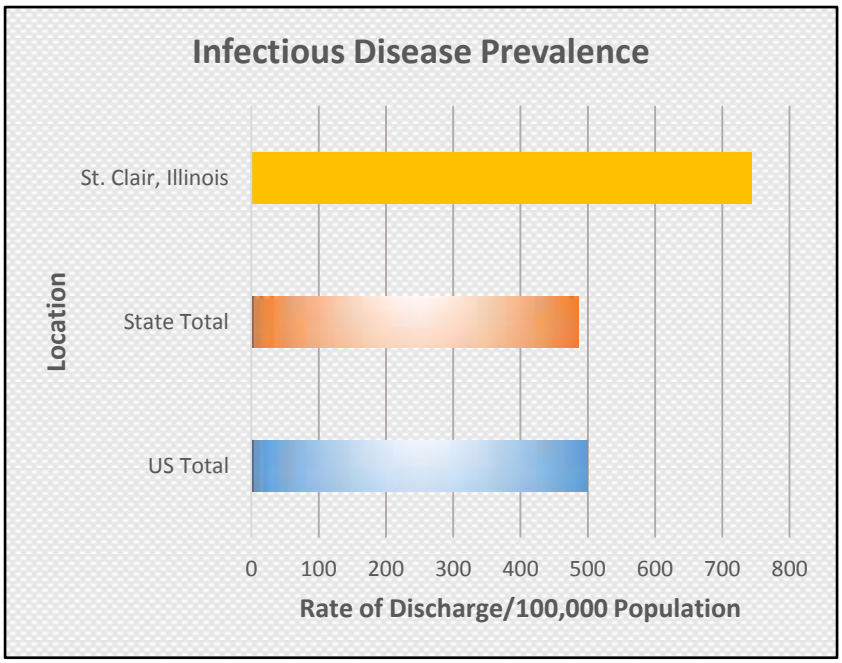
Figure 2: Comparison of Septicemia Prevalence (Excluding Labor-Induced) of St. Clair County, Illinois, and US (2013)

Location	Rate of discharges per 100,000 population
US Total	411.9
State Total	396.5
St. Clair, Illinois	**653.2**

Source: Healthcare Cost and Utilization Project (HCUP) Data

Figure 3: Comparison of Infectious Disease Prevalence by Major Diagnostic Category of St. Clair County, Illinois, and US (2013)

Figures 3 and 4 present HCUP information to compare the prevalence of infectious disease in St. Clair County to the prevalence of infectious disease in Illinois and the United States. This data is compiled from hospital inpatient discharge records. It accounts for all individuals discharged from participating hospitals with a primary diagnosis related to infectious disease.



Source: Healthcare Cost and Utilization Project (HCUP) Data

The graph and table depict a significantly larger rate of discharge attributed to infectious disease in St. Clair County, approximately 743.9/100,000 population, versus the United States approximation of 486/100,000 population. The disparity between the county and Illinois is even larger, with Illinois presenting a proportion of approximately 500/100,000 population.

Figure 4: Prevalence of Infectious Diseases by Major Diagnostic Category in St. Clair County, Illinois, and US (2013)

Location	Rate of discharges per 100,000 population
US	499.5
State	485.9
St. Clair County	743.9

Source: Healthcare Cost and Utilization Project (HCUP) Data

Chronic Disease

PREMATURE DEATH

The figures given in Figure 1 represent the rate of years per lives lost (YPLL) before age 75 per 100,000 populations. This accounts for any mortalities that occur before age 75. For example, an individual who becomes deceased at 25 years of age contributes 50 years of potential life lost. This statistic has been age-adjusted for the year 2000 population.

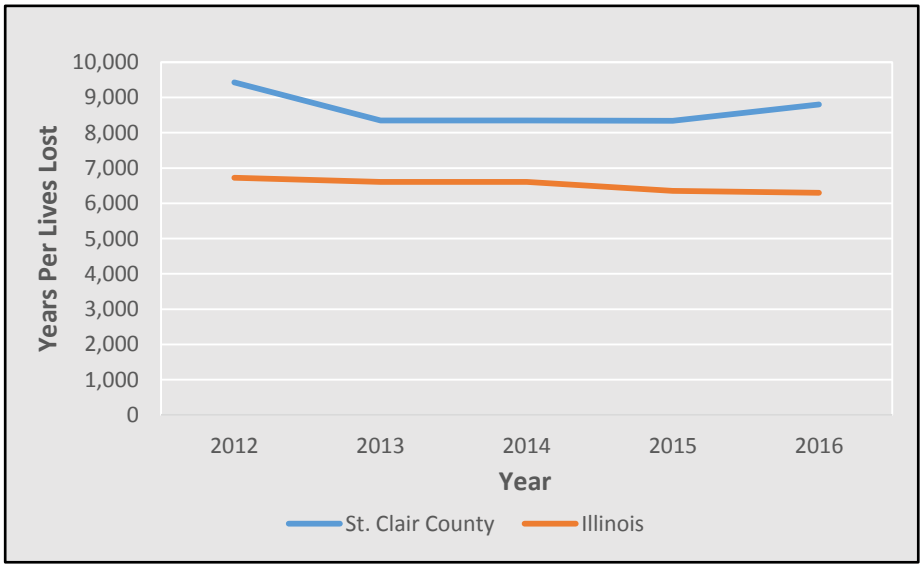
The graph (Figure 2) shows that the number of Total Years of Potential Life Lost (YPLL) in St. Clair County is consistently greater than in the state as a whole. This means that more individuals living in or visiting St. Clair County are experiencing death prematurely more frequently than in Illinois.

Figure 1: Total Years of Potential Life Lost (YPLL) Before Age 75 per 100,000 (2012-2016)

Year	St. Clair County	Illinois
2012	9,433	6,728
2013	8,345	6,604
2014	8,345	6,604
2015	8,341	6,349
2016	8,800	6,300

Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings

Figure 2: Years of Potential Life Lost (YPLL) Before Age 75 (2012-2016)



Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings 2016.

DIABETES

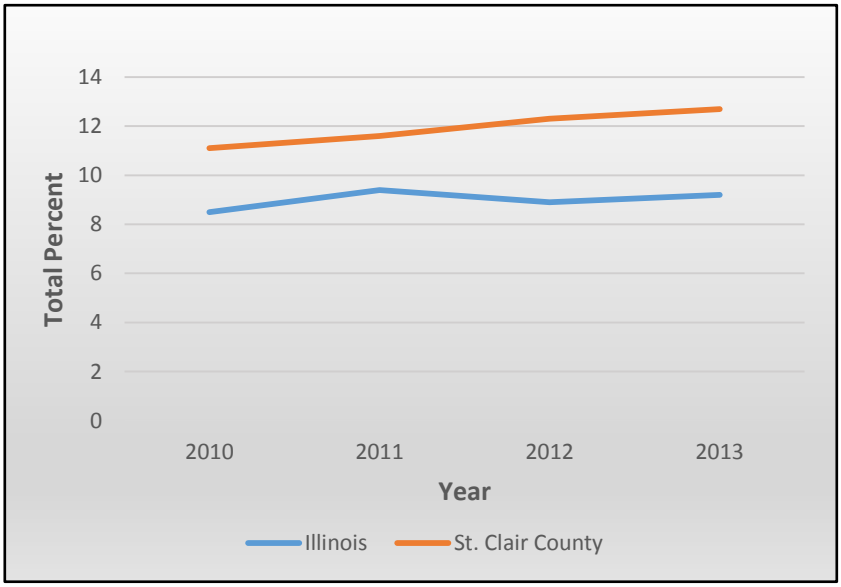
What is diabetes?

