

# Community Health Needs Assessment 2016

**OSF SAINT LUKE MEDICAL CENTER**

HENRY COUNTY

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# Community Health Needs Assessment

July 2016

*Collaboration for sustaining health equity*

## Executive Summary

The Henry County Community Health-Needs Assessment is a collaborative undertaking by OSF Saint Luke Medical Center to highlight the health needs and well-being of residents in Henry County. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Henry County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Henry County region, the predictors for and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Results from this study can be used for strategic decision-making purposes as they directly relate to the health needs of the community. The study was designed to assess issues and trends impacting the communities served by the collaborative, as well as perceptions of targeted stakeholder groups.

This study includes a detailed analysis of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publically available sources as well as private sources of data. Additionally, primary data were collected for the general population and the at-risk or economically disadvantaged population. Areas of investigation included perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to medical care, dental care, prescription medications and mental-health counseling. Additionally, demographic

characteristics of respondents were utilized to provide insights into why certain segments of the population responded differently.

Ultimately, the identification and prioritization of the most important health-related issues in the Henry County region were identified. The collaborative team considered health needs based on: (1) magnitude of the issue (i.e., what percentage of the population was impacted by the issue); (2) severity of the issue in terms of its relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method, the collaborative team prioritized two significant health needs:

- ***Healthy Behaviors – defined as healthy eating and active living, and their impact on obesity***
- ***Behavioral Health – including mental health and substance abuse***

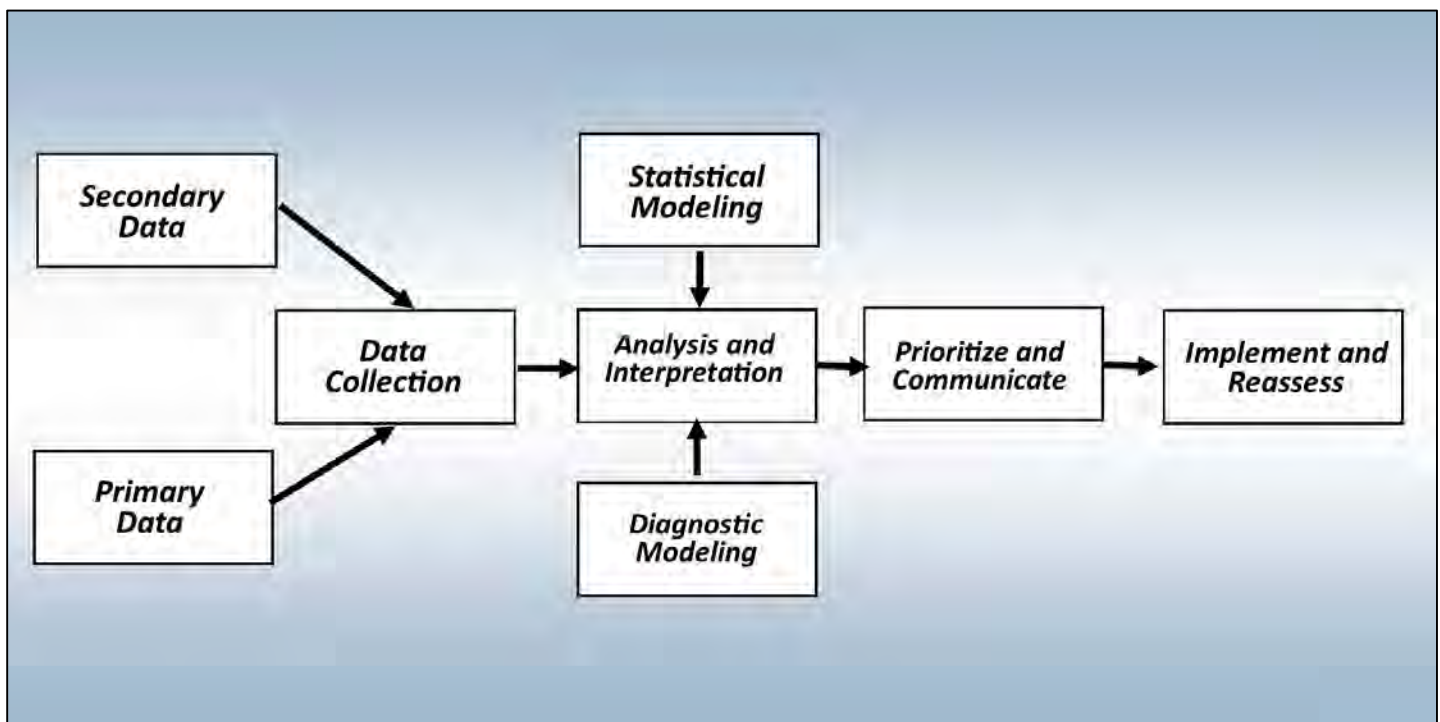
# I. INTRODUCTION

## Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010, added new requirements for tax-exempt hospitals to conduct community health-needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health-needs assessment (CHNA) takes into account input from specific individuals who represent the broad interests of the community served by OSF Saint Luke Medical Center including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, create a plan, and act upon unmet community health needs. Results from this assessment will be made widely available to the public.

The structure of the CHNA is based on standards used by the Internal Revenue Service to develop Form 990, Schedule H–Hospitals, designated solely for tax-exempt hospitals. The fundamental areas of the community health-needs assessment are illustrated in Figure 1.

**Figure 1. Community Health Needs Assessment Framework**



## Design of the Collaborative Team: Community Engagement, Broad Representation and Special Knowledge

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members of the collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included representatives from OSF Saint Luke Medical Center, members of the Henry

County Health Department, and administrators from key community partner organizations. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met in April and July 2015 and in the first quarter of 2016. Additionally, numerous meetings were held between the facilitators and specific individuals during the process.

Specifically, members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Note that the collaborative team provided input for all sections of the CHNA. Individuals, affiliations, titles and expertise can be found in Appendix 1.

### **Definition of the Community**

In order to determine the geographic boundaries for OSF Saint Luke Medical Center, analyses were completed to identify what percentage of inpatient and outpatient activity was represented by Henry County. Data show that Henry County alone represents over 80% of all patients for the hospital.

In addition to defining the community by geographic boundaries, this study targets the at-risk population as an area of potential opportunity to improve the health of the community.

### **Purpose of the Community Health-Needs Assessment**

In the initial meeting, the collaborative committee identified the purpose of this study. Specifically, this study has been designed to provide necessary information to health-care organizations, including hospitals, clinics and health departments, in order to create strategic plans in program design, access and delivery. Results of this study will act as a platform that allows health-care organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, hospitals, clinics, agencies and health departments will use this CHNA to improve the quality of healthcare in Henry County.

### **Community Feedback from Previous Assessments**

The 2013 CHNA was made widely available to the community to allow for feedback. Specifically, the hospital posted both a full version and a summary version of the 2013 CHNA on its website. While no written feedback was received by individuals from the community via the available mechanism, verbal feedback was provided by key stakeholders from community-service organizations and incorporated as part of the collaborative process.

### **Summary of 2013 CHNA Identified Health Needs and Implementation Plans**

The 2013 CHNA for Henry County identified four significant health needs. These included: behavioral health, wellness education and services, local availability of services for the elderly and youth, and early detection through cancer screening. Specific actions were taken to address these needs. Detailed discussions of goals and strategies to improve these health needs can be seen in Appendix 2.

## II. METHODS

To complete the comprehensive community health-needs assessment, multiple sources were examined. Secondary statistical data were used to assess the community profile, morbidity rates and causes of mortality. Additionally, based on a sample of 786 survey respondents (25 respondents used a version translated into Spanish) from Henry County, a study was completed to examine perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to healthcare.

### **Secondary Data for the Community Health Needs Assessment**

We first used existing secondary statistical data to develop an overall assessment of health-related issues in the community. Within each section of the report, there are definitions, importance of categories, data and interpretations. At the end of each chapter, there is a section on key takeaways.

Based on several retreats, a separate OSF Collaborative Team used COMP data to identify six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, diabetes and infections. In order to define each disease category, we used modified definitions developed by Sg2. Sg2 specializes in consulting for healthcare organizations. Their team of experts includes MDs, PhDs, RNs and healthcare leaders with extensive strategic, operational, clinical, academic, technological and financial experience.

### **Primary Data Collection**

In addition to existing secondary data sources, primary survey data were also collected. This section describes the research methods used to collect, code, verify and analyze primary survey data. Specifically, we discuss the research design used for this study: survey design, data collection and data integrity.

#### **A. Survey Instrument Design**

Initially, all publicly available health-needs assessments in the U.S. were assessed to identify common themes and approaches to collecting community health-needs data. By leveraging best practices from these surveys, we created our own pilot survey in 2012, designed for use with both the general population and the at-risk community. To ensure that all critical areas were being addressed, the entire OSF collaborative team was involved in survey design/approval through several fact-finding sessions. Additionally, several focus groups were used to collect the qualitative information necessary to design survey items. Specifically, for the community health-needs assessment, five specific sets of items were included:

**Ratings of health issues in the community** – to assess the importance of various community health concerns. Survey items included assessments of topics such as cancer, diabetes and obesity. In all, there were 16 choices provided for survey respondents.

**Ratings of unhealthy behaviors in the community** – to assess the importance of various unhealthy behaviors. Survey items included assessments of topics such as violence, drug abuse and smoking. In all, there were 13 choices provided for survey respondents.

**Ratings of issues concerning well-being** – to assess the importance of various issues relating to well-being in the community. Survey items included assessments of topics such as access to healthcare, safer neighborhoods and effective public transportation. In all, there were 12 choices provided for survey respondents.

**Accessibility to healthcare** – to assess the degree to which residents could access healthcare when needed. Survey items included assessments of topics such as access to medical, dental and mental-healthcare, as well as access to prescription medications.

**Healthy behaviors** – to assess the degree to which residents exhibited healthy behaviors. The survey items included assessments of topics such as exercise and healthy eating habits.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the five categories discussed above.

After the initial survey was designed, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. The pilot study was conducted at the Heartland Community Health Clinic's facilities. The Heartland Clinic was chosen as it serves the at-risk population and also has a facility that serves a large percentage of the Latino population. A total of 230 surveys were collected. Results from the pilot survey revealed specific items to be included/excluded in the final survey instrument. Item selection criteria for the final survey included validity, reliability and frequency measures based on responses from the pilot sample. A copy of the final survey is included in Appendix 3.

## B. Sample Size

In order to identify our potential population, we first identified the percentage of the Henry County population that was living in poverty. Specifically, we multiplied the population of the county by its respective poverty rate to identify the minimum sample size to study the at-risk population. The poverty rate for Henry County was 10.8 percent in 2014. The population used for the calculation was 49,635, yielding a total of 5,361 residents living in poverty in the Henry County area.

We assumed a normal approximation to the hypergeometric distribution given the targeted sample size.

$$n = (Nz^2pq)/(E^2 (N-1) + z^2 pq)$$

where:

$n$  = the required sample size

$N$  = the population size

$pq$  = population proportions (set at .05)

$z$  = the value that specified the confidence interval (use 90% CI)

$E$  =desired accuracy of sample proportions (set at +/- .05)

For the total Henry County area, the minimum sample size for those living in poverty was 258. Note that for *aggregated* analyses (combination of at-risk and general populations); an additional 270 random surveys were needed from those not living in poverty in order to properly represent the views of the population in Henry County.

The data collection effort for this CHNA yielded a total of 786 usable responses. This exceeded the threshold of the desired 90% confidence interval.



To provide a representative profile when assessing the aggregated population for the Henry County region, the general population was combined with a portion of the at-risk population. To represent the at-risk population as a percentage of the aggregate population, a random-number generator was used to select at-risk cases to include in the general sample. This provided a total usable sample of 574 respondents for analyzing the aggregate population. Sample characteristics can be seen in Appendix 4.

### **C. Data Collection**

To collect data in this study, two techniques were used. First, an online version of the survey was created. Second, a paper version of the survey was distributed. In order to be sensitive to the needs of respondents, surveys stressed assurance of complete anonymity. Note that versions of both the online survey and paper survey were translated into Spanish.

To specifically target the at-risk population, surveys were distributed at homeless shelters, food pantries and soup kitchens. Since we specifically targeted the at-risk population as part of the data collection effort, this became a stratified sample, as we did not specifically target other groups based on their socio-economic status.

### **D. Data Integrity**

Comprehensive analyses were performed to verify the integrity of the data for this research. Without proper validation of the raw data, any interpretation of results could be inaccurate and misleading if used for decision-making. Therefore, several tests were performed to ensure that the data were valid. These tests were performed before any analyses were undertaken. Data were checked for coding accuracy, using descriptive frequency statistics to verify that all data items were correct. This was followed by analyses of means and standard deviations and comparison of primary data statistics to existing secondary data.

### **E. Analytic Techniques**

To ensure statistical validity, we used several different analytic techniques. Specifically, frequencies and descriptive statistics were used for identifying patterns in residents' ratings of various health concerns. Additionally, appropriate statistical techniques were used for identification of existing relationships between perceptions, behaviors and demographic data. Specifically, we used Pearson correlations,  $\chi^2$  tests and tetrachoric correlations when appropriate, given characteristics of the specific data being analyzed.

CHAPTER 1 OUTLINE

- 1.1 Population
- 1.2 Age, Gender and Race Distribution
- 1.3 Household/Family
- 1.4 Economic Information
- 1.5 Education
- 1.6 Key Takeaways from Chapter 1

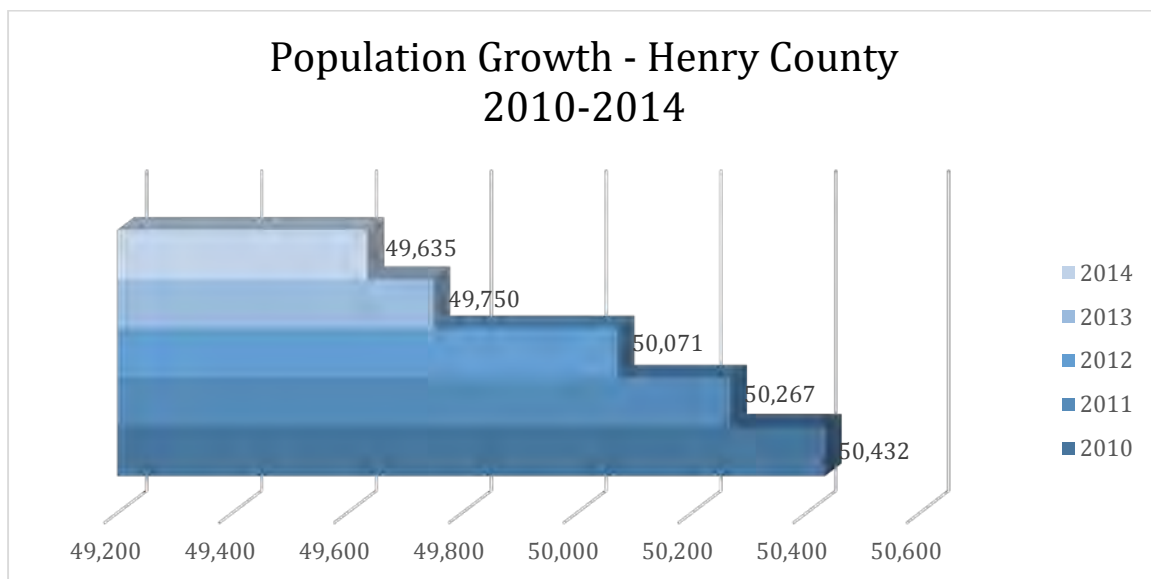
# CHAPTER 1. DEMOGRAPHIC PROFILE

## 1.1 Population

*Importance of the measure:* Population data characterize individuals residing in Henry County. Population data provide an overview of population growth trends and build a foundation for additional analysis of data.

### Population Growth

Data from the last census indicate the population of Henry County has slightly decreased (1.6%) between 2010 and 2014.



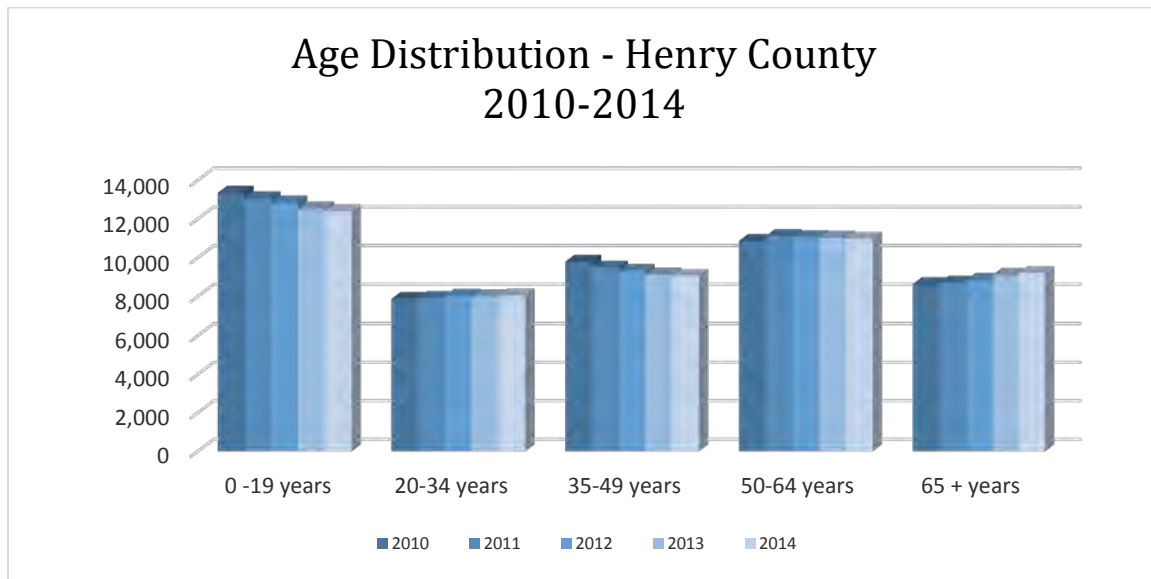
Source: US Census

## 1.2 Age, Gender and Race Distribution

*Importance of the measure:* Population data broken down by age, gender, and race groups provide a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of healthcare services. Understanding the cultural diversity of communities is essential when considering healthcare infrastructure and service delivery systems.

### Age

As indicated in the graph below, the percentage of individuals in Henry County aged 50-64 held steady between 2010 and 2014, and the percentage of individuals aged 65 and older increased from 8,624 to 9,194 between 2010 and 2014.

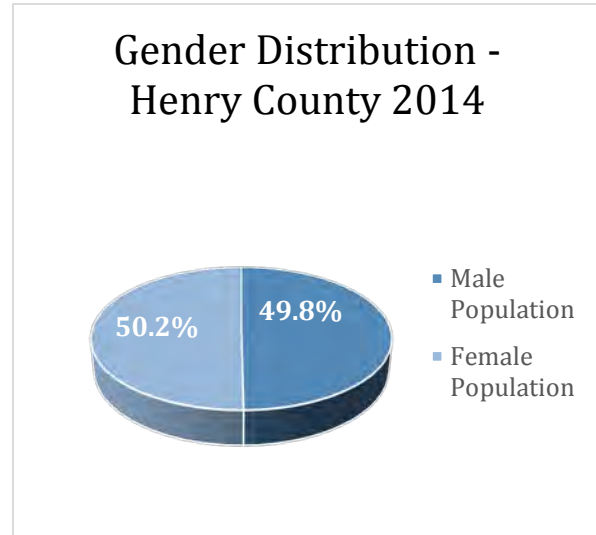
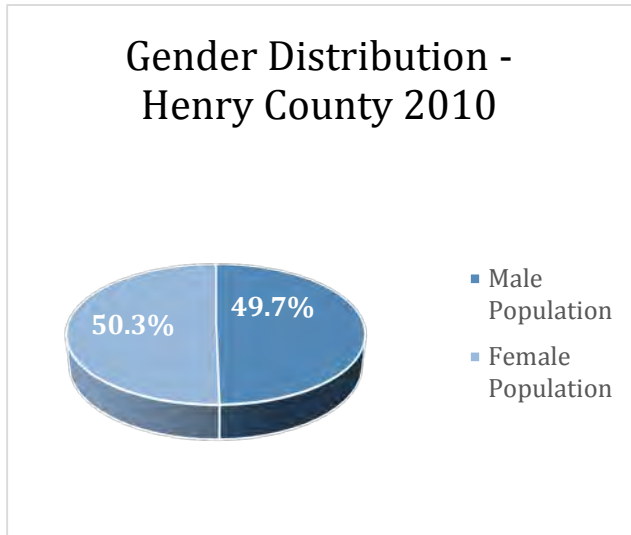


Age	2010	2011	2012	2013	2014
0 -19 years	13,347	13,063	12,843	12,538	12,384
20-34 years	7,868	7,910	8,030	7,986	8,039
35-49 years	9,787	9,478	9,308	9,113	9,050
50-64 years	10,860	11,115	11,048	11,019	10,968
65 + years	8,624	8,701	8,842	9,094	9,194

Source: US Census

## Gender

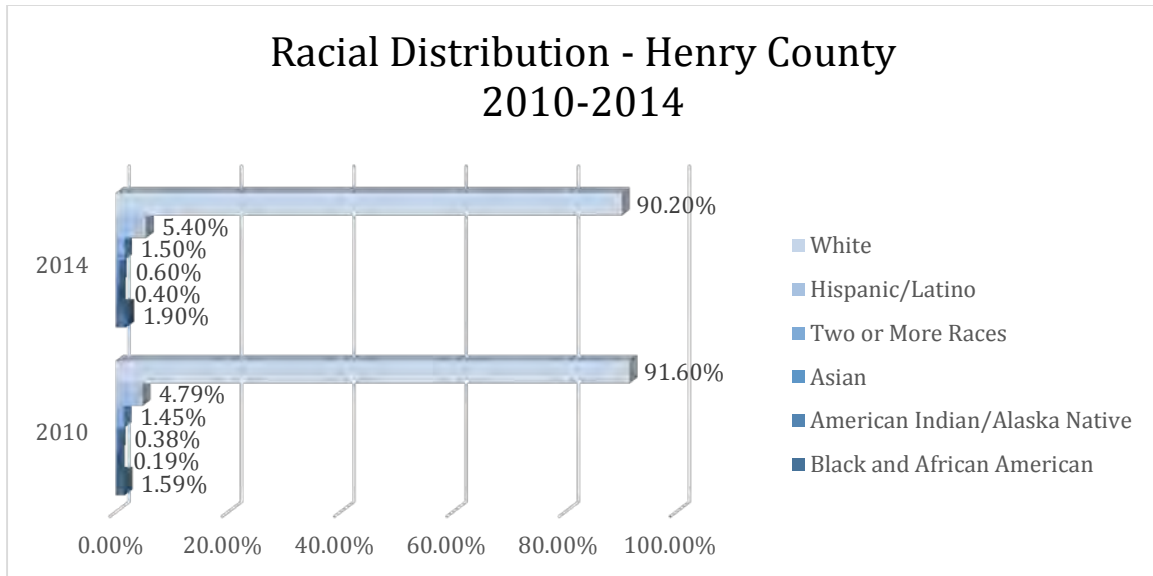
The gender distribution of Henry County residents has remained relatively consistent between 2010 and 2014.



Source: US Census

## Race

With regard to race and ethnic background, Henry County is largely homogenous, yet in recent years, the county is becoming more diverse. Data from 2014 suggest that White ethnicity comprises just over 90% of the population in Henry County. However, the non-White population of Henry County has been increasing (from 8.4% to 9.8% in 2014), with Black ethnicity comprising 1.9% of the population, multi-racial ethnicity comprising 1.5% of the population, and Hispanic/Latino ethnicity comprising 5.4% of the population.

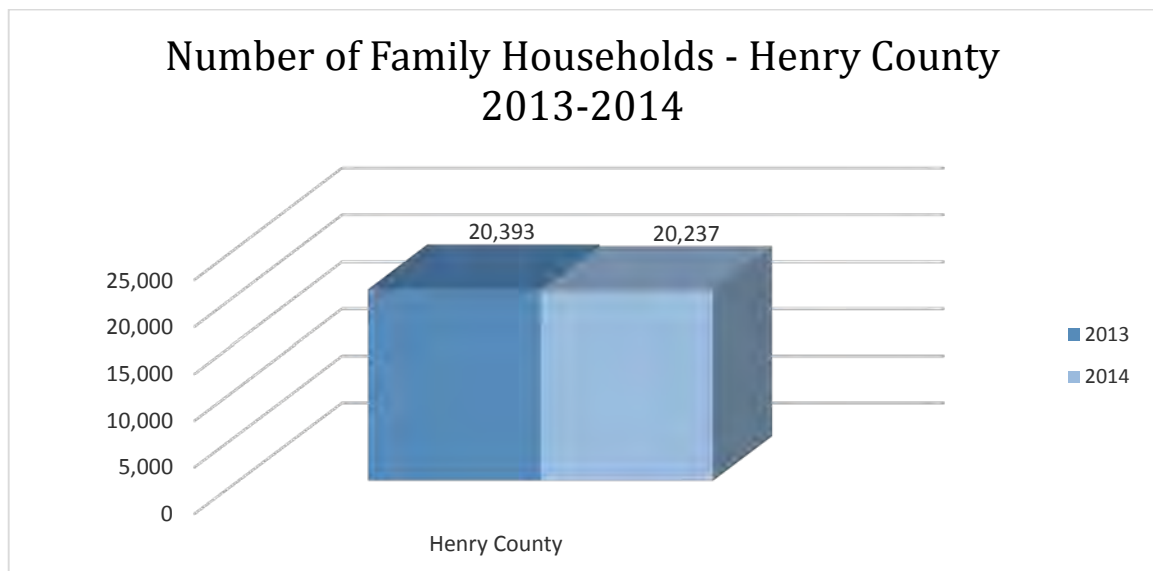


Source: US Census

## 1.3 Household/Family

*Importance of the measure:* Families are an important component of a robust society in Henry County, as they dramatically impact the health and development of children and provide support and well-being for older adults.

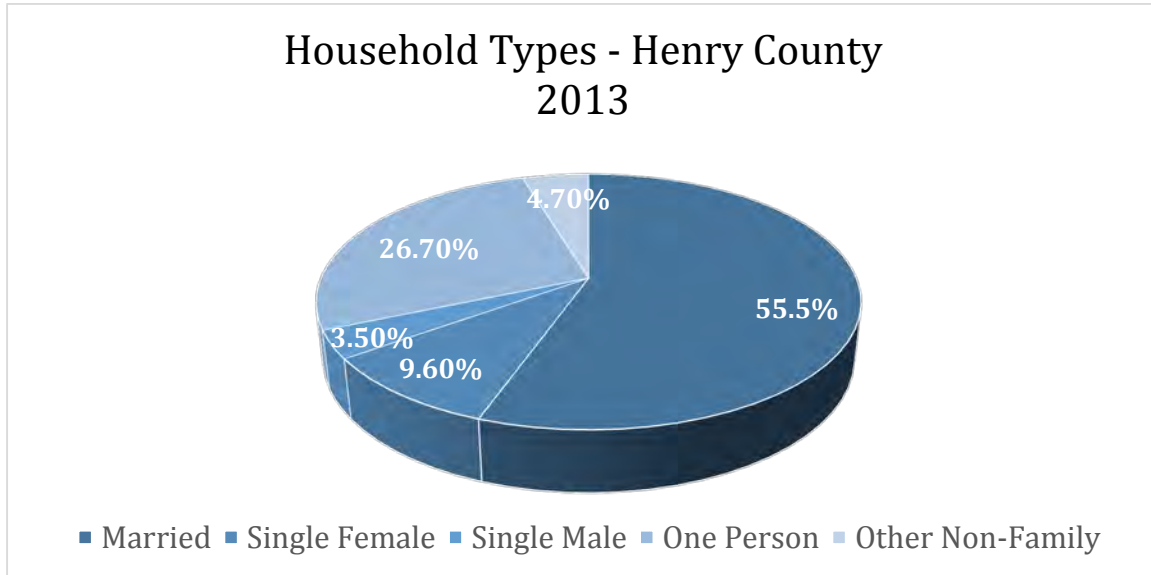
As indicated in the graph below, the number of family households in Henry County decreased slightly from 2013 to 2014.



Source: US Census

### Family Composition

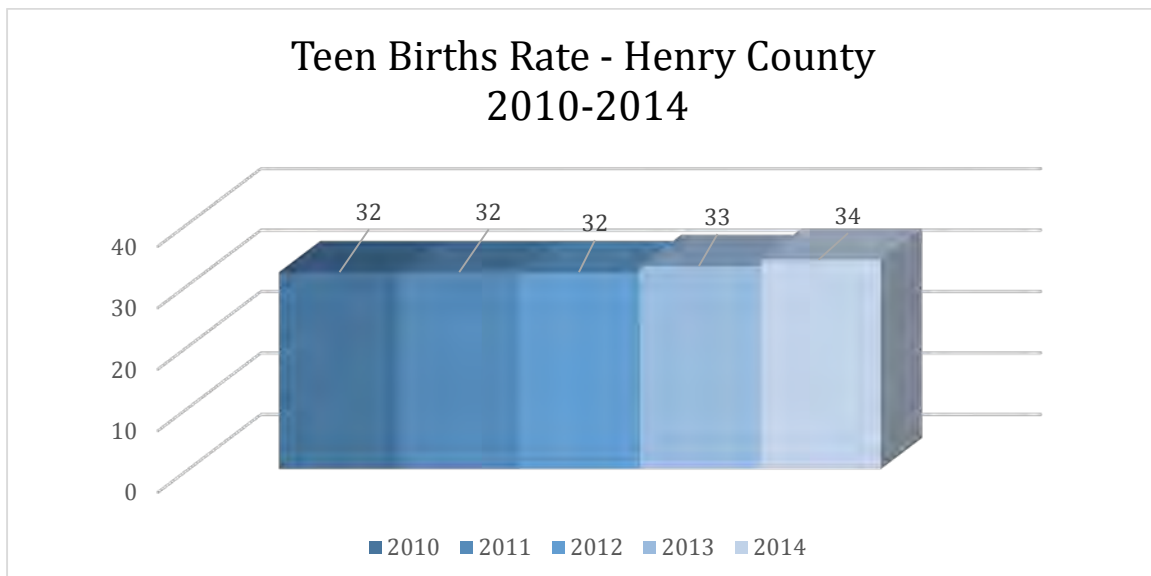
In Henry County, data from 2013 suggest the percentage of two-parent families in Henry County is over 50%. One-person households represent 26.7% of the county population. And single-female households represent 9.6%.



Source: 2013 Statisticalatlas.com

### Early Sexual Activity Leading to Births from Teenage Mothers

Henry County has experienced an increase in teenage birth rate per 100,000 women. However, teen births are still just below the Illinois average of 36 per 1,000 women.



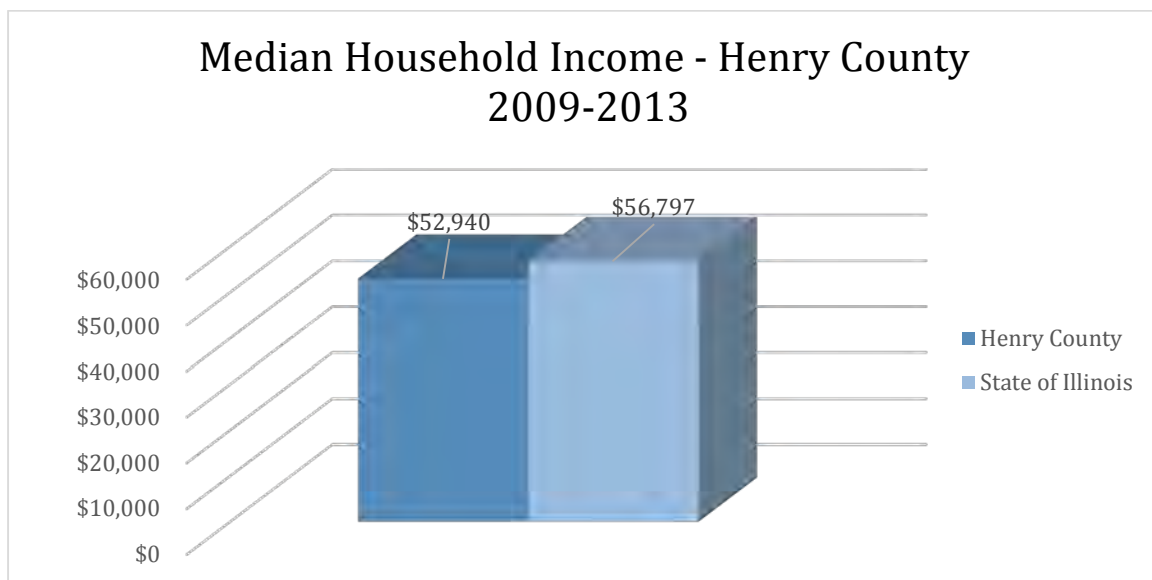
Source: Illinois Department of Public Health

## 1.4 Economic Information

*Importance of the measure:* Median income divides households into two segments with one-half of households earning more than the median income and the other half earning less. Because median income is not significantly impacted by unusually high or low-income values, it is considered a more reliable indicator than average income. To live in poverty means to lack sufficient income to meet one's basic needs. Accordingly, poverty is associated with numerous chronic social, health, education, and employment conditions.

