

Community Health Needs Assessment 2019

SAINT JAMES HOSPITAL

known as OSF SAINT JAMES - JOHN W. ALBRECHT
MEDICAL CENTER

LIVINGSTON COUNTY

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Community Health Needs Assessment

2019

Collaboration for sustaining health equity

Executive Summary

The Livingston County Community Health-Needs Assessment is a collaborative undertaking by OSF Saint James – John W. Albrecht Medical Center to highlight the health needs and well-being of residents in Livingston County. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Livingston County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Livingston 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 publicly 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 Livingston 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, three significant health needs were identified and determined to have equal priority:

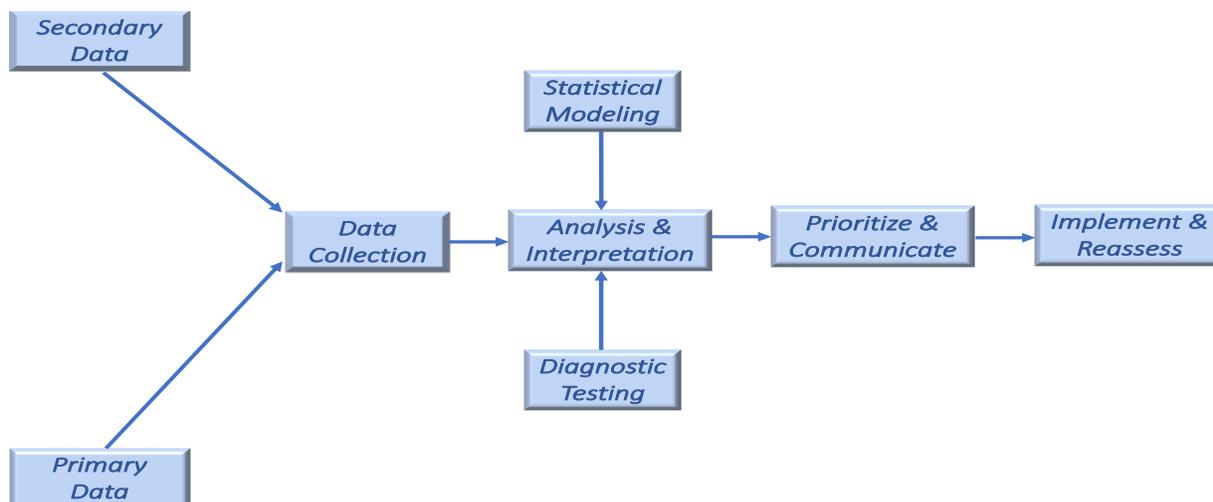
- **Healthy Behaviors** – *defined as active living and healthy eating, and their impact on obesity*
- **Behavioral Health** – *including mental health*
- **Substance abuse** – *specific focus not included in Behavioral Health*

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 James – John W. Albrecht 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. This CHNA Report was approved by the OSF Healthcare System’s Board of Directors on July 29, 2019.

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 below.



Collaborative Team and Community Engagement

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 James – John W. Albrecht Medical Center, members of the Livingston 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 the first and second quarters of 2018 and in the first

quarter of 2019. 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. Individuals, affiliations, titles and expertise can be found in Appendix 1. Note that the collaborative team provided input for all sections of the CHNA.

Definition of the Community

In order to determine the geographic boundaries for OSF Saint James – John W. Albrecht Medical Center, analyses were completed to identify what percentage of inpatient and outpatient activity was represented by Livingston County. Data show that Livingston County alone represents 76.5% 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. Note that the at-risk population was defined as those individuals that were eligible to receive Medicaid based on the state of Illinois guidelines using household size and income level.

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 Livingston County. When feasible, data are assessed longitudinally to identify trends and patterns by comparing with results from the 2016 CHNA and benchmarked with State of Illinois averages.

Community Feedback from Previous Assessments

The 2016 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 2016 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.

2016 CHNA Health Needs and Implementation Plans

The 2016 CHNA for Livingston County identified two significant health needs. These included: Healthy Behaviors, defined as healthy eating and active living, and their impact on obesity; and Behavioral Health, including mental health and substance abuse. 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 439 survey respondents from Livingston County, a study was completed to examine perceptions of the community health-related issues, healthy behaviors, behavioral health, food security, social determinants of health and access to healthcare.

Secondary Data Collection

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.

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 2018, designed for use with both the general population and the at-risk community. To ensure that all critical areas were being addressed, the entire 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, eight 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.

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.

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.

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, healthy eating habits and cancer screenings.

Behavioral health – to assess community issues related to areas such as anxiety and depression.

Food security – to assess access to healthy food alternatives.

Social determinants of health – to assess the impact that social determinants may have on the above-mentioned areas.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the eight 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. A total of 230 surveys were collected in Peoria, IL in May and June 2018. 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.

Sample Size

In order to identify our potential population, we first identified the percentage of the Livingston 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 Livingston County was 13.3 percent in 2017. The population used for the calculation was 36,518 yielding a total of 4,857 residents living in poverty in the Livingston 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 Livingston County area, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 381. The data collection effort for this CHNA yielded a total of 439 usable responses. This exceeded the threshold of the desired 90% confidence interval.

To provide a representative profile when assessing the aggregated population for the Livingston 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. Additionally, efforts were made to ensure that the demography of the sample was aligned with population demographics according to U.S. Census data. This provided a total usable sample of 356 respondents for analyzing the aggregate population. Sample characteristics can be seen in Appendix 4.

Data Collection

Survey data were collected 3rd quarter 2018. 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.

Note that use of electronic surveys to collect community-level data may create a potential for bias from convenience sampling error. To recognize for potential bias in the community sample, a second control sample of data was collected. Specifically, the control sample consisted of random patients surveyed at the hospital, assuming that patients receiving care represent an unbiased representation of the community. All questions on the patient version of the survey pertaining to access to healthcare were removed, as these questions were not relevant to current patients. Data from the community sample and the control sample were compared using *t-tests* and tetrachoric correlations when appropriate. Results show that the community sample did not exhibit any significance patterns of bias. If specific relationships exhibited a potential for bias between the community sample and the control sample, they are identified in the social-determinants sections of the analyses within each chapter.

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.

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, χ^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 Telehealth Interest and Internet Access
- 1.7 Key Takeaways from Chapter 1

CHAPTER 1

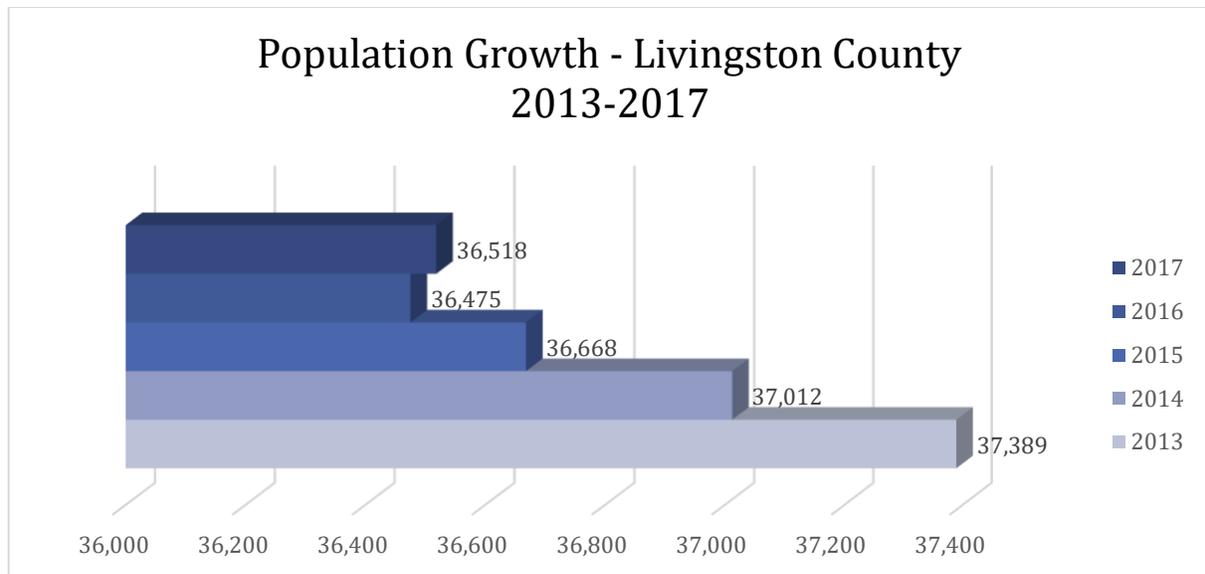
DEMOGRAPHY AND SOCIAL DETERMINANTS

1.1 Population

Importance of the measure: Population data characterize individuals residing in Livingston 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 Livingston County decreased (2.4%) between 2013 and 2016 but experienced an increase in 2017 (1.2%).