Diabetes is a metabolic disorder in which an individual has higher than average blood sugar (blood glucose levels) because insulin production is inadequate or because the body does not respond correctly to insulin, or both. Type I Diabetes is the medical term used to describe individuals whose body does not produce enough insulin. Type II Diabetes refers to the improper function or response to insulin produced. The majority of diabetes cases fall under the Type II category. It is a long-term condition that can be easily managed effectively when individual is armed with appropriate information.

Figure 1 and 2 illustrate the trend in diabetes prevalence in St. Clair County compared to Illinois. As depicted in graph 1, the Illinois line shows a varying trend in percent of individuals with diabetes diagnoses. Conversely, the St. Clair County line shows a constant upwards trend. Likewise, prevalence of diabetes in St. Clair County has remained greater than Illinois.

According to the Center for Disease Control, the age-adjusted rates for diabetes are highest among African American adults. Compared to the national average of 34.9%, the African American community is 12.1% more likely to be obese with an age-adjusted rate of 47.8%. This indicates an even greater disparity among the majority of our community population served, which is approximately 82% African American.

Figure 1: Prevalence of Diabetes in St. Clair County and Illinois Population Comparison (2010-2013)



Source: Center for Disease Control and Prevention

Figure 2: Percent of Population with Diabetes in St. Clair County and Illinois Comparison Table (2010-2013)

Year	Total % for IL	Total % for St. Clair County
2010	8.5	11.1
2011	9.4	11.6
2012	8.9	12.3
2013	9.2	12.7
2014	9.4	-

Source: Center for Disease Control and Prevention

OBESITY

Defining obesity

Identifying overweight and obesity refers to determining an individual's body mass index (BMI). A BMI that is greater than 25 is considered overweight. A BMI that is greater than 30 falls within the obese range. Likewise, there are three classes of obesity associated with ranges of BMI. Increased BMI is also positively associated with other adverse health outcomes.

Figure 1: Obesity 2016 Health

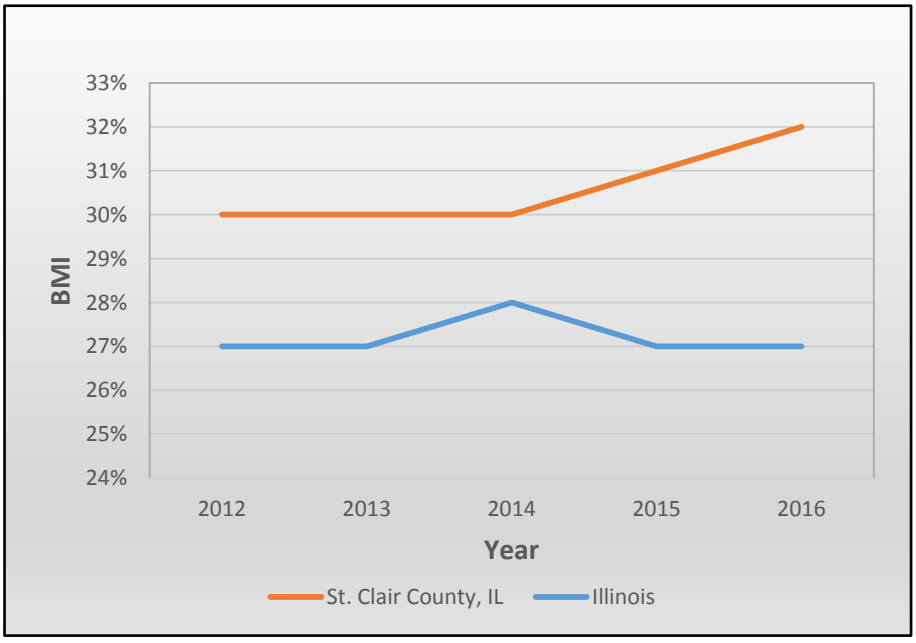
Total Illinois Counties	102
St. Clair County	97

Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings 2016.

The obesity health ranking is provided from the Robert Johnson Wood Foundation County Health Ranking tool. Figure 1 indicates that out of the 102 counties that comprise Illinois, St. Clair County is ranks 97th with regard to obesity prevalence. The higher the ranking, the lower the health outcome.

Figure 2 provides information on the prevalence of obesity in St. Clair County and Illinois over the last five years. Gestational diabetes (pregnancy-induced diabetes) reports were excluded from the following information.

Figure 2: Trend Report of Individuals with Body Mass Index (BMI) > 30 (2012-2016)

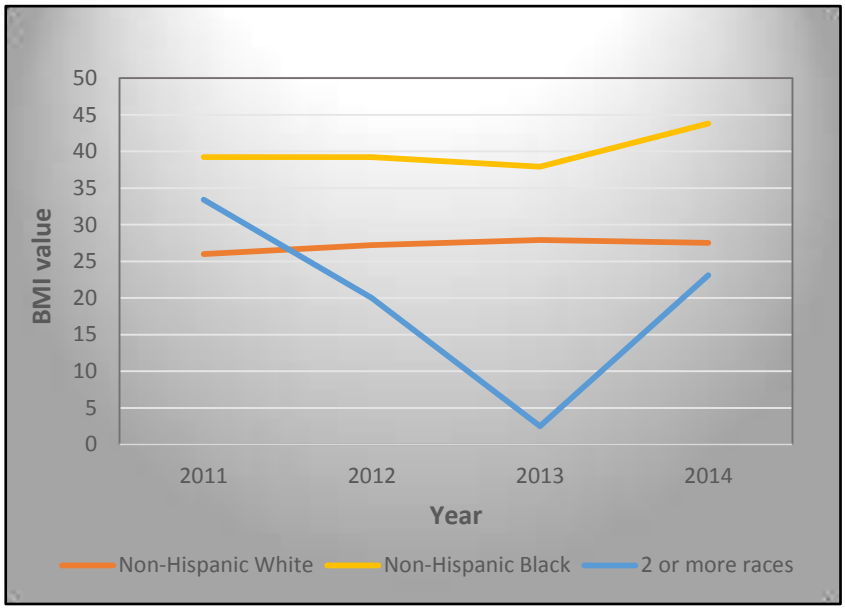


Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings 2016.

This graph illustrates a fluctuating rate of obesity in Illinois. Beginning in 2014, the state has seen a steady increase in the amount of individuals with a BMI greater than 30. In addition, St. Clair County has shown a sharp increase in obesity in the last two years. Likewise, the percent of individuals considered obese in St. Clair County has remained significantly greater than Illinois over the last five years. In fact, the most significant gap was reported in the current year (2016) when 32% of adults in St. Clair County identified a BMI greater than 30 and 27% of adults in Illinois identified a BMI of 30 or more.

Although the reliability and validity of the BRFSS measures of weight and BMI are high, there remain limitations of this data collection process. An analysis found that BRFSS data is largely at risk for underestimating the total obese population compared with studies that directly measure height and weight due to self-reporting. This may suggest the information does not account for a proportion of obese individuals. Thus, the percent of adults with a BMI greater than 30 is higher than the current report indicates.