### Median Income Level

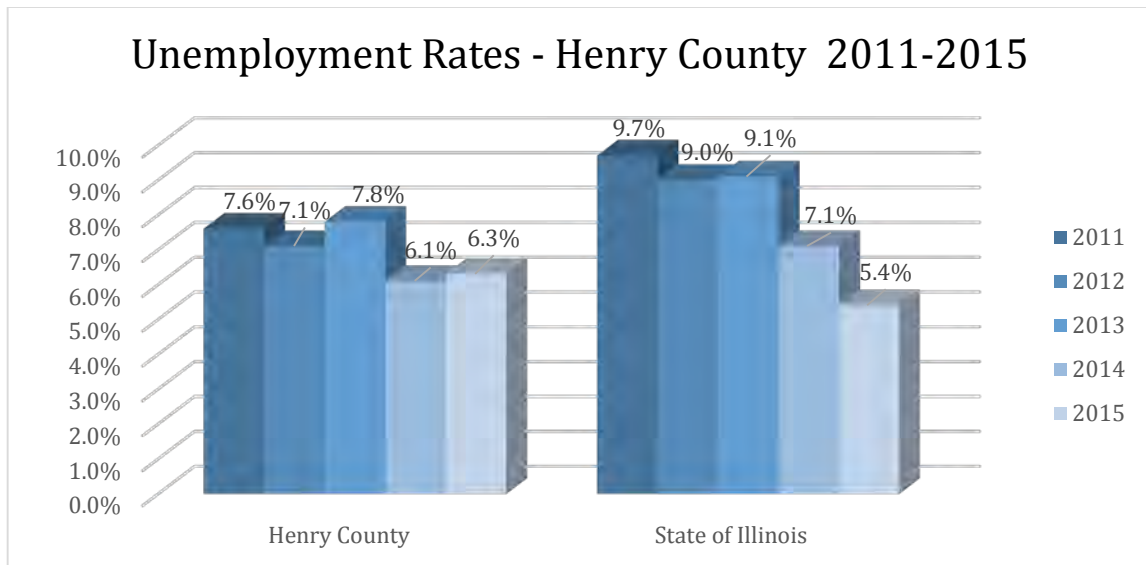
For 2009-2013, the median household income in Henry County was lower than the State of Illinois.



Source: US Census

### Unemployment

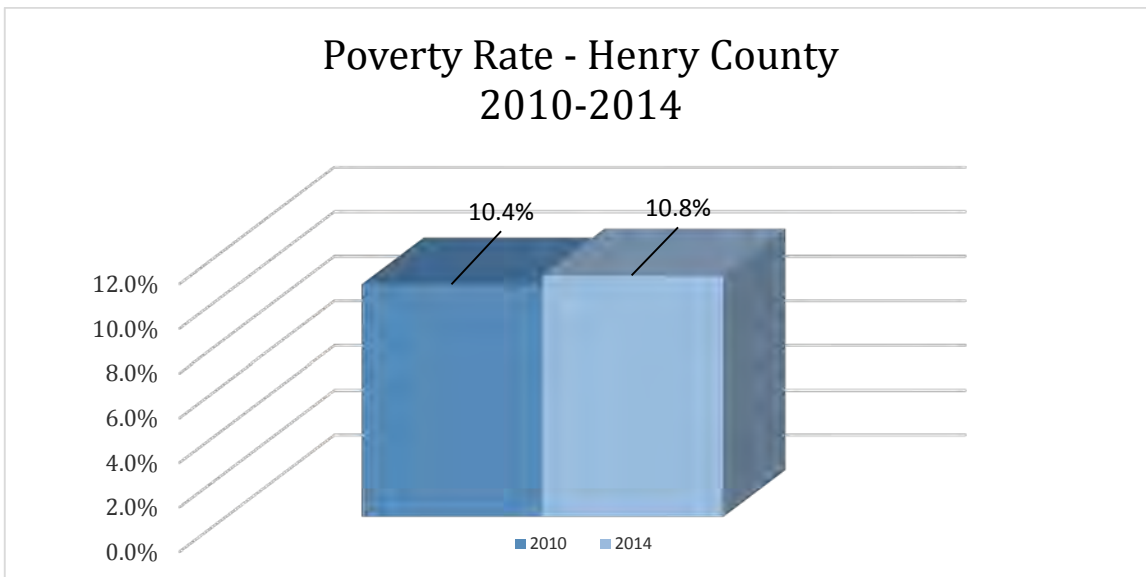
For the years 2011 to 2014, the Henry County unemployment rate has been lower than the State of Illinois unemployment rate. In 2015, it is higher. Between 2013 and 2015, unemployment decreased from 7.8% to 6.3%.



Source: Bureau of Labor Statistics

### Families in Poverty

Poverty has a significant impact on the development of children and youth. In Henry County, the percentage of families living in poverty between 2010 and 2014 increased slightly. In Henry County, the overall poverty rate is 10.8%, which is lower than the State of Illinois poverty rate of 14.4%.



Source: US Census



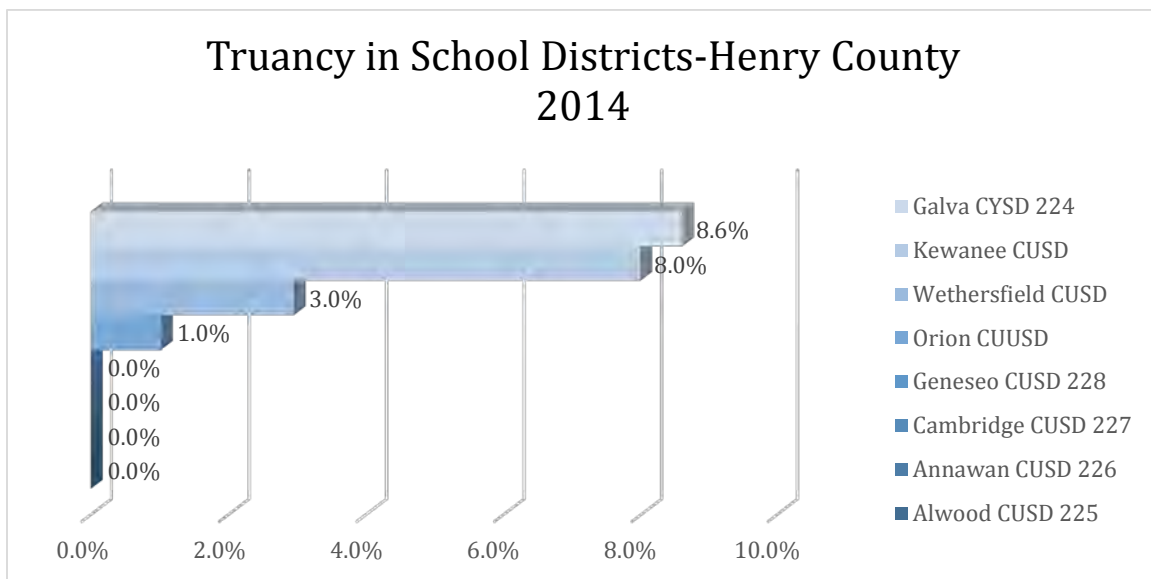
## 1.5 Education

*Importance of the measure:* According to the National Center for Educational Statistics<sup>1</sup>, “The better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income.” Research suggests that the higher the level of educational attainment and the more successful one is in school, the better one’s health will be and the greater likelihood of one selecting healthy lifestyle choices. Accordingly, years of education is strongly related to an individual’s propensity to earn a higher salary, gain better employment, and foster multifaceted success in life.

### Truancy

Chronic truancy is a major challenge to the academic progress of children and young adults. The causes of truancy vary considerably for young children. Truancy of middle- and high-school students is more likely a result of the inappropriate behavior and decisions of individual students. Primary school truancy often results from decisions and actions of the parents or caregivers rather than the students themselves. The State of Illinois defines truancy as a student who is absent without valid cause for 5% or more of the previous 180 regular attendance days.

Galva CYSD and Kewanee CUSD districts have the largest percentage of students who were chronically truant in 2014.

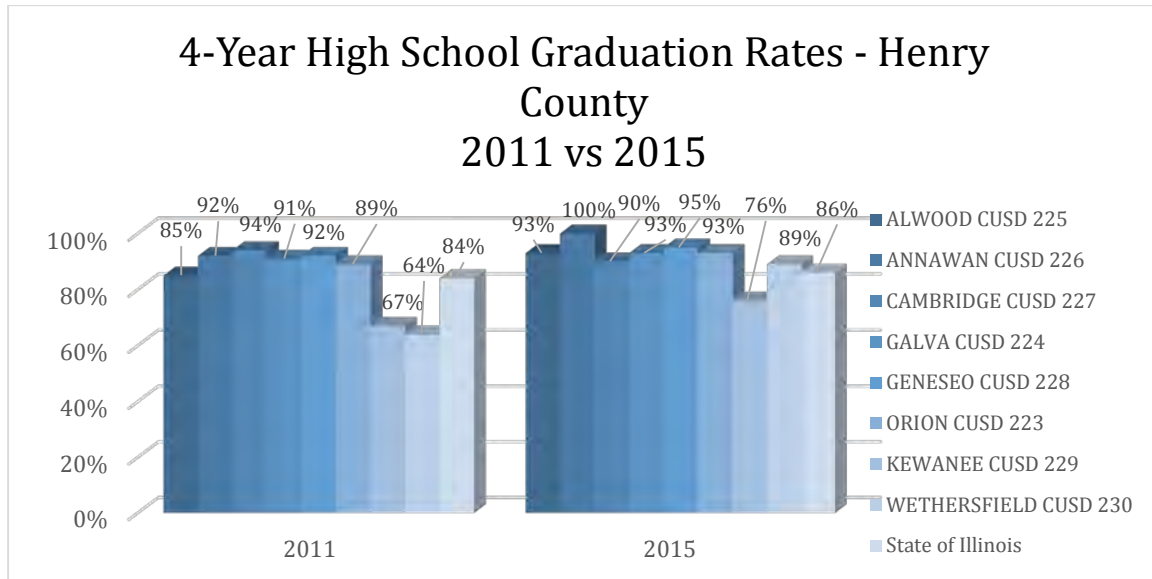


Source: Illinois Report Card

<sup>1</sup> NCES 2005

## High School Graduation Rates

In 2015, Kewanee CUSD school district in Henry County reported high school graduation rates that were below the State average of 86%.



Source: Illinois State Board of Education, School Year 2011 & 2015 District Report Card Summary

## 1.6 Key Takeaways from Chapter 1

- ✓ **POPULATION DECREASED OVER THE LAST 5 YEARS.**
- ✓ **POPULATION IS AGING**
- ✓ **DECREASING WHITE POPULATION, INCREASING LATINO AND BLACK POPULATION**
- ✓ **TEEN BIRTHS PER 1,000 FEMALE POPULATION, AGES 15-19 HAVE INCREASED OVER THE LAST THREE YEARS BUT ARE BELOW THE AVERAGE ACROSS THE STATE OF ILLINOIS**
- ✓ **SINGLE FEMALE HEAD-OF-HOUSE-HOUSEHOLD REPRESENTS 9.6% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY**
- ✓ **UNEMPLOYMENT HAS DECREASED SLIGHTLY BUT IS HIGHER THAN THE STATE OF ILLINOIS**
- ✓ **MOST HENRY COUNTY SCHOOL DISTRICTS HAVE COMPARABLE GRADUATION RATES TO THE STATE AVERAGE**

**CHAPTER 2 OUTLINE**

- 2.1 Accessibility
- 2.2 Wellness
- 2.3 Access to Information
- 2.4 Physical Environment
- 2.5 Health Status
- 2.6 Key Takeaways from Chapter 2

## CHAPTER 2. PREVENTION BEHAVIORS

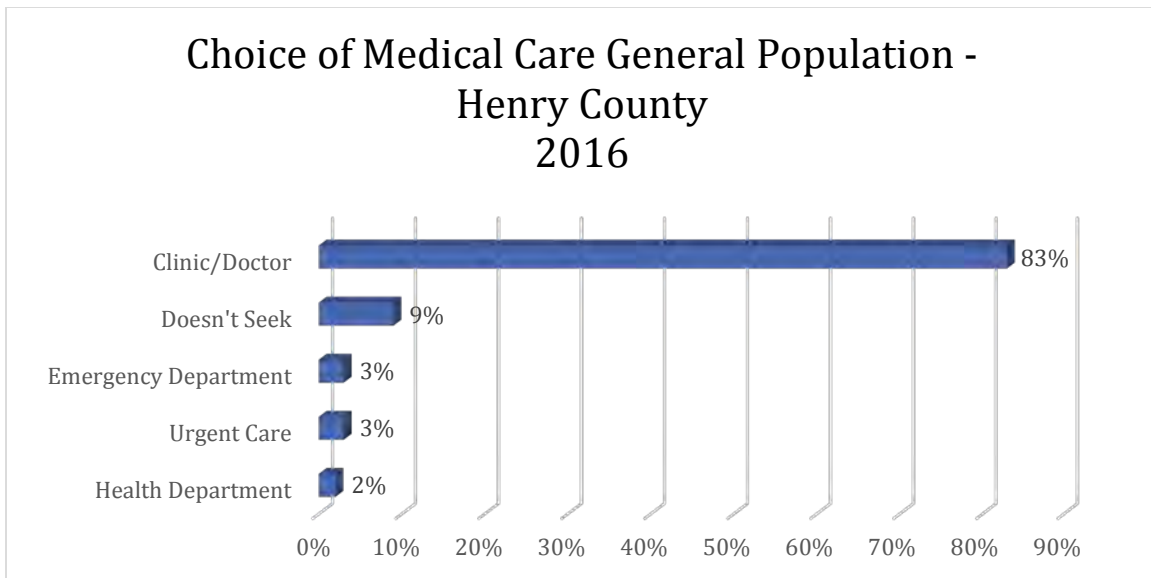
### 2.1 Accessibility

*Importance of the measure:* It is critical for healthcare services to be accessible. Therefore, accessibility to healthcare must address both the associated financial costs and the supply and demand of medical services.

#### Choice of Medical Care

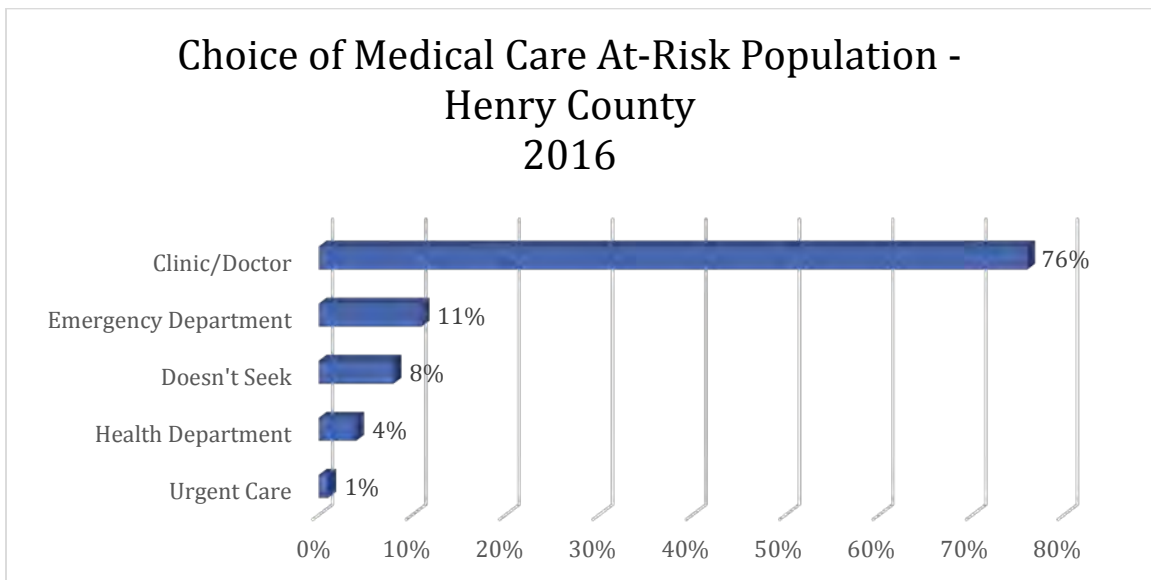
Survey respondents were asked to select the type of healthcare facility used when sick. Six different alternatives were presented, including clinic or doctor's office, emergency department, urgent-care facility, health department, no medical treatment, and other. The modified sample of 574 respondents was used for general population in order to more accurately reflect the demographic characteristics for Henry County.

The most common response for source of medical care was clinic/doctor's office, chosen by 83% of survey respondents. This was followed by not seeking medical attention (9%), the emergency department at a hospital (3%), urgent care (3%), and the health department (2%). This distribution of facility choice is quite different from more urban locations in the OSF system, where there has been more significant usage of urgent care facilities. This may be a result of the lack of urgent care facilities in Henry County.



Source: CHNA Survey

For the at-risk population, the most common response for choice of medical care was also clinic/doctor's office (76%). This was followed by the emergency department at a hospital (11%), not seeking medical attention (8%), urgent care facilities (4%), and the health department (1%).



Source: CHNA Survey

### Demographic Factors Related to Choice of Medical Care

Several demographic characteristics show significant relationships with an individual's choice of medical care. The following relationships were found using correlational analyses:

**Clinic/Doctor's Office** tends to be used more often by women, older people, White people and those with higher education and income. Clinic/Doctor's office is used less often by Latino people and the homeless.

**Urgent Care** does not show significant demographic correlations.

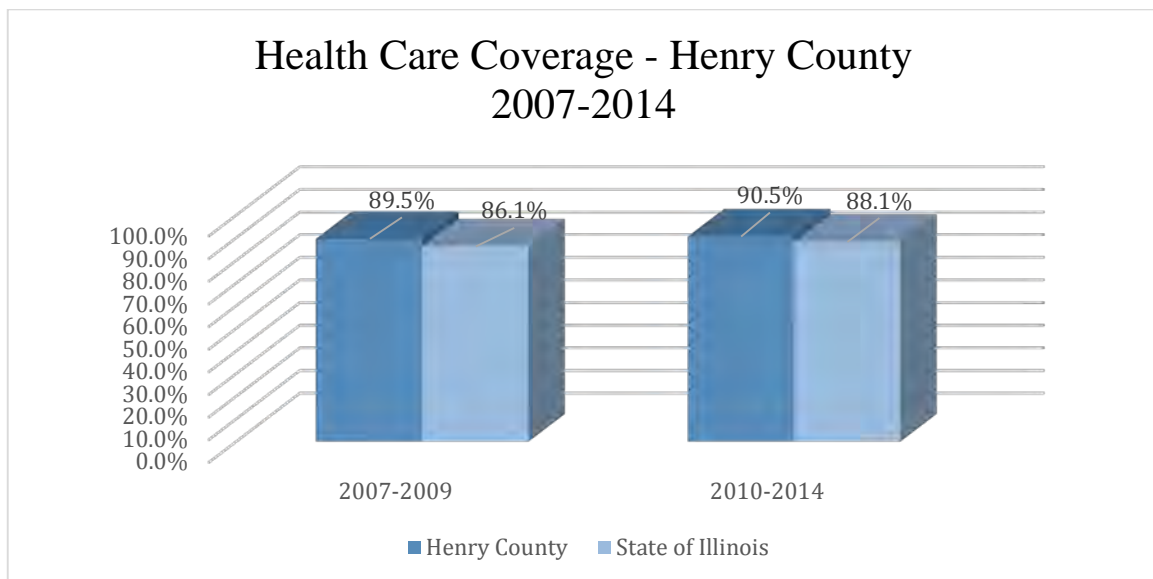
**Emergency Department** tends to be used more often by people of Latino ethnicity.

**Do Not Seek Medical Care** is chosen more often by men, younger people and Latino people.

**Health Department** is chosen more often by younger people and homeless people.

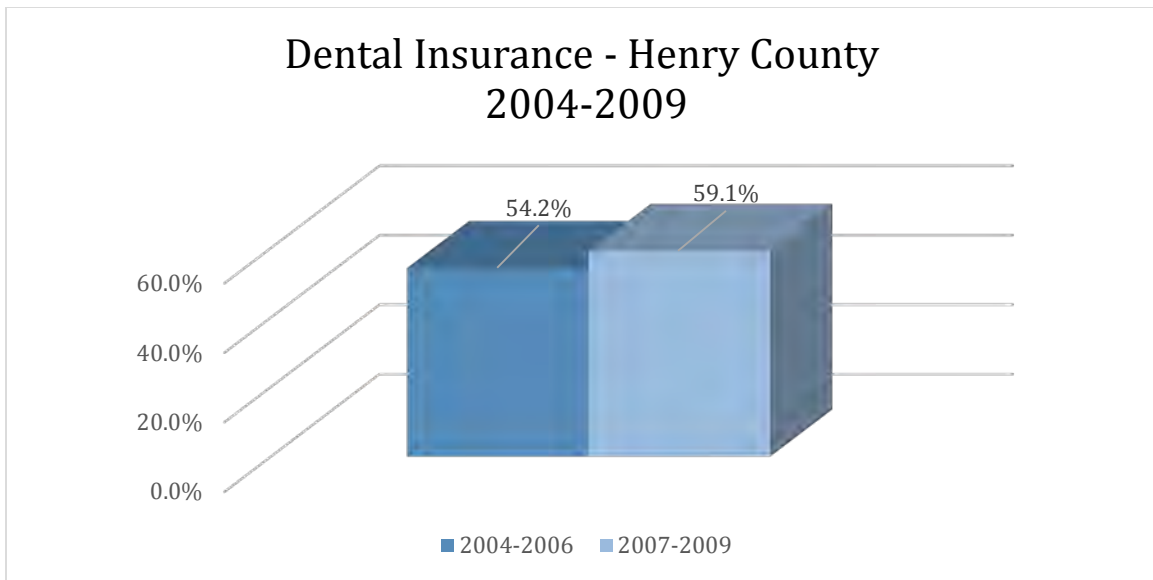
## Insurance Coverage

With regard to medical insurance coverage, data gathered from the Illinois Behavioral Risk Factor Surveillance System show that residents in Henry County possess healthcare coverage at a lower rate (86.1%) compared to the State of Illinois (88.1%).



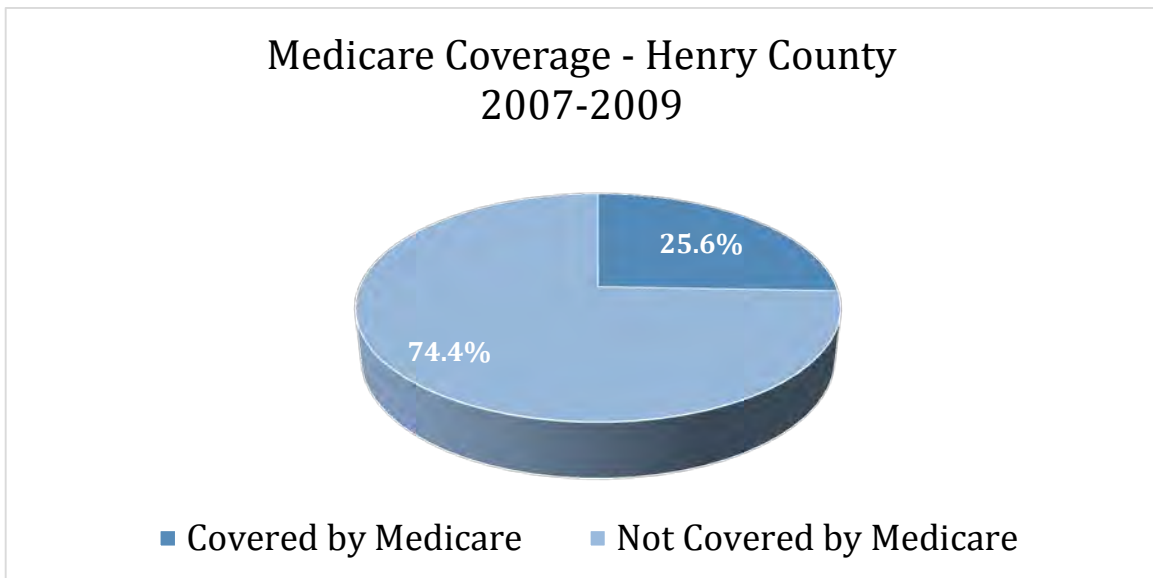
*Source: Illinois Behavioral Risk Factor Surveillance System*

With regard to dental insurance, 59.1% of Henry County residents possessed dental insurance coverage in 2007-2009 compared to 54.2% of Henry County residents in 2004-2006. These are the most recent data, as the BRFSS has not been updated for this metric since 2009.



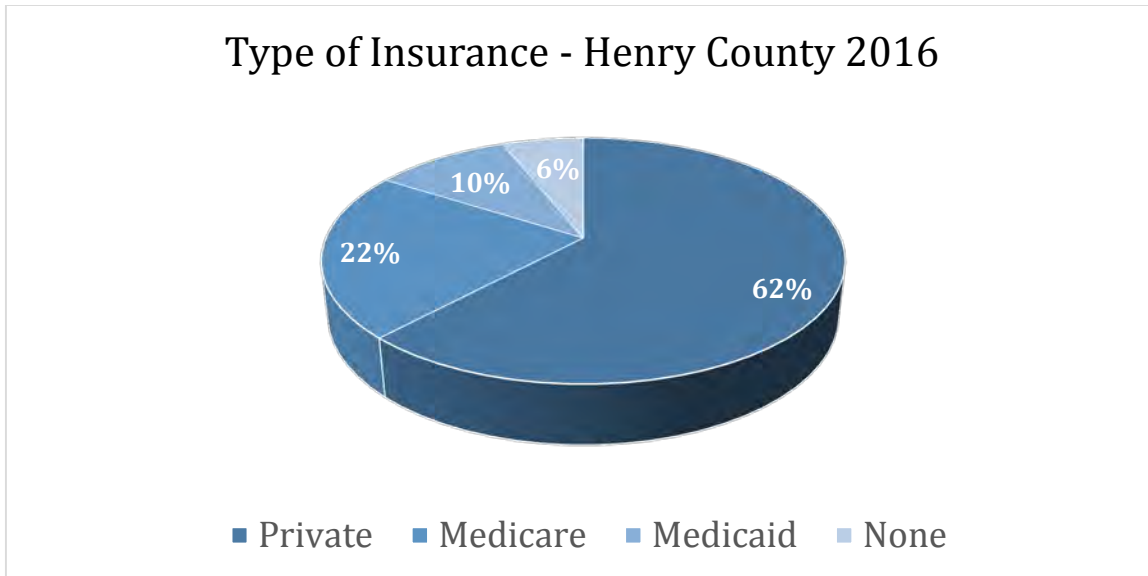
Source: Illinois Behavioral Risk Factor Surveillance System

With regard to Medicare Coverage, approximately 25.6% of Henry County residents received Medicare coverage between 2007 and 2009. These are the most recent data, as the BRFSS has not been updated for this metric since 2009.



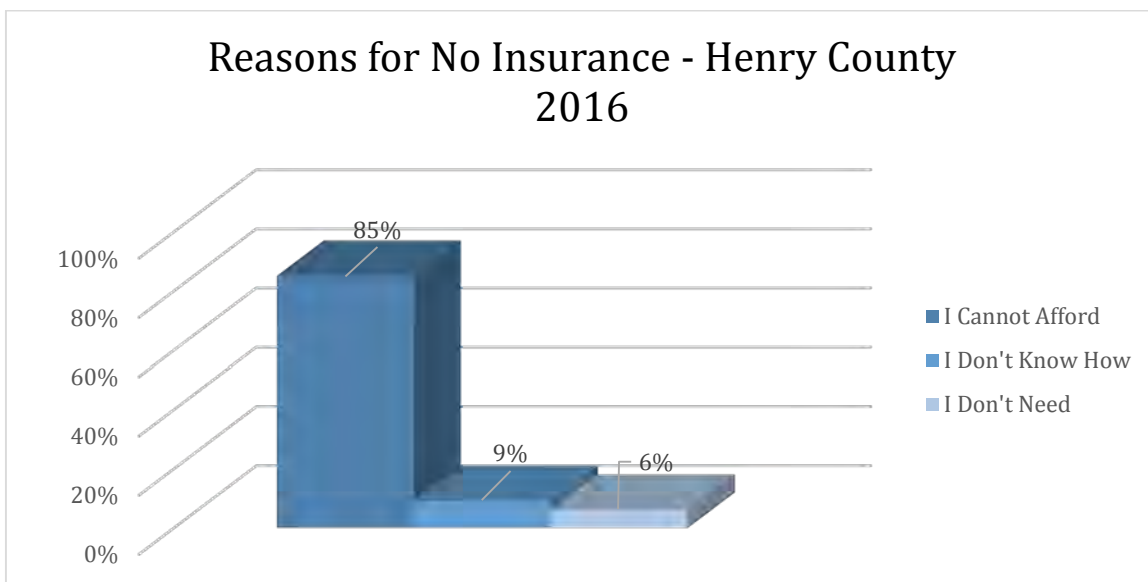
Source: Illinois Behavioral Risk Factor Surveillance System

A more precise analysis for insurance coverage is possible with data from the CHNA survey. According to survey data, 62% of the residents in Henry County are covered by private insurance.



Source: CHNA Survey

Data from the survey show that for the 6% of individuals who do not have insurance, the most common reason was cost.



Source: CHNA Survey

### ***Demographic Factors Related to Type of Insurance***

Several demographic characteristics show significant relationships with an individual’s type of insurance. The following relationships were found using correlational analyses:

**Medicare** tends to be used more frequently by older people, White people, and those with lower education and income.

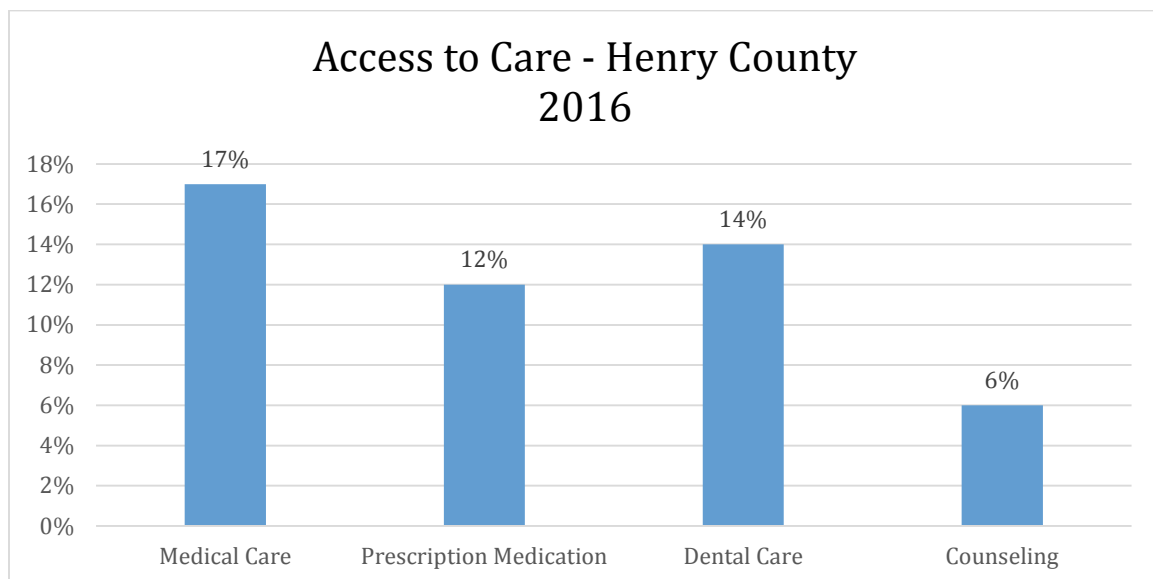
**Medicaid** tends to be used more frequently by younger people, Black people, homeless people, and those with lower education and income.