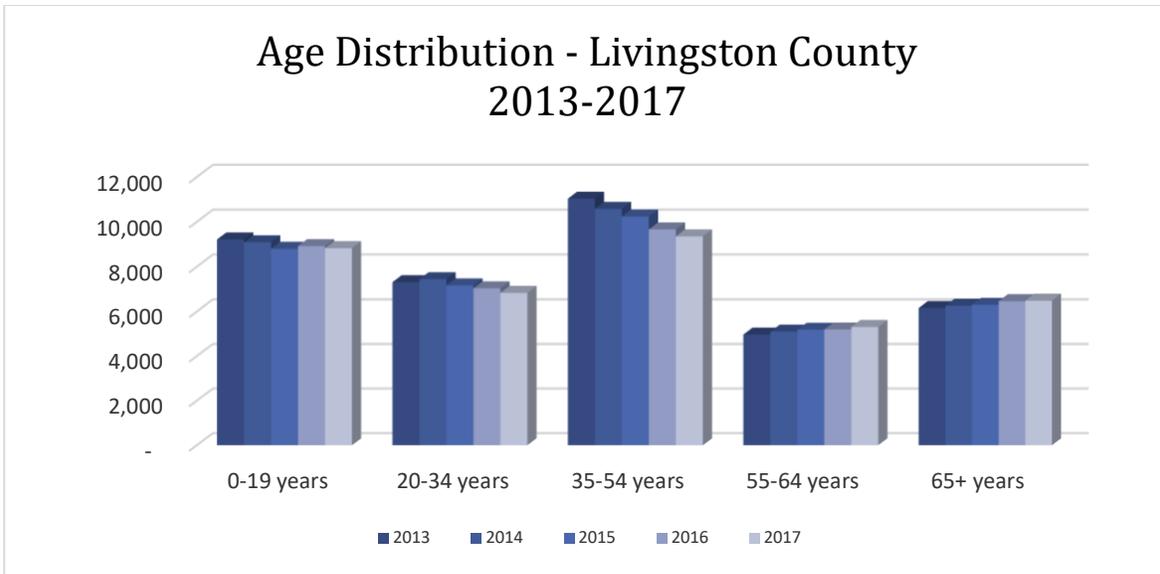
Source: US Census

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 Livingston County aged 35-54 declined 15.2% between 2013 and 2017, and the percentage of individuals aged 65 and older increased 5.4% between 2013 and 2017.

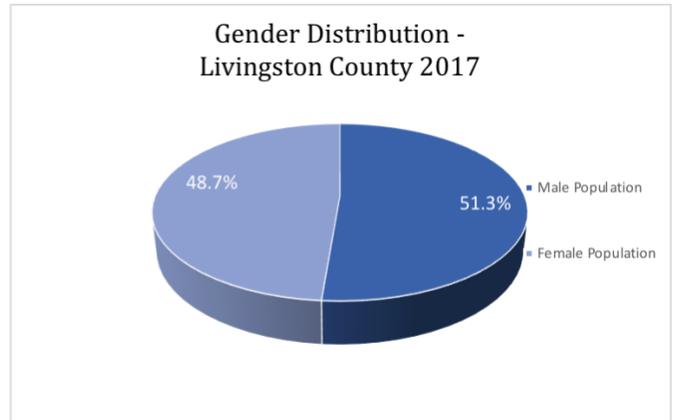
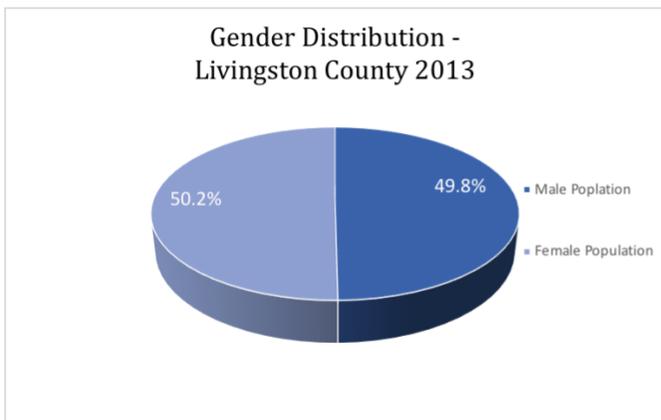


Age	2013	2014	2015	2016	2017
0-19 years	9,218	9,091	8,800	8,919	8,829
20-34 years	7,313	7,445	7,167	7,036	6,833
35-54 years	11,034	10,580	10,237	9,666	9,353
55-64 years	4,965	5,100	5,183	5,194	5,310
65+ years	6,157	6,260	6,302	6,463	6,487

Source: US Census

Gender

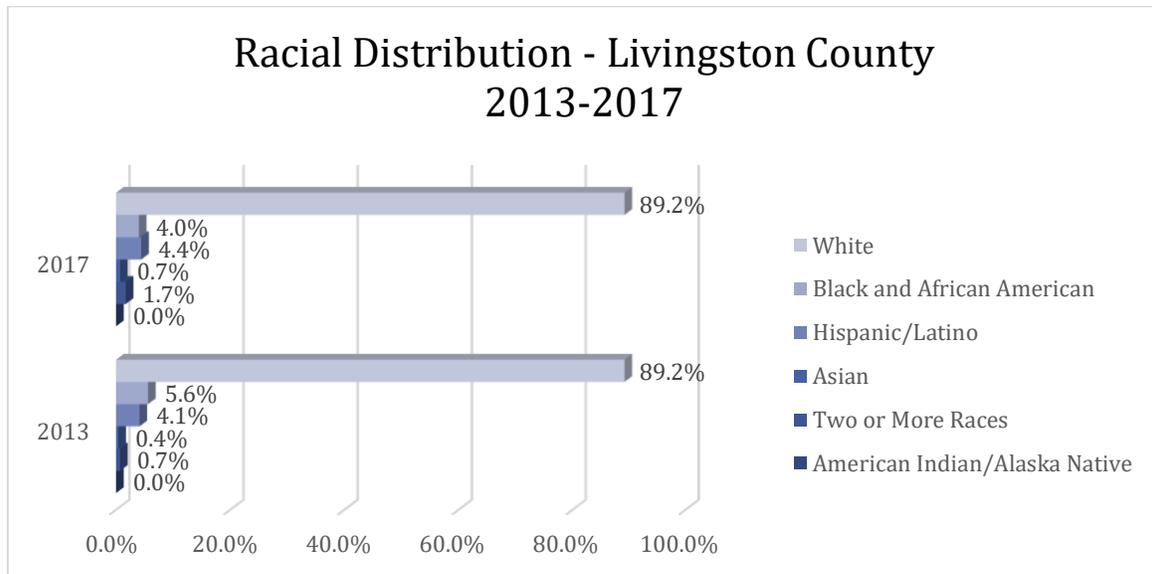
The gender distribution of Livingston County residents has remained relatively consistent between 2013 and 2017.



Source: US Census

Race

With regard to race and ethnic background, Livingston County is largely homogenous. Data from 2017 suggest no change in White ethnicity (89.2%) of the population in Livingston County while the non-White population of Livingston County was 10.8% in 2017, with Black ethnicity comprising 4.0% of the population, multi-racial ethnicity comprising 1.7% of the population, and Hispanic/Latino ethnicity comprising 4.4% of the population.