Figure 3: Obesity Prevalence in Illinois by Race (2011-2014)



Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings

Figures 3 and 4 depict the prevalence of obesity and classify the information by race. The provided classifications, *non-Hispanic White*, *non-Hispanic Black*, and *two or more races*, make up the majority of the hospitals primary population served.

The graph and table portray a significant prevalence of obesity (BMI > 30) for the non-Hispanic black group. The group with the second highest rate of obesity is non-Hispanic white. This indicates a greater risk for the hospital's population served to suffer from obesity.

Figure 4: Obesity Prevalence Comparison by Race (2011-2014)

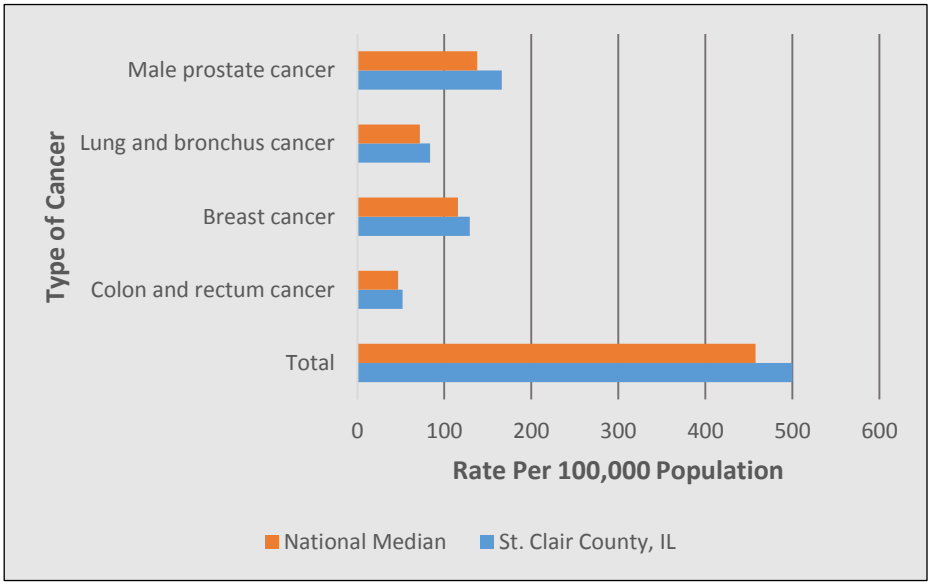
Year	Non-Hispanic White	Non-Hispanic Black	Two or more races
2011	26	39.2	33.4
2012	27.2	39.2	20
2013	27.9	37.9	2.5
2014	27.5	43.8	23.1

Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings 2016.

CANCER

Figure 1 and 2 depict the prevalence of cancer in St. Clair County compared to the United States. The information is separated by type of cancer including male prostate, lung and bronchus, breast, and colon and rectum cancer. As shown in Figure 1, the total rate per 100,000 population is approximately 500/100,000 in St. Clair County versus 458/100,000 in the United States. Each type of cancer also has significantly higher rates in St. Clair County compared to national rates. Figure 2 provides the rates per 100,000 population associated with each type of cancer and respective locations.

Figure 1: Cancer Prevalence in the US Compared to St. Clair County by Type (2006-2010)



Source: Center for Disease Control and Prevention

Figure 2: Cancer Prevalence by Type Comparison Table (2006-2010)

Type of Cancer	St. Clair County	National Median
Overall	499.8	457.6
Colon and rectum cancer	52	46.8
Breast cancer	129.2	115.6
Lung and bronchus cancer	83.5	71.7

Source: Center for Disease Control and Prevention

HEART DISEASE

What is cardiovascular (heart) disease?

Cardiovascular disease, commonly referred to as heart disease, occurs when plaque builds up around the walls of the arteries in the heart. The accumulation of plaque makes it difficult for blood flow to move through the arteries, thus cutting off the blood and oxygen needed to keep the heart working. If the blood clot is substantial enough it can cause a heart attack, stroke, or other adverse health effects (American Heart Association, n.d.)

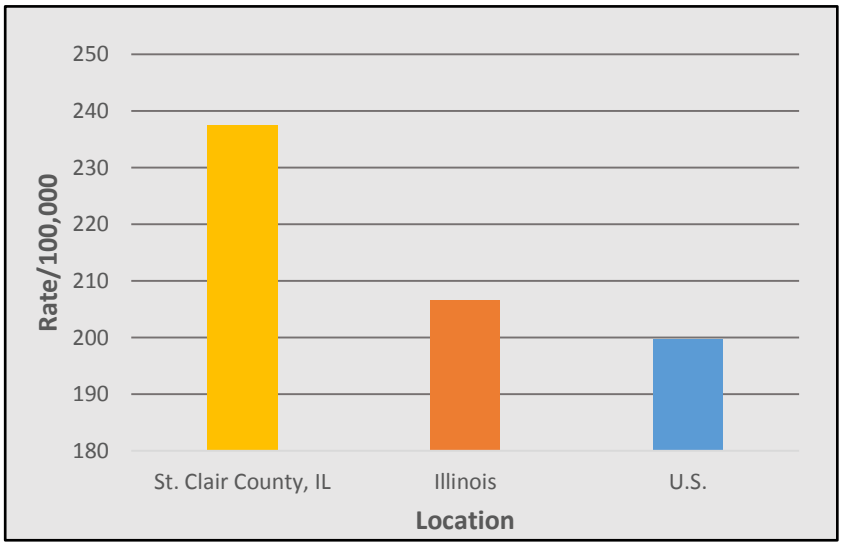
Figures 1 provides information related to the prevalence of heart disease in St. Clair County, Illinois, and the United States. As shown, St. Clair County has a much higher prevalence of heart disease (237.5/100,000) than Illinois (206.5/100,000) and the United States (199.6/100,000).

Additionally, Africans Americans (non-Hispanic) are generally at a higher risk for suffering from heart disease compared to other races. Thus, the risk associated with Touchette Regional Hospital's population served is exacerbated because of the percent of population identified as African American.

Figure 2 illustrates the rate of individuals in St. Clair County experiencing heart disease categorized by race. African Americans (non-Hispanic) show the highest rate per 100,000, followed by Caucasian (non-Hispanic) and Hispanics.

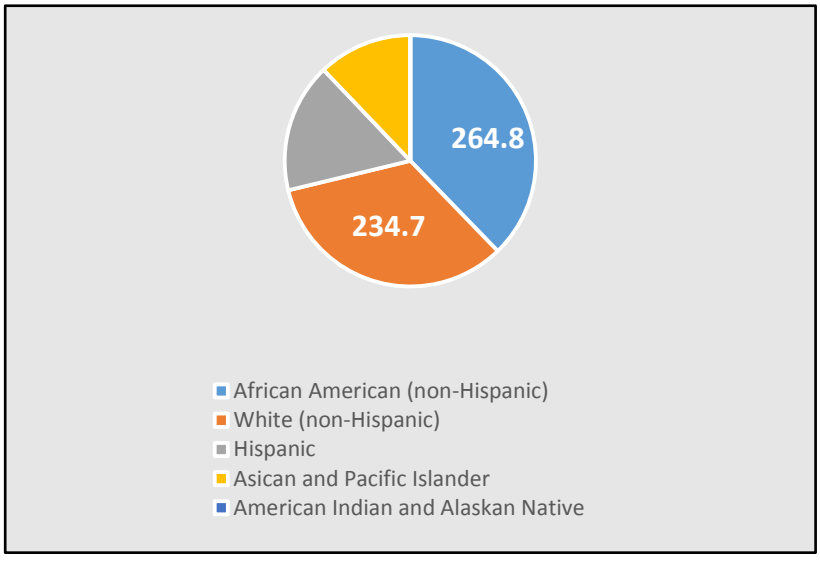
Figure 3 provides the values associated with each race.