**Private Insurance** is used more often by younger people, White people, and those with higher education and income.

**No Insurance** tends to be reported more often by younger people, Latino people, those with lower education and income, and the homeless.

## Access to Care

In the CHNA survey, respondents were asked, “Was there a time when you needed care but were not able to get it?” Access to four types of care were assessed: medical care, prescription medications, dental care and counseling. Survey results show that 17% of the population did not have access to medical care when needed; 12% of the population did not have access to prescription medications when needed; 14% of the population did not have access to dental care when needed; and 6% of the population did not have access to counseling when needed.



Source: CHNA Survey

### ***Demographic Factors Related to Access to Care***

Several demographic characteristics show a significant relationship with an individual’s ability to access care when needed. The following relationships were found using correlational analyses:

**Access to medical care** tends to be higher for older people, White people, and lower for Latino residents and the homeless.

**Access to prescription medications** tends to be higher for White people, and those with higher education and income. Homeless people are less likely to have access to prescription medications.

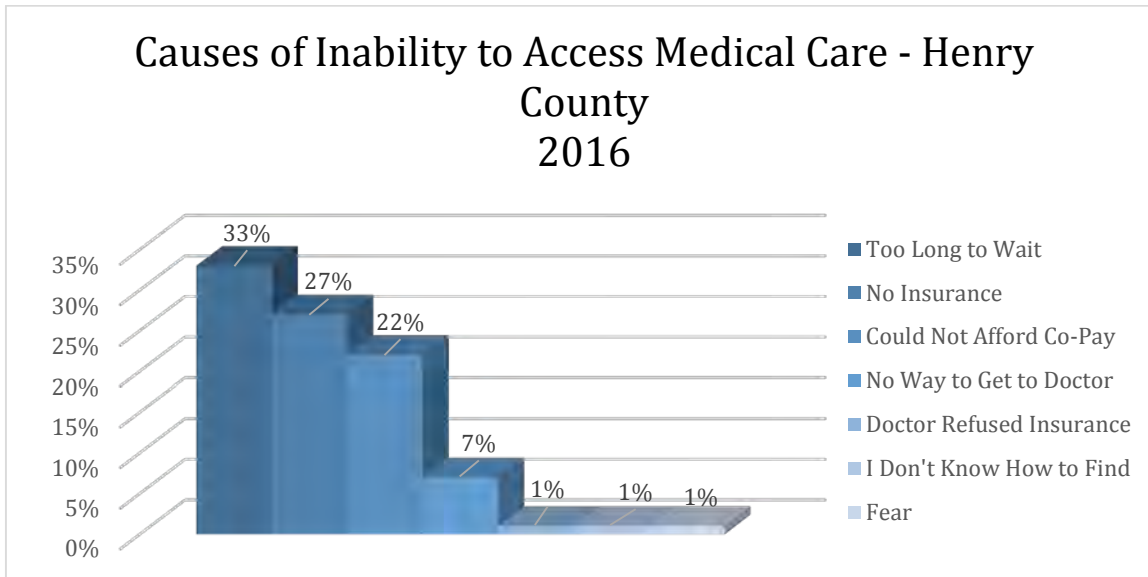
**Access to dental care** tends to be greater for people with the following characteristics: older people, White people, and those with higher education and higher income. Homeless people are less likely to have access to dental care.

**Access to counseling** tends to be rated higher by White people.



**Reasons for No Access – Medical Care**

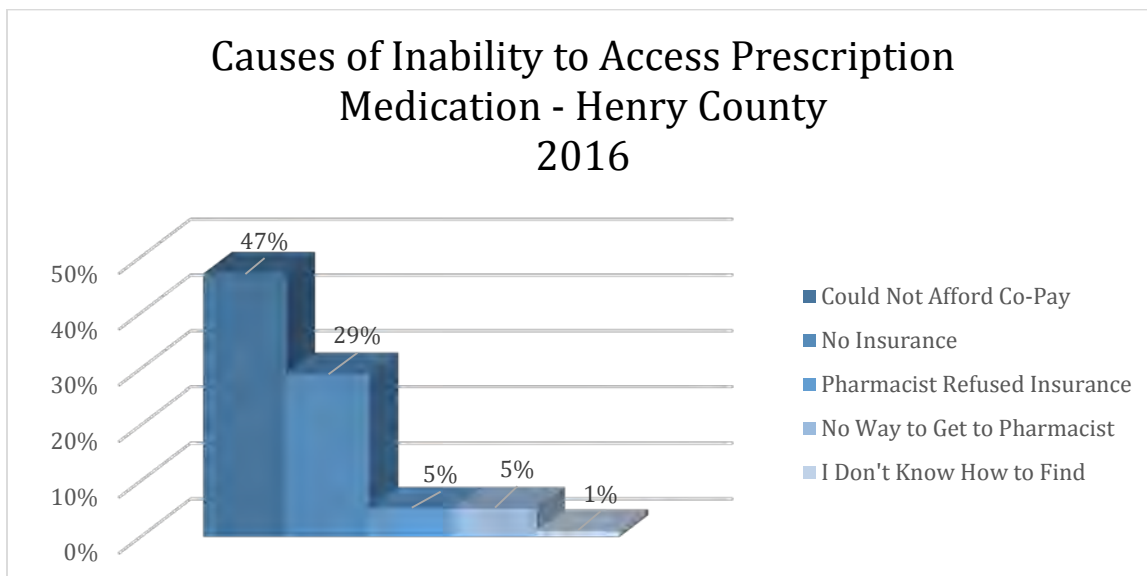
Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. The leading causes of the inability to gain access to medical care were too long to wait for an appointment (33%), no insurance (27%), and the inability to afford the copay (22%). Refusal of insurance by physician (7%) was also relatively frequent. Note that total percentages do not equal 100% as respondents could choose more than one answer or did not respond to the question.



Source: CHNA Survey

**Reasons for No Access – Prescription Medication**

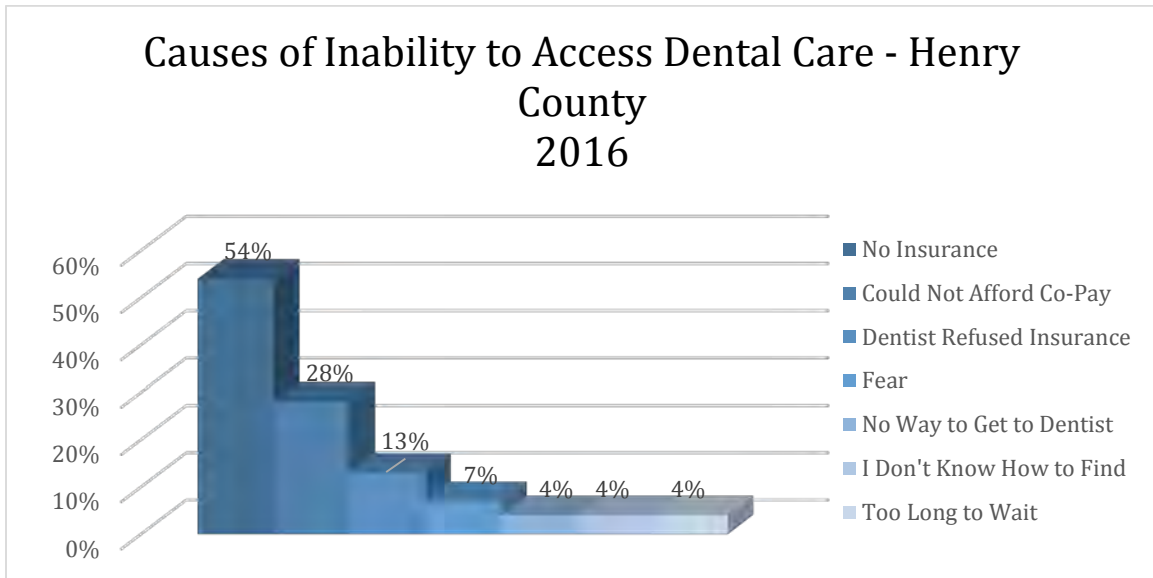
Survey respondents who reported they were not able to get prescription medications when needed were asked a follow-up question. In Henry County, the leading causes of the inability to gain access to prescription medicine were the inability to afford copayments or deductibles (47%) and no insurance (29%). Note that total percentages do not equal 100% as respondents could choose more than one answer or did not respond to the question.



Source: CHNA Survey

**Reasons for No Access – Dental Care**

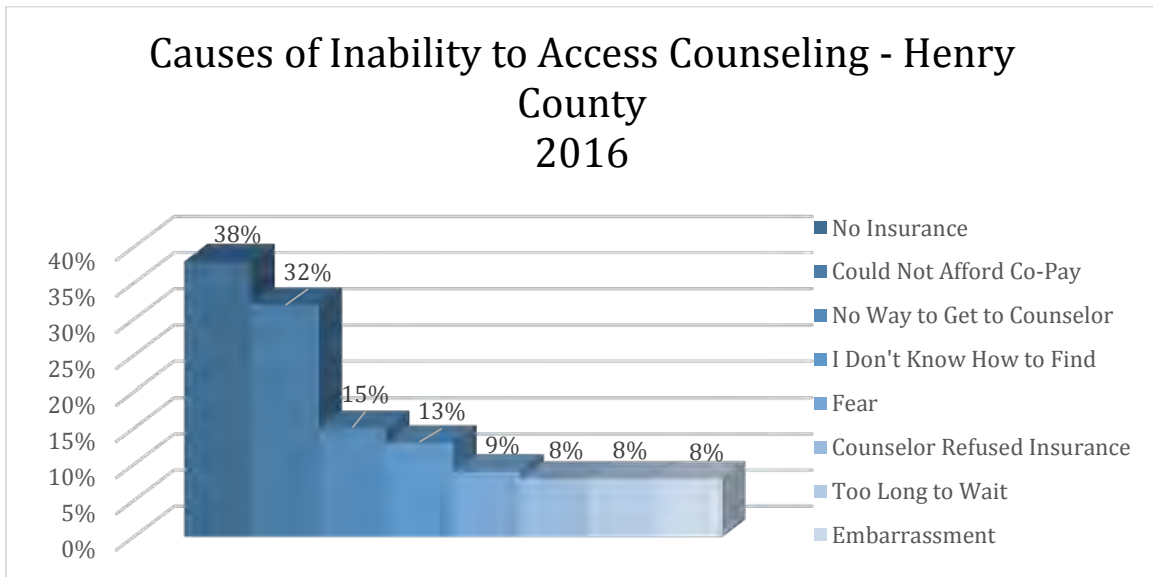
Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading causes of inability to gain access to dental care were no insurance (54%), and the inability to afford copayments or deductibles (28%). No way to get to the dentist was also a frequently cited cause, with 13%. Note that total percentages do not equal 100% as respondents could choose more than one answer.



Source: CHNA Survey

**Reasons for No Access – Counseling**

Survey respondents who reported they were not able to get counseling when needed were asked a follow-up question. In Henry County, the leading causes of the inability to gain access to counseling were the lack of insurance (38%), inability to afford co-pay (32%), no way to get to the counselor (15%), and the inability to find (13%). Note that total percentages do not equal 100% as respondents could choose more than one answer.



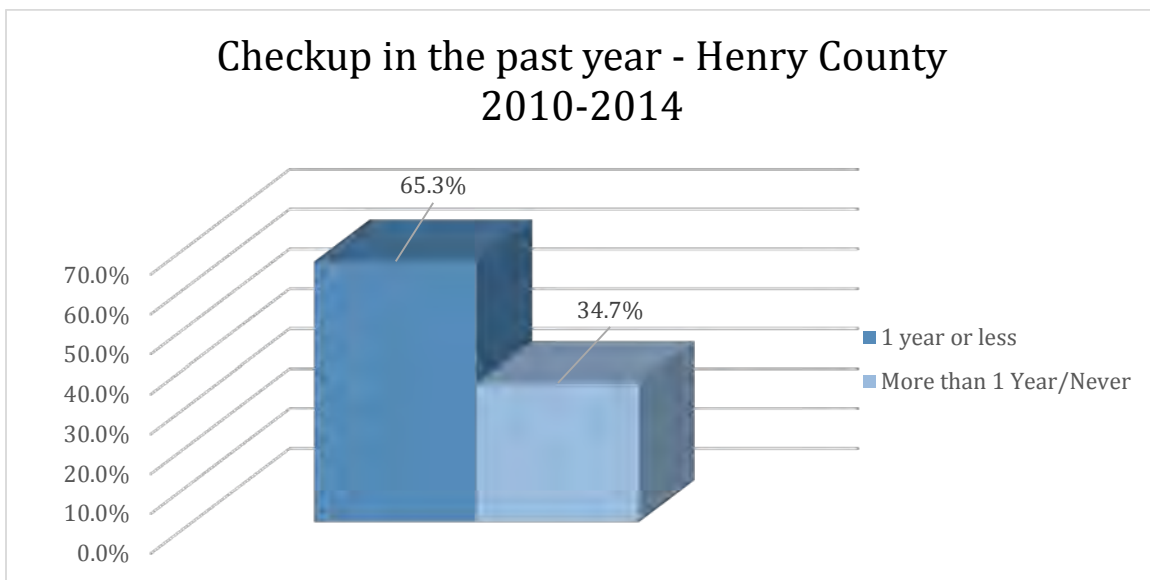
Source: CHNA Survey

## 2.2 Wellness

*Importance of the measure:* Preventative healthcare measures, including scheduling a routine well-visit, getting a flu shot, engaging in a healthy lifestyle, and undertaking screenings for diseases are essential to combating morbidity and mortality while reducing healthcare costs.

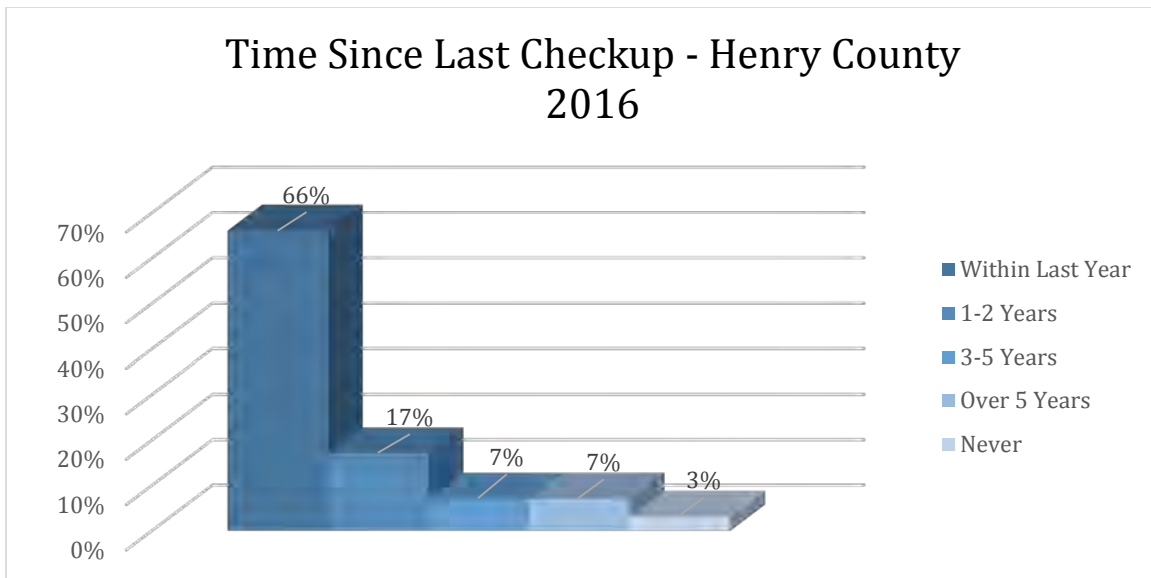
### Frequency of Checkup

Numerous health problems can be minimized when detected early. Therefore, regularly scheduled checkups can be very important. According to the latest data from the Illinois BRFSS, 65.3% of residents in Henry County report having had a routine checkup within the last year.



Source: Illinois Behavioral Risk Factor Surveillance System

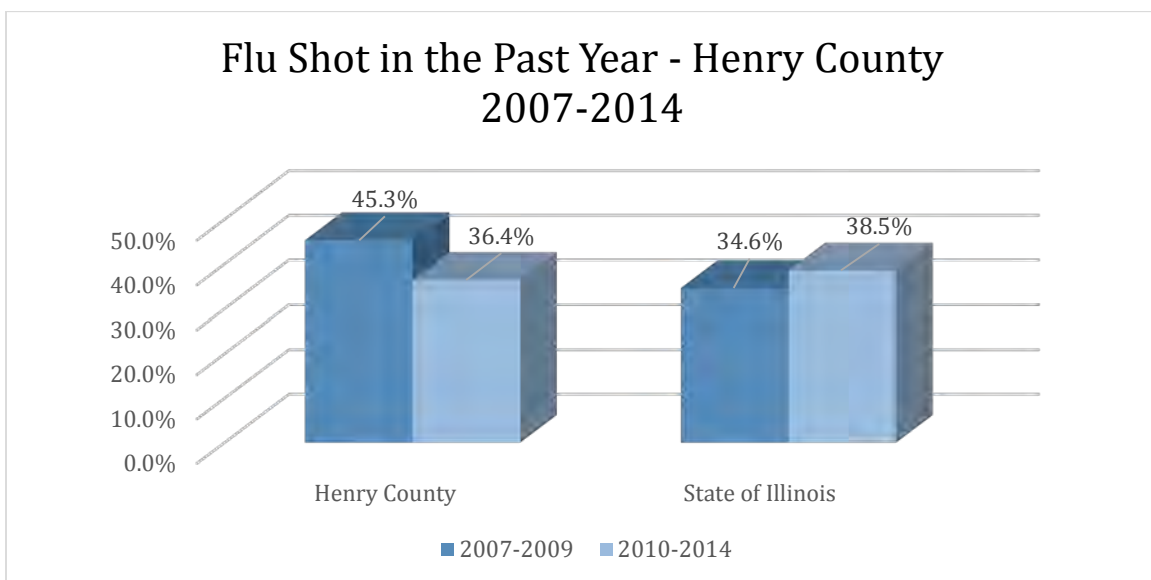
Results from the CHNA survey show a similar percentage of residents getting a checkup. Survey results show that 66% of Henry County residents have had a checkup in the last year.



Source: CHNA Survey Data

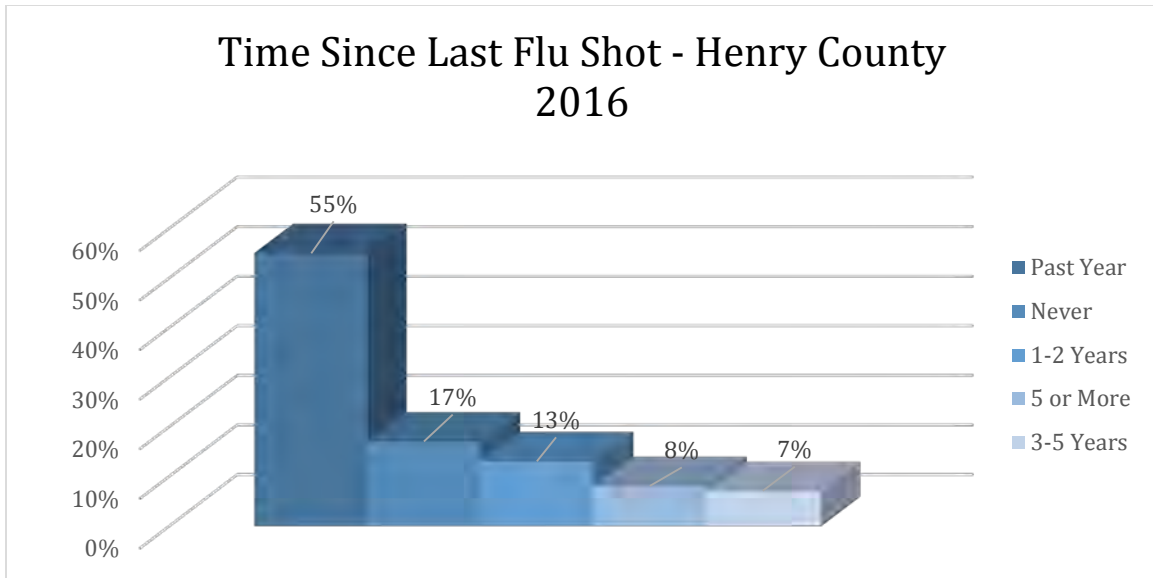
## Frequency of Flu Shots

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The chart below shows that the percentage of people who have had a flu shot in the past year is 36.4% for Henry County in 2010-2014 compared to 45.3% for 2007-2009. During the same timeframe, the State of Illinois realized an increase.



Source: Illinois Behavioral Risk Factor Surveillance System

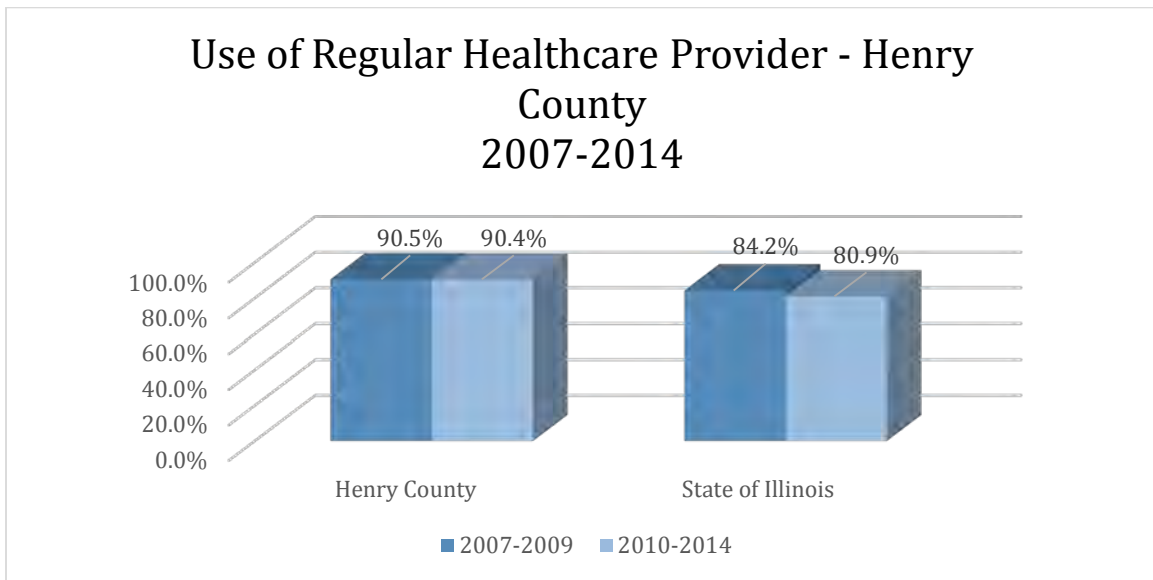
CHNA survey data provide additional insights into prevalence of flu shots, and a more positive result for Henry County.



Source: CHNA Survey

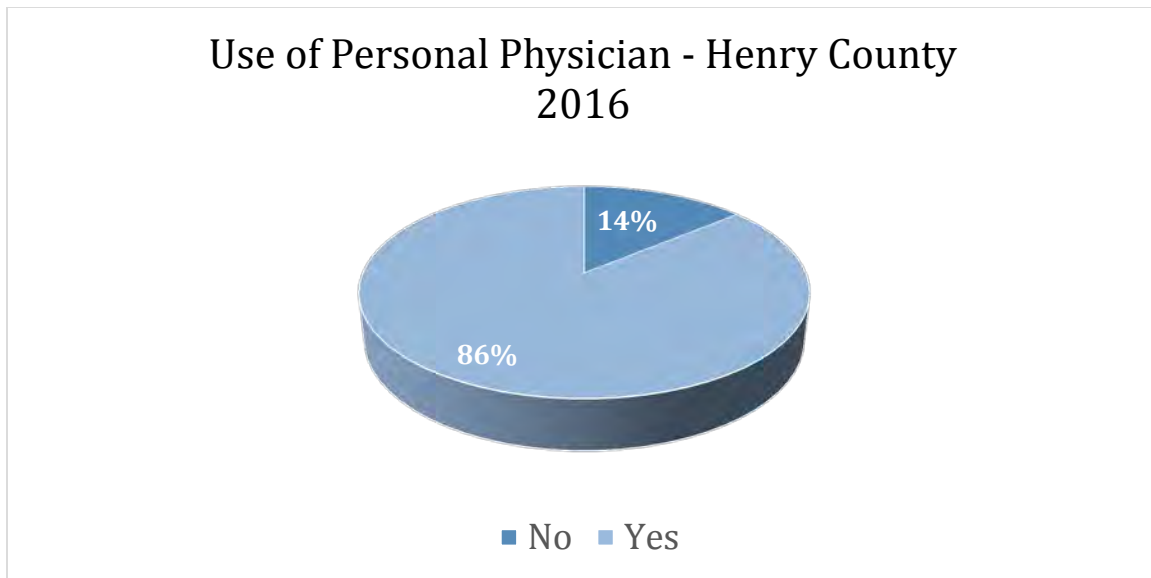
## Usual Healthcare Provider

In Henry County, the most recent secondary data indicate 90.4% of residents utilize a regular healthcare provider, similar to 2007-2009. The percentage of residents in Henry County reporting a usual healthcare provider is higher than the State of Illinois average, which fell slightly.



Source: Illinois Behavioral Risk Factor Surveillance System

Similarly, the CHNA survey asked respondents if they had a personal physician. Having a personal physician suggests that individuals are more likely to get wellness check-ups and less likely to use an emergency department as a primary healthcare service. According to survey data, 86% of residents have a personal physician.



Source: CHNA Survey

### ***Demographic Factors Related to Wellness***

Multiple demographic characteristics show significant relationships with wellness. The following relationships were found using correlational analyses:

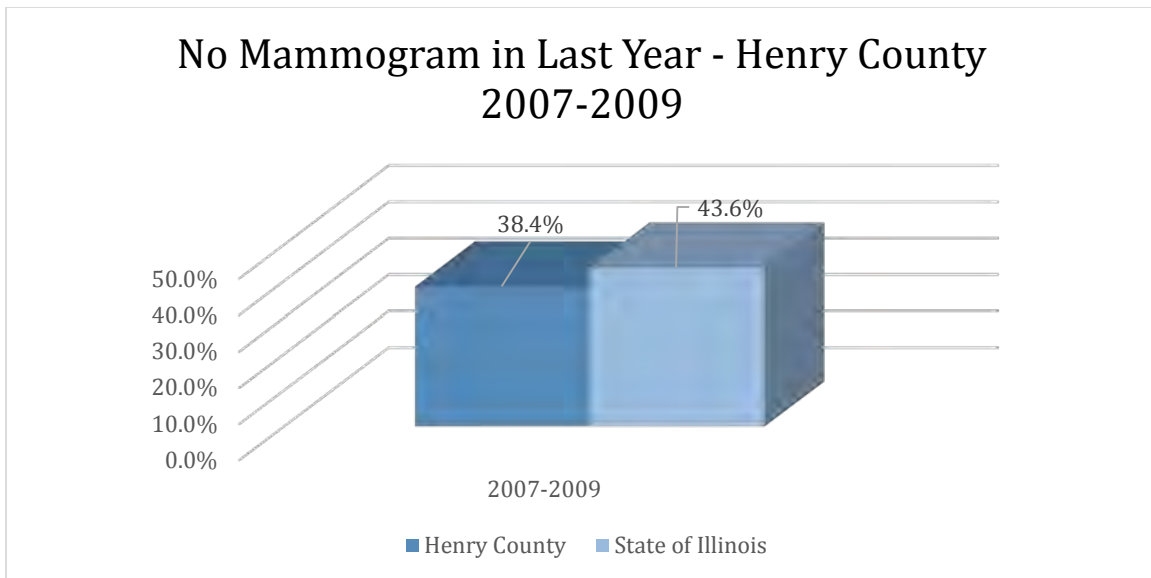
**Frequency of checkup** tends to be higher for women, older people and lower for Latino and homeless people.

**Frequency of flu shot** tends to be higher for older people and those with higher education. Latino people and the homeless receive a flu shot less often.

**Having a personal physician** tends to be more likely for older people, White people, and those with higher income. Latino people are less likely to report having a personal physician.

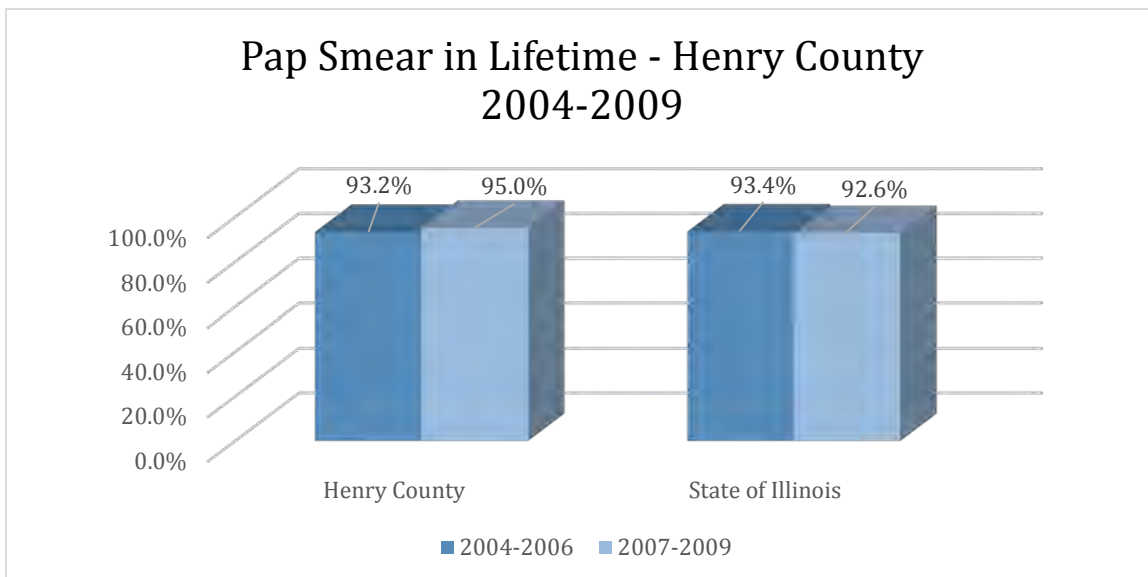
### **Women's Healthcare**

Using the most recent available data from 2007-2009, 38.4% of residents from Henry County reported they had not had a mammogram within the last year.



Source: Illinois Behavioral Risk Factor Surveillance System

Research suggests pap smears are important in detecting pre-cancerous cells in the uterus and cervix. The percentage of women who have ever had a pap smear has increased slightly between 2004-2006 and 2007-2009. Compared to the State of Illinois, Henry County is now slightly higher.