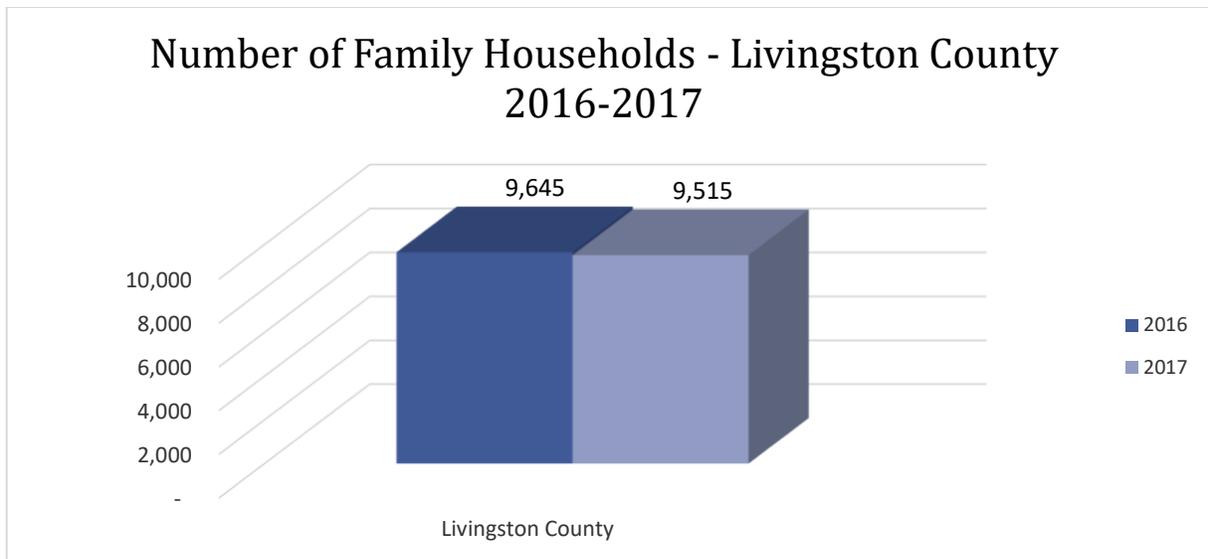


Source: US Census

1.3 Household/Family

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

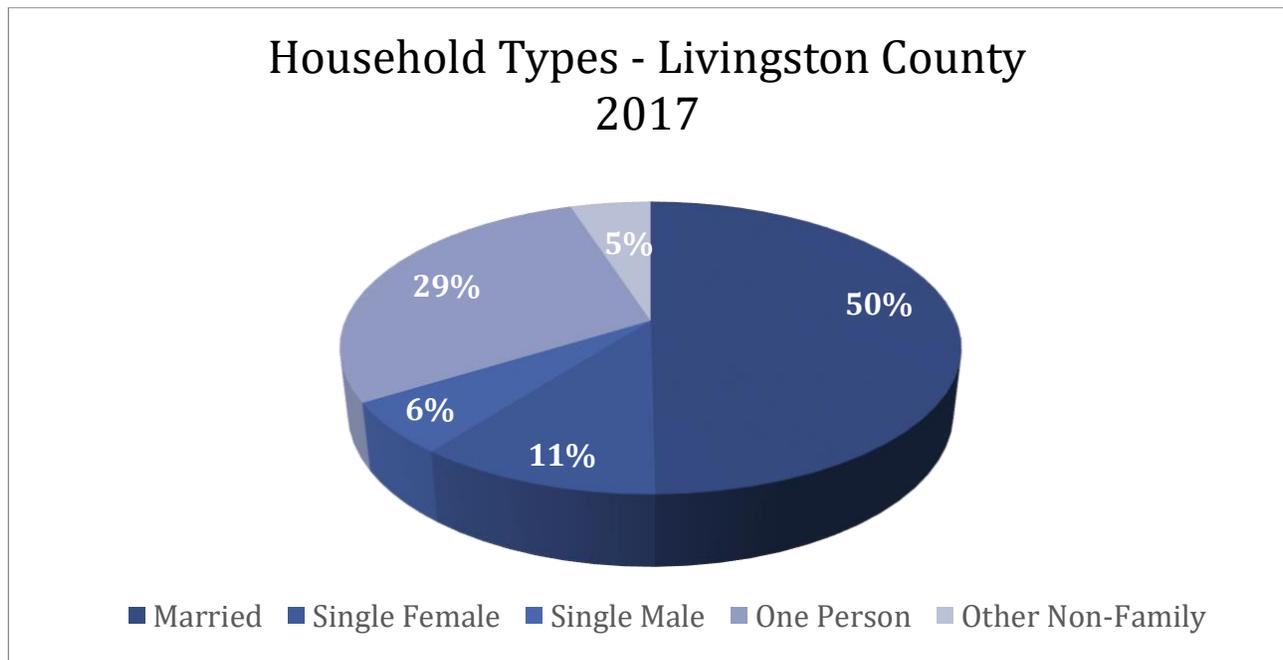
As indicated in the graph below, the number of family households in Livingston County decreased slightly from 2016 to 2017.



Source: US Census

Family Composition

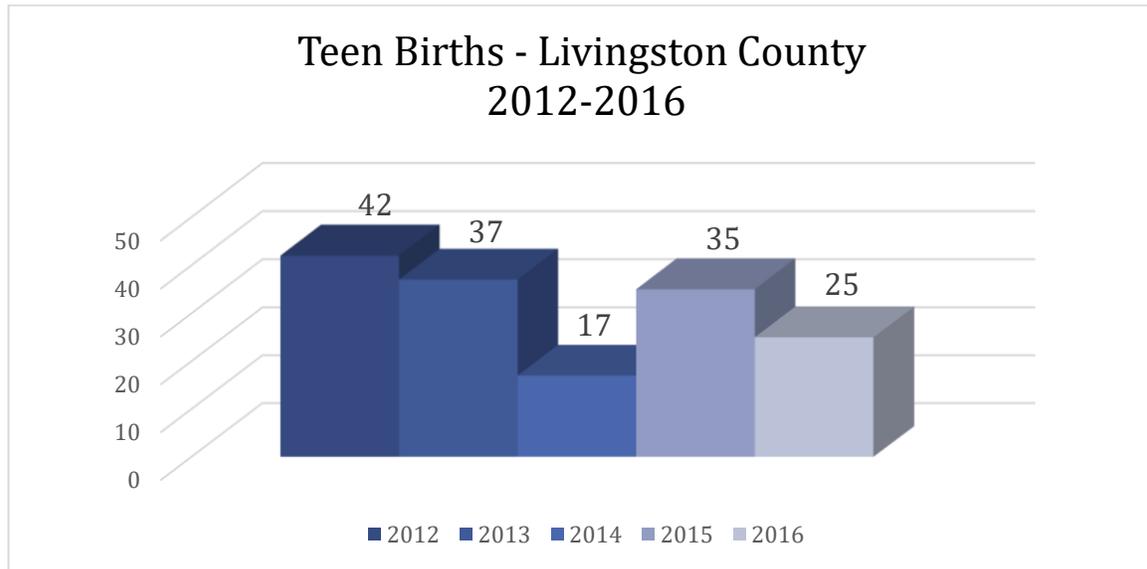
Data from 2017 suggest the percentage of two-parent families in Livingston County is 50%. One-person households represent 29% of the county population. And single-female households represent 11%.



Source: US Census

Early Sexual Activity Leading to Births from Teenage Mothers

Livingston County has experienced a fluctuation in teenage birth count. The teen birth count fluctuated from 2012-2016, with a dramatic decline between 2012-2014 followed by an increase in 2015.



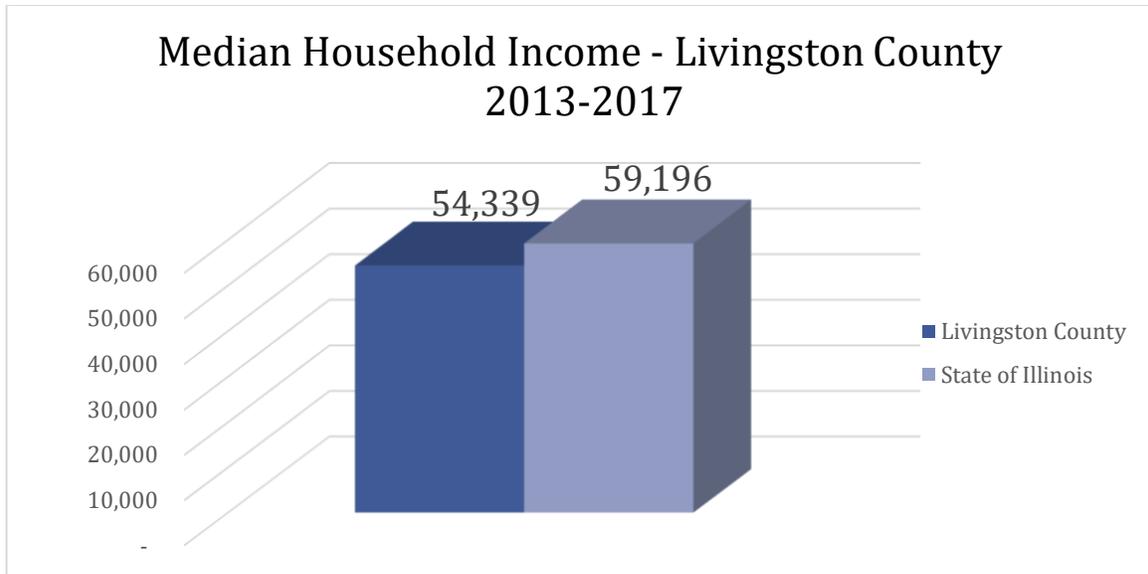
Source: Illinois Department of Public Health