Figure 1: Coronary Heart Disease Prevalence Compared in St. Clair County, Illinois, and U.S.



Source: Center for Disease Control and Prevention

Figure 2: Coronary Heart Disease Prevalence in St. Clair County by Race (2011-2013)



Source: Center for Disease Control and Prevention

Figure 3: Coronary Heart Disease Prevalence in St. Clair County, Age-Adjusted 35+ (2011-2013)

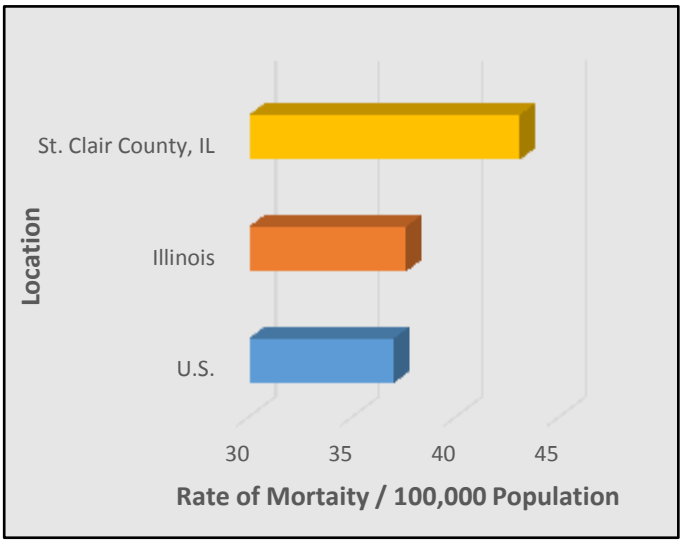
Race	Rate/100,000
African American (non-Hispanic)	264.8
White (non-Hispanic)	234.7
Hispanic	116.8
Asian and Pacific Islander	85
American Indian and Alaskan Native	-

Source: Center for Disease Control and Prevention

STROKE

Figures 1 and 2 illustrate the comparison of stroke-related mortalities in St. Clair County, Illinois, and the United States. As shown in Figure 1, St. Clair County has significantly more deaths related to stroke than Illinois and the US. Figure 2 provides the numbers associated with these rates.

Figure 1: Mortality Rates Related to Stroke Comparison of St. Clair County, Illinois and the US (2011-2013)



Source: Center for Disease Control and Prevention

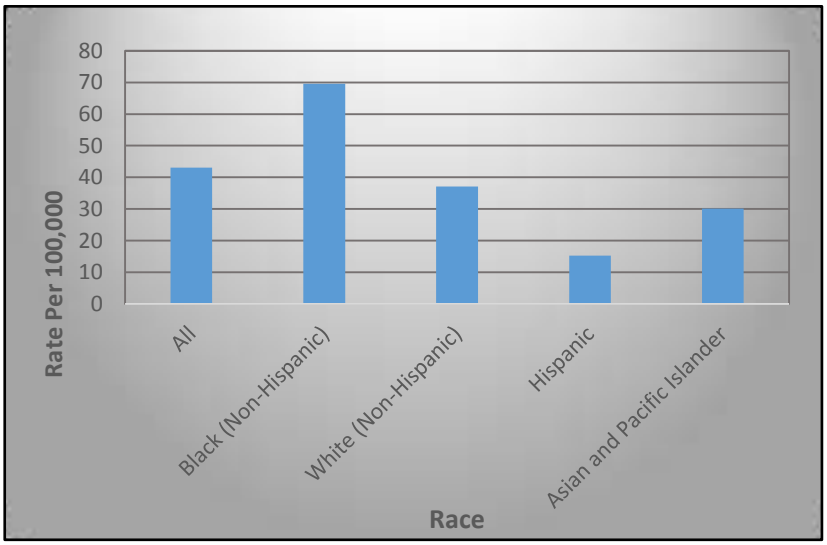
Figure 2: Mortality Rates Related to Stroke Comparison Table US (2011-2013)

Location	Rate/100,000
U.S.	37
Illinois	37.6
St. Clair County	43.1

Source: Center for Disease Control and Prevention

Figures 3 categorizes St. Clair County's population by race. Mortality rates related to stroke in St. Clair County are then compared between races. Figure 3 reveals that African American (non-Hispanic) experience the highest rate of stroke-related deaths, followed by White (non-Hispanics). These two groups comprise the majority of St. Clair County's population, suggesting that Touchette Regional Hospital's primary population served is at high-risk for suffering from stroke and deaths related to stroke.

Figure 3: Stroke Mortality Rate by Race in St. Clair County (2011-2013)



HYPERTENSION

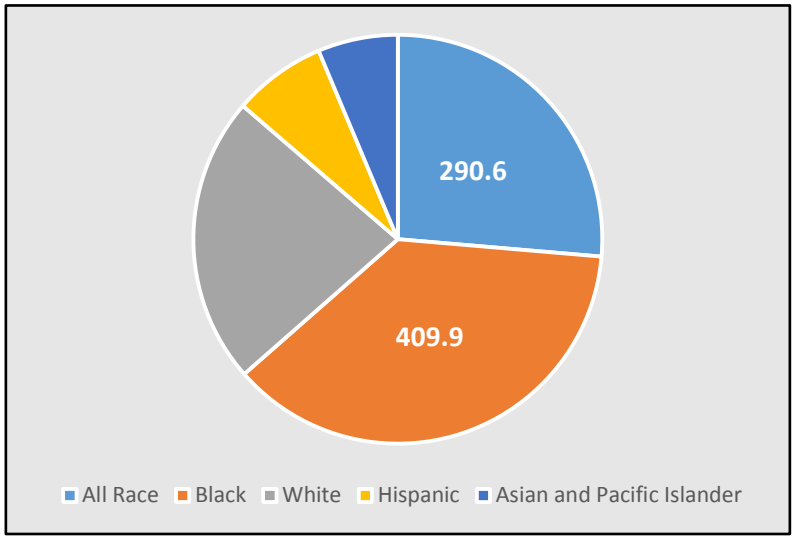
What is hypertension?
Commonly referred to as high blood pressure, hypertension refers to a medical condition that occurs with blood flows with the greater intensity through the blood vessels. This can cause damage to blood vessels, thus affecting vital organs requiring proper blood flow (PubMed Health)

First, Figure 1 categorizes St. Clair County' population by race and compares mortality rates due to hypertension. It illustrates that African Americans experience the highest rate of hypertension-related mortality among all the groups. In fact, the rate per 100,000 for African Americans is even greater than the population as a whole.

Figure 2 provides information on the rate of discharges with a primary diagnosis of hypertension. These rates are compared between St. Clair County, Illinois, and the United States. Participating St. Clair County hospitals see higher rates per 100,000 discharges of individuals suffering from hypertension than those in Illinois and even the nation as a whole.