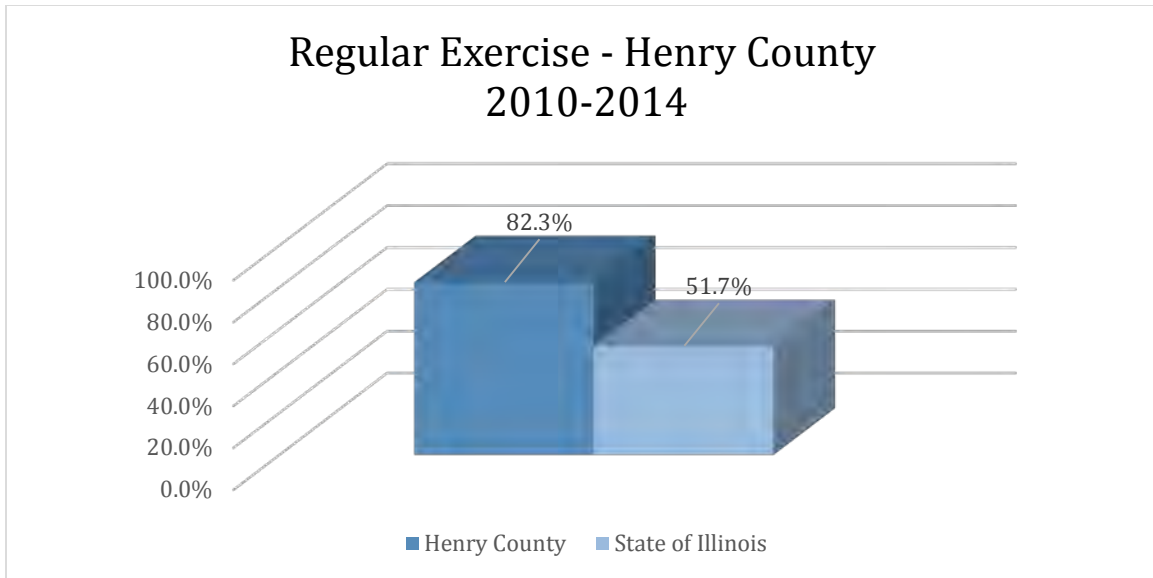
Source: Illinois Behavioral Risk Factor Surveillance System

## Healthy Lifestyle

A healthy lifestyle, comprised of regular physical activity and balanced diet, has been shown to increase physical, mental, and emotional well-being.

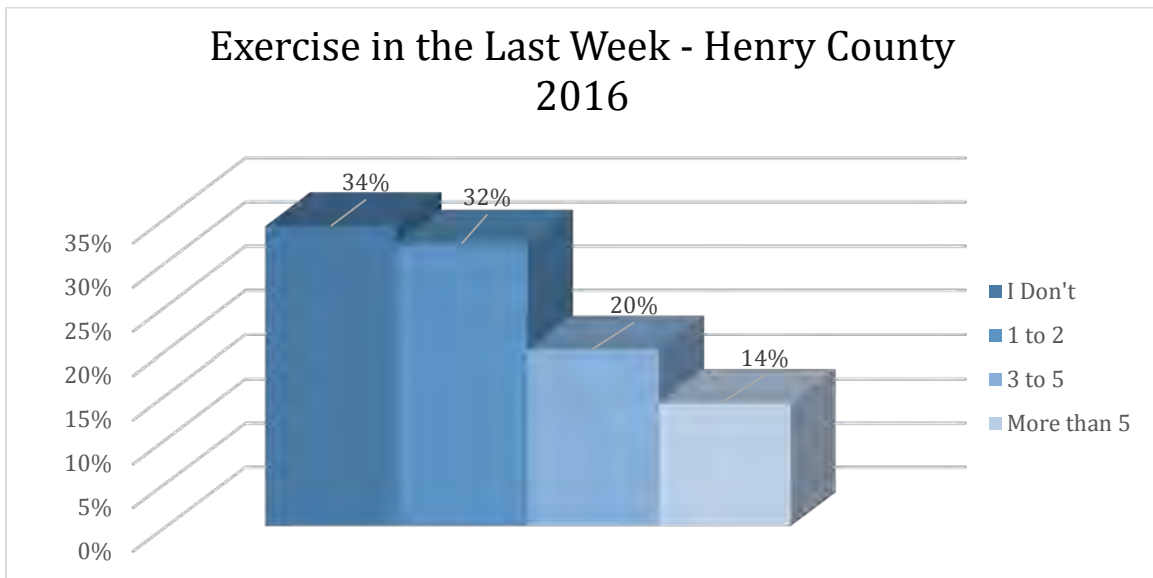
### Physical Exercise

According to recent data, 82.3% of the residents in Henry County exercise. The percentage of individuals who exercise in Henry County is higher than the State of Illinois.



Source: Illinois Behavioral Risk Factor Surveillance System

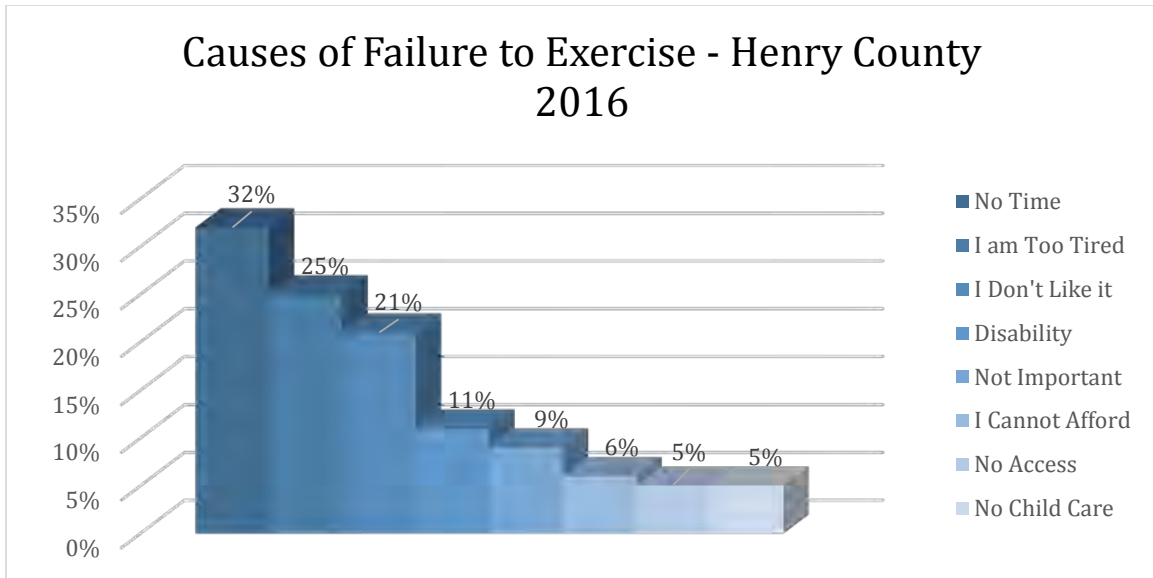
CHNA survey data allow for a more detailed assessment of exercise. Specifically, 34% of respondents indicated that they do not exercise at all, while 32% of residents exercise 1-2 times per week.



Source: CHNA Survey

To find out why some residents do not exercise at all, a follow up question was asked. The most common reasons for not exercising are not having enough time or energy and a dislike of exercise.

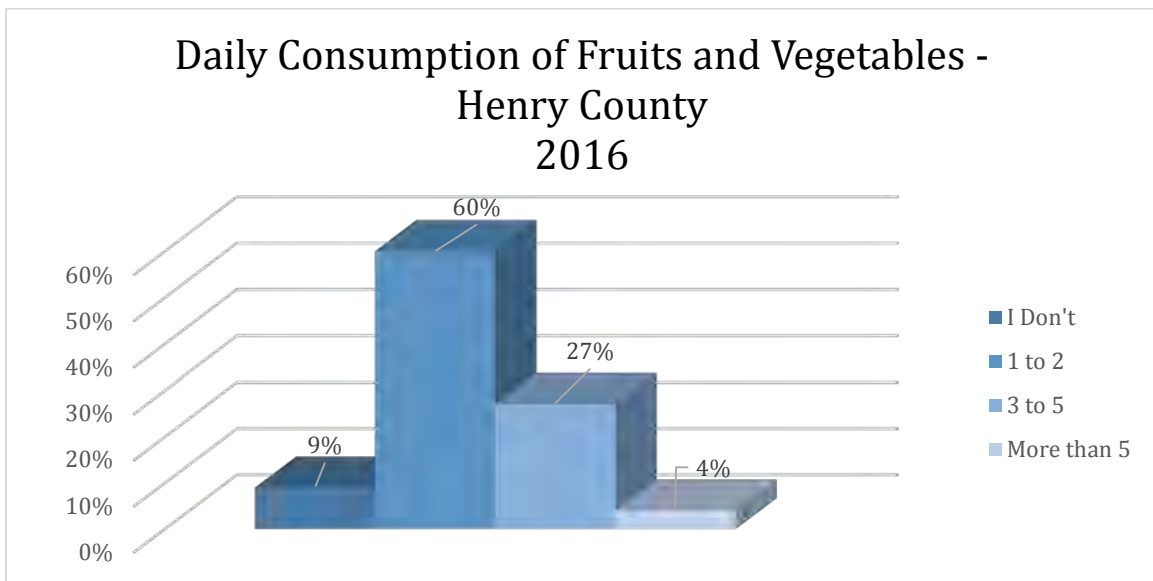




Source: CHNA Survey

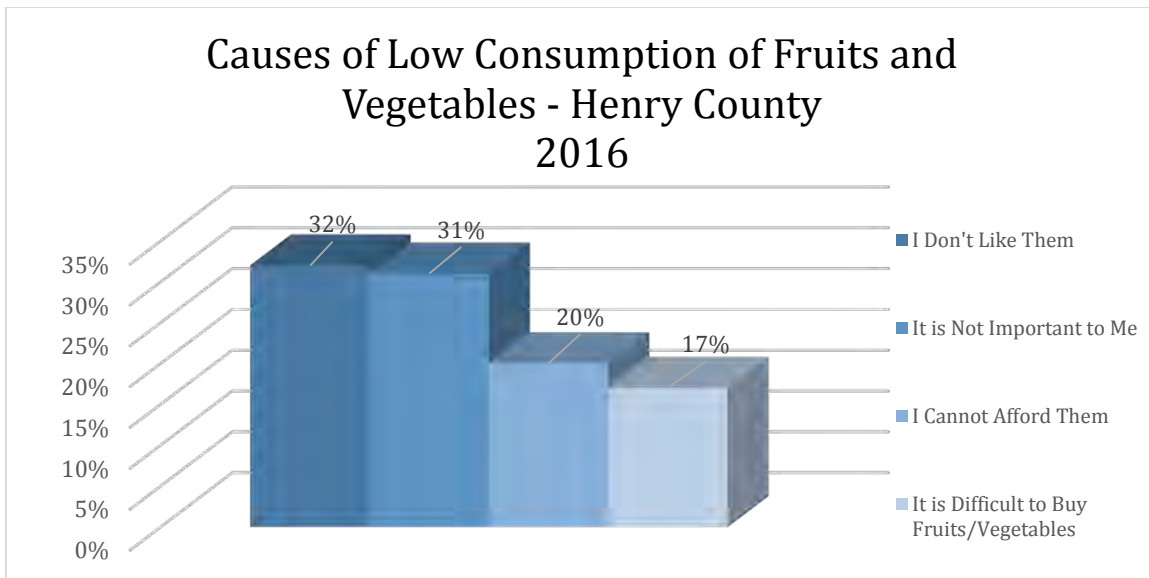
### Healthy Eating

Nutrition and diet are critical to preventative care. Over two-thirds (69%) of Henry County residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of Henry County residents who consume five or more servings per day is only 4%.



Source: CHNA Survey

Those individuals who indicated they do not eat any fruits or vegetables were asked a follow up question. Reasons most frequently given for failing to eat more fruits and vegetables are dislike of fruits and vegetables (32%), a lack of importance (31%), the expense involved (20%), and the difficulty to buy fruits and vegetables (17%).



Source: CHNA Survey

### ***Demographic Factors Related to Healthy Lifestyle***

There are multiple demographic characteristics showing significant relationships with healthy lifestyle.

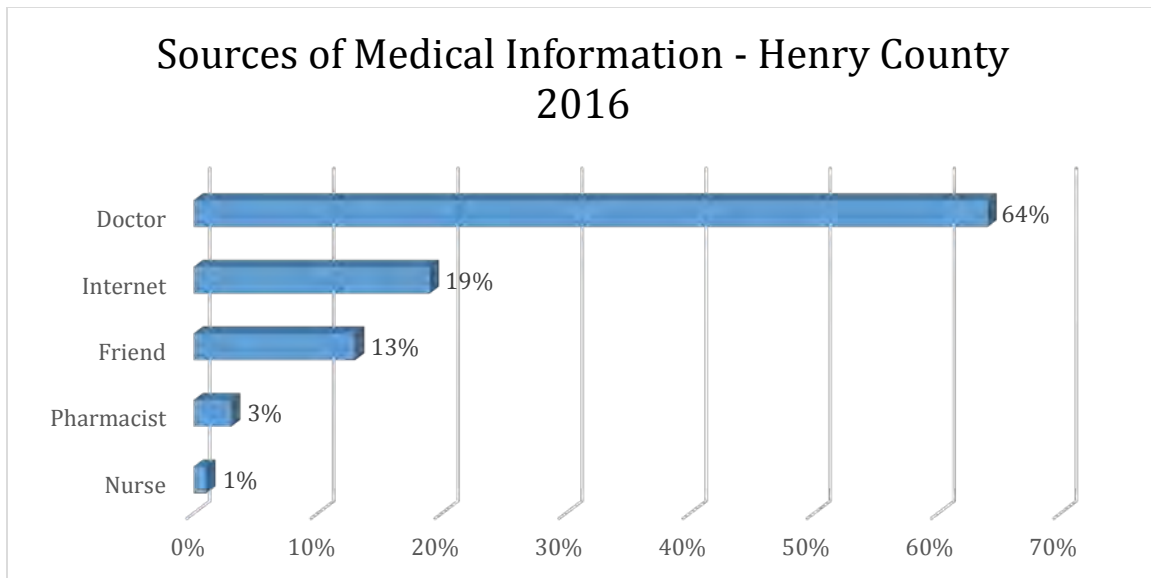
**Frequency of exercise** tends to be higher for people with higher education and income.

**Frequency of fruit and vegetable consumption** tends to be higher for women and people with higher education.

## **2.3 Access to Information**

*Importance of the measure:* It is important to understand how people access medical information. The more proactive the population becomes in managing its own health, the more important access to accurate information becomes.

Respondents were asked, “Where do you get most of your medical information?” The vast majority of respondents obtained information from their doctor. While the Internet was the second most common choice, it was significantly lower than information from doctors.



Source: CHNA Survey

### ***Demographic Factors Related to Access to Information***

Several demographic characteristics show significant relationships with frequency of access to various sources of information. The following relationships were found using correlational analyses:

**Access to Information from a Doctor** tends to be higher for women, older people and White people, and lower for homeless people.

**Access to Information from a Friend** tends to be higher for men, younger people, Latino people, and the homeless.

**Access to Information from the Internet** tends to be higher for younger people, White people, and those with higher education and income.

**Access to Information from a Pharmacy** does not show significant relationships.

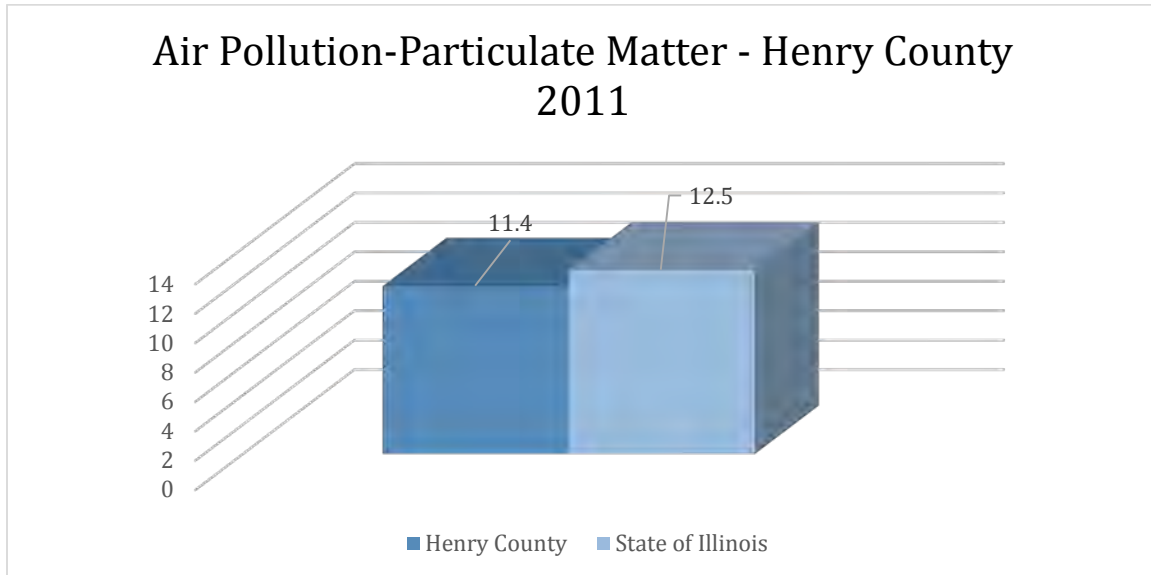
**Access to Information from a Church Nurse** does not show significant relationships.

## **2.4 Physical Environment**

### *Importance of the measure:*

According to the County Health Rankings, Air Pollution - Particulate Matter (APPM) is the average daily density of fine particulate matter in micrograms per cubic meter (PM<sub>2.5</sub>) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases are emitted from power plants, manufacturing facilities and automobiles.

The relationship between elevated air pollution, particularly fine particulate matter and ozone, and compromised health has been well documented. Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. The APPM for Henry County (11.4) is slightly lower than the State average of 12.5.



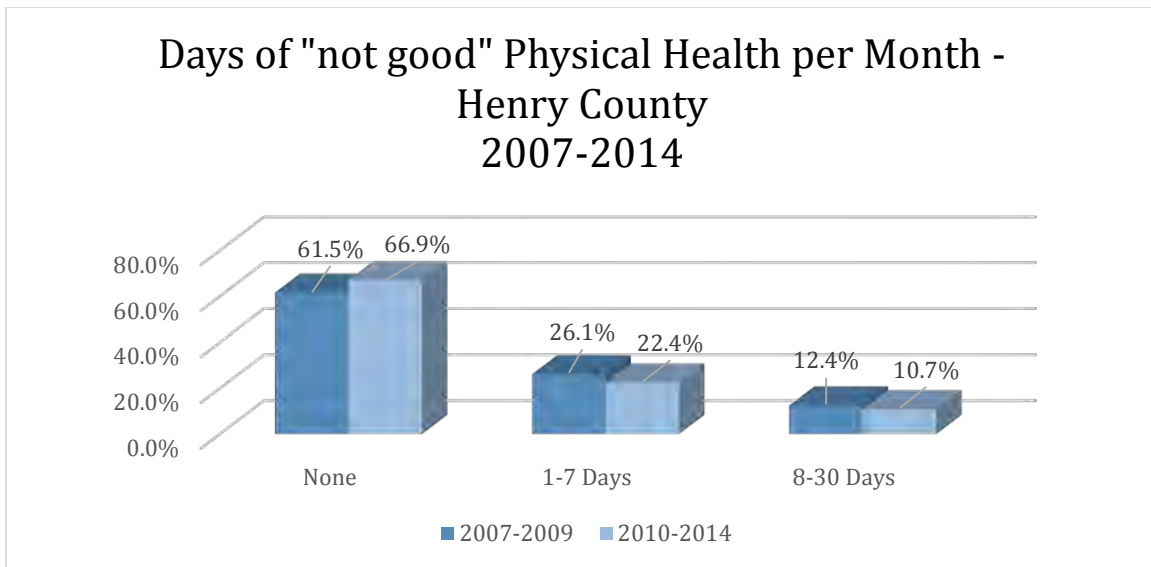
Source: County Health Rankings 2011 Data

## 2.5 Health Status

*Importance of the measure:* Self-perceptions of health can provide important insights to help manage population health. Not only do self-perceptions provide benchmarks regarding health status, but they can also provide insights into how accurately people perceive their own health.

### Physical Health

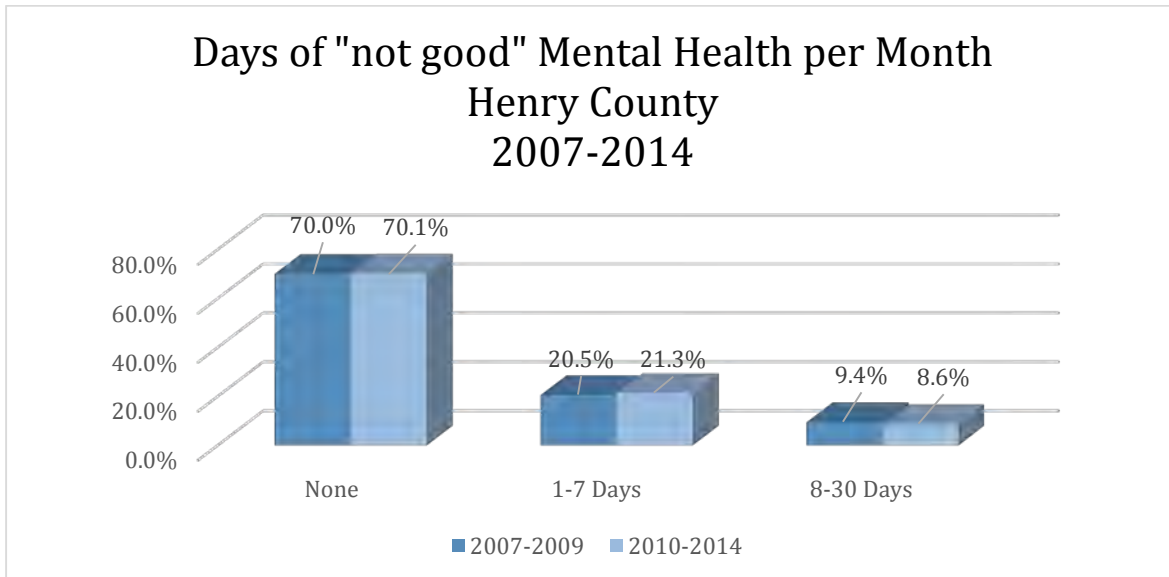
There was a decrease in the percentage of Henry County residents reporting they felt physically unhealthy on 8 or more days per month in 2009 (12.4%) versus 2014 (10.7%).



Source: Illinois Behavioral Risk Factor Surveillance System

### Mental Health

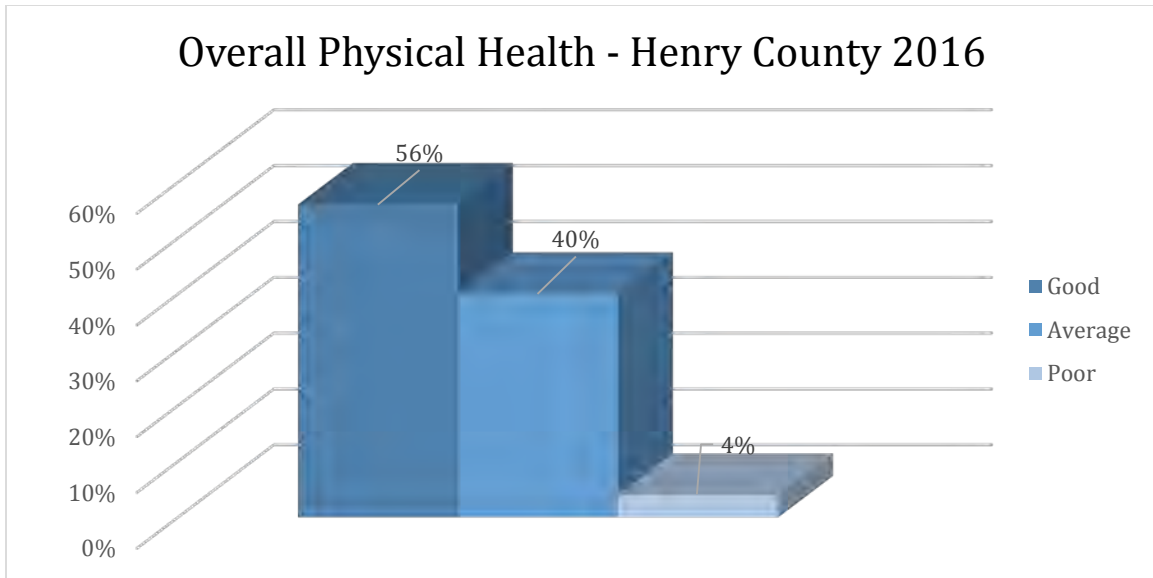
Over 20% of residents in Henry County reported they had experienced 1-7 days with poor mental health per month in 2007-2009, and 9.4% felt mentally unhealthy on 8 or more days per month. In 2010-2014, there was a slight increase in the number of people that reported poor mental health for 1-7 days and a slight decrease in people that reported poor mental health 8 or more days per month.



Source: Illinois Behavioral Risk Factor Surveillance System

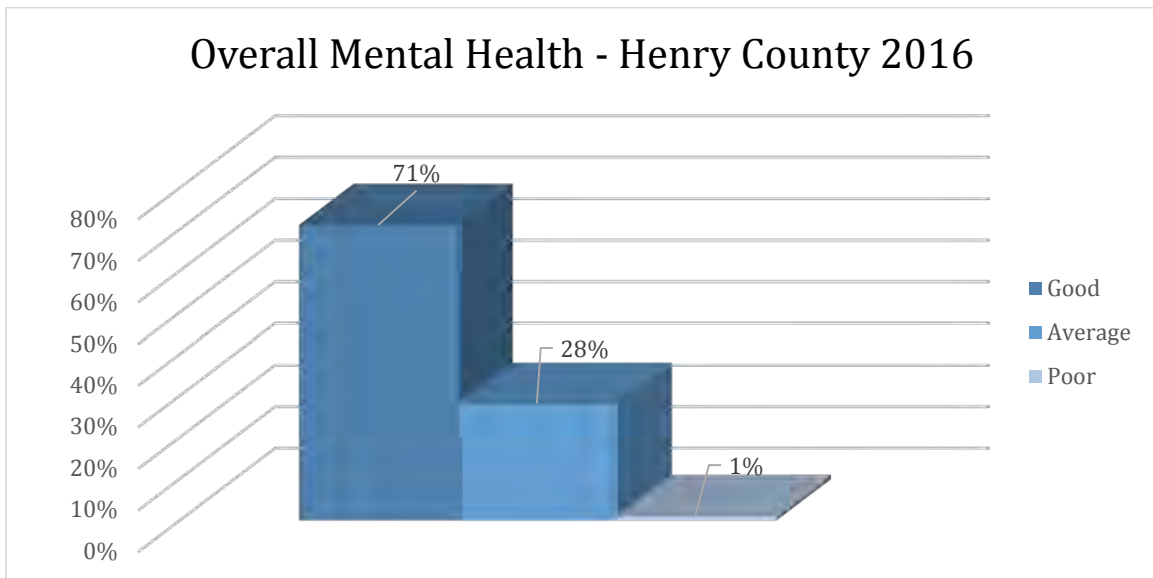
### Self Perceptions of Overall Health

Over half (56%) of Henry County Residents report having good overall physical health, while 4% rated themselves as having poor physical health.



Source: CHNA Survey

In regard to overall mental health, 71% of respondents stated they have good overall mental health and 1% stated it is poor.



Source: CHNA Survey

## Demographic Factors Related to Self Perceptions of Health

Demographic characteristics show significant relationships with self-perceptions of health. The following relationships were found using correlational analyses:

*Perceptions of physical health* tend to be higher for men and those with higher education and income. Homeless people were less likely to report good physical health.

*Perceptions of mental health* tend to be higher for older people and those with higher education and income. Latino people and homeless people were less likely to report good mental health.

## 2.6 Key Takeaways from Chapter 2

- ✓ **ED IS CHOSEN BY 11% OF THE AT-RISK POPULATION AS THE PRIMARY SOURCE OF HEALTHCARE**
- ✓ **FOR ALL RESIDENTS, 9% CHOOSE NOT TO SEEK MEDICAL CARE**
- ✓ **THE MAJORITY OF THE POPULATION EXERCISES TWO OR FEWER TIMES PER WEEK**
- ✓ **THE MAJORITY OF HENRY COUNTY RESIDENTS EAT 2 OR FEWER SERVINGS OF FRUITS AND VEGETABLES PER DAY**
- ✓ **MOST RESIDENTS HAVE HIGH SELF-PERCEPTIONS OF BOTH PHYSICAL AND MENTAL HEALTH**

CHAPTER 3 OUTLINE

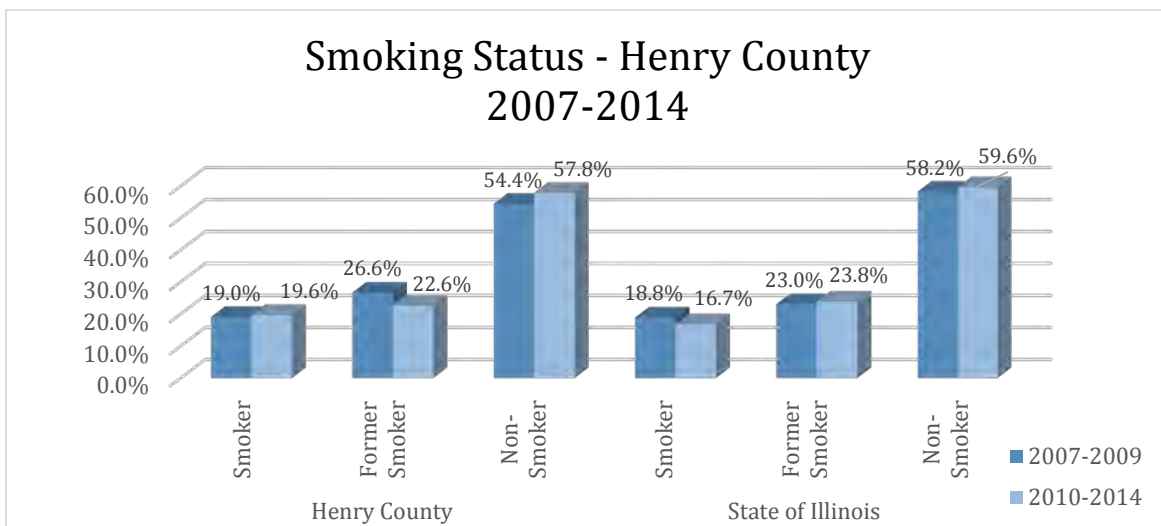
- 3.1 Tobacco Use
- 3.2 Drug and Alcohol Use
- 3.3 Overweight and Obesity
- 3.4 Predictors of Heart Disease
- 3.5 Key Takeaways from Chapter 3

# CHAPTER 3. SYMPTOMS AND PREDICTORS

## 3.1 Tobacco Use

*Importance of the measure:* In order to appropriately allocate healthcare resources, a thorough analysis of the leading indicators regarding morbidity and disease must be conducted. In this way, healthcare organizations can target affected populations more effectively. Research suggests tobacco use facilitates a wide variety of adverse medical conditions.

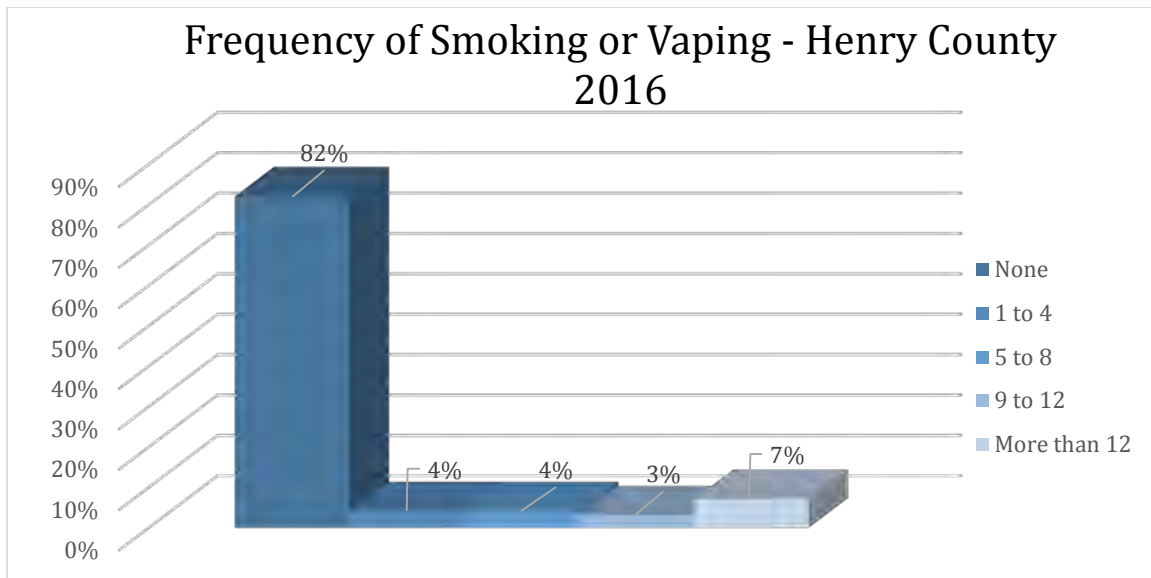
Smoking rates in Henry County are above the State of Illinois averages. There was a slight increase in the percentage of Henry County residents reporting they were current smokers between 2007-2009 (19%) and 2010-2014 (19.6%). There was also an increase in the percentage of Henry County residents reporting they were current non-smokers between 2007-2009 (54.4%) and 2010-2014 (57.8%).