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

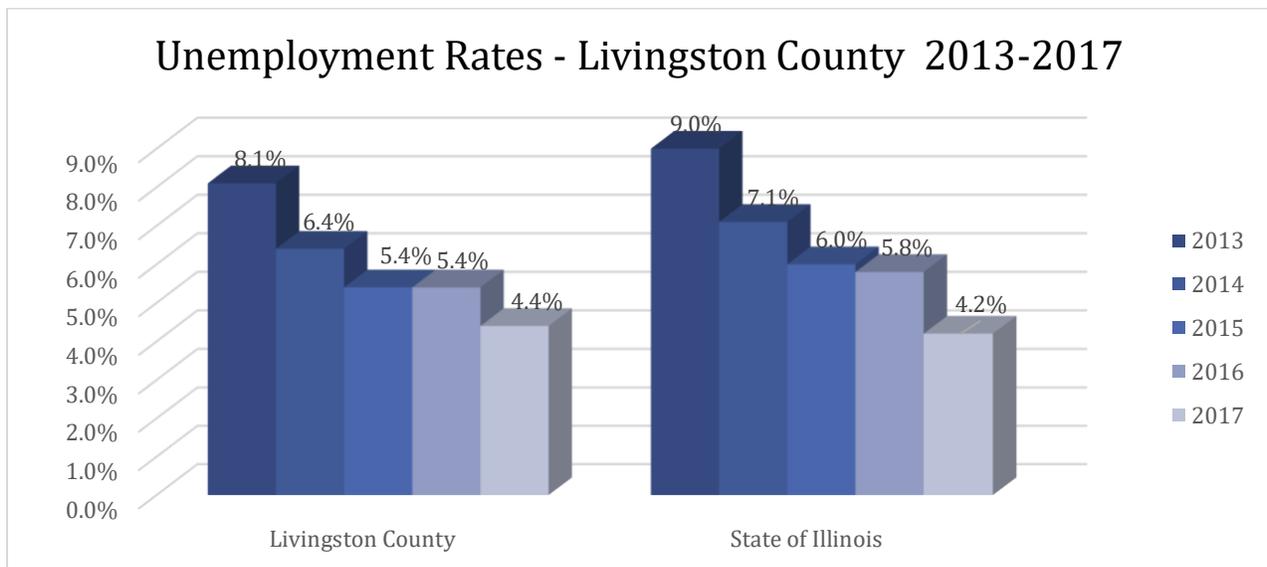
For 2013-2017, the median household income in Livingston County was lower than the State of Illinois.



Source: US Census

Unemployment

For the years 2013 to 2016, the Livingston County unemployment rate was lower than the State of Illinois unemployment rate. However, it is higher for the year 2017. Overall, between 2013 and 2017, unemployment in Livingston County decreased by 3.7%.

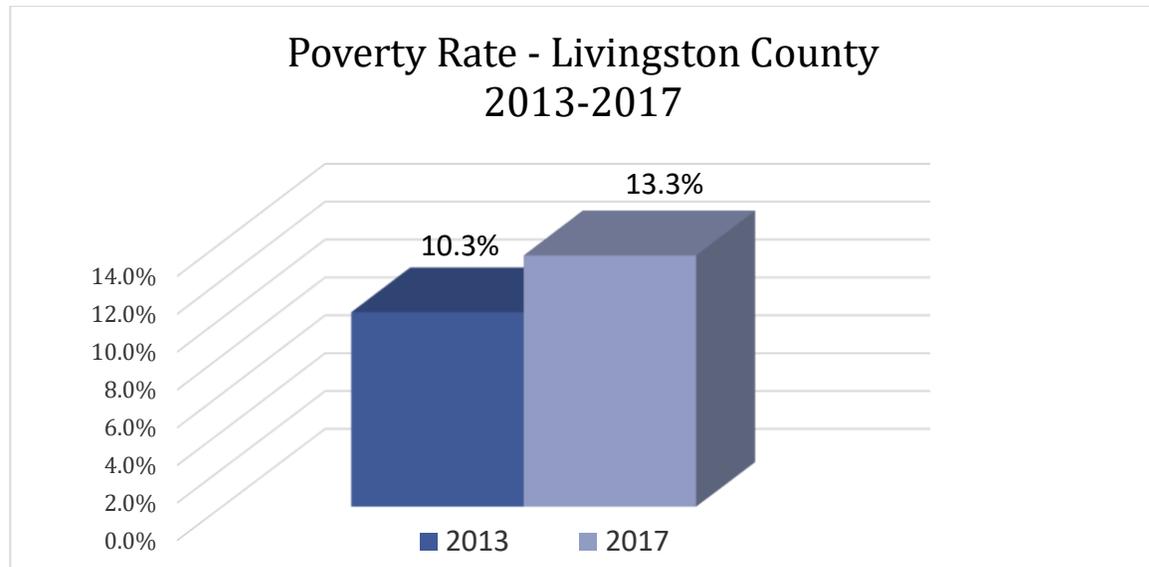


Source: Bureau of Labor Statistics

Individuals in Poverty

In Livingston County, the percentage of individuals living in poverty between 2013 and 2017 increased by 3.0%. The poverty rate for individuals is 13.3%, which is slightly lower than the State

of Illinois individual poverty rate of 13.5%. Poverty has a significant impact on the development of children and youth. In 2017 the poverty rate for families living in Livingston County (9.2%) was lower than the State of Illinois family poverty rate (9.8%).



Source: US Census

1.5 Education

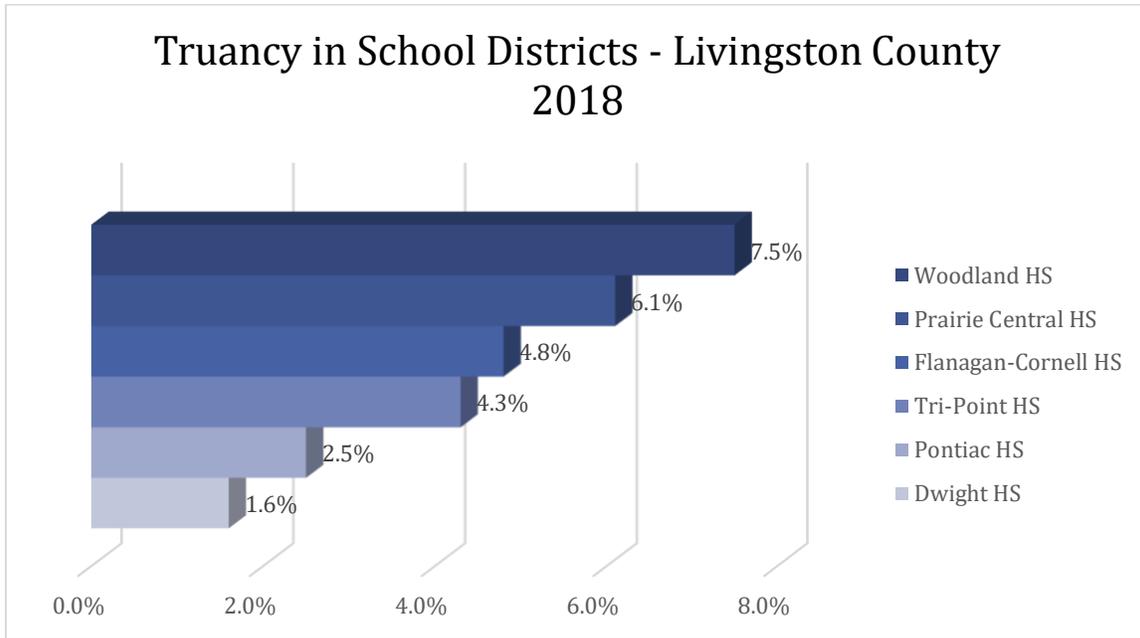
Importance of the measure: According to the National Center for Educational Statistics¹, “The better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income.” Research suggests that the higher the level of educational attainment 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.