Figure 1: Hypertension Mortality Rates per 100,000 by Race, Age-Adjusted for Adults 35+ (2011-2013)

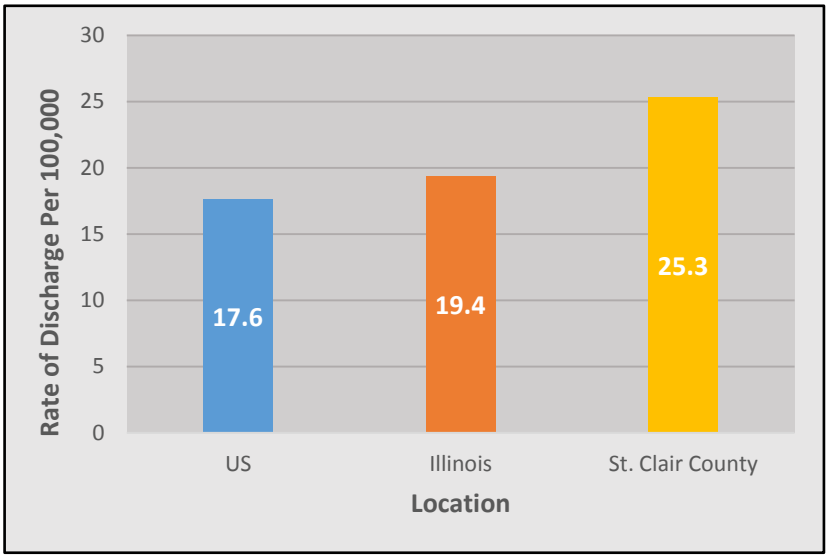
Age-Adjusted 35+ (2011-2013)



Source: Center for Disease Control and Prevention

Figure 2: Hypertension Mortality Rates per 100,000 by Race, Age-Adjusted for Adults 35+ (2011-2013)

Age-Adjusted 35+ (2011-2013)



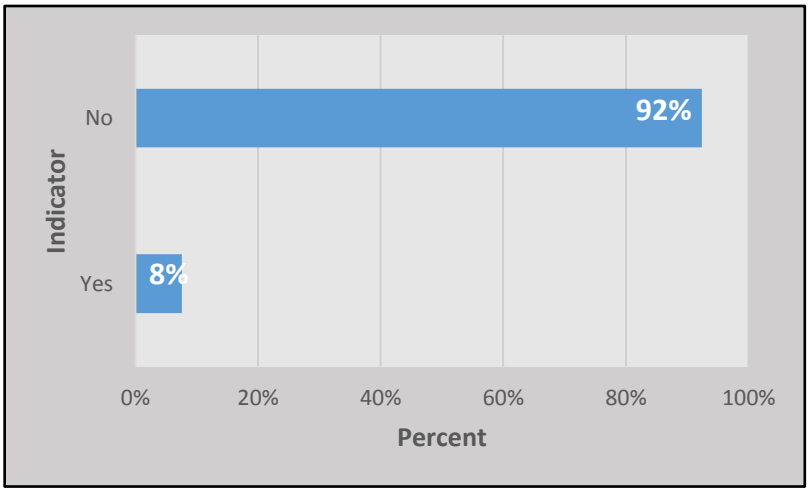
Source: Healthcare Cost and Utilization Project (HCUP) Data

ASTHMA

The information provided in Figure 1 and 2 illustrate the prevalence of asthma in St. Clair County, as well as compared to Illinois and the United States. Figure 1 depicts information provided through self-reporting of individuals who have received asthma diagnosis. Due to budgetary constraints, IBRFSS was last conducted in 2011. At this time, 92 percent of individuals reported not having asthma; the remaining 8 percent reported having an asthma diagnosis.

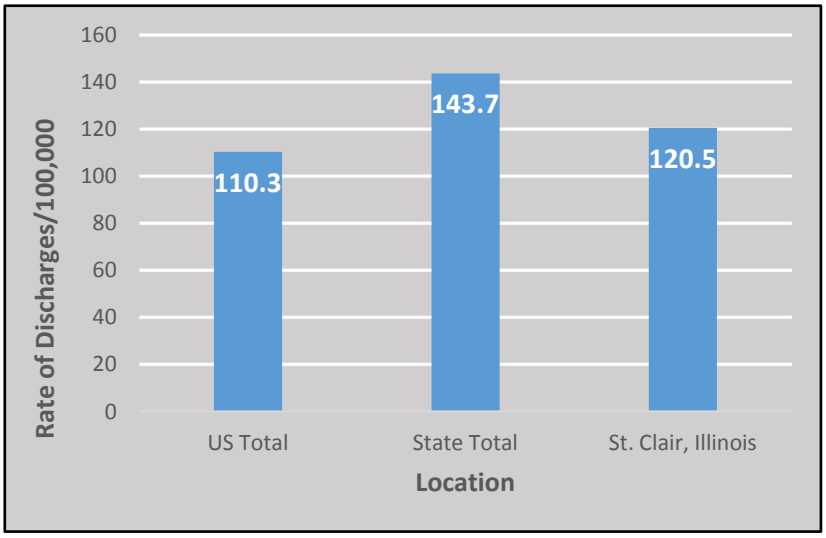
Figure 2 illustrates the rate per 100,000 discharges with a primary diagnosis of asthma in St. Clair County, Illinois, and the United States. As shown, Illinois overall experiences the highest prevalence of asthma diagnoses, followed by St. Clair County.

Figure 1: Self-Report of Individuals Diagnosed with Asthma in St. Clair County (2011)



Source: Illinois Behavioral Risk Factor Surveillance Survey

Figure 2: Rate of Asthma per 100,000 Indicated by Inpatient Discharges (2013)



Source: Healthcare Cost and Utilization Project (HCUP) Data

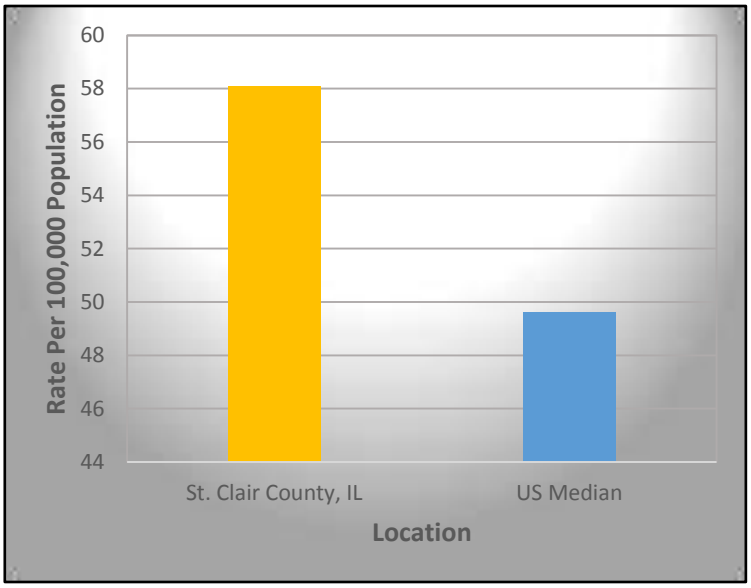
CHRONIC LOWER RESPRITORY DISEASE

What is chronic lower respiratory disease?
CLRDs include asthma, emphysema, and chronic bronchitis. It is characterized by shortness of breath that is typically caused by obstruction to airways.