Source: Illinois Behavioral Risk Factor Surveillance System

CHNA survey data show 82% of Henry County Respondents do not smoke and only 7% state they smoke more than 12 cigarettes (or vape) per day.





Source: CHNA Survey

## Demographic Factors Related to Smoking

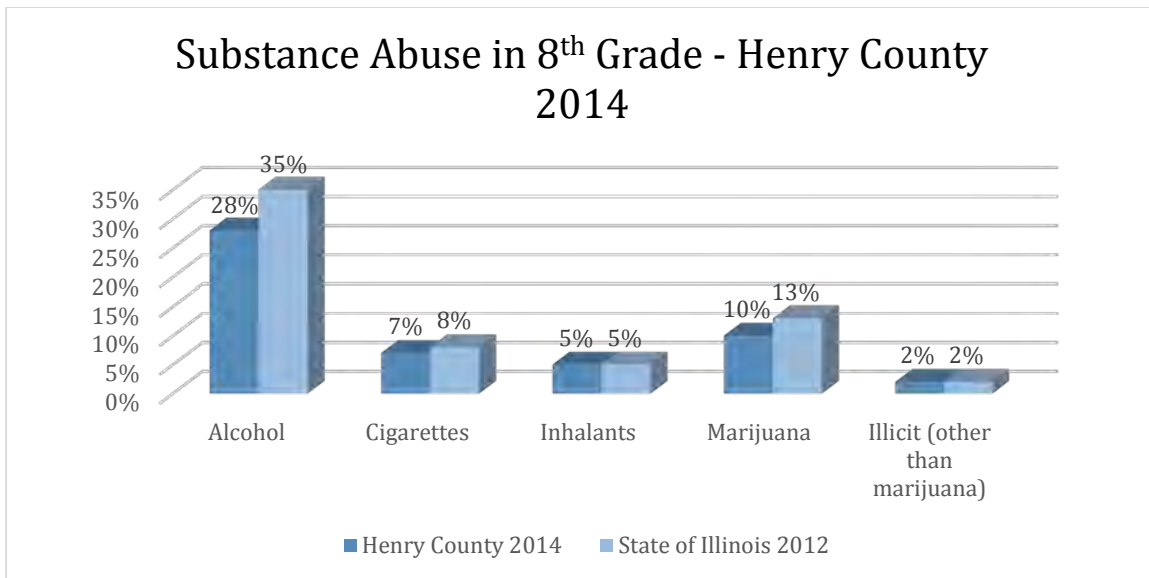
Several demographic characteristics show significant relationships with incidence of smoking or vaping. The following relationships were found using correlational analyses:

*Frequency of smoking or vaping* was higher among those with lower education and income.

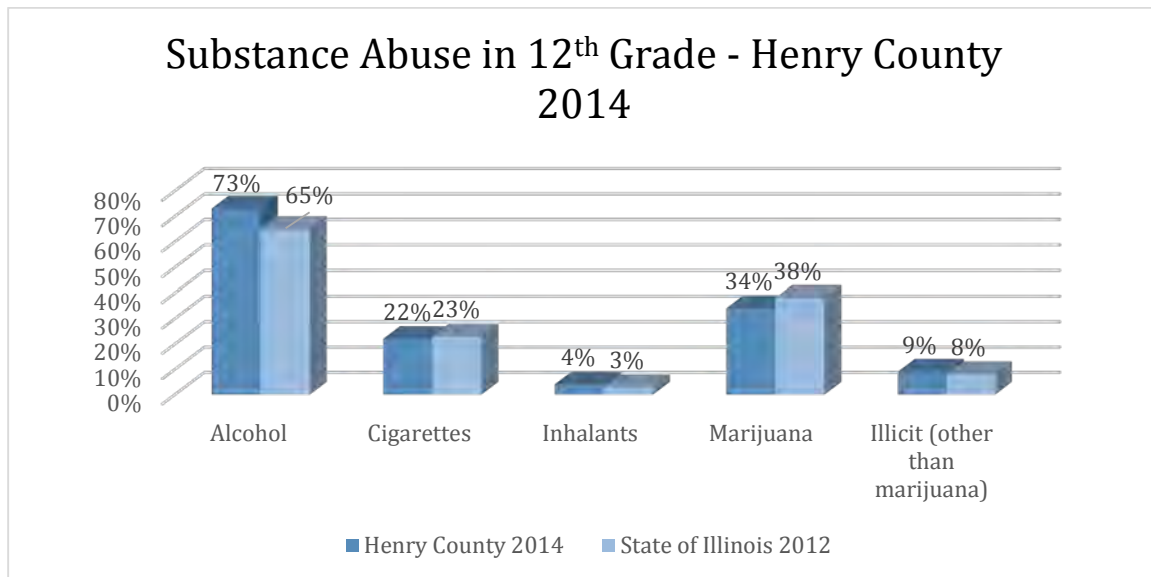
## 3.2 Drug and Alcohol Abuse

*Importance of the measure:* Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors of high school students is a leading indicator of adult substance abuse in later years.

Data from the 2014 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Henry County is at or below State averages in all categories among 8<sup>th</sup> graders. Among 12<sup>th</sup> graders, Henry County is at or below State averages in all categories except for alcohol. Note that data are not available for Illinois in 2014; therefore, 2012 benchmarks are used.



Source: [https://iys.cprd.illinois.edu/UserFiles/Servers/Server\\_178052/File/2014/cnty14\\_Henry.pdf](https://iys.cprd.illinois.edu/UserFiles/Servers/Server_178052/File/2014/cnty14_Henry.pdf)



Source: [https://iys.cprd.illinois.edu/UserFiles/Servers/Server\\_178052/File/2014/cnty14\\_Henry.pdf](https://iys.cprd.illinois.edu/UserFiles/Servers/Server_178052/File/2014/cnty14_Henry.pdf)

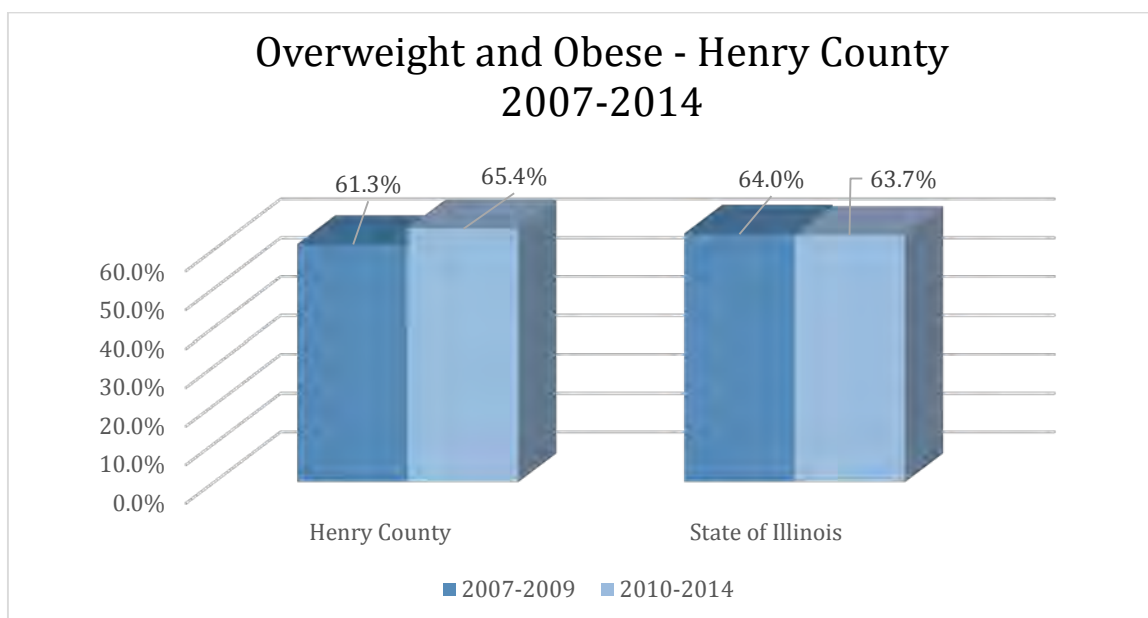
## 3.3 Overweight and Obesity

*Importance of the measure:* Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Henry County. The US Surgeon General has characterized obesity as “the fastest-growing, most threatening disease in America today.” According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion, ranking Illinois 6<sup>th</sup> in the nation for obesity-attributed medical costs.

With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children.

With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

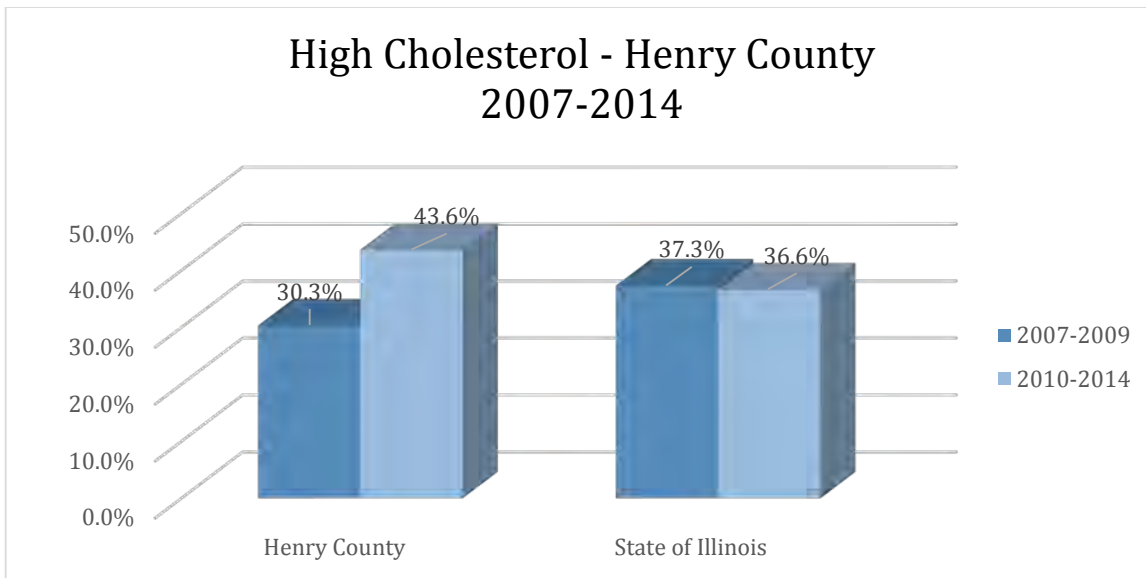
In Henry County, the number of people diagnosed with obesity and being overweight has increased over the years from 2007-2009 to 2010-2014. Note specifically that the percentage of obese and overweight people has increased from 61.3% to 65.4%. Overweight and obesity rates in Illinois have decreased from 2009 (64.0%) to 2014 (63.7%).



*Source: Illinois Behavioral Risk Factor Surveillance System*

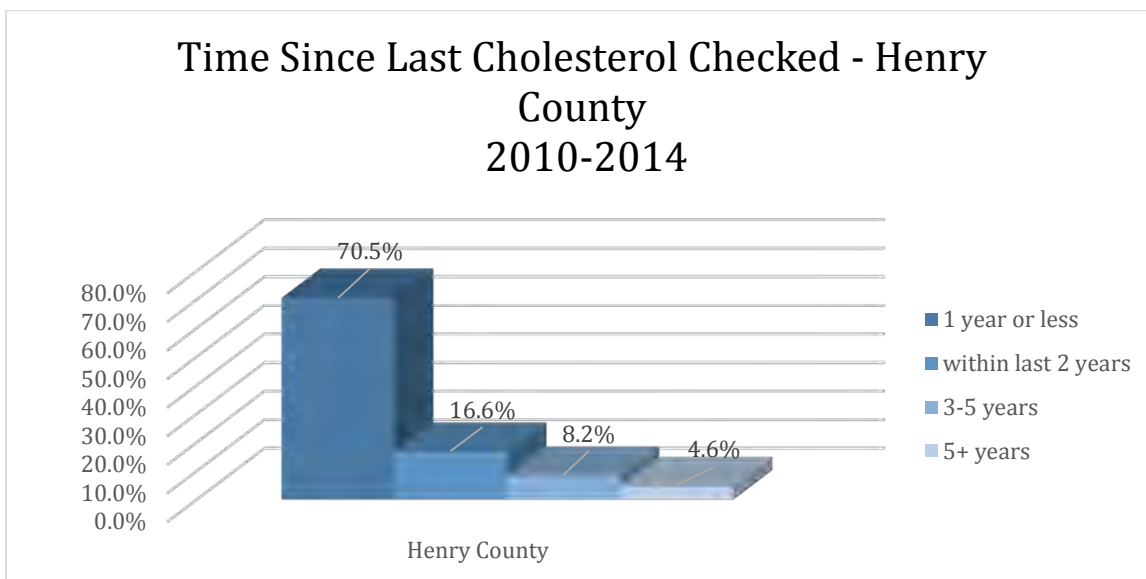
### 3.4 Predictors of Heart Disease

Residents in Henry County report a higher than State average prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is higher in Henry County (43.6%) than the State of Illinois average of 36.6%.



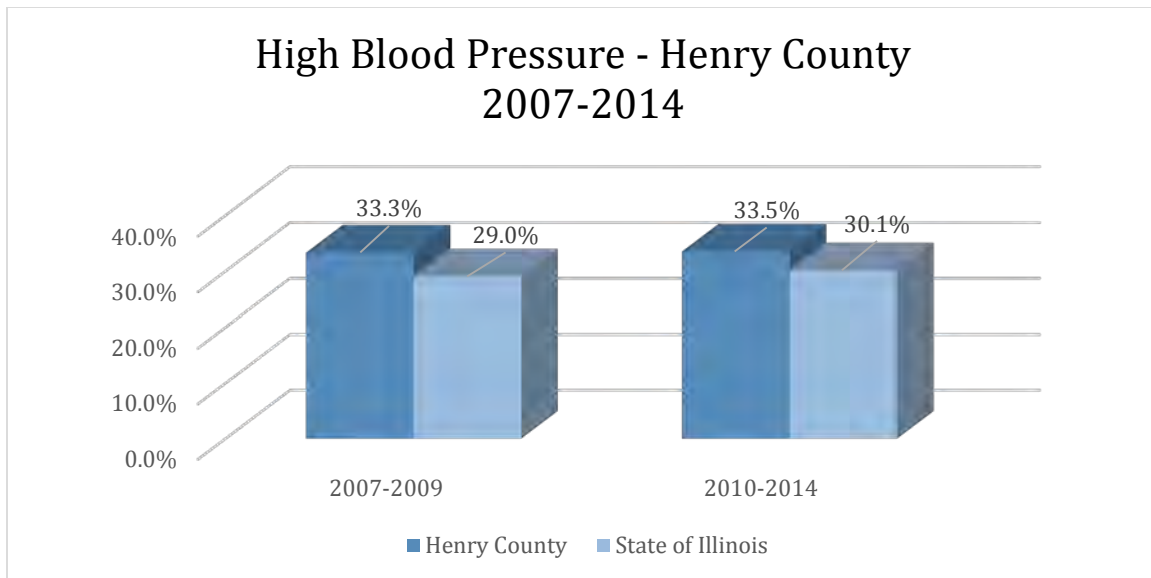
Source: Illinois Behavioral Risk Factor Surveillance System

However, most residents of Henry County report having their cholesterol checked within the past year.



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Henry County has a lower percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Henry County residents reporting they have high blood pressure in 2014 decreased from 33.3% to 29%.



*Source: Illinois Behavioral Risk Factor Surveillance System*

### 3.5 Key Takeaways from Chapter 3

- ✓ **TOBACCO USAGE HAS INCREASED SLIGHTLY IN HENRY COUNTY**
- ✓ **SUBSTANCE USE AMONG 12<sup>TH</sup> GRADERS FOR INHALANTS AND ILLICIT DRUGS ARE SLIGHTLY HIGHER THAN STATE AVERAGES**
- ✓ **THE PERCENTAGE OF PEOPLE WHO ARE OVERWEIGHT AND OBESE HAS INCREASED IN HENRY COUNTY**
- ✓ **RISK FACTORS FOR HEART DISEASE (OBESITY AND CHOLESTEROL) ARE INCREASING**

**CHAPTER 4 OUTLINE**

- 4.1 Healthy Babies
- 4.2 Cardiovascular
- 4.3. Respiratory
- 4.4 Cancer
- 4.5 Diabetes
- 4.6 Infectious Disease
- 4.7 Injuries
- 4.8 Mortality
- 4.9 Key Takeaways from Chapter 4

## CHAPTER 4. MORBIDITY AND MORTALITY

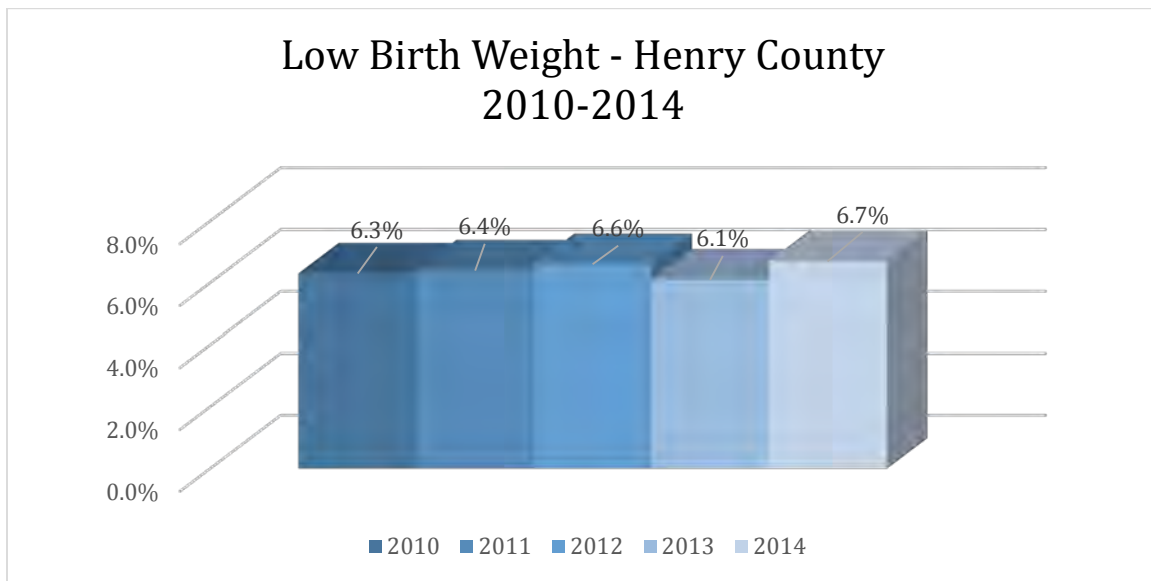
Given the lack of recent disease/morbidity data from existing secondary data sources, much of the data used in this chapter was manually gathered from Henry County hospitals using COMP data. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

### 4.1 Healthy Babies

*Importance of the measure:* Regular prenatal care is a vital aspect in producing healthy babies and children. Screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of prenatal care. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies. Prenatal care can provide health risk assessments for the mother and fetus, early intervention for medical conditions and education to encourage healthy habits, including nutritional and substance-free health during pregnancy.

#### Low Birth Weight Rates

Low birth weight rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth weight rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low birth weight in Henry County increased from 2010 (6.3%) to 2014 (6.7%).

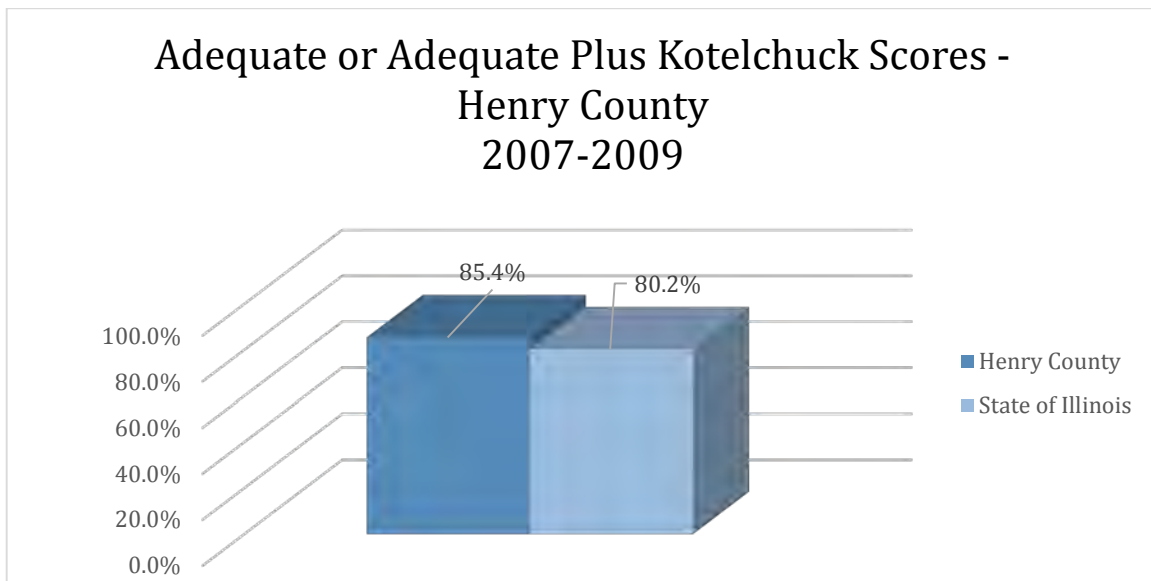


Source: <http://www.countyhealthrankings.org>

## Initiation of Prenatal Care

Prenatal care is comprehensive medical care provided for the mother and fetus, which includes screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with adverse birth outcomes. Kotelchuck Index Scores are used to determine the quantity of prenatal visits received between initiation of services and delivery. Adequate (80%-109% of expected visits) and Adequate Plus (receiving 110% of recommended services) of received services is compared to the number of expected visits for the period when care began and the delivery date.

Of the babies born in 2009 in Henry County, 85.4% were born with “Adequate” or “Adequate Plus” prenatal care. This figure is higher than the State of Illinois average of 80.2% of babies born with similar prenatal care. These are the most recent data, and have not been updated since 2009.



Source: Illinois Department of Public Health

## 4.2 Cardiovascular Disease

### *Importance of the measure:*

Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease, and atherosclerosis.

### **Coronary Atherosclerosis**

Coronary Atherosclerosis, sometimes-called hardening of the arteries, can slowly narrow and harden the arteries throughout the body. When atherosclerosis affects the arteries of the heart, it is called coronary artery disease.

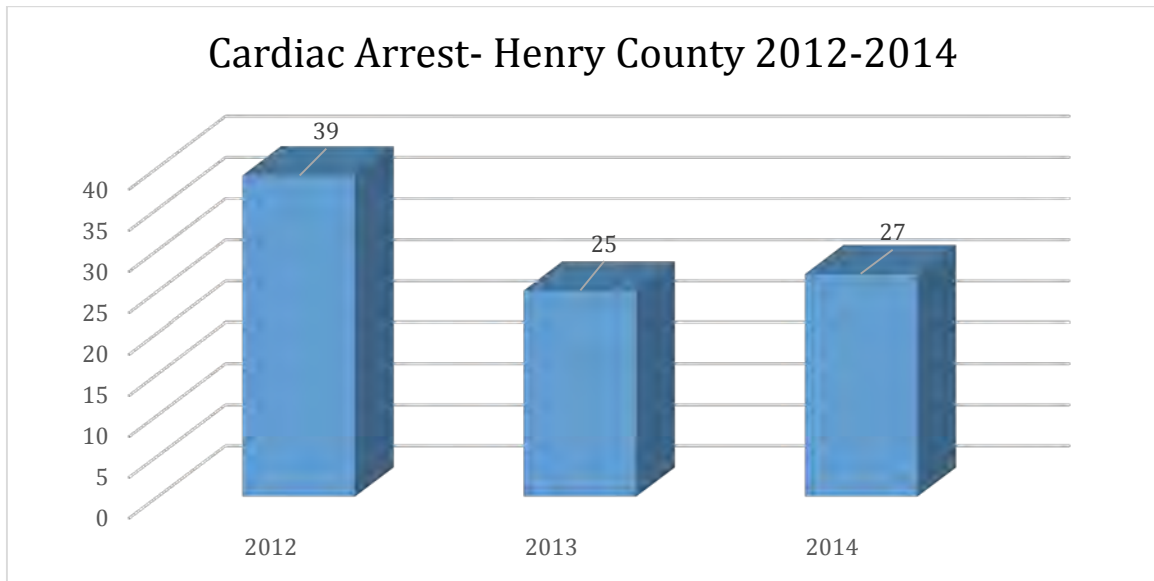
Coronary artery disease is a leading cause of death for Americans. Most of these deaths are from heart attacks caused by sudden blood clots in the heart's arteries.

The number of cases of coronary atherosclerosis complication at Henry County area hospitals has been low, and no cases were reported in 2014. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

### **Cardiac Arrest**

Cases of dysthymia and cardiac arrest at Henry County area hospitals has decreased by 12 cases between FY12 and FY14. Note that hospital-level data only show hospital admissions.

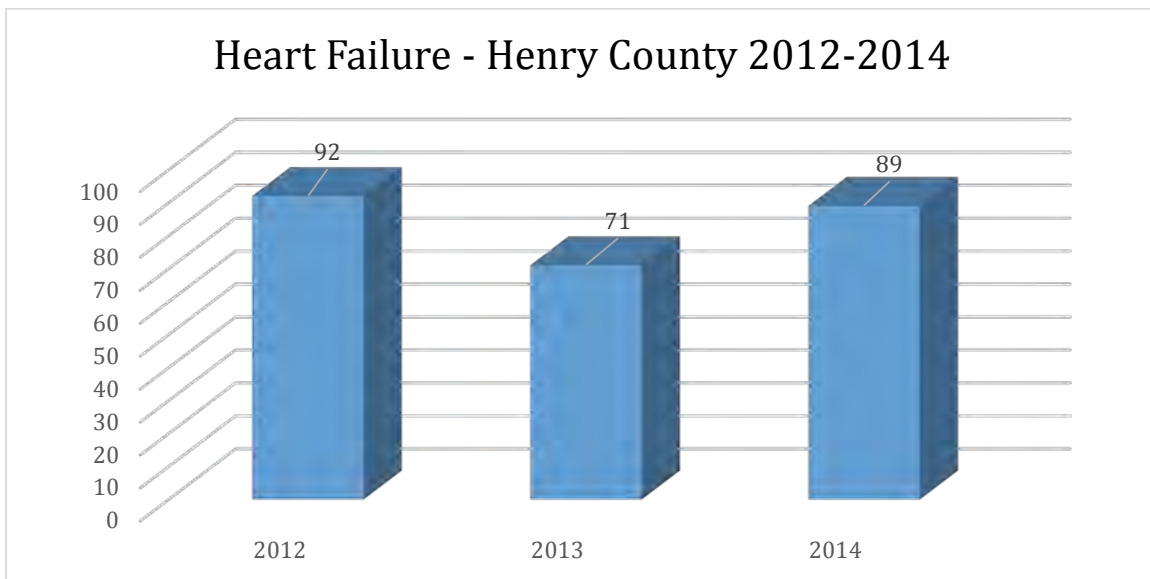




Source: COMPdata 2015

### Heart Failure

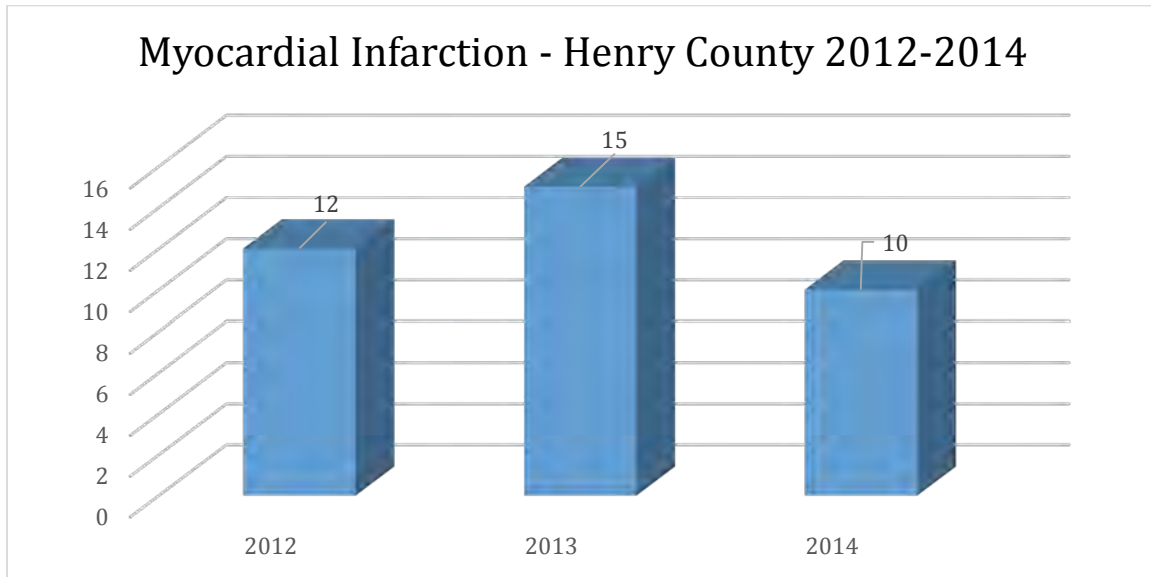
The number of treated cases of heart failure at Henry County area hospitals have decreased slightly. In FY 2012, 92 cases were reported, and in FY 2014, there were 89 cases reported. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2015

## Myocardial Infarction

The number of treated cases of myocardial infarction at area hospitals in Henry County have decreased from 12 in 2012 to 10 in 2014. Note that hospital-level data only show hospital admissions.



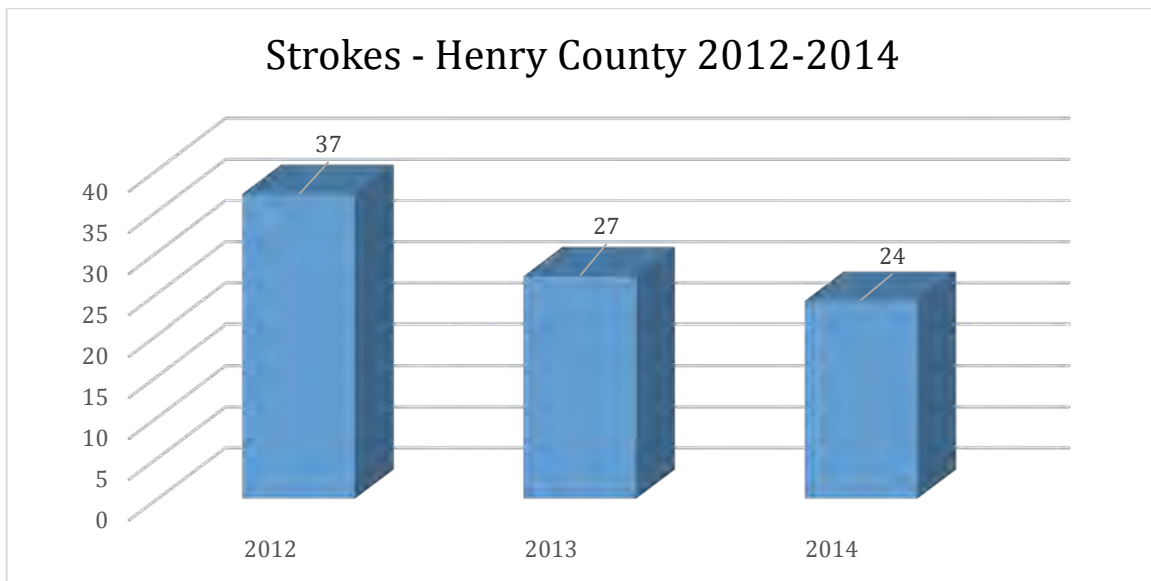
Source: COMPdata 2015

## Arterial Embolism

There were no treated cases of arterial embolism at Henry County area hospitals in 2014. Note that hospital-level data only show hospital admissions.