¹ NCES 2005

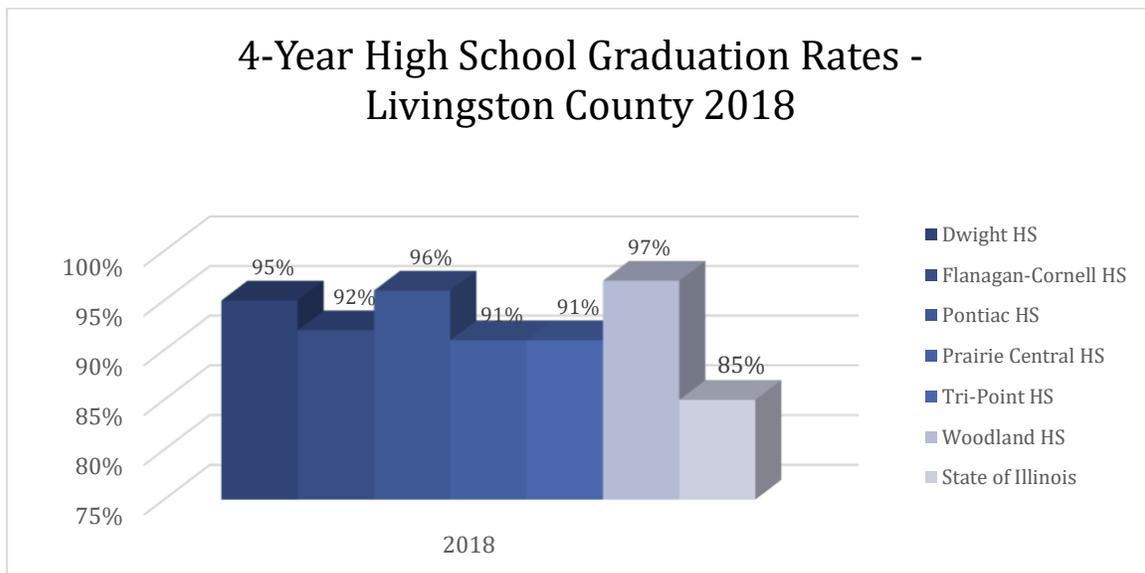
Woodland High School and Prairie Central High School have the largest percentage of students who were chronically truant in 2018.



Source: Illinois Report Card

High School Graduation Rates

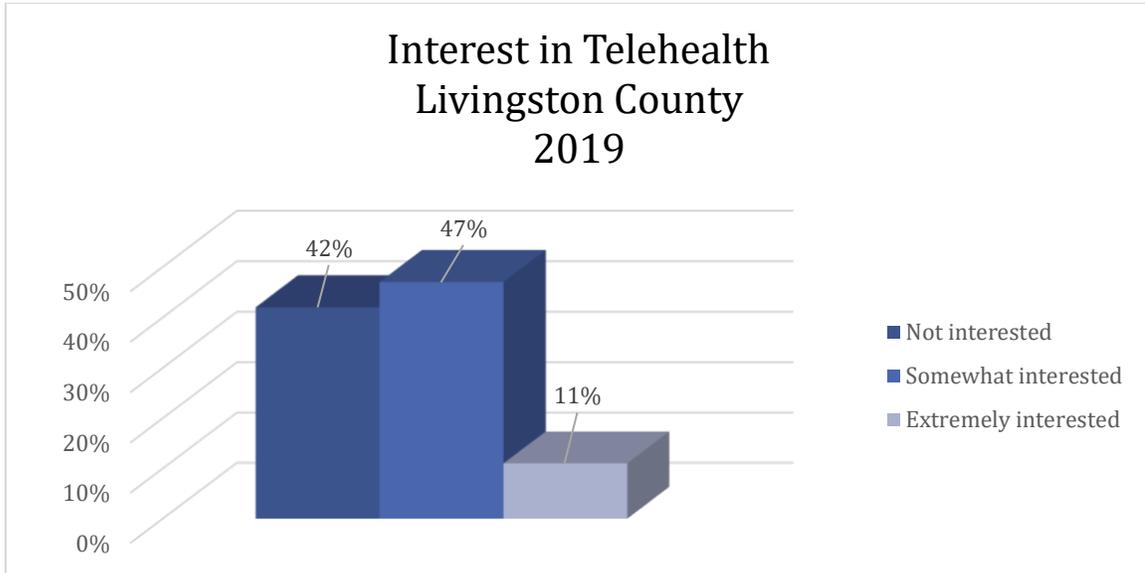
In 2018, none of the schools in Livingston County reported high school graduation rates that were below the State average of 85%.



Source: Illinois Report Card

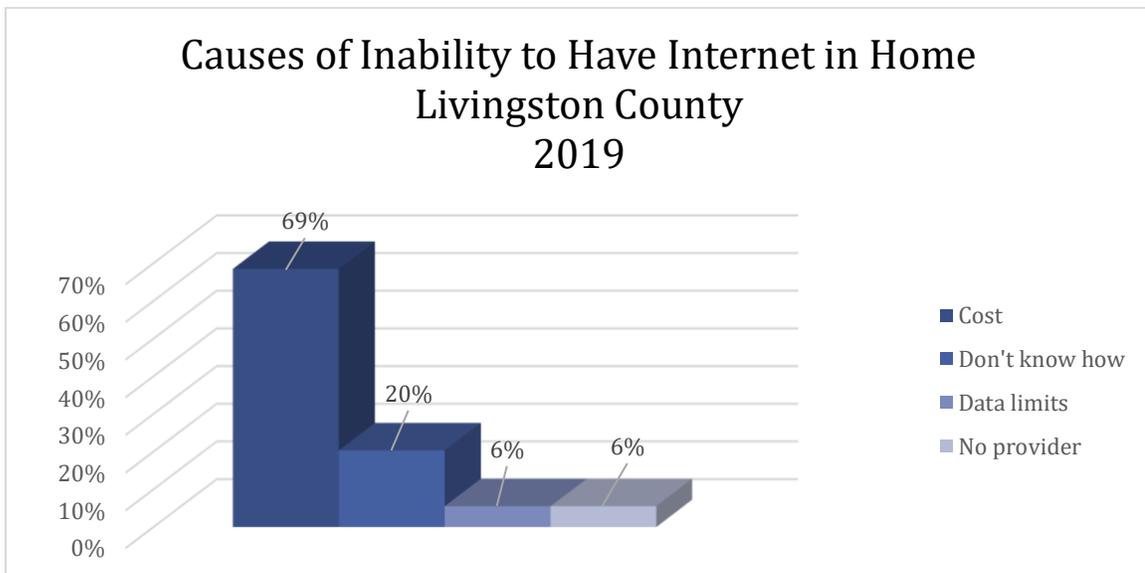
1.6 Telehealth Interest and Internet Accessibility

Survey respondents were asked *How interested would you be in health services provided through Internet or phone?* Of respondents, 58% indicated they would be either somewhat or extremely interested.



Source: CHNA Survey

In terms of accessibility, 82% of respondents indicated they had access to free public Internet, and 80% indicated they had Internet in their homes. For those that did not have Internet in their home, cost was the most frequently cited reason.



Source: CHNA Survey

Social Determinants Related to Telehealth and Internet Access

Several factors show significant relationships with an individual's interest in telehealth and Internet access. The following relationships were found using correlational analyses:

Interest in telehealth tends to be rated higher by younger people, those with higher education and those with higher income.

Access to Internet tends to be rated higher for younger people, those with higher education, those with higher income and those with a stable housing environment.

1.7 Key Takeaways from Chapter 1

- ✓ POPULATION DECREASED OVER THE LAST 5 YEARS.
- ✓ POPULATION OVER AGE 65 IS INCREASING.
- ✓ SINGLE FEMALE HEAD-OF-HOUSE-HOUSEHOLD REPRESENTS 11% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.
- ✓ APPROXIMATELY 2/3 OF THE POPULATION IS INTERESTED IN TELEHEALTH SERVICES.

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

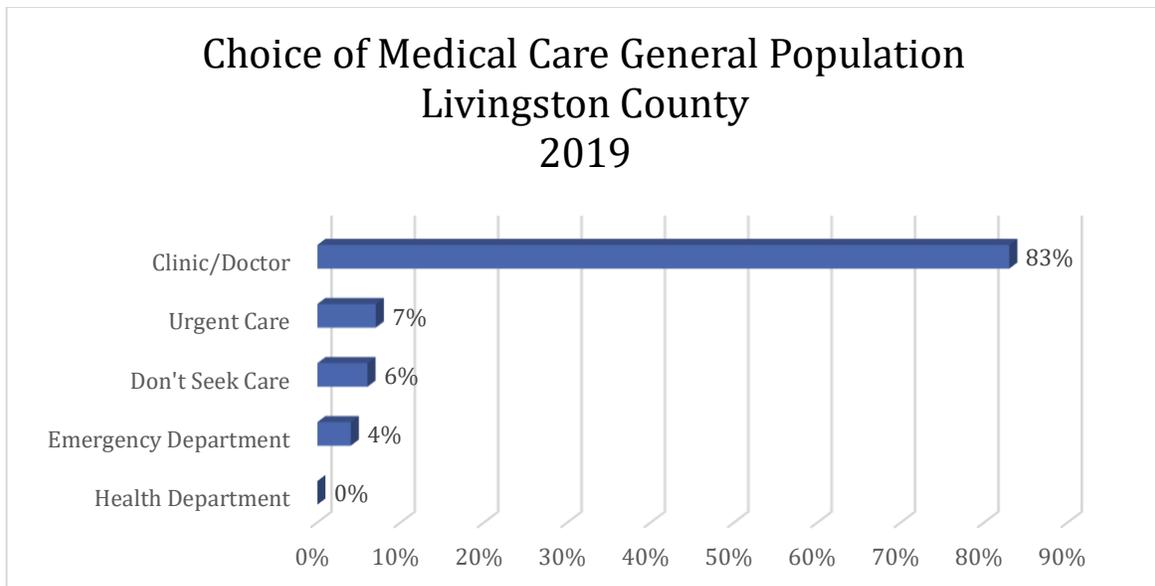
2.1 Accessibility

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 most common response for source of medical care was clinic/doctor's office, chosen by 83% of survey respondents. This was followed by urgent care (7%), not seeking medical attention (6%), the emergency department at a hospital (4%), and the health department (0%).