Figure 1 illustrates the prevalence of CLRD in St. Clair County compared to the United States. As shown, St. Clair County has a significantly higher percentage of CLRD than the United States.

Figure 2 compares the rate of CLRD among African Americans (non-Hispanic) and White (non-Hispanic) in St. Clair County and the United States. These race categories were chosen because they comprise the majority of St. Clair County's population. When compared to the United States both groups present higher rates per 100,000 population of CLRD in St. Clair County.

Figure 1: Chronic Lower Respiratory Disease Prevalence Comparison of St. Clair County and the United States (2005-2011)



Source: Center for Disease Control and Prevention

Figure 2: Chronic Lower Respiratory Disease Prevalence in St. Clair County by Race (2005-2011)

Race (non-Hispanic)	St. Clair County	US Median
African American	45.5	31.3
White	61.8	51.8

Source: Center for Disease Control and Prevention

Maternal and Child Health

LOW BIRTH WEIGHT

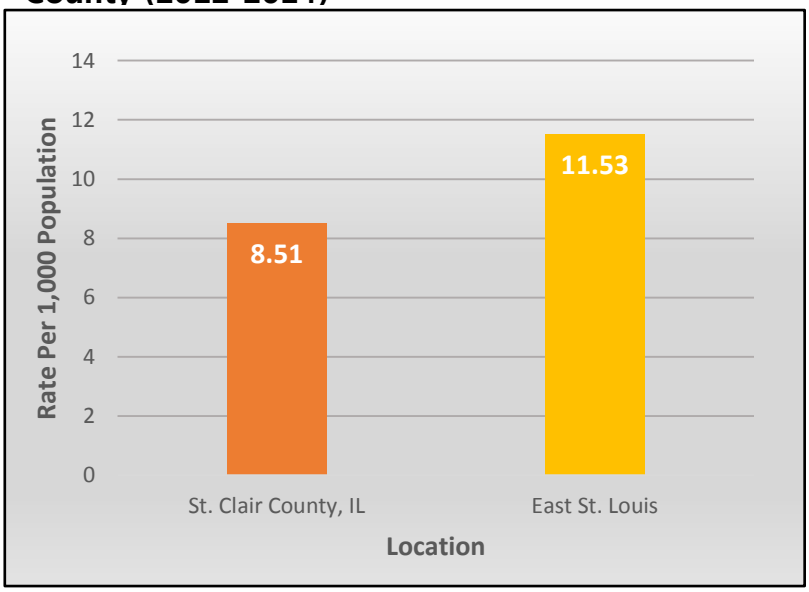
Defining Low Birth Weight

Low birth weight refers to babies that are born underweight, as compared to their gestational age. Generally, a birth weight recorded of 5 pounds, 8 ounces is considered low birth weight. Any baby born weighing less than 3 pounds is considered very low.

Figure 1 compares the prevalence of low birth weight in St. Clair County to East St. Louis Health District. The prevalence is greater in ESTL Health District (11.5/100,000 population) than the rate in St. Clair County (8.51/100,000).

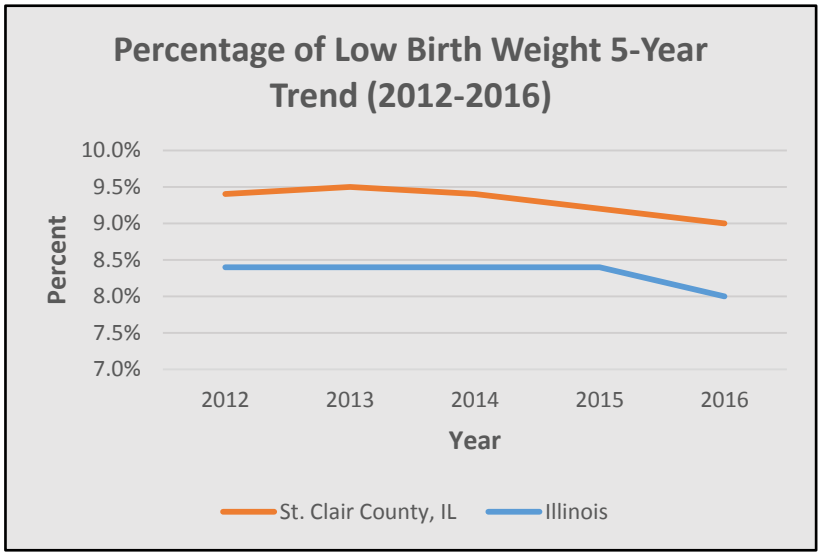
Figure 2 illustrates the trend in prevalence of low birth weight in St. Clair County compare to Illinois. As shown, the percent of babies born with a low birth weight has been consistently greater than Illinois over the last five years. However, St. Clair County has seen a steady decline in low birth weight among county residents.

Figure 1: Low Birth Weight Prevalence Comparison between East St. Louis Health District and St. Clair County (2012-2014)



Source: Health Resources and Services Administration (HRSA) Uniform Data System (UDS) Mapper

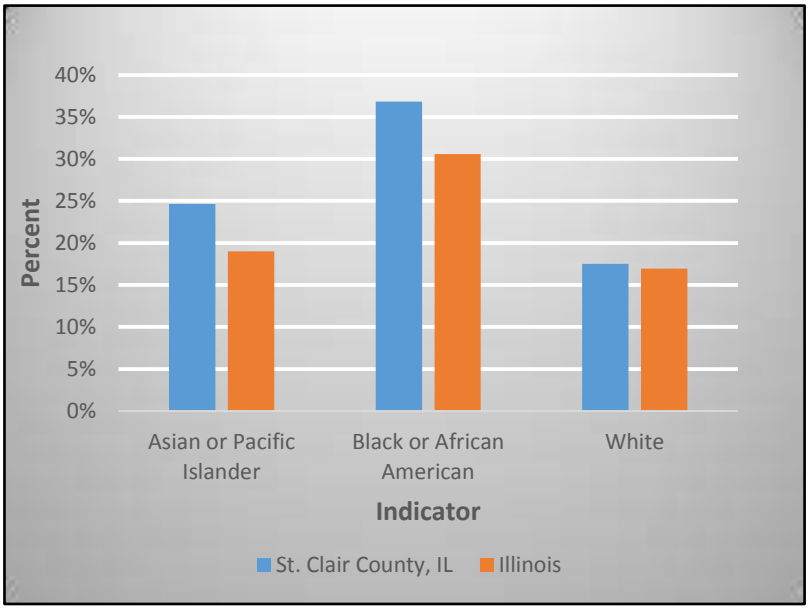
Figure 2: Percentage of Low Birth Weight Prevalence Comparison between St. Clair County and Illinois (2012-2014)



Source: Robert Johnson Wood Foundation, University of Wisconsin Population Health Institute. County Health Rankings

PRENATAL CARE

Figure 1: Comparison of Late Entry into Prenatal Care by Race (2014)



Source: Center for Disease Control and Prevention Wonder Tool

Prenatal care refers to medical care receive during pregnancy including checkups and prenatal medical tests. The figures provided refer to mothers who begin prenatal care post-first trimester (or before 4 – 9 months).