## Strokes

The number of treated cases of stroke at Henry County area hospitals have decreased between FY 2012 and FY 2014. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.



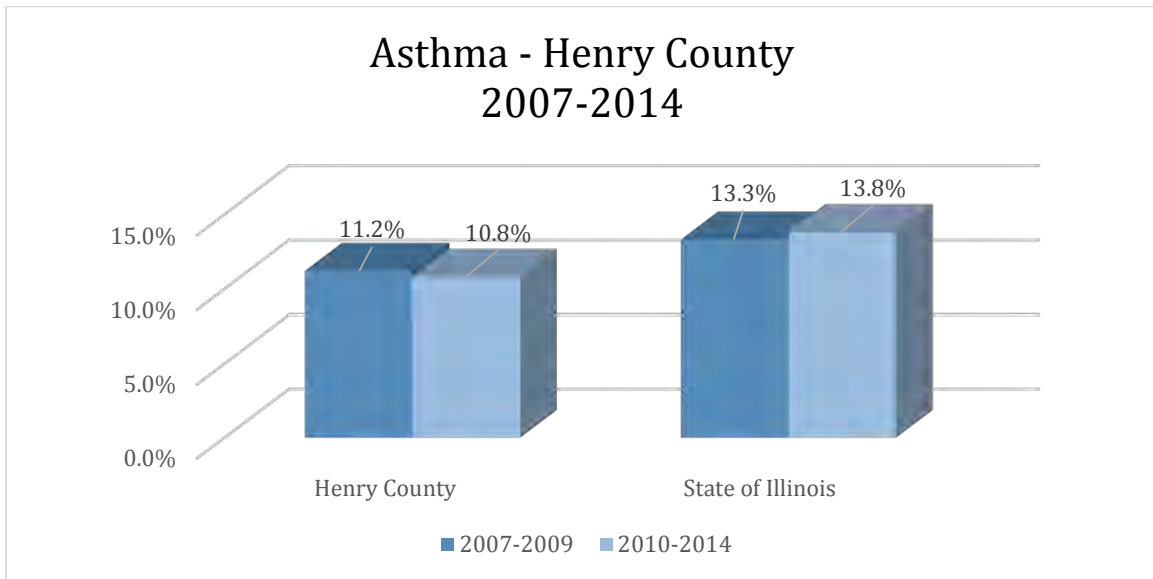
Source: COMPdata 2015

## 4.3 Respiratory

*Importance of the measure:* Disease of the respiratory system includes acute upper respiratory infections such as influenza, pneumonia, bronchitis, asthma, emphysema, and Chronic Obstructive Pulmonary Disease (COPD). These conditions are characterized by breathlessness, wheezing, chronic coughing, frequent respiratory infections, and chest tightness. Many respiratory conditions can be successfully controlled with medical supervision and treatment. However, children and adults who do not have access to adequate medical care are likely to experience repeated serious episodes, trips to the emergency room and absences from school and work. Hospitalization rates illustrate the worst episodes of respiratory diseases and are a proxy measure for inadequate treatment.

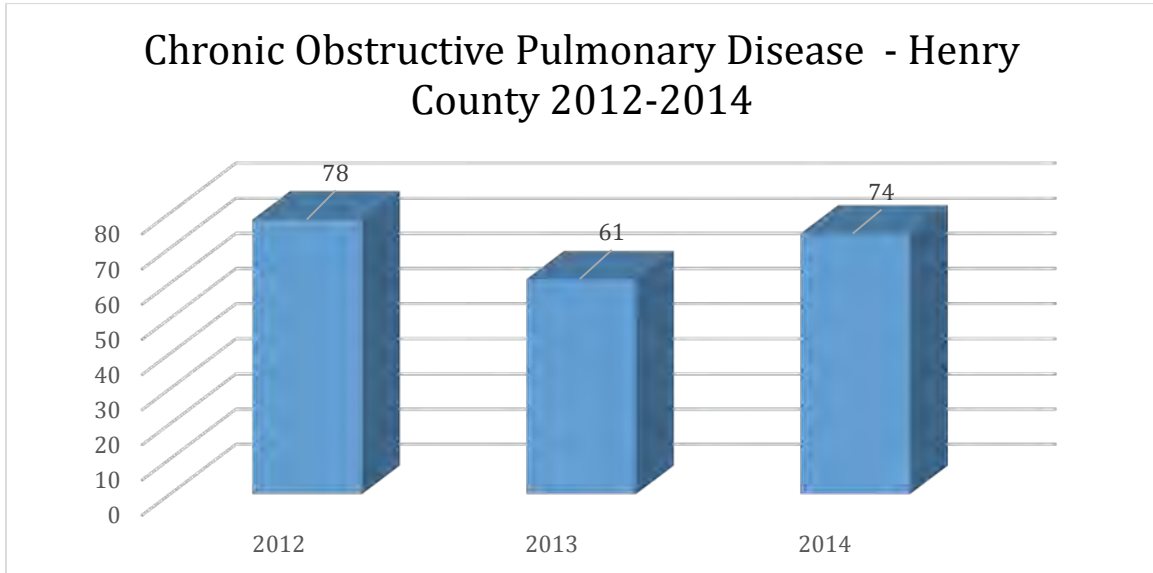
### Asthma

The percentage of residents that have asthma in Henry County have decreased slightly between 2007-2009 and 2010-2014, while State averages are increasing slightly. According to the Illinois BRFSS, asthma rates in Henry County (10.8%) are lower than the State of Illinois (13.8%).



Source: Illinois Behavioral Risk Factor Surveillance System

Treated cases of COPD at Henry County area hospitals have remained stable between FY 2012 and FY 2014, with a significant decline in FY13. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

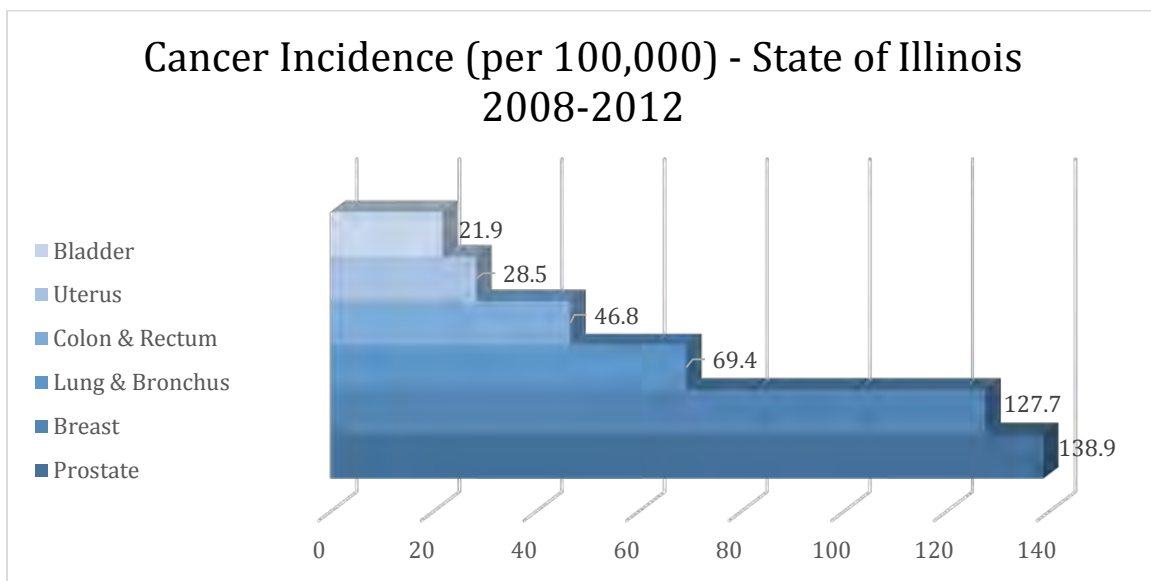


Source: COMPdata 2015

## 4.4 Cancer

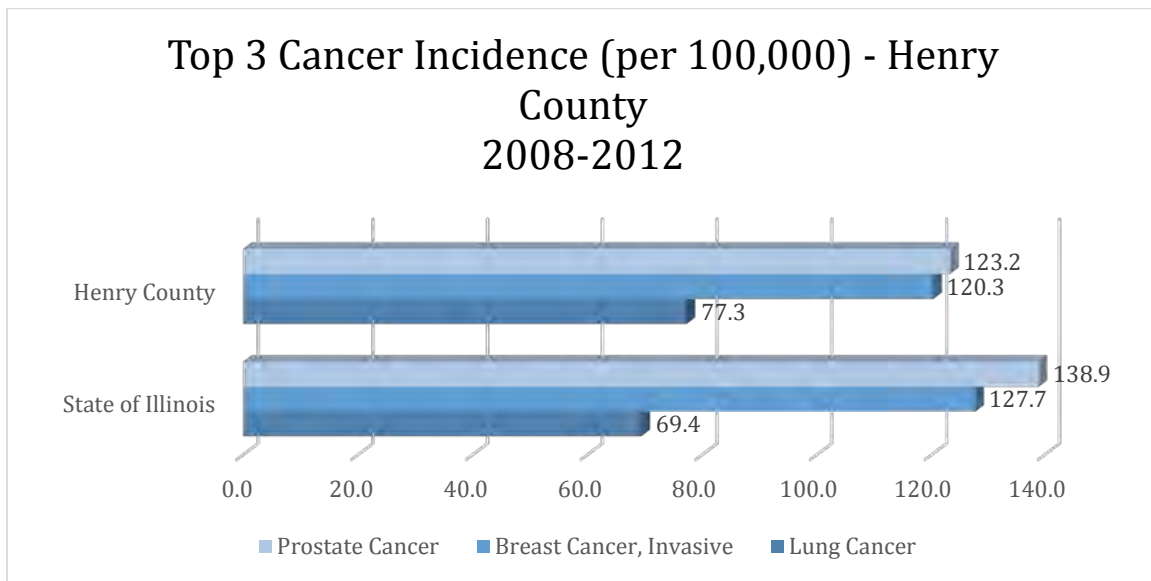
*Importance of the measure:* Cancer is caused by the abnormal growth of cells in the body and many causes of cancer have been identified. Generally, each type of cancer has its own symptoms, outlook for cure, and methods for treatment. Cancer is one of the leading causes of death in Henry County.

The top six cancers by treatment in the State of Illinois for 2008-2012 can be seen below. The most prevalent cancers in the State of Illinois are prostate cancer, breast cancer and lung and bronchus cancer, respectively.



Source: [http://www.idph.state.il.us/cancer/15/county\\_rpt/County\\_Section\\_I\\_Site\\_Specific\\_Cancer\\_Incidence.pdf](http://www.idph.state.il.us/cancer/15/county_rpt/County_Section_I_Site_Specific_Cancer_Incidence.pdf)

For the top three prevalent cancers in Henry County, comparisons can be seen below. Specifically, prostate cancer and breast cancer are lower than the State, while lung and bronchus cancer rates are higher than the State of Illinois.



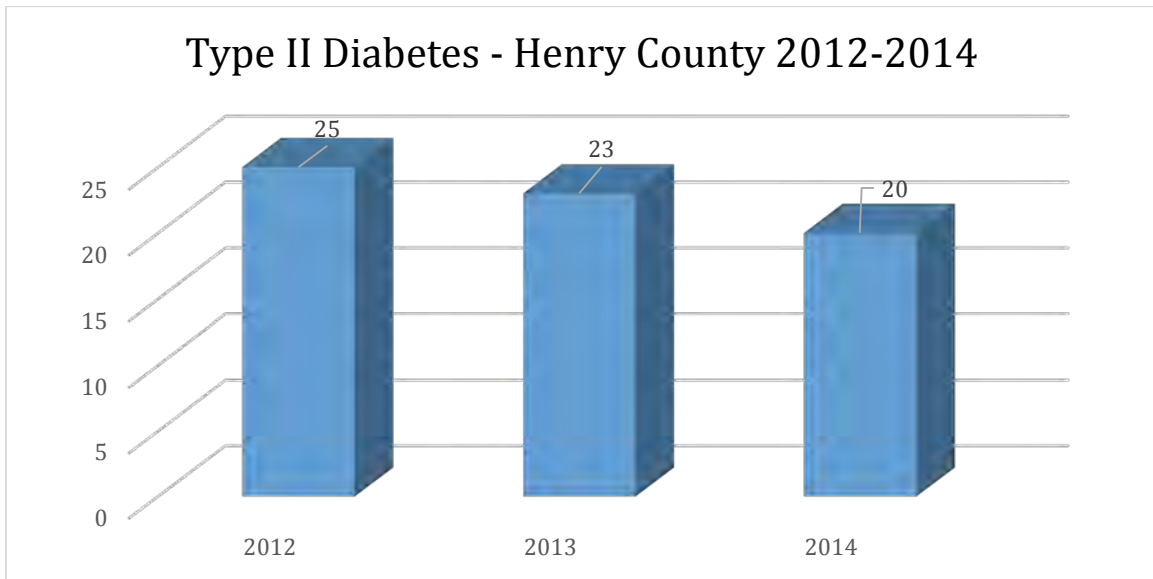
Source: [http://www.idph.state.il.us/cancer/15/county\\_rpt/County\\_Section\\_I\\_Site\\_Specific\\_Cancer\\_Incidence.pdf](http://www.idph.state.il.us/cancer/15/county_rpt/County_Section_I_Site_Specific_Cancer_Incidence.pdf)

## 4.5 Diabetes

### *Importance of the measure:*

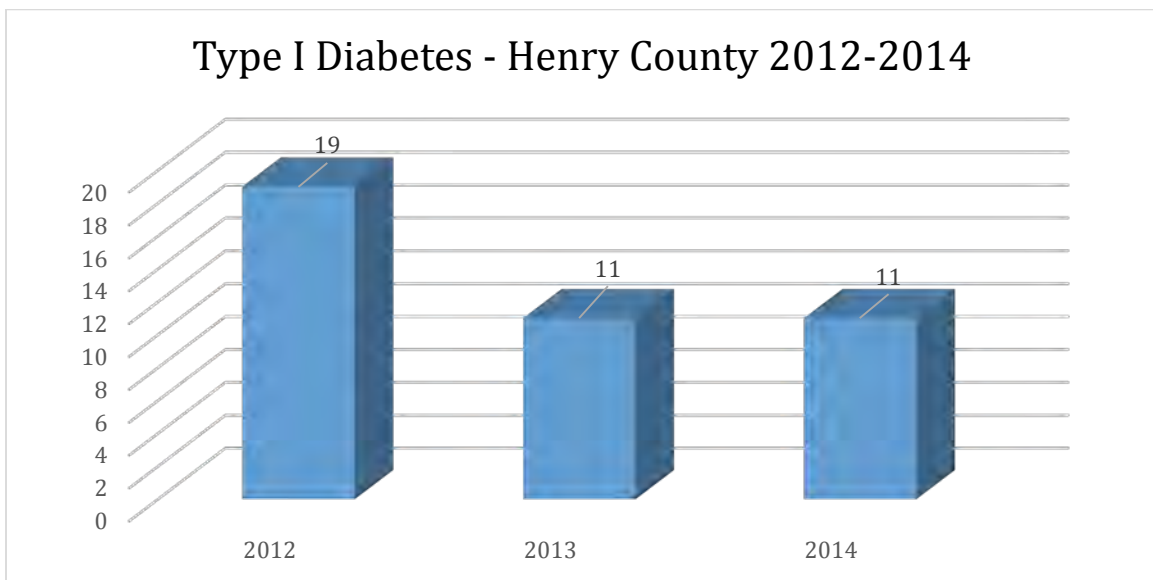
Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 5-10% of individuals with diabetes have Type I diabetes (previously known as juvenile diabetes).

Inpatient cases of Type II diabetes from Henry County have slightly decreased between FY 2012 (25 cases) and FY 2014 (20 cases). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



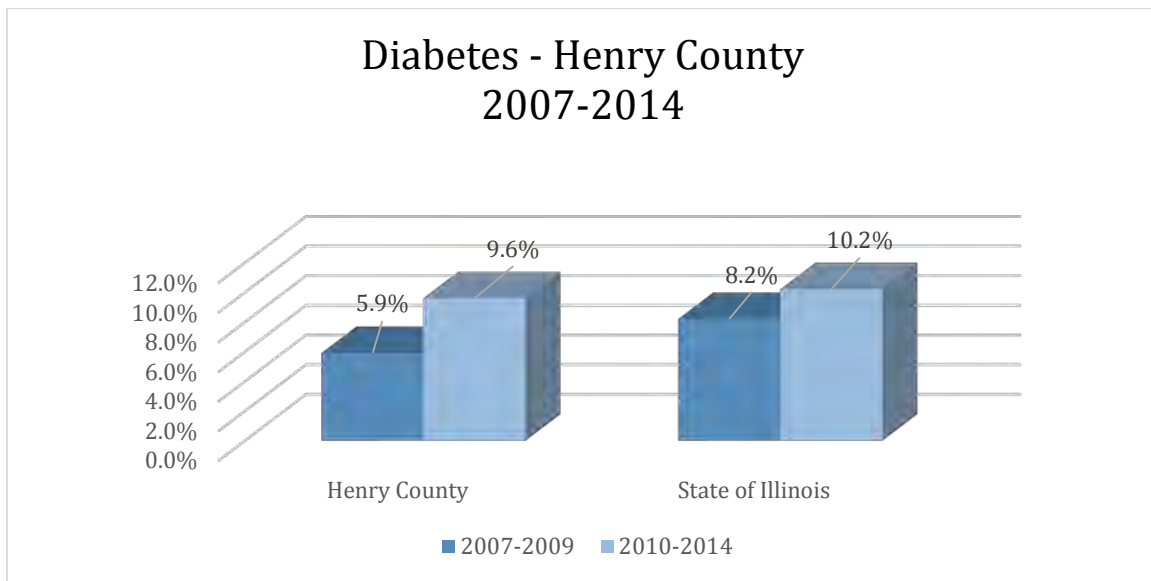
Source: COMPdata 2015

Inpatient cases of Type I diabetes show a decrease from 2012 (19) to 2014 (11) for Henry County. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



Source: COMPdata 2015

Data from the Illinois BRFSS indicate that 9.6% of Henry County residents have diabetes. Trends are concerning, as the prevalence of diabetes is increasing dramatically in Henry County and is approaching the State of Illinois average.



Source: Illinois Behavioral Risk Factor Surveillance System

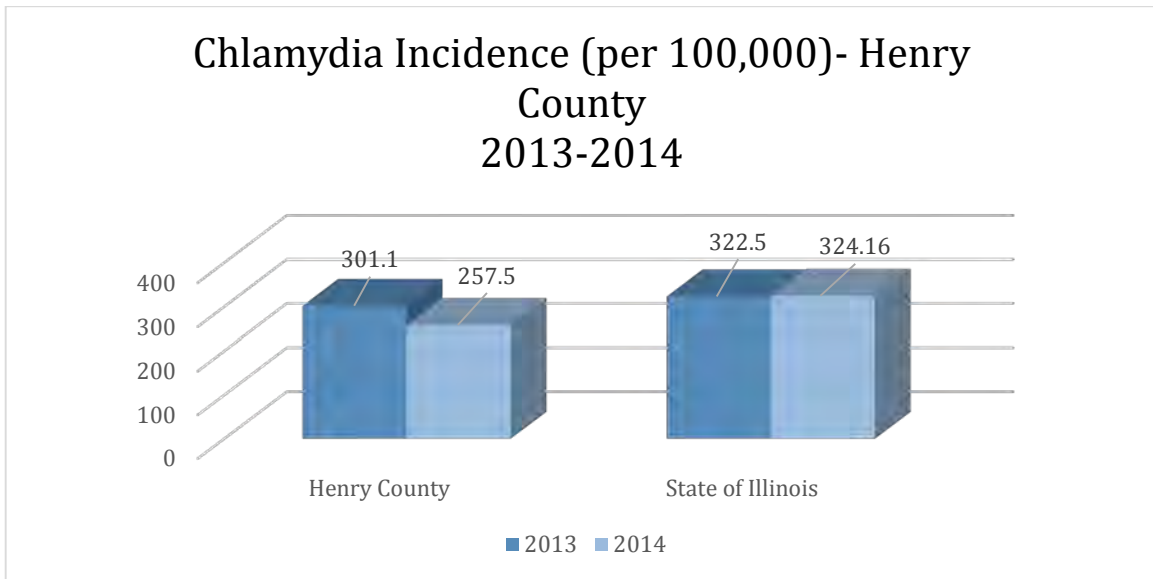
## 4.6 Infectious Diseases

*Importance of the measure:* Infectious diseases, including sexually transmitted infections and hepatitis, are related to high-risk sexual behavior, drug and alcohol abuse, limited access to healthcare, and poverty. It would be highly cost-effective for both individuals and society if more programs focused on prevention rather than treatment of infectious diseases.

### Chlamydia and Gonorrhea Cases

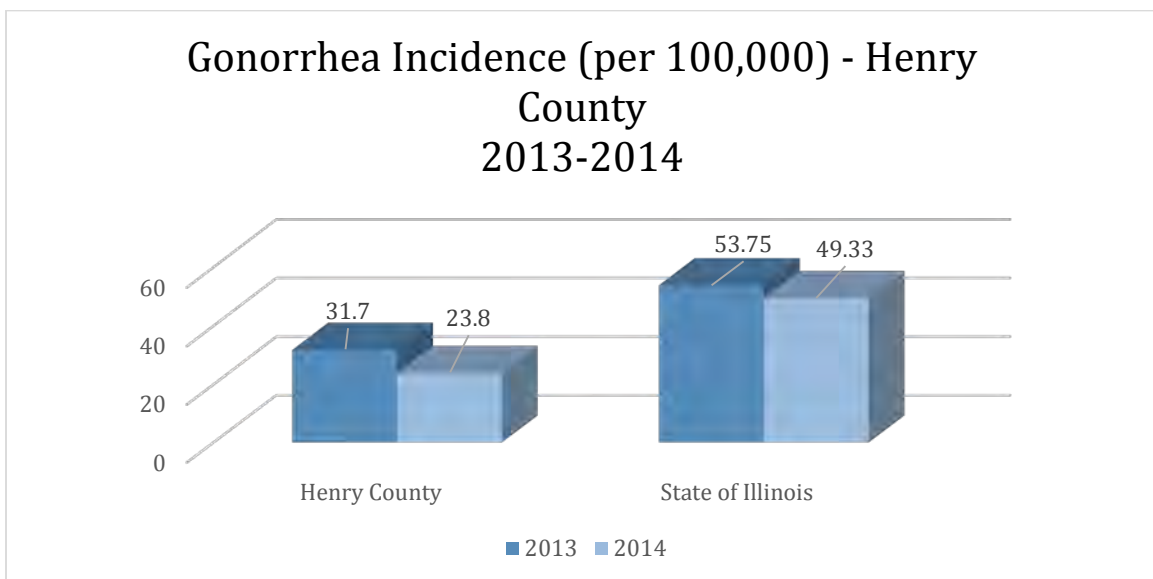
The data for the number of infections of chlamydia in Henry County from 2013-2014 indicate a significant decrease. There is a slight increase of incidence of chlamydia across the State of Illinois. Rates of chlamydia in Henry County are lower than State averages.





Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in Henry County indicate a decrease from 2013-2014, similar to the State of Illinois from 2013-2014.



Source: Illinois Department of Public Health

## Vaccine preventable diseases

A vaccine-preventable disease is an infectious disease for which an effective preventive vaccine exists. If a person acquires a vaccine-preventable disease and dies, the death is considered a vaccine-preventable death. According to the Illinois Public Health Department, the most common and serious vaccine-preventable diseases are: Varicella (chickenpox), Tetanus (lockjaw), Pertussis (whooping cough), Poliomyelitis (Polio), Measles (Rubella), Mumps, Rubella (German measles), Diphtheria, Hepatitis B, and Hemophilic Influenza Type B (HIB) Infections. These diseases used to strike thousands of children each year. Today there are relatively few cases, but outbreaks still occur each year because some babies are not immunized. Henry County has shown no significant outbreaks compared to state statistics, but there are limited data available.<sup>2</sup>

### Vaccine Preventable Diseases 2011-2014 Henry County Region

<b>Mumps</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Henry County	0	0	0	0
State of Illinois	78	32	26	142
<b>Pertussis</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Henry County	2	3	0	0
State of Illinois	1509	2026	785	764
<b>Varicella</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Henry County	9	6	2	8
State of Illinois	881	898	731	598

Source: <http://iquery.illinois.gov/DataQuery/Default.aspx>

### Tuberculosis 2011-2014 Henry County Region

<b>Tuberculosis</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Henry County	0	0	0	1
State of Illinois	358	347	327	320

Source: Illinois Electronic Disease Surveillance System (I-NEDSS)

<sup>2</sup> Source: <http://www.idph.state.il.us/about/vpcd.htm>

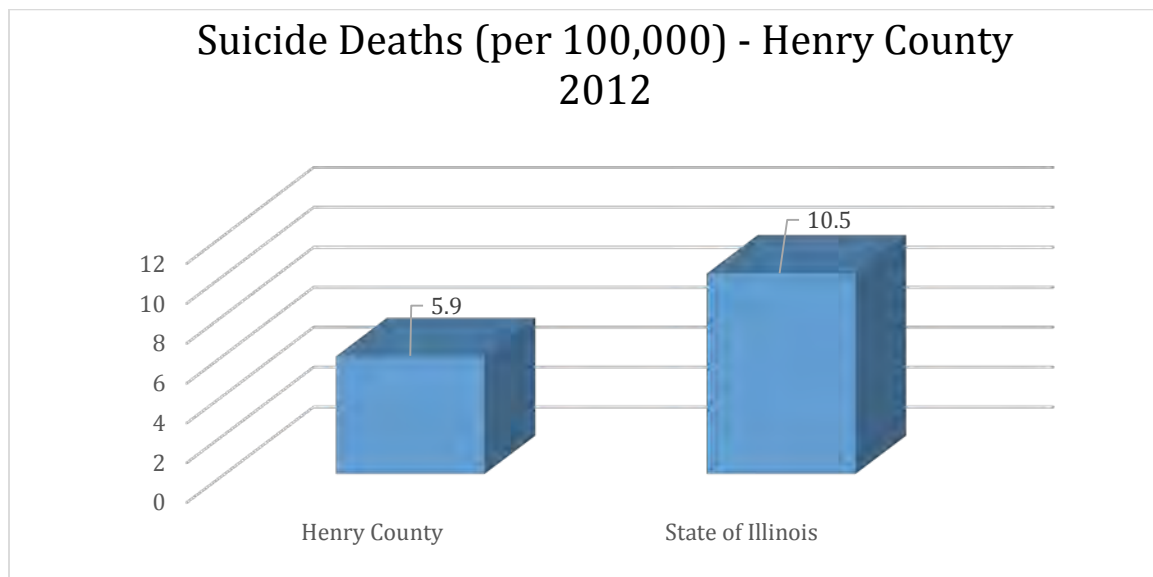
## 4.7 Injuries

### *Importance of the measure:*

Unintentional injuries are injuries or accidents resulting from car accidents, falls and unintentional poisonings. In many cases, these types of injuries—and the deaths resulting from them—are preventable. Suicide is intentional self-harm resulting in death. These injuries are often indicative of serious mental health problems requiring the treatment of other trauma-inducing issues.

### **Intentional – suicide**

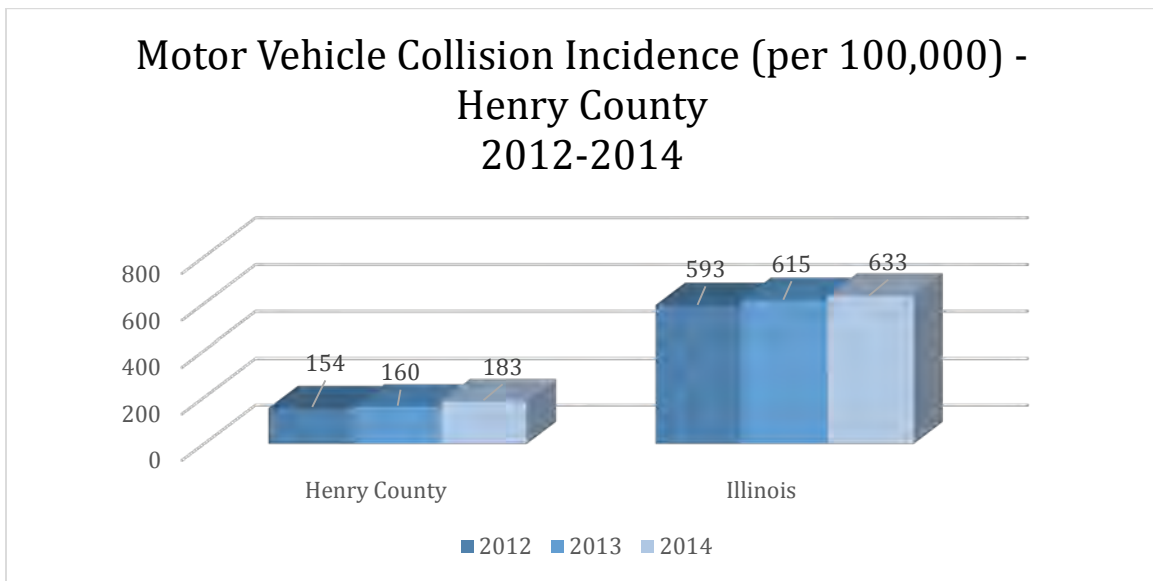
The number of suicides in Henry County indicate lower incidence than State of Illinois averages, as there were approximately 5.9 per 100,000 people in Henry County in 2012.



*Source: Illinois Department of Public Health*

### **Unintentional – motor vehicle**

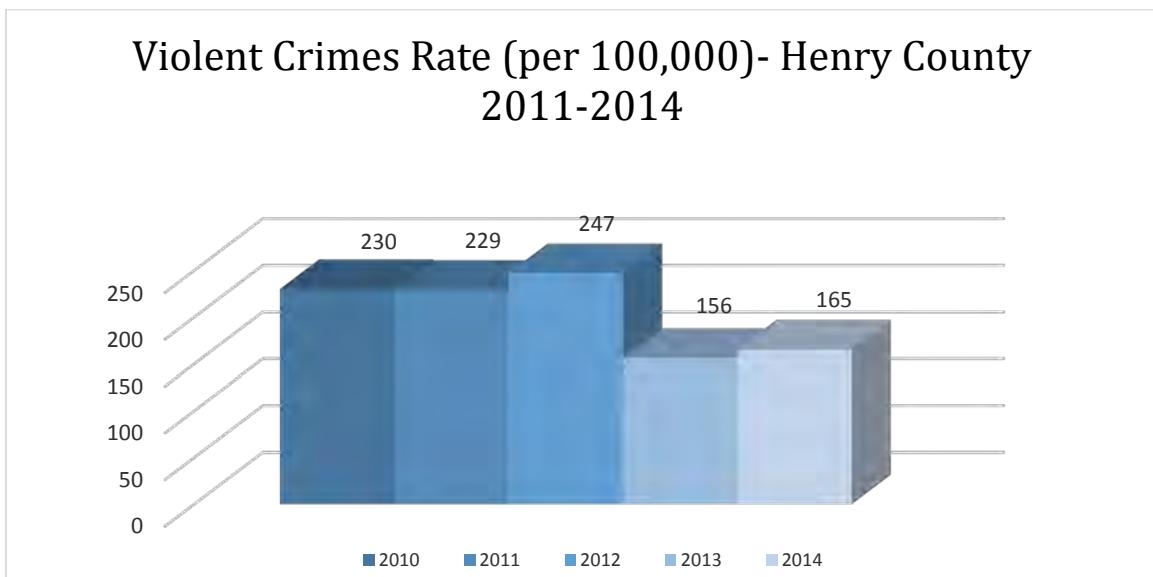
Research suggests that car accidents are a leading cause of unintentional injuries. In Henry County, the number of incidents between 2012 and 2014 for several types of motor vehicle collisions including vehicle overturn, railroad train, sideswipe, angle, parked motor vehicle, turning, and rear-end accidents has increased slightly but is significantly lower than State of Illinois averages.