Source: CHNA Survey

Comparison to 2016 CHNA

Clinic/doctor's office remained relatively stable (84% in 2016 and 83% in 2019). Emergency department as a primary choice for healthcare had a significant decrease from 9% in 2016 to 4% in 2019.

Social Determinants Related to Choice of Medical Care

Several factors 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 older people, White people and those with a stable housing environment.

Urgent Care tends to be used more by younger people.

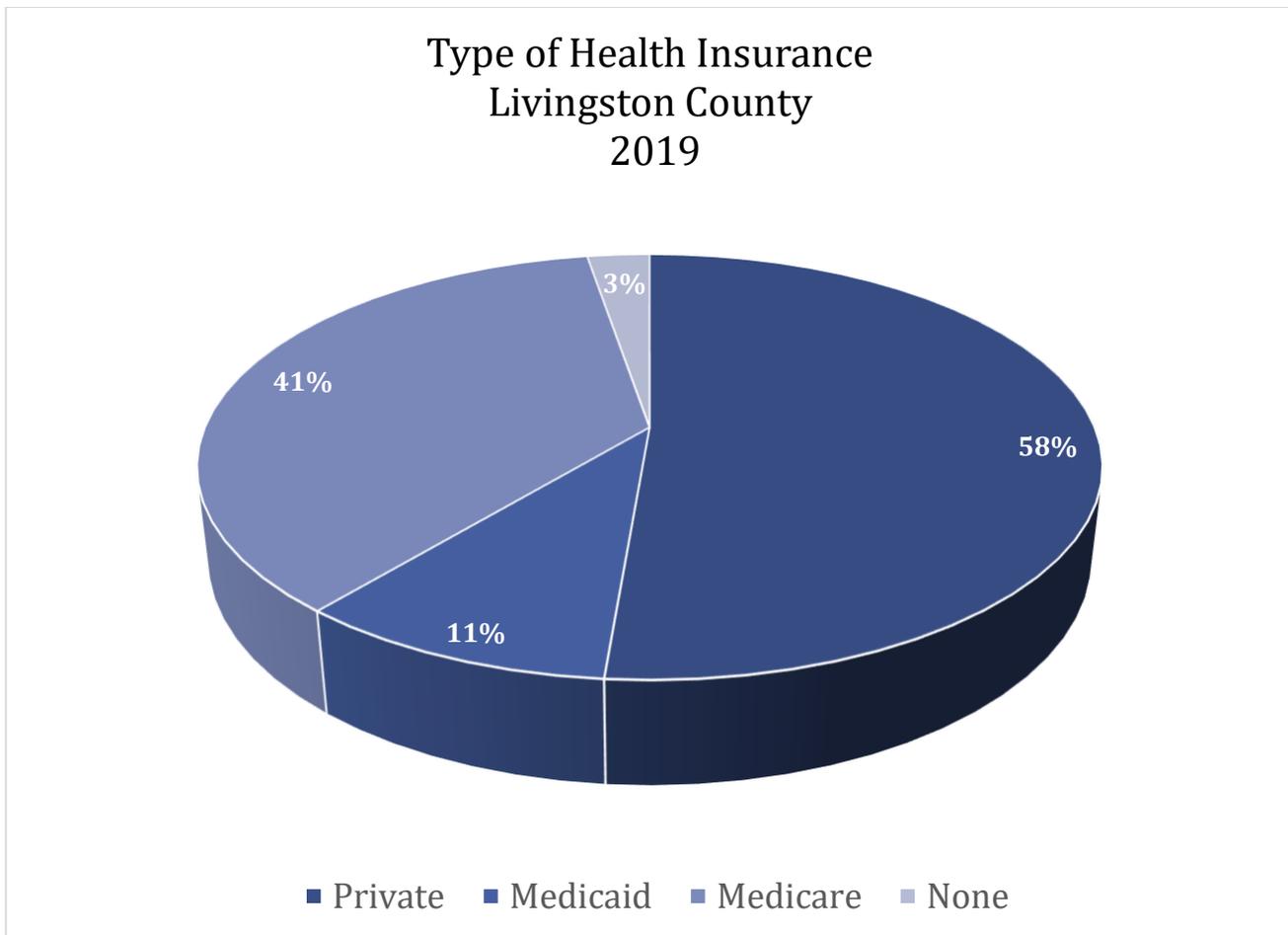
Emergency Department tends to be used more by those with a lower education, those with a lower income and those with an unstable (e.g., homeless) housing environment.

Do Not Seek Medical Care did not have any significant correlates.

Health Department did not have any significant correlates.

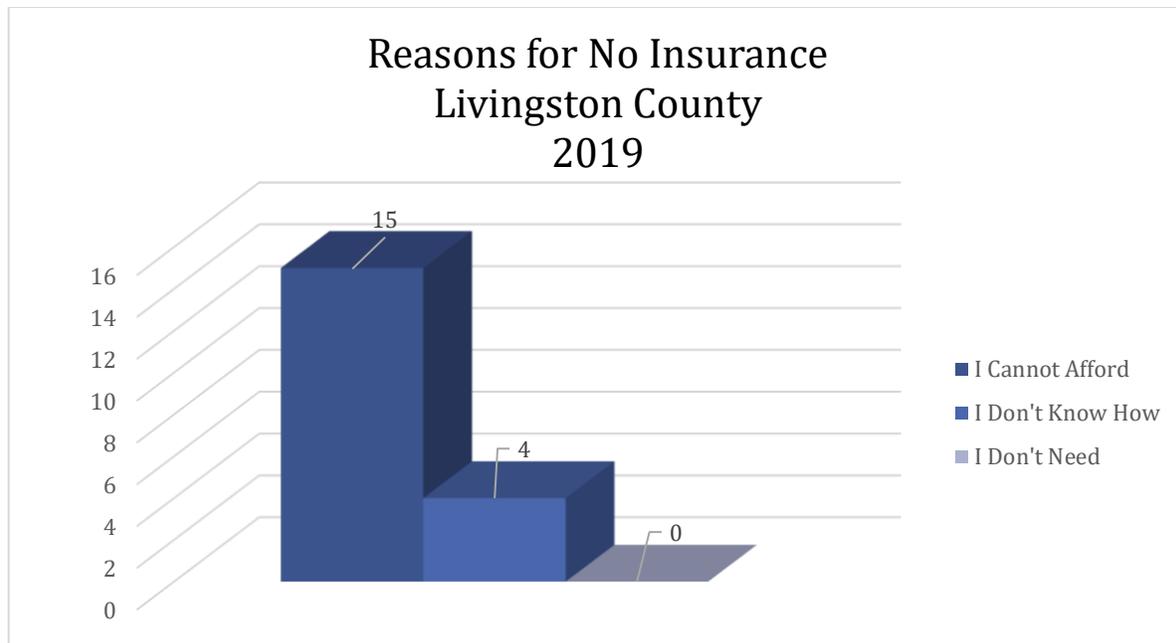
Insurance Coverage

According to survey data, 58% of the residents are covered by private insurance, followed by Medicare (41%), and Medicaid (11%). Only 3% of respondents indicated they did not have any health insurance.



Source: CHNA Survey

Data from the survey show that for the 3% of individuals who do not have insurance, the most common reason was cost. Note that these data are displayed in frequencies rather than percentages given the low number of responses.



Source: CHNA Survey

Comparison to 2016 CHNA

Compared to survey data from the 2016 CHNA, there has been a significant increase in Medicare insurance, from 26% in 2016 to 41% in 2019. Medicaid has decreased from 16% in 2016 to 11% in 2019.

Social Determinants Related to Type of Insurance

Several 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, those with lower education and income.