Figures 1 and 2 show the comparison between St. Clair County and Illinois for the prevalence of late entry into prenatal care. The information is categorized by race. In general, African Americans (non-Hispanic) show the greatest prevalence compared to other races. Likewise, the percent is even greater among African Americans (non-Hispanic) living in St. Clair County.

Figure 2: Late Entry into Prenatal Care Comparison between St. Clair County and Illinois

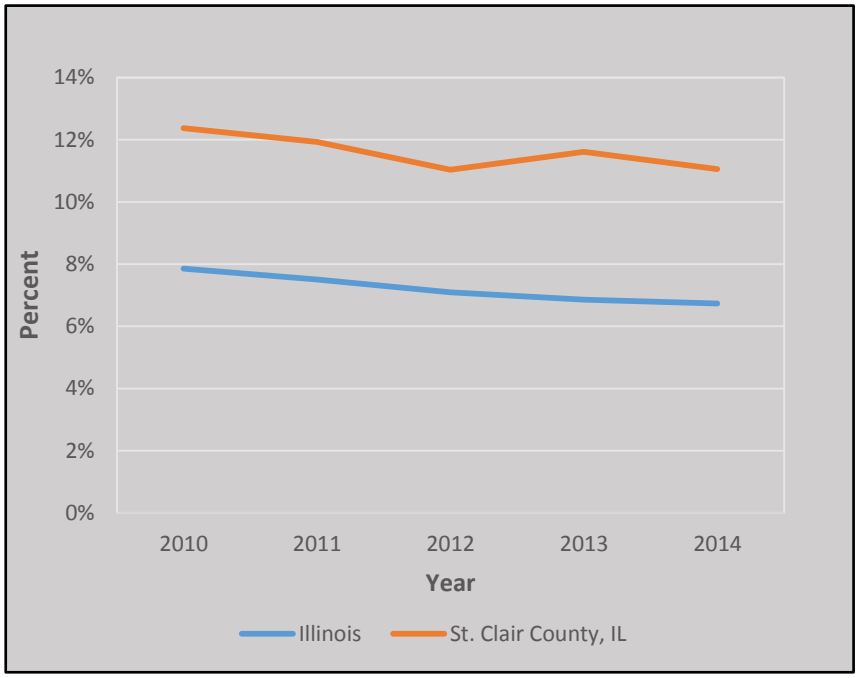
Indicator	St. Clair County	Illinois
Asian or Pacific Islander	24.6%	19%
Black or African American	36.8%	30.5%
White	17.5%	16.9%

Source: Center for Disease Control and Prevention Wonder

TOBACCO USE

Figures 1 and 2 illustrate the percent of mothers actively smoking or using any form of tobacco while pregnant. Figure 1 follows a five-year trend in Illinois and St. Clair County with regard to tobacco use during pregnancy. St. Clair County has a consistently higher prevalence of pregnant women using tobacco compared to Illinois. However, while St. Clair County has shown some variance over the last five years, there has been an overall decline in both the county and the state.

Figure 1: Percent of Mothers Using Tobacco during Pregnancy in St. Clair County and Illinois (2010-2014)



Source: Center for Disease Control and Prevention Wonder Tool

Figure 2: Percent of Mothers Using Tobacco during Pregnancy Comparison between Illinois and St. Clair County (2010-2014)

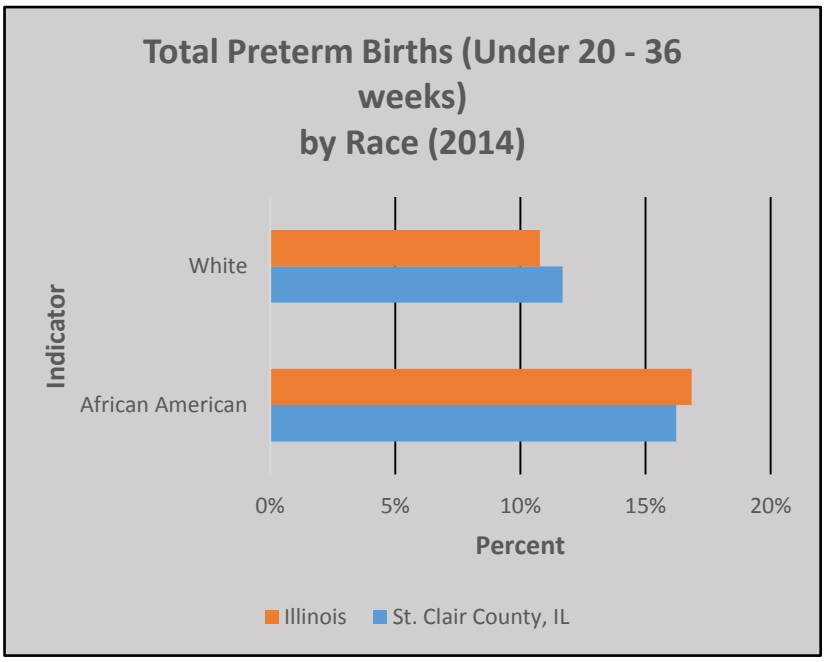
Year	Illinois	St. Clair County
2010	7.86%	12.38%
2011	7.50%	11.93%
2012	7.09%	11.04%
2013	6.85%	11.61%
2014	6.73%	11.05%

Source: Center for Disease Control and Prevention Wonder Tool

PRETERM BIRTH

Preterm births refer to babies that are both before full term, or 37-40 weeks, have been reached. This generally occurs between 20 and 36 weeks. Figures 1 and 2 compare the percent of total preterm births that occur in St. Clair County and Illinois by race. As shown in Figure 1, preterm births are more common among African Americans (non-Hispanic) overall. The prevalence is higher in St. Clair County compared to Illinois, as well.

Figure 1: Total Preterm Births (Under 20 – 36 Weeks Gestation) Comparison between St. Clair County and Illinois by Race (2014)



Source: Center for Disease Control and Prevention Wonder

Figure 2: Total Preterm Births (Under 20 – 36 Weeks Gestation)

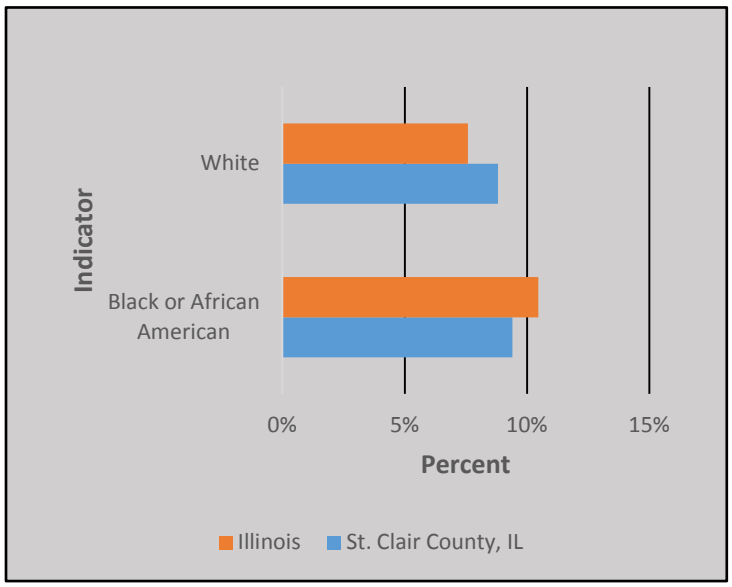
Indicator	St. Clair County, IL	Illinois
African American	16.22%	16.84%
White	11.69%	10.78%

Source: Center for Disease Control and Prevention Wonder Tool

Figures 3 and 4 depict how many births occur in "late preterm". This refers to a pregnancy that lasts only 34 – 36 weeks. Touchette Regional Hospital's obstetrics department offered that the majority of births at the hospital occur in the third trimester and are considered late preterm.