Source: Illinois Department of Transportation

## Violent Crimes

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault. Violent crime is represented as an annual rate per 100,000 people. The number of violent crimes has decreased significantly for 2010-2014 in Henry County.



Source: Illinois County Health Rankings and Roadmaps

## 4.8 Mortality

*Importance of the measure:* Presenting data that focuses on causes of mortality provides an opportunity to define and quantify which diseases are causing the most deaths.

The top two leading causes of death in the State of Illinois and Henry County are similar as a percentage of total deaths in 2013. Cancer is the cause of 27.3% of deaths in Henry County and Diseases of the Heart are the cause of 22% of deaths in Henry County.

Top 5 Leading Causes of Death for all Races by County, 2013		
Rank	Henry County	State of Illinois
1	Malignant Neoplasm (27.3%)	Diseases of Heart
2	Diseases of Heart (22%)	Malignant Neoplasm
3	Chronic Lower Respiratory Disease (5.64%)	Cerebrovascular Disease
4	Cerebrovascular Disease (5.0%)	Chronic Lower Respiratory Disease
5	Accidents (1.69%)	Accidents

Source: Illinois Department of Public Health

## 4.9 Key Takeaways from Chapter 4

- ✓ **LOW BIRTH WEIGHTS HAVE BEEN INCREASING SLIGHTLY IN HENRY COUNTY**
- ✓ **MOST VARIATIONS OF CARDIAC DISEASE HAVE SEEN A DECREASE SINCE 2012**
- ✓ **LUNG CANCER RATES IN HENRY COUNTY ARE SLIGHTLY HIGHER THAN STATE AVERAGES**
- ✓ **ASTHMA HAS SEEN A SIGNIFICANT REDUCTION IN HENRY COUNTY AND IS LOWER THAN STATE AVERAGES**
- ✓ **WHILE STATE AVERAGES HAVE ONLY SEEN A SLIGHT INCREASE, DIABETES IS TRENDING UPWARD SIGNIFICANTLY IN HENRY COUNTY AND IS APPROACHING STATE AVERAGES**
- ✓ **CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF MORTALITY IN HENRY COUNTY**

**CHAPTER 5 OUTLINE**

- 5.1 Perceptions of Health Issues
- 5.2 Perceptions of Unhealthy Behavior
- 5.3. Perceptions of Issues with Well Being
- 5.4 Summary of Community Health Issues
- 5.5 Community Resources
- 5.6 Significant Needs Identified and Prioritized

## **CHAPTER 5. PRIORITIZATION OF HEALTH-RELATED ISSUES**

In this chapter, we identify the most critical health-related needs in the community. To accomplish this, we first consider community perceptions of health issues, unhealthy behaviors and issues related to well-being. Using key takeaways from each chapter, we then identify important health-related issues in the community. Next, we complete a comprehensive inventory of community resources; and finally, we prioritize the most significant health needs in the community.

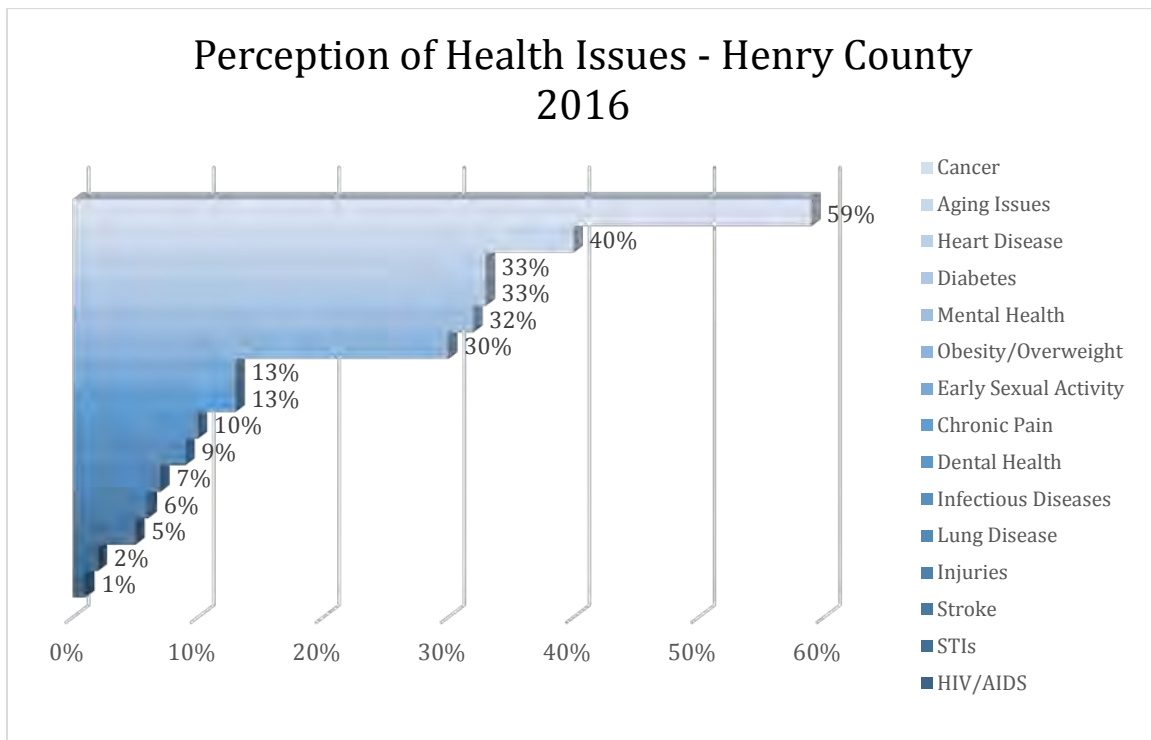
Specific criteria used to identify these issues included: (1) magnitude in the community; (2) severity in the community; (3) potential for impact to the community.

### **5.1 Perceptions of Health Issues**

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 15 different options.

The health issue that rated highest was cancer. It was identified 59% of the time and was significantly higher than other categories based on *t-tests* between sample means. This was followed by aging issues, and several specific concerns such as heart disease, diabetes, mental health, and obesity.

Note that perceptions of the community were accurate in some cases. For example, cancer is the leading cause of mortality in Henry County. Also, obesity is an important concern and the survey respondents accurately identified these as an important health issues.



Source: CHNA Survey

## Demographic Factors Related to Perceptions of Health Issues

Several demographic characteristics show significant relationships with perceptions of health issues. The following relationships were found using correlational analyses:

**Aging issues** tend to be rated higher by older people and those with low education.

**Cancer** tends to be of greater concern to White people.

**Chronic Pain** is of greater concern to those with lower income.

**Dental health** does not show significant correlations.

**Diabetes** is rated higher by Latino people and those with low education and income.

**Heart disease** tends to be rated higher by men, older people and White people.

**HIV** tends to be rated higher by people with Black and Latino ethnicity.

**Early sexual activity** tends to be rated higher by younger people and Latino people.

**Infectious disease** is rated higher by those with higher education.

**Injury** does not show significant correlations.

**Lung disease** does not show significant correlations.

**Mental health** tends to be rated higher by younger people.

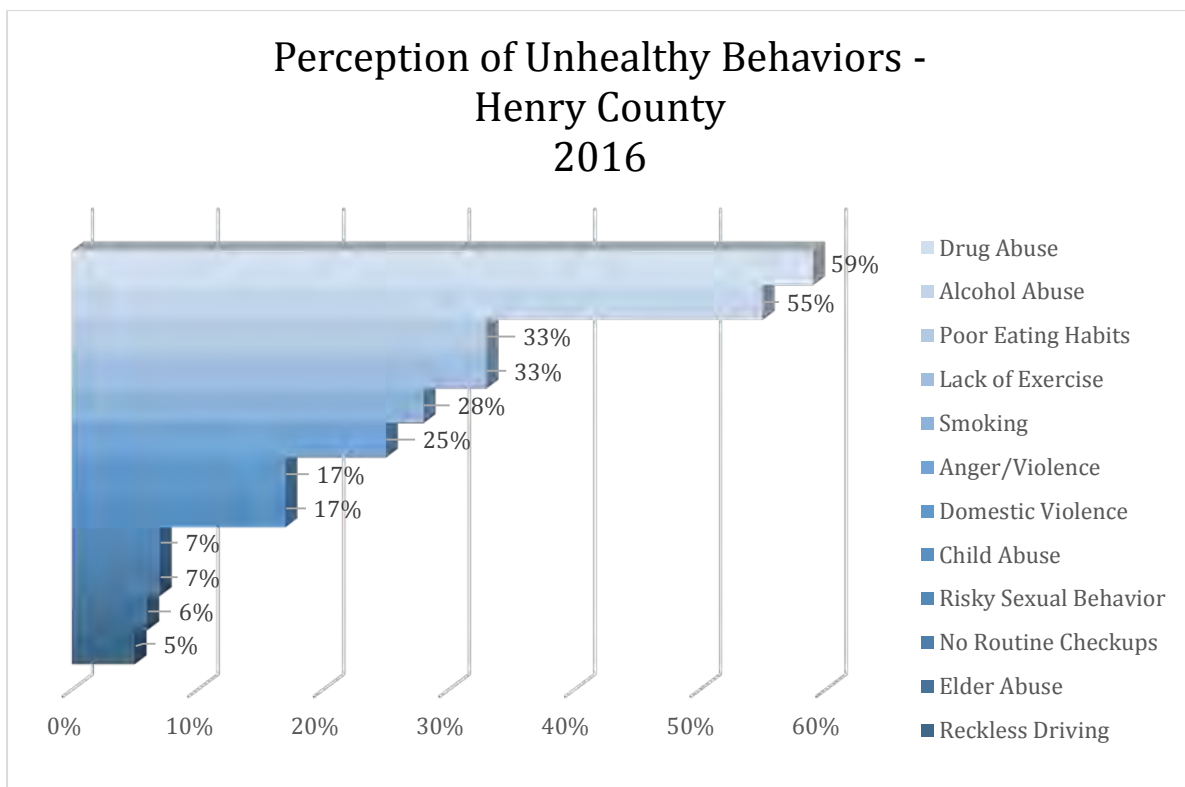
**Obesity** tends to be rated higher by people with higher education.

**STIs** tend to be rated higher by younger people.

**Stroke** does not show significant correlations.

## 5.2 Perceptions of Unhealthy Behaviors

Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 12 choices. The two unhealthy behaviors that rated highest were drug abuse and alcohol abuse.



Source: CHNA Survey



## Demographic Factors Related to Perceptions of Unhealthy Issues

Several demographic characteristics show significant relationships with perceptions of unhealthy behaviors. The following relationships were found using correlational analyses:

*Anger/Violence* does not show significant correlations.

*Alcohol Abuse* is rated higher by men.

*Child abuse* tends to be rated higher by homeless people.

*Domestic Violence* does not show significant correlations.

*Drug abuse* tends to be rated higher by White individuals.

*Elder abuse* is rated more highly by individuals with low income.

*Lack of exercise* does not show significant correlations.

*No check-ups* does not show significant correlations.

*Poor eating habits* tends to be rated higher by those with high education and income.

*Reckless driving* does not show significant correlations.

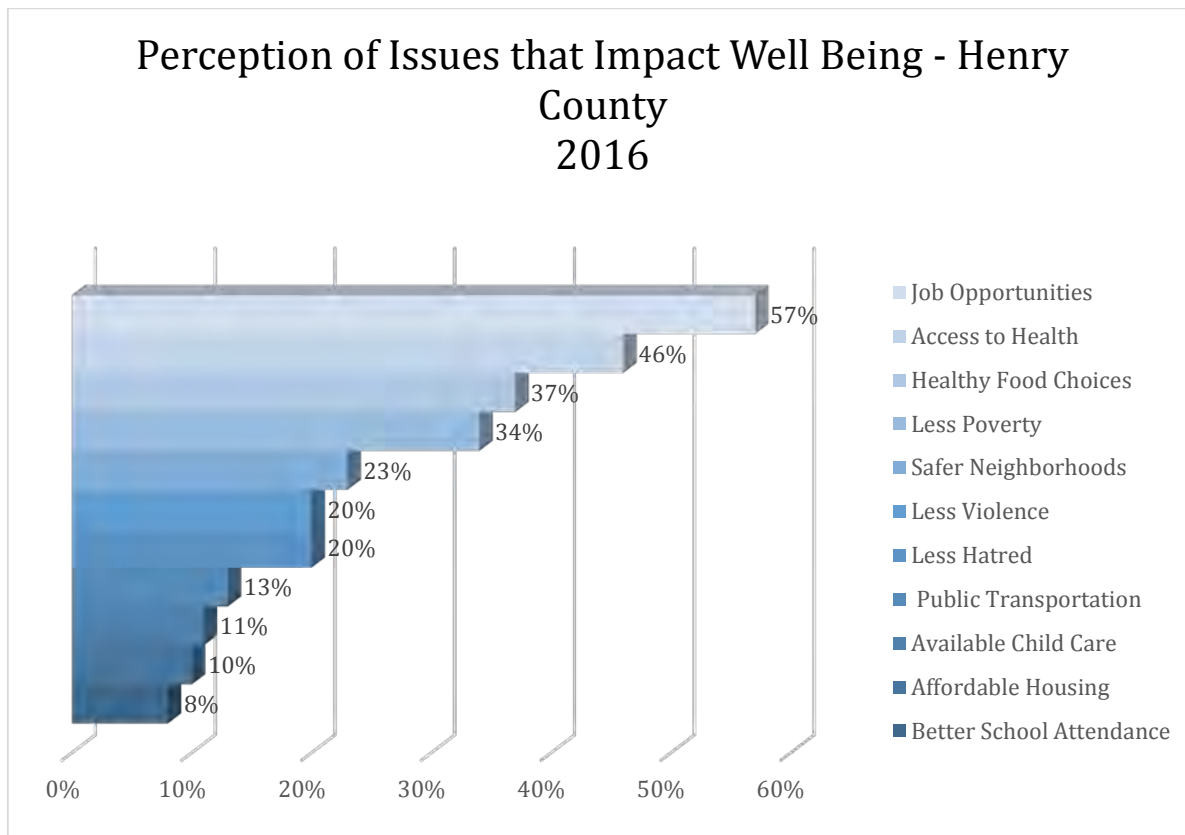
*Smoking* does not show significant correlations.

*Risky Sex Behavior* is rated higher by younger people and Latino people.

## 5.3 Perceptions of Issues Impacting Well Being

Respondents were asked to select the three most important issues impacting well-being in the community out of a total of 11 choices.

The issue impacting well-being that rated highest was job opportunities. It is not surprising that job opportunities was rated high given unemployment rates in recent years. Job opportunities was followed by access to health services, healthy food choices and less poverty.



Source: CHNA Survey

## Demographic Factors Related to Perceptions of Well Being

Several demographic characteristics show significant relationships with perceptions of well being issues. The following relationships were found using correlational analyses:

**Access to health services** tends to be rated higher by older individuals.

**Affordable housing** tends to be rated higher by Latino people and those with lower education and income.

**Availability of childcare** tends to be rated higher by women and younger individuals.

**Better schools** is rated higher by younger people.

**Job opportunities** tend to be rated higher by men.

**Public transportation** tends to be rated higher by Black individuals and higher by those with lower education and income.

**Access to healthy food** is rated higher by those with high education.

*Less poverty* is rated higher by men.

*Safer neighborhoods* is rated higher by women and White people, and lower by Latino people.

*Less hatred* does not show significant correlations.

*Less violence* tends to be rated higher by older people.

## 5.4 Summary of Community Health Issues

Based on findings from the previous analyses, a chapter-by-chapter summary of key takeaways is used to provide a foundation for identification of the most important health-related issues in the community. Considerations for identifying key takeaways include magnitude in the community, strategic importance to the community, existing community resources, and potential for impact and trends and future forecasts.

**Demographics (Chapter 1)** – Four factors were identified as the most important areas of impact from the demographic analyses:

- Total population is decreasing
- Aging population
- Early sexual activity- teen births
- Changing population – increasing Black and Latino ethnicities

**Prevention Behaviors (Chapter 2)** – Five factors were identified as the most important areas of impact from the chapter on prevention behaviors:

- ED usage, particularly among the low-income population
- Low income population that does not seek medical attention
- Lack of exercise
- Mental health
- Lack of healthy eating

**Symptoms and Predictors (Chapter 3)** – Five factors were identified as the most important areas of impact from the chapter on symptoms and predictors:

- Tobacco usage
- Drug abuse
- Alcohol abuse
- Obesity
- Risk factors for heart disease

**Morbidity and Mortality (Chapter 4)** – Four factors were identified as the most important areas of impact from the chapter on morbidity/mortality behaviors:

- Low birth weights
- Cancer – lung
- Diabetes
- Heart Disease

### **Identification of Potential Health-Related Needs Considered for Prioritization**

Before the prioritization of significant community health-related needs was performed, results were aggregated into 10 potential categories. Based on similarities and duplication, the 10 potential areas considered are:

- **Use of ED as primary source of medical care**
- **Not seeking healthcare when needed**
- **Poor healthy behaviors – nutrition & exercise**
- **Diabetes**
- **Mental health**
- **Obesity**
- **Low birth weights**
- **Substance abuse**
- **Heart disease**
- **Cancer-lung**

## **5.5 Community Resources**

After summarizing potential categories for prioritization in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 10 health-related areas were being addressed. A resource matrix can be seen in Appendix 5 relating to the 10 health-related issues.

There are numerous forms of resources in the community. They are categorized as recreational facilities, county health departments, community agencies and area hospitals/clinics. A detailed list of community resources and descriptions appears in Appendix 6.

## **5.6 Significant Needs Identified and Prioritized**

In order to prioritize the previously identified dimensions, the collaborative team considered health needs based on: (1) magnitude of the issues (e.g., what percentage of the population was impacted by the issue); (2) severity of the issues in terms of their relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method (as seen in Appendix 7), the collaborative team identified two significant health needs and considered both priorities:

- **Healthy Behaviors – defined as active living and healthy eating, and their impact on obesity**
- **Behavioral Health – including mental health and substance abuse**

## **HEALTHY BEHAVIORS – ACTIVE LIVING, HEALTHY EATING AND SUBSEQUENT OBESITY**

**ACTIVE LIVING.** A healthy lifestyle, comprised of regular physical activity and balanced diet, has been shown to increase physical, mental, and emotional well-being. Note that 34% of respondents in Henry County indicated that they do not exercise at all, and 32% of residents exercise only 1-2 times per week.

**HEALTHY EATING.** Over two-thirds (69%) of Henry County residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of Henry County residents who consume five or more servings per day is only 4%.

**OBESITY.** In Henry County, the number of people diagnosed with obesity and being overweight has increased from 2009 to 2014. Note specifically that the percentage of obese and overweight people has increased from 61.3% to 65.4%. Overweight and obesity rates in Illinois have decreased from 64% in 2009 to 63.7% in 2014.

## **BEHAVIORAL HEALTH – MENTAL HEALTH AND SUBSTANCE ABUSE**

**MENTAL HEALTH.** Over 20% of residents in Henry County reported they had experienced 1-7 days with poor mental health per month in 2007-2009, and 9.4% felt mentally unhealthy on 8 or more days per month. In 2010-2014, there was a slight increase in the number of people that reported poor mental health for 1-7 days and a slight decrease in people that reported poor mental health 8 or more days per month.

**SUBSTANCE ABUSE.** Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors of students is a leading indicator of adult substance abuse in later years. Data from the 2014 Illinois Youth Survey measures illegal substance use (alcohol, cigarettes, and other drugs – mainly marijuana) among adolescents. Henry County 12<sup>th</sup> graders are at or below State averages, with the exception of alcohol use at 73%.

## APPENDIX 1. MEMBERS OF COLLABORATIVE TEAM

Members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Individuals, affiliations, titles and expertise are as follows:

**Carrie Boelens** is the OSF HealthCare Community Relations Specialist for the Kewanee service area, a position she has held since October 2015. Prior to this role, Carrie was the Community Health Educator at Henry and Stark County Health Departments for 7 years, followed by 2 years as the Director of Marketing & Development for OSF Saint Luke Medical Center in Kewanee. She holds a Bachelor of Science degree in Workforce Education Development from Southern Illinois University and a Master of Science degree from Eastern Illinois University.

**John Bowser** is OSF Saint Luke Medical Center's Vice President -Chief Financial Officer, serving in this role since 2013. John has over 15 years of healthcare experience beginning his healthcare career with OSF in 2000 at OSF Saint Joseph Medical Center in Bloomington, IL and then the OSF Multispecialty Group in Peoria, IL. John has a Bachelor's degree from Western Illinois University and a Master of Business Administration from Illinois State University. He is accountable for the financial leadership at OSF Saint Luke and participates in many committees and projects locally and ministry wide. John also serves as the Chairman of Trustees for the First Congregational Church of Toulon.

**Tom Burhorn, CLU, LUTCF**, is CEO and President of Tom Burhorn Financial Services Inc. Before opening his insurance agency in 2005, Tom was a MetLife representative for 13 years. In 2003, Tom achieved the designation of Charter Life Underwriter from the American College. He received his Bachelor of Science Degree in Finance from Illinois State University. Tom, at the Rank of Lieutenant Colonel, retired from the Illinois Army National Guard in 2007.

**Lori Christiansen** is the Director of Rehabilitation Services at OSF Saint Luke Medical Center and also serves in a leadership role with the hospital's wellness program. She received a Bachelor of Science Degree in Speech and Hearing Sciences and a Master of Science Degree in Speech/Language Pathology from Bradley University. She is a licensed Speech/Language Pathologist, certified Early Interventionist, and holds Wellness Council of America Faculty Status and Wellness Certification Level IV. Lori is currently a member of the Board of Directors for the Kewanee Schools Foundation and the Kewanee Kiwanis Club. She also serves on the Kewanee Community Drug and Alcohol Task Force as a member of the Governing Board and Chair of the Data and Education Team. Lori is involved with community early intervention initiatives as a member of the Local Interagency Council for Early Intervention and as the Chair for the Abilities Plus Prevention Initiative Advisory Board.

**Lynn Fulton** was appointed the chief executive officer of Kewanee Hospital in June 2012 after serving 9 years as the chief operating officer. Since joining the OSF Ministry, she is the President of OSF Saint Luke Medical Center. When asked recently about her proudest accomplishment, she answered working with the leadership team to change the culture at Kewanee Hospital now OSF Saint Luke. Lynn has her Bachelor of Business majoring in Marketing and Channel Logistics Management from Western Illinois University and her Master of Applied Science in Health Care Administration from the University of St. Francis. Lynn lives in Kewanee with her husband Mike, CFO of Union Federal Savings & Loan, and their three children Megan, Spencer and Emma.

**Holly Gustafson-Hicks** is the Director of OSF Medical Group Kewanee at Saint Luke Medical Center. Holly is a Licensed Respiratory Care Practitioner. Holly joined the organization in 1997 in the Cardiopulmonary Department, she accepted the Manager position of Cardiopulmonary in 1999 while implementing the first Sleep Lab to serve the community. In 2012, she additionally served as Interim Director of the Emergency Department and CCU for 10 months. In 2013, Holly served as the Interim Director of the Family Health Clinic accepting a position of Director in 2014 where she has remained since. Over the past 19 years of service, Holly has participated in several committees and teams to enhance processes, educate Mission Partners, and serve the community in health and wellness. Holly was born and raised in Kewanee and very proud to work for OSF in Kewanee and serve her community.

**Jackie Kernan** is OSF Saint Luke Medical Center's Vice President -Chief Nursing Officer, serving in this role since 2015. Jackie has a Bachelor of Science in Nursing from the University of Saint Francis and is currently working on a Master of Science in Nursing with a Leadership focus from Saint Francis College of Nursing. She serves on many OSF Saint Luke and OSF Healthcare System Committees and projects.

**Russell Medley** is a Community and Economic Development Educator for the University of Illinois Extension in Unit 7, a region consisting of Henry, Mercer, Rock Island, and Stark Counties. Medley holds a B.A. degree from Knox College and a M.S. degree in Urban and Regional Planning from the University of Iowa. Medley has a particular focus on workforce development, downtown planning and revitalization, target industry analysis, and the development and quantification of economic development strategies for municipal and regional entities. Medley has nearly 20 years of experience in the urban planning and economic development fields with stints as Planner/Analyst for a county government and as an Economic Development Specialist and Marketing & Research Director for a countywide economic development organization in the Chicago Suburbs. Medley's most recent position before affiliating with the University of Illinois Extension was as the Executive Director for Kewanee Economic Development Corporation in Kewanee, IL.

**Jill Milroy** is the Executive Director of the YMCA of Kewanee. She has 36 years of experience in several areas including aquatics, programming, and community events with a focus on youth development, healthy living and social responsibility. Jill is an active community member of the Rotary Club, Kewanee Community Drug and Alcohol Task Force, YMCA Alliance and USA Gymnastics.

**Rhonda Nelson**, M.S.Ed., LCPC, received a degree in Counseling from Western Illinois University in 1988. Nelson is a Licensed Clinical Professional Counselor (LCPC) Rhonda achieved national certification as a Mental Health First Aid USA Instructor (Adult Population) in 2009 through the National Council for Community Behavioral Healthcare and is an active Mental Health First Aid Trainer. She achieved MHFA Instructor status for the Youth Population in April 2013. Rhonda served in a variety of positions before becoming the Vice President of Behavioral Health Services for Bridgeway Inc. in 2005.

**Tim Nimrick** is a Vice President of Community State Bank (Kewanee, Galva, Neponset and Franklin) and has over 20 years of experience in banking and financial services. Tim is also the Executive Officer of the 634<sup>th</sup> Brigade Support Battalion in the Illinois Army National Guard with over 20 years of service. Guard. He holds a Bachelor of Science degree in Marketing from Illinois State University. In addition to the OSF advisory board, Tim serves as a board member for the Kewanee Economic Development Corporation and the Housing Authority of Henry County.

**Mark Rewerts** is the Senior Vice President and Chief Lending Officer of the State Bank of Toulon. Mark has been with the Bank for the past 12 years and has worked in the banking industry for 26 years. Mark has a degree in Economics from Western Illinois University and graduated from the Graduate School of Banking at the University of Wisconsin, Madison in 2004. Mark is currently chairman of the OSF Saint Luke Hospital Community Board and is Trustee of the Kewanee Area Healthcare Trust. In addition, Mark is Treasurer of the Kewanee Economic Development Corp. in Kewanee, a Board member of the Kiwanis Club of Kewanee and a member of the Kiwanis Foundation Board, Financial Secretary of St. Timothy Lutheran Church in Wyoming, IL and a board member of the Wyoming History & Arts Association.

**Robert Sehring** is the Central Region CEO of OSF Healthcare System, which encompasses much of Central Illinois and includes all of the Ministry's programs, services and facilities – both acute and ambulatory. Mr. Sehring is accountable for ensuring that the clinical and administrative services across the Central Region are organized to meet the needs of patients and their families in delivering improved health and performance. Also, he is accountable for achieving the region's clinical, patient satisfaction, and financial goals. Finally, Mr. Sehring oversees the organization's Population Health and Managed Care activities. Prior to that, Mr. Sehring served as the Chief Ministry Services Officer at OSF Healthcare System overseeing various Ministry-wide services including supply chain, facilities management and construction, human resources, and employer services. Prior to joining OSF, he held various executive positions with Aetna, New York Life, and Metropolitan Life Insurance.

**Duane Stevens** is the Administrator of the Henry and Stark County Health Departments. A graduate of Western Illinois University with a degree in Accountancy. He has been employed with the Henry and Stark County Health Departments since 2005 and has served as the Administrator since 2014. Prior to his employment with the health department, he spent 5 years as the Accounting Administrator with the County of Henry. Duane has been instrumental in obtaining funding and implementing many programs at the department. Duane is an active member of the Illinois Association of Public Health Administrators along with serving on many committees and boards for public health. He also serves on the OSF Saint Luke Community Board and is a volunteer coach in the community.

**Christopher Sullens, EdD** has been the Superintendent of the Kewanee Community Unit School District 229 for the past ten years. The PreK-12th grades District has over 2,000 students and employs over 250 people. He earned his Doctor of Education in Educational Leadership from Nova Southeastern University (Chicago 17 Cluster). He has an Educational Specialist degree from Western Illinois University and both Master's and Bachelor's degrees from Northern Illinois University. He is currently the President of the Kewanee Rotary Club as well as a member of Kiwanis. He is a member of both economic development and educational boards.

**Frank Tocha** is a retired educator with 34 years of experience as a teacher, coach, elementary principal, high school athletic director and high school assistant principal. He holds a Bachelor's Degree in History and Master's Degrees in Educational Foundations and Administration from Western Illinois University. Frank has served on The Kewanee a Drug and Alcohol Taskforce, The Kewanee Area United Way Board, The Kewanee High School Athletic Hall of Fame Committee, The Committee of 10 School Consolidation Committee, The Kewanee Hospital Foundation Board, The Kewanee Hospital Board of Trustees and The OSF Saint Luke Medical Center Community Advisory Board.



In addition to collaborative team members, the following **facilitators** managed the process and prepared the Community Health Needs Assessment. Their qualifications and expertise are as follows:

**Michelle A. Carrothers (Coordinator)** is currently the Vice President of Strategic Reimbursement for OSF Healthcare System, a position she has served in since 2014. She serves as a Business Leader for the Ministry Community Health Needs Assessment process. Michelle has over 32 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her Fellow of the Healthcare Financial Management Association Certification in 2011. Currently she serves on the National Board of Examiners for HFMA. Michelle serves on various Peoria Community Board of Directors and Illinois Hospital Association committees.

**Dawn Irion (Coordinator)** is a Strategic Reimbursement Analyst at OSF Healthcare System. She has worked for OSF Healthcare System since 2004 and has acted as the coordinator for 11 Hospital Community Health Need Assessments. In addition, she has coordinated the submission of the Community Benefit Attorney General report and the filing of the IRS Form 990 Schedule H since 2008. Dawn has been a member of the McMahon-Illini Chapter of Healthcare Financial Management Association for over ten years. Dawn will assume the responsibilities of President-Elect on the board of the McMahon-Illini HFMA Chapter starting in June of 2016.

**Dr. Laurence G. Weinzimmer, Ph.D. (Principal Investigator)** is the Caterpillar Inc. Professor of Strategic Management in the Foster College of Business at Bradley University in Peoria, IL. An internationally recognized thought leader in organizational strategy and leadership, he is a sought-after consultant to numerous *Fortune 100* companies and not-for-profit organizations. Dr. Weinzimmer has authored over 100 academic papers and four books, including two national best sellers. His work appears in 15 languages, and he has been widely honored for his research accomplishments by many prestigious organizations, including the Academy of Management. Dr. Weinzimmer has served as principle investigator for numerous community assessments, including the United Way, Economic Development Council and numerous hospitals. His approach to Community Health Needs Assessments was identified by the Healthcare Financial Management Association (HFMA) as a Best-in-Practice methodology. Dr. Weinzimmer was contracted for assistance in conducting the CHNA.

## APPENDIX 2. ACTIVITIES RELATED TO 2013 CHNA PRIORITIZED NEEDS

Four needs were identified in the Henry County 2013 CHNA. Below are examples of activities implemented during the last three years to address these needs:

### **Behavioral Health:** Identified as Prioritized Health Need

- Recruited a licensed clinical professional counselor in Henry County. The LCPC has started looking for and providing information on the signs, symptoms and treatment for season depression.

### **Wellness Education and Services:** Identified as Prioritized Health Need

- Provided presentations highlighting the importance of obtaining a flu vaccination. Sent nurses to area school for children to receive flu vaccinations. Financial education provided utilizing local experts to educate the community.

### **Local Availability of services for the Elderly and youth:** Identified as Prioritized Health Need

- Improved access by adding local specialty clinics. Hosted local education programs targeting the elderly and youth populations.