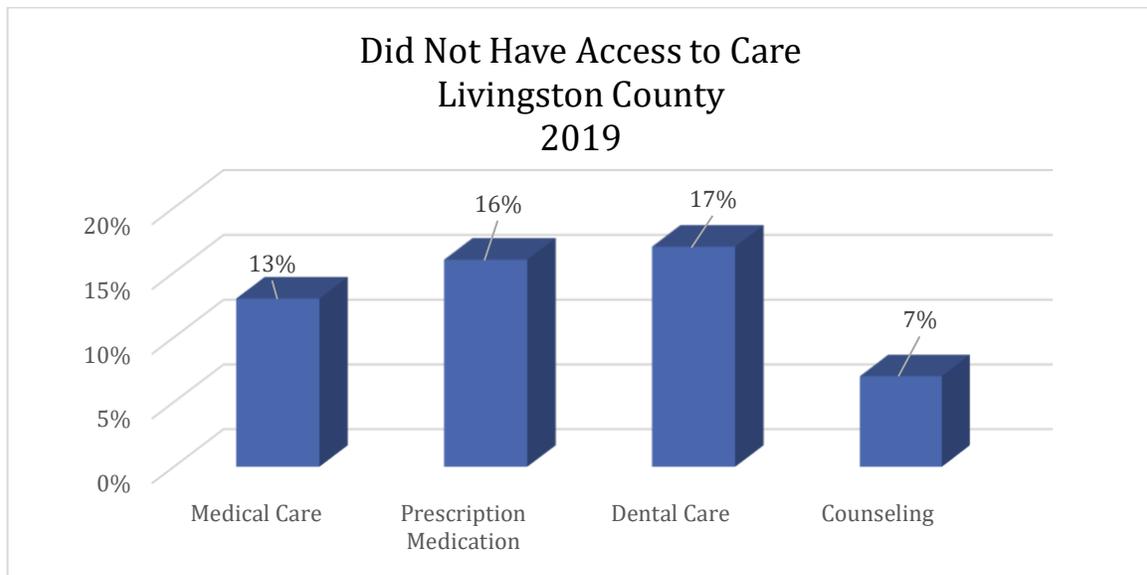
Medicaid tends to be used more frequently by younger people, Black people, those with lower education and those with lower income, and people with an unstable (e.g., homeless) housing environment. Given the low survey response rate for Black findings should be interpreted with caution.

Private Insurance is used more often by those with higher education, those with higher income and those with a stable housing environment .

No Insurance tends to be reported more often by younger people, Latino people, those with lower education and income, and people with an unstable (e.g., homeless) housing environment. Given the low survey response rate for Latino people, findings should be interpreted with caution.

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 13% of the population did not have access to medical care when needed; 16% of the population did not have access to prescription medications when needed; 17% of the population did not have access to dental care when needed; and 7% of the population did not have access to counseling when needed.



Source: CHNA Survey

Social Determinants Related to Access to Care

Several 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, those with higher education, those with higher income and those with a stable housing environment.

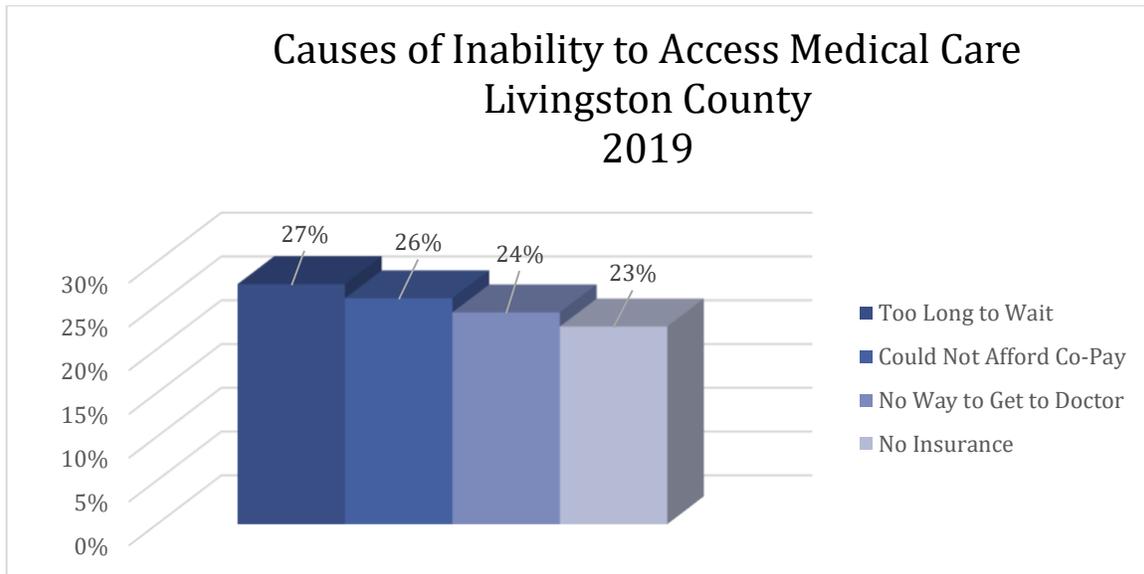
Access to prescription medications tends to be higher for White people, those with higher education, those with higher income, and those with a stable housing environment.

Access to dental care tends to be higher for those with higher education and those with higher income. Those with an unstable (e.g., homeless) housing environment are less likely to have access to dental care.

Access to counseling tends to be higher for those with those with higher income, and those with a stable housing environment.

Reasons for No Access – Medical Care

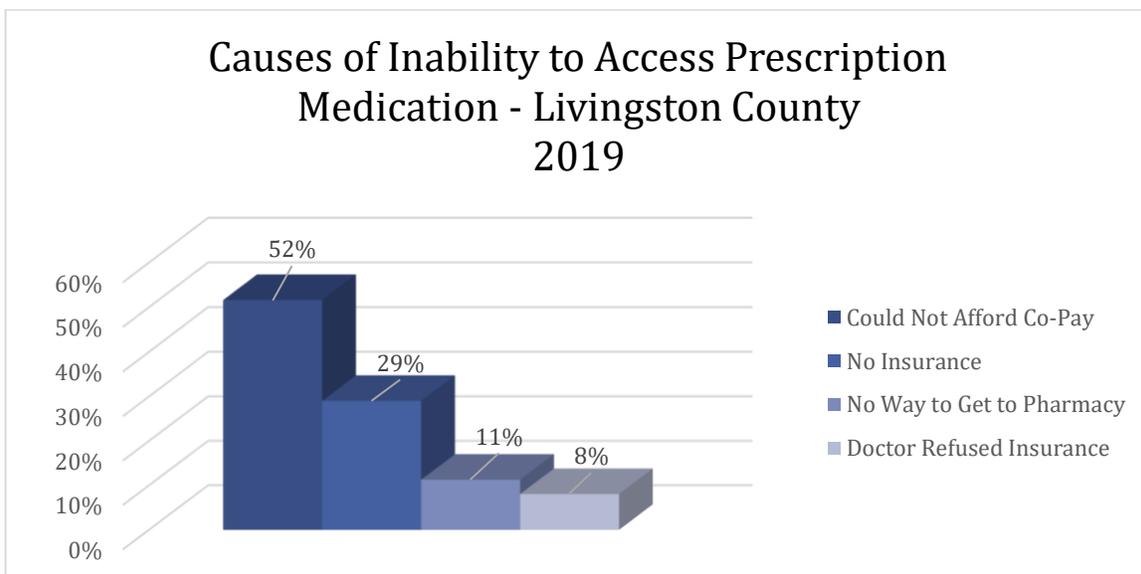
Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. The leading causes of the inability to gain access to medical care were too long to wait for an appointment (27%), the inability to afford the copay (26%), no way to get to the doctor (24%) and no insurance (23%).



Source: CHNA Survey

Reasons for No Access – Prescription Medication

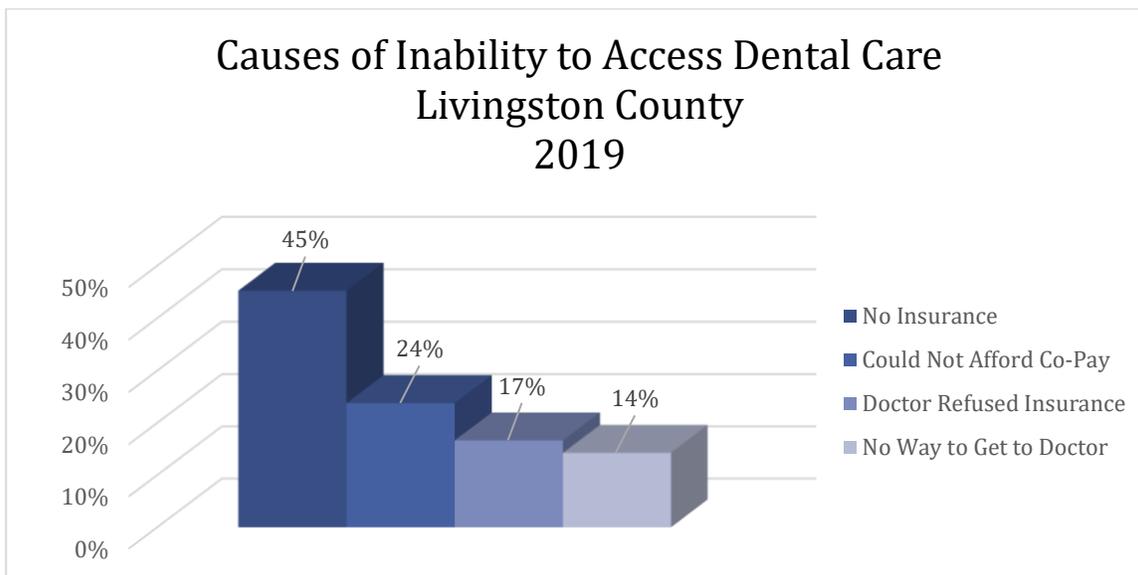
Survey respondents who reported they were not able to get prescription medications when needed were asked a follow-up question. The leading causes of the inability to gain access to prescription medicine were the inability to afford copayments or deductibles (52%) and no insurance (29%).



Source: CHNA Survey

Reasons for No Access – Dental Care

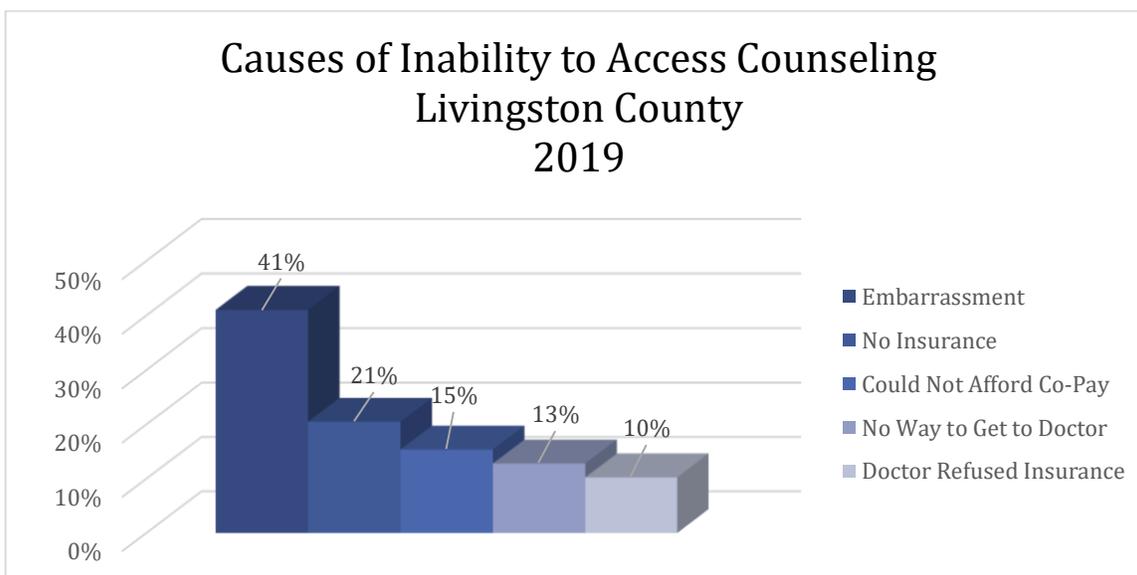
Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading cause was no insurance (45%), followed by the inability to afford copayments or deductibles (24%), refusal of insurance (17%), and no way to get to the dentist (14)%.



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. The leading cause of the inability to gain access to counseling was embarrassment (41%).



Source: CHNA Survey

Comparison to 2016 CHNA

Access to Medical Care – Compared to 2016, results show a slight decrease (1%) in those that were not able to get medical care when needed.

Access to Prescription Medications – Compared to 2016, results show a slight increase (1%) in those that were not able to get prescription medication when needed.

Access to Dental Care – Compared to 2016, results show a decrease (2%) in those that were not able to get dental care when needed.

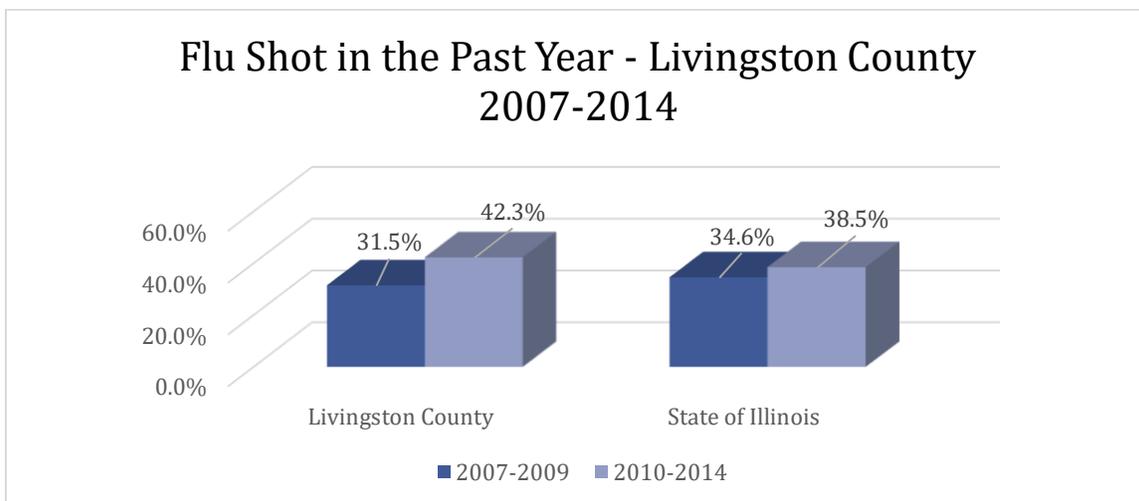
Access to Counseling – Compared to 2016, results show a slight increase (1%) in those that were not able to get counseling when needed.

2.2 Wellness

Importance of the measure: Preventative healthcare measures, including 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 Flu Shots

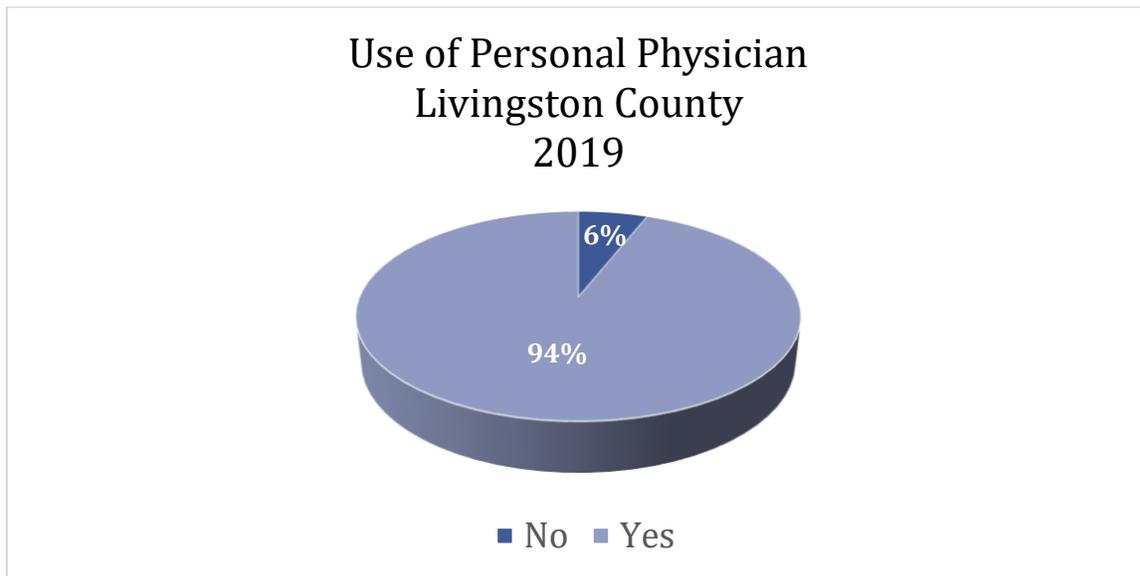
The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The chart below shows that the percentage of people who have had a flu shot in the past year is 42.3% for Livingston County in 2010-2014 compared to 31.5% for 2007-2009. During the same timeframe, the State of Illinois also realized an increase. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

Personal Physician

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, 94% of residents have a personal physician.



Source: CHNA Survey

Comparison to 2016 CHNA

The 2019 CHNA survey results for having a personal physician are higher compared to the 2016 CHNA. Specifically, 90% of residents reported a personal physician in 2016 and 94% reported a personal physician in 2019.

Social Determinants Related to Having a Personal Physician