As illustrated by Figure 3, late preterm births are more common among African Americans (non-Hispanic) in both St. Clair County and Illinois. However, the state shows a higher prevalence of late pre-term birth among African Americans (non-Hispanic), while St. Clair County shows a higher prevalence of preterm births among White (non-Hispanic).

Figure 3: Late Preterm Births (Under 34 – 36 Weeks Gestation) Comparison between St. Clair County and Illinois by Race (2014)



Source: Center for Disease Control and Prevention Wonder Tool

Figure 4: Late Preterm Births (Under 34 – 36 Weeks Gestation) Comparison

Indicator	St. Clair County	Illinois
African American	9.41%	10.47%
White	8.82%	7.58%

Source: Center for Disease Control and Prevention Wonder Tool

VIOLENCE

CRIME

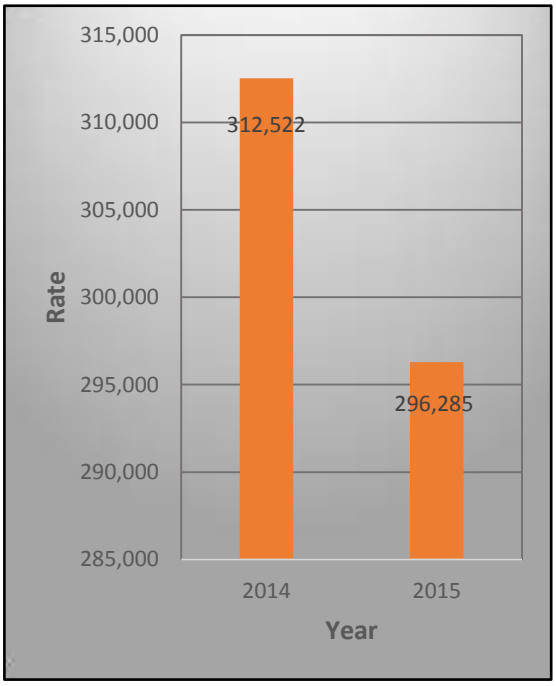
The data provided in this section is based on the Illinois Uniform Crime Reporting (UCR) Data that is offered by participating county and state departments and agencies. It is based on reports made to the police of certain crime offenses that include: criminal homicide, rape, robbery, aggravated battery or assault, burglary, theft, motor vehicle theft, arson, forced commercial sex acts, and human trafficking.

Figures 1 and 2 compare the total index crime rate horizontally the crime rate in St. Clair County and Illinois from 2014 to 2015. Figure 1 shows that the crime rate in Illinois decreased from 2014 to 2015. Conversely, Figure 2 illustrates an increase in reported crimes in St. Clair County between years.

Likewise, the data can be compared vertically between locations. According to the UCR Report, the total population in St. Clair County for 2014 and 2015 was 266,955 and 265,729 respectively. This conveys 2.82% in 2014 and 2.98% in 2015 report of crime offenses per population. Illinois' total population was 12,882,135 (2014) and 12,880,580 (2015). This yields 2.4% and 2.3% report of crime offenses, respectively, per population. Therefore, St. Clair County residents are at higher risk for experiencing or being involved the aforementioned criminal activities.

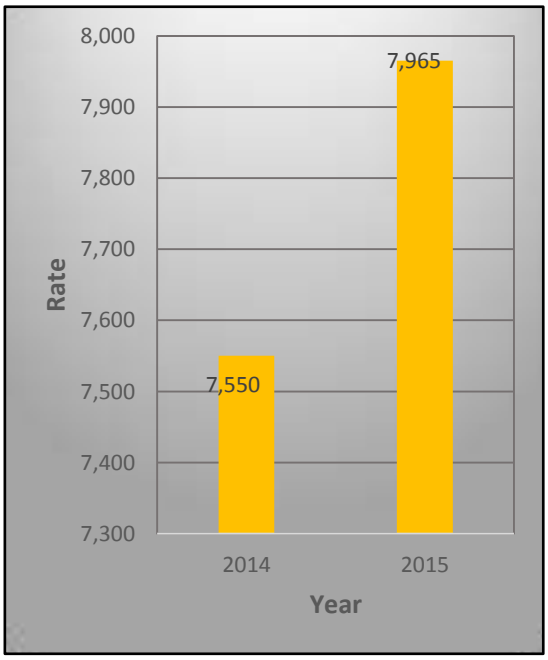
Figure 3 compares the number of reported crime by participating police departments for regions in the East St. Louis Health District from 2014 to 2015. While Cahokia and Sauget Police Departments report an increase in the number of crime offenses reported, East St. Louis and Washington Park Police Departments reported decreases. There was insufficient data available at this time for Centerville.

Figure 1: Total State Index Crime Offense Rate in Illinois (2014-2015)



Source: Uniform Crime Reporting Data

Figure 2: Total County Index Crime Offense Rate in St. Clair County (2014-2015)



Source: Uniform Crime Reporting Data

Figure 3: Comparison of Crime Index by District in St. Clair County (Excluding State Agencies) (2014-2015)

District/Reporting Agency	2014	2015
Cahokia PD	3,571	4,040
East St. Louis PD	7,842	6,406
Sauget PD	48,052	54,605
Washington Park PD	5,784	5,496

Source: Uniform Crime Reporting Data

References

American Heart Association. What is Cardiovascular Disease? (n.d.).

Boston Children's Hospital (2013). Low birthweight in newborns Symptoms & Causes.

Center for Disease Control and Prevention (2010-2014). CDC Wonder Tool.

Center for Disease Control and Prevention

Center for Managing Chronic Disease (n.d.) About Chronic Disease. Retrieved October 17, 2016, from http://cmcd.sph.umich.edu/about/about-chronic-disease/

Feeding America (Interactive County-Level Map) http://map.feedingamerica.org/county/2012/overall/illinois

"Health Policy Brief: The Relative Contribution of Multiple Determinants to Health Outcomes," *Health Affairs*, August 21, 2014.

Healthy People 2020, Access to Health Serviceshttps://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

Healthy People 2020, Social Determinants of Health https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Health Resources and Services Administration (Provider Access) http://ahrf.hrsa.gov/arfdashboard/HRCT.aspx

HRSA UDS Mapper (insurance status) http://www.udsmapper.org/mapESA.cfm

National Alliance for Mental Illness (NAMI)

PubMed Health https://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0024199/ - hypertension

Robert Johnson Wood Foundation
http://www.countyhealthrankings.org/app/illinois/2016/rankings/st-clair/county/factors/overall/snapshot

Substance Abuse and Mental Health Services Association (SAMHSA)

United States Department of Agriculture (n.d.). Supplemental Nutrition Assistance Program (SNAP). Retrieved from http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap

Utilization of Services Definition http://mchp-appserv.cpe.umanitoba.ca/viewDefinition.php?definitionID=102752