### **Early Detection through cancer screening:** Identified as Prioritized Health Need

- Provided educational programs in the community. Encouraged screening from physician offices.

## APPENDIX 3. SURVEY

### COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

#### INSTRUCTIONS

We want to know how you view our community, so we are inviting you to participate in a research study for community health-needs. Your opinions are important. This questionnaire will take approximately 10 minutes to complete. All of your individual responses are confidential. We will use results of the surveys to improve our understanding of health needs in the community.

Please read each question and mark the response that best represents your views of community needs.

#### I. IMPORTANT HEALTH ISSUES IN OUR COMMUNITY

Please identify the three **(3) most important health issues** in our community.

- |  |  |
|--|--|
| <input type="checkbox"/> Aging issues, such as Alzheimer's disease, hearing loss, memory loss or arthritis | <input type="checkbox"/> Infectious/contagious diseases such as flu, pneumonia, food poisoning |
| <input type="checkbox"/> Cancer  | <input type="checkbox"/> Injuries  |
| <input type="checkbox"/> Chronic pain  | <input type="checkbox"/> Lung disease (asthma, COPD)   |
| <input type="checkbox"/> Dental health (including tooth pain)  | <input type="checkbox"/> Mental health issues such as depression, hopelessness, anger, etc     |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Obesity/overweight  |
| <input type="checkbox"/> Early sexual activity   | <input type="checkbox"/> Sexually transmitted infections                                       |
| <input type="checkbox"/> Heart disease/heart attack  | <input type="checkbox"/> Stroke  |
| <input type="checkbox"/> HIV/AIDS  | <input type="checkbox"/> Other _____   |

#### II. UNHEALTHY BEHAVIORS

Please identify the three **(3) most important unhealthy behaviors** in our community.

- |   |  |
|---|--|
| <input type="checkbox"/> Angry behavior/violence                              | <input type="checkbox"/> Not able to get a routine checkup |
| <input type="checkbox"/> Alcohol abuse  | <input type="checkbox"/> Poor eating habits                |
| <input type="checkbox"/> Child abuse  | <input type="checkbox"/> Reckless driving                  |
| <input type="checkbox"/> Domestic violence                                    | <input type="checkbox"/> Risky sexual behavior             |
| <input type="checkbox"/> Drug abuse   | <input type="checkbox"/> Smoking                           |
| <input type="checkbox"/> Elder abuse (physical, emotional, financial, sexual) | <input type="checkbox"/> Other _____                       |
| <input type="checkbox"/> Lack of exercise                                     |  |

#### III. ISSUES WITH YOUR WELL BEING

Please identify the three **(3) most important factors that impact your well being** in our community.

- |   |   |
|---|---|
| <input type="checkbox"/> Access to health services  | <input type="checkbox"/> Healthy food choices                 |
| <input type="checkbox"/> Affordable clean housing   | <input type="checkbox"/> Less hatred & more social acceptance |
| <input type="checkbox"/> Availability of child care | <input type="checkbox"/> Less poverty                         |
| <input type="checkbox"/> Better school attendance   | <input type="checkbox"/> Less violence                        |
| <input type="checkbox"/> Job opportunities          | <input type="checkbox"/> Safer neighborhoods/schools          |
| <input type="checkbox"/> Good public transportation | <input type="checkbox"/> Other _____                          |

**IV. ACCESS TO HEALTH CARE**

**The following questions ask about your own personal health and health choices. Remember, this survey will not be linked to you in any way.**

1. When you get sick, where do you go? Please choose only one.

- Clinic/Doctor's office       Emergency Department       I don't seek medical attention  
 Urgent Care Center       Health Department       Other \_\_\_\_\_

2. How long has it been since you have been to the doctor to get a checkup when you were well (not because you were already sick)?

- Within the last year       1-2 years ago       3-5 years ago  
 5 or more years ago       I have never been to a doctor for a checkup.

3. In the last year, was there a time when you needed medical care but were not able to get it?

- No (please go to question 5)       Yes (please go to the next question)

4. If you just answered "yes" to question 3, why weren't you able to get medical care? Choose all that apply.

- I didn't have health insurance.       The doctor or clinic refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't know how to find a doctor.  
 I didn't have any way to get to the doctor.       Too long to wait for appointment.  
 Fear  
 Other \_\_\_\_\_

5. In the last year, was there a time when you needed prescription medicine but were not able to get it?

- No (please go to question 7)       Yes (please go to the next question)

6. If you just answered "yes" to question 5, why weren't you able to get prescription medication? Choose all that apply.

- I didn't have health insurance.       The pharmacy refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't have any way to get to the pharmacy.  
 I didn't know how to find a pharmacy.       Other \_\_\_\_\_

7. About how long has it been since you have been to the dentist to get a checkup (not for an emergency)?

- Within the last year       1-2 years ago       3-5 years ago  
 5 or more years ago       I have never been to a dentist for a checkup.

8. In the last year, was there a time when you needed dental care but could not get it?

- No (please go to question 10)       Yes (please go to the next question)

9. If you just answered "yes" to question 8, why weren't you able to get dental care? Choose all that apply.

- I didn't have dental insurance.       The dentist refused to take my insurance or Medicaid.  
 I couldn't afford to pay my co-pay or deductible.       I didn't know how to find a dentist.  
 I didn't have any way to get to the dentist.       Too long to wait for appointment.  
 Fear.  
 Other \_\_\_\_\_

10. In the last year, was there a time when you needed mental-health counseling but could not get it?  
 No (please go to question 12)       Yes (please go to the next question)

11. If you just answered "yes" to question 10, why weren't you able to get mental-health counseling? Choose all that apply.

- |  |  |
|--|--|
| <input type="checkbox"/> I didn't have insurance.                          | <input type="checkbox"/> The counselor refused to take my insurance or Medicaid. |
| <input type="checkbox"/> I couldn't afford to pay my co-pay or deductible. | <input type="checkbox"/> I didn't know how to find a counselor.                  |
| <input type="checkbox"/> I didn't have any way to get to a counselor.      | <input type="checkbox"/> Too long to wait for appointment.                       |
| <input type="checkbox"/> Fear.   | <input type="checkbox"/> Other _____   |
| <input type="checkbox"/> Embarrassment.                                    |  |

12. In the last week how many times did you participate in deliberate exercise, (such as jogging, walking, golf, weight-lifting, fitness classes) that lasted for at least 30 minutes or more?

- None (please go to next question)     1 - 2     3 - 5     More than 5

13. If you answered "none" to the last question, why **didn't** you exercise in the past week? Choose all that apply.

- |   |   |
|---|---|
| <input type="checkbox"/> I don't have any time to exercise.           | <input type="checkbox"/> I don't like to exercise.            |
| <input type="checkbox"/> It is not important to me.                   | <input type="checkbox"/> I can't afford the fees to exercise. |
| <input type="checkbox"/> I don't have access to an exercise facility. | <input type="checkbox"/> I am too tired.                      |
| <input type="checkbox"/> I don't have child care while I exercise.    | <input type="checkbox"/> I have a physical disability.        |
| <input type="checkbox"/> Other _____                                  |   |

14. On a typical day, how many servings of fruits and/or vegetables do you have?

- None (please go to next question)     1 - 2     3 - 5     More than 5

15. If you answered "none" to the last question, why **didn't** you eat fruits/vegetables? Choose all that apply.

- |  |  |
|--|--|
| <input type="checkbox"/> It is difficult to buy fruits and/or vegetables | <input type="checkbox"/> I don't like fruits/vegetables    |
| <input type="checkbox"/> It is not important to me.                      | <input type="checkbox"/> I can't afford fruits/vegetables. |
| <input type="checkbox"/> Other _____                                     |  |

16. On a typical day, how many cigarettes do you smoke (either actual or electronic/vapor)?

- None     1 - 4     5 - 8     9 - 12     More than 12

17. Where do you get most of your medical information (*check **only one***)

- Doctor     Friends/family     Internet     Pharmacy     Nurse at my church

18. Do you have a personal physician?     No     Yes

19. Overall, my physical health is:  Good     Average     Poor

20. Overall, my mental health is:  Good     Average     Poor

21. How long has it been since you have had a flu shot?

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Within the last year | <input type="checkbox"/> 1-2 years ago               | <input type="checkbox"/> 3-5 years ago |
| <input type="checkbox"/> 5 or more years ago  | <input type="checkbox"/> I have never had a flu shot |  |

**V. BACKGROUND INFORMATION**

What county do you live in?

- Henry  Other

What type of insurance do you have?

- Medicare  Medicaid  Private/commercial  None

If you answered "none" to the last question, why **don't** you have insurance? Choose all that apply.

- I cannot afford insurance  I don't need insurance  
 I don't know how to get insurance  Other \_\_\_\_\_

What is your gender?  Male  Female

What is your age?

- Under 20  21-30  31-40  41-50  51-60  61-70  71 or older

What is your race?

- White  Black/African American  
 Hispanic/Latino  Native American/American Indian/Alaska Native  
 Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino)  
 Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro)  
 Other race not listed here: \_\_\_\_\_

What is your highest level of education?

- Less than high school  Some high school  High school degree (or GED/equivalent)  
 Some college (no degree)  Associate's degree  Bachelor's degree  
 Graduate or professional degree  Other: \_\_\_\_\_

What was your total income last year, before taxes?

- Less than \$20,000  \$20,001 to \$40,000  \$40,001 to \$60,000  
 \$60,001 to \$80,000  \$80,001 to \$100,000  over \$100,000

Do you:  Rent  Own  Other

How many people live in your home? \_\_\_\_\_

What is your job status?

- Full-time  Part-time  Unemployed  Homemaker  
 Retired  Disabled  Student  Armed Forces

Is there anything else you would like to tell us about community concerns, health problems or services in the community?

---

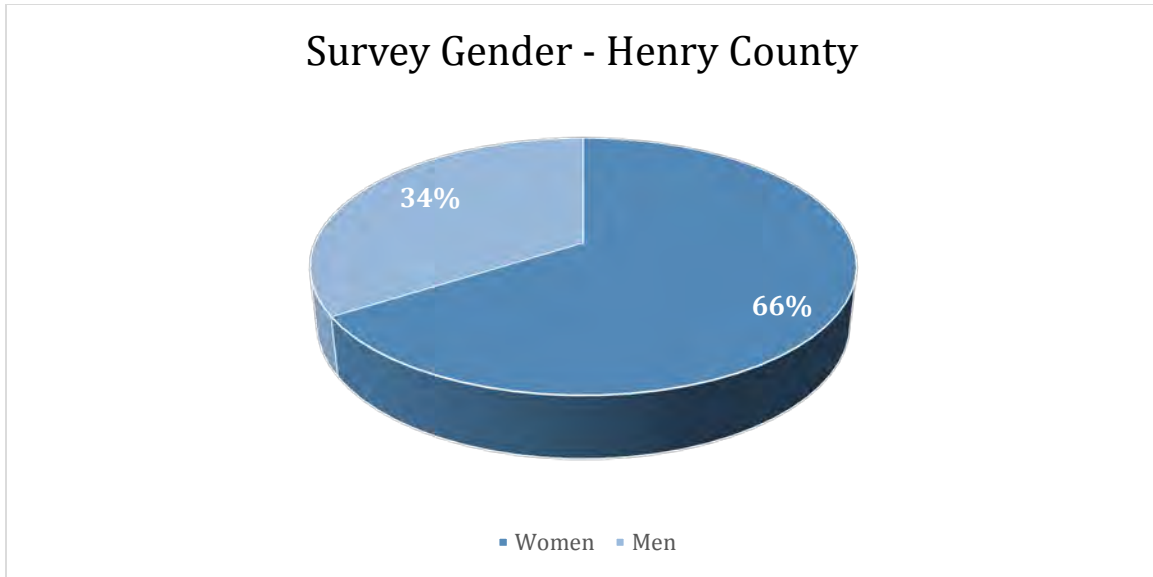
**Thank you very much for sharing your views with us!**

This survey instrument was reviewed by the Committee on the Use of Human Subjects and Research (CUSHR), Bradley University Institutional Review Board (IRB) in May, 2015

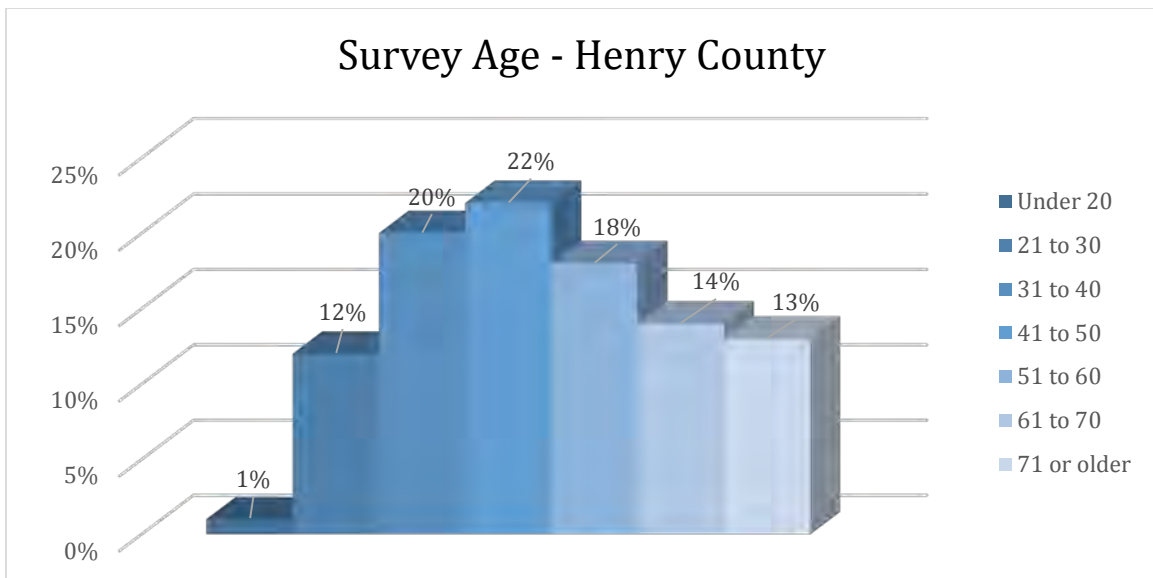
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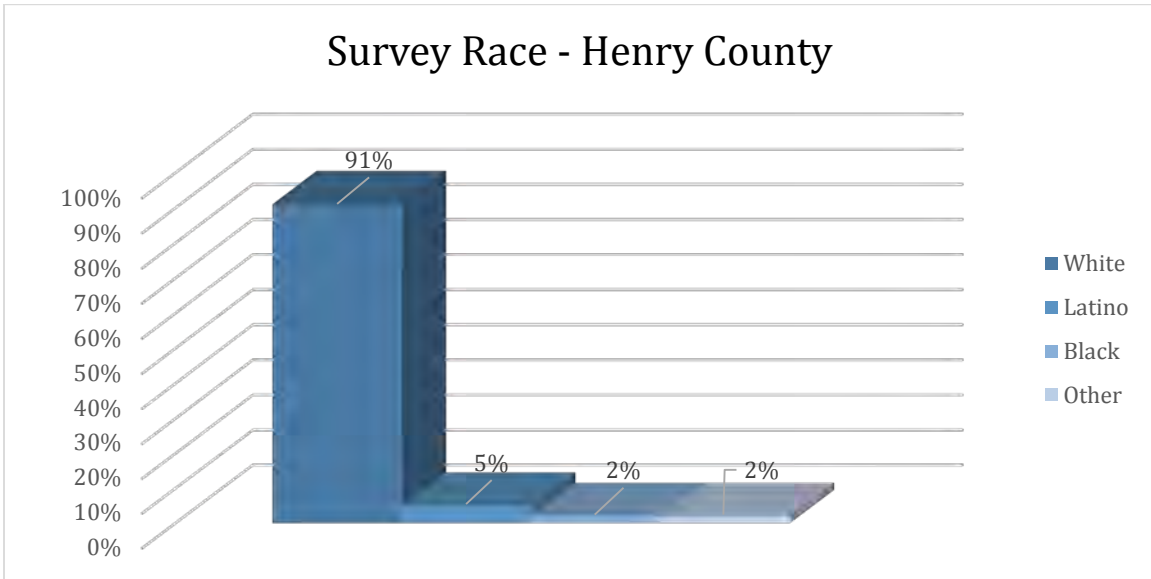
## APPENDIX 4. CHARACTERISTICS OF SURVEY RESPONDENTS FOR GENERAL SAMPLE



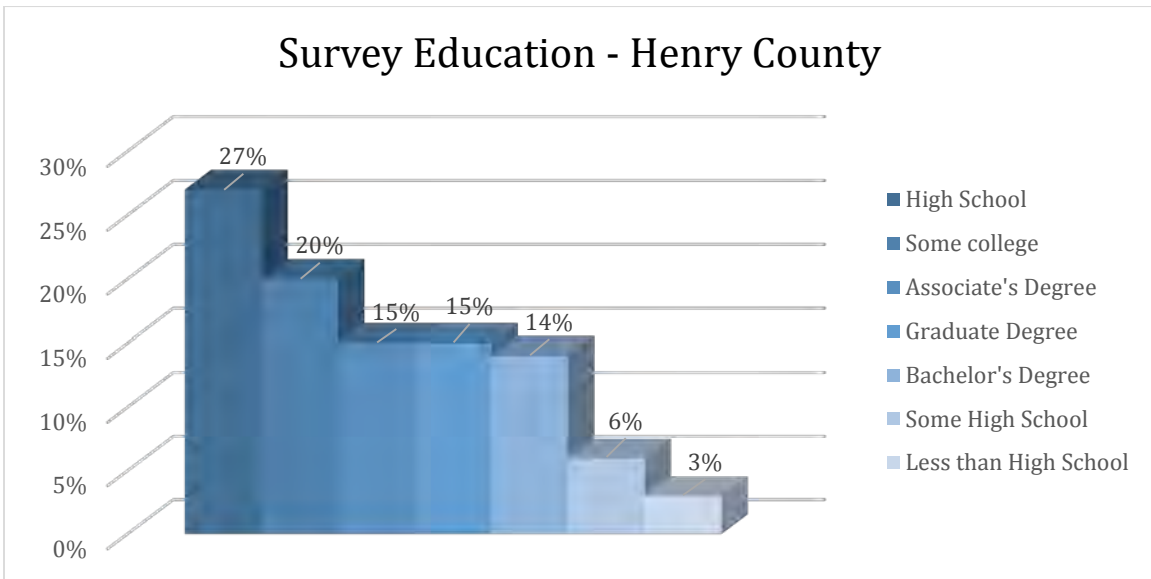
Source: CHNA Survey



Source: CHNA Survey



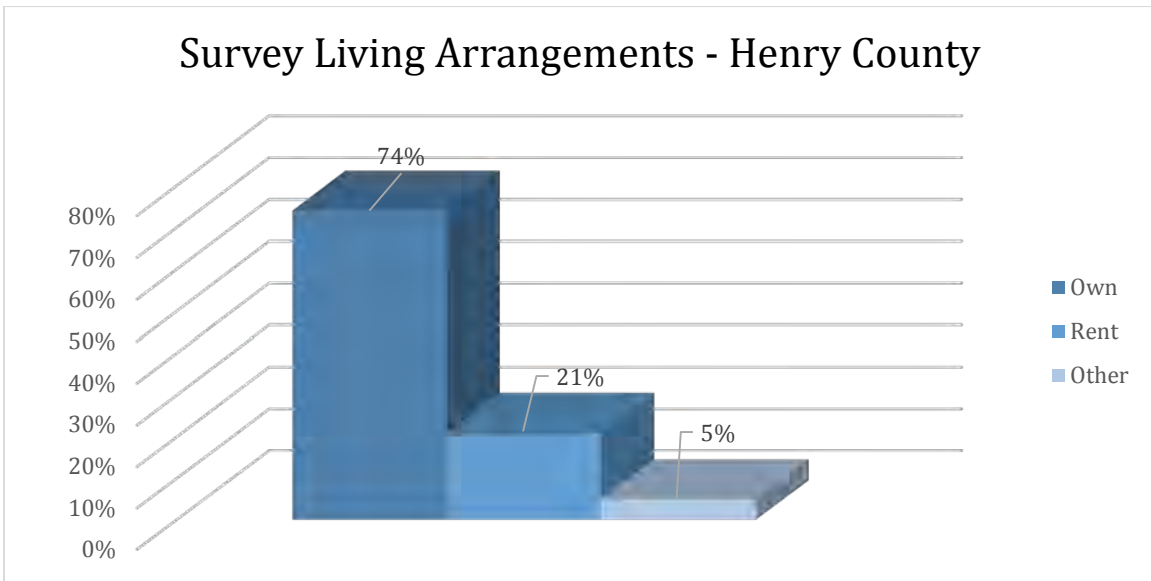
Source: CHNA Survey



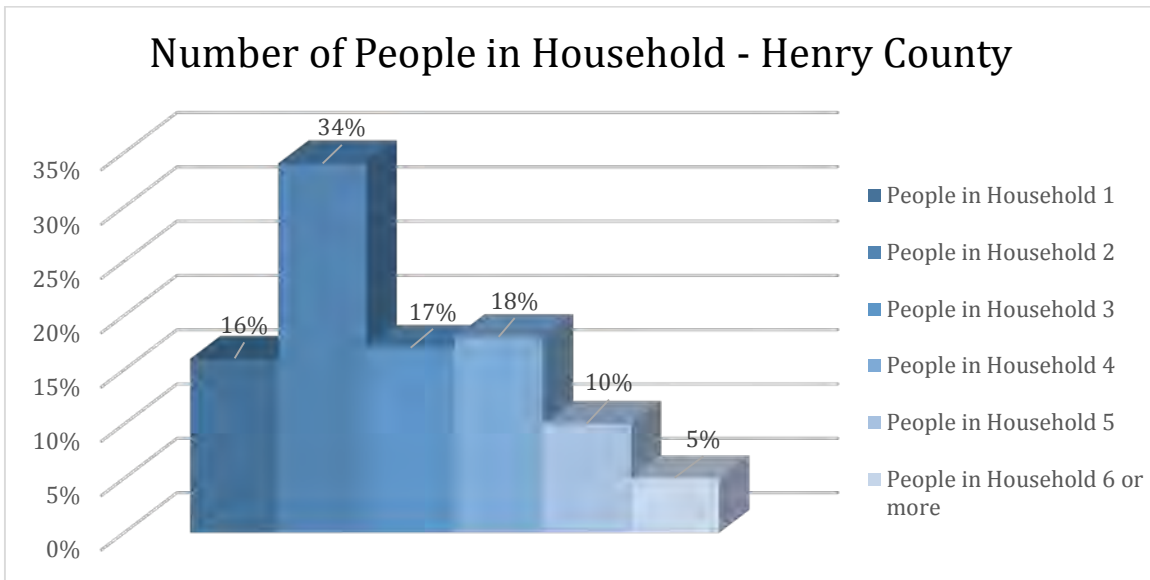
Source: CHNA Survey

Income: Mean income for sample was \$50,989.00





Source: CHNA Survey



Source: CHNA Survey

### APPENDIX 5. RESOURCE MATRIX

	OSF Saint Luke Medical Center (Kewanee)	Access to Care	Cancer	Diabetes	Healthy Behaviors/ Nutrition & Exercise	Heart Disease	Mental Health	Obesity	Low Birth Weights	Substance Abuse
<b>Recreational Facilities</b>										
	YMCA				X			X		
	Kewanee Park District				X			X		
	Geneseo Park District				X			X		
<b>Health</b>										
	Henry County Health Department	X	X	X	X	X	X	X	X	X
<b>Community Agencies</b>										
	Alcoholics Anonymous									X
	Bridgeway						X			X
	Henry County Youth Services Bureau						X			
	Kewanee Alcohol and Drug Task Force						X			X
	Kewanee Food Pantry				X					
	Bureau-Henry Stark Regional Office of Education (21st Century Program)				X					
	University of Illinois Extension			X	X			X		
	Housing Authority of Henry County				X					X
<b>Hospitals / Clinics</b>										
	OSF Saint Luke Medical Center (Kewanee)	X	X	X	X	X	X	X	X	X
	OSF Multi-Specialty Group	X	X	X	X	X	X	X	X	X
	OSF HomeCare and Hospice	X	X			X				
	Hammond-Henry Hospital (Geneseo)	X	X	X	X	X	X	X	X	X
	Kewanee Medical Clinic	X	X	X	X	X	X	X	X	X
	Ahearn & Associates Medical Center	X	X	X	X	X	X	X	X	X
	Regional Family Health Center	X	X	X	X	X	X	X	X	X
	Preferred Home Healthcare & Hospice	X	X			X				

## APPENDIX 6. DESCRIPTION OF COMMUNITY RESOURCES

### Recreational Facilities (3)

#### YMCA of Kewanee

YMCA of Kewanee strives to be a safe place where all people feel welcomed regardless of background. They bring people of all ages and ethnicities together to help them make meaningful connections, improve health and well-being, to teach and reinforce positive values and find a sense of respect, belonging and engagement. The Y will strengthen our entire community through youth development, healthy living and social responsibility.

#### Kewanee Park District

The Kewanee Park District exists to provide care for public lands and opportunities for personal growth. They work with citizens of Kewanee to provide a broad spectrum of opportunities to renew, restore and recreate, balancing often stressful lifestyle. The Park District encourages participation of individuals and families to develop the highest possible level of physical and mental well-being with the intent of creating a well-balanced and healthy community.

#### Geneseo Park District

The Geneseo Park District provides recreation opportunities that contribute to the Geneseo well-being of all citizens, by establishing and maintaining a comprehensive public park and recreation system.

### Health Departments (1)

#### Henry County Health Department

The Henry County Health Department offers clinic services, Women's Health, Family Planning, Physicals, Well-child, Immunization, STD, WIC/Breastfeeding, Community and Group Presentations, Home Health-skilled nursing and homecare services, and Environmental Health Services in the Henry County area.

### Community Agencies/Private Practices (8)

#### Alcoholics Anonymous

Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others to recover from alcoholism. Alcoholic's Anonymous meetings are offered in the Henry County area.

#### Bridgeway

Bridgeway is a not-for-profit community based employer with decades of experience in providing Solutions to Businesses. Bridgeway businesses produce needed products and services in addition to providing a wide range of contracted services. Bridgeway's primary focus is on the needs and desires of the consumer; the development of innovative ways to achieve consumer goals, the removal of barriers that hinder access to services, and the continuous enhancement of the quality of services and the quality of life of the people they serve.

### **Henry County Youth Services Bureau**

The mission of the Henry County Youth Services Bureau is to empower youth to succeed by serving them in their home, school and community. Founded in 1972, they are dedicated to providing free counseling services to youth ages 3 to 21. YSB Counselors provide a wide array of services, including: Individual counseling, Diversion Program for youth involved with Henry County Court Services, Assessments, Referral Services, and Group Counseling. YSB Staff provide counseling services at a location that is convenient to the client and their family. Counseling sessions are offered year round, and can be held at a client's school, home, community center, or the YSB office.

### **Kewanee Community Drug & Alcohol Task Force**

The Kewanee Community Drug and Alcohol Task Force was established in 1984. A Drug Free Community Grant was awarded to the KCDATF in 2011. The DFC grant provides \$125,000 per year for 5 years with an opportunity to apply for another 5 years! The Mission of the Kewanee Community Drug and Alcohol Task Force is to decrease the use and abuse of alcohol and other drugs among youth in the Kewanee area. The vision that unites our efforts is: to decrease the use and abuse of alcohol and other drugs among youth in the Kewanee area so that the entire community will work toward common goals to change the culture of alcohol and drug use.

### **Kewanee Food Pantry**

The Kewanee Food Pantry is dedicated to providing for the needs of hungry people by collecting and distributing food and grocery products and educating the community about Nutrition.

### **Bureau-Henry and Stark Regional Office of Education**

The mission of the Bureau, Henry and Stark County Regional Office of Education is to support and enhance educational growth through advocacy and leadership. The vision of the Bureau, Henry and Stark County Regional Office of Education is to be a proactive intermediate educational agency serving the learning community through innovative and collaborative leadership.

### **University of Illinois Extension**

University of Illinois Extension is the flagship outreach effort of the University of Illinois at Urbana-Champaign, offering educational programs to residents of all of Illinois' 102 counties — and far beyond. Extension provides practical education you can trust to help people, businesses, and communities solve problems, develop skills, and build a better future. U of I Extension offers educational programs in five broad areas:

Energy and environmental stewardship, Food safety and security, Economic development and workforce preparedness, Family health, financial security, and wellness, and Youth development.

### **Housing Authority of Henry County**

The Housing Authority of Henry County provides qualified individuals with affordable housing and resources to assist in their personal growth. There are 176 families in Henry County who are recipients of a Section 8 Housing Certificate, issued by the Housing Authority of Henry County, enabling them to receive rental assistance in private housing in Henry County. The Housing Authority of Henry County was an early Housing Organization, meeting the needs of a largely rural area. This foresight and

commitment has been carried out by the Commissioners throughout the past 66 years. A stable housing environment has created a social climate for good community values.

## **Hospitals/Clinics (8)**

### **OSF Saint Luke Medical Center**

OSF Saint Luke Medical Center, a 25-bed Critical Access Hospital located in Kewanee, Illinois and provides Inpatient services, a broad range of Outpatient services, Emergency services and primary care services. For over 95 years, OSF Saint Luke has kept pace with many innovations in health care, including a new hospital that opened in 2008. OSF Saint Luke Medical Center has a long history of "friends and neighbors taking care of friends and neighbors" while providing an excellent patient experience.

### **OSF Multi-Specialty Group**

OSF Multi-Specialty Group offers a wide range of medical and surgical care, as well as other specialty services, through provider offices located at OSF Saint Luke Medical Center.

### **OSF Home Care and Hospice**

OSF Home Care and Hospice offer health care and services to home bound individuals as well as services at end of life through Hospice.

### **Hammond-Henry Hospital**

Hammond-Henry Hospital is a 25-bed Critical Access Hospital located in Geneseo, Illinois and provides Inpatient services, a broad range of Outpatient services, Emergency services and primary care services.

### **Kewanee Medical Clinic**

The Kewanee Medical Clinic is a medical practice providing a wide range of medical services.

### **Ahearn & Associates Medical Center, Inc.**

Ahearn & Associates Medical Center, Inc. provides office care for acute and chronic illnesses as well as wellness exams and preventive healthcare services.

### **Regional Family Health Center**

Regional Family Health Center is a medical practice providing a wide range of medical services.

### **Preferred Home Healthcare & Hospice**

Preferred Home Health Care offers a full range of health care services including home health, hospice, private duty nursing, medical equipment and supplies, seating and mobility products, a retail show floor, and retail and compounding pharmacy services.

## APPENDIX 7. PRIORITIZATION METHODOLOGY

### 5-STEP PRIORITIZATION OF COMMUNITY HEALTH ISSUES

#### **Step 1. Review Data for Potential Health Issues**

#### **Step 2. Briefly Discuss Relationships Among Issues**

#### **Step 3. Apply “PEARL” Test from Hanlon Method<sup>3</sup>**

Screen out health problems based on the following feasibility factors:

**Propriety** – Is a program for the health problem appropriate?

**Economics** – Does it make economic sense to address the problem?

**Acceptability** – Will a community accept the program? Is it wanted?

**Resources** – Is funding available for a program?

**Legality** – Do current laws allow program activities to be implemented?

#### **Step 4. Use Voting Technique to Narrow Potential Issues**

#### **Step 5. Prioritize Issues. Use a weighted-scale approach (1-5 scale) to rate remaining issues based on:**

**1. Magnitude** – size of the issue in the community. Considerations include, but are not limited to:

- *Percentage of general population impacted*
- *Prevalence of issue in low-income communities*
- *Trends and future forecasts*

**2. Severity** – importance of issue in terms of relationships with morbidities, comorbidities and mortality. Considerations include, but are not limited to:

- *Does an issue lead to serious diseases/death*
- *Urgency of issue to improve population health*

**3. Potential for impact through collaboration** – can management of the issue make a difference in the community?

Considerations include, but are not limited to:

- *Availability and efficacy of solutions*
- *Feasibility of success*

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<sup>3</sup> “Guide to Prioritization Techniques.” National Connection for Local Public Health (NACCHO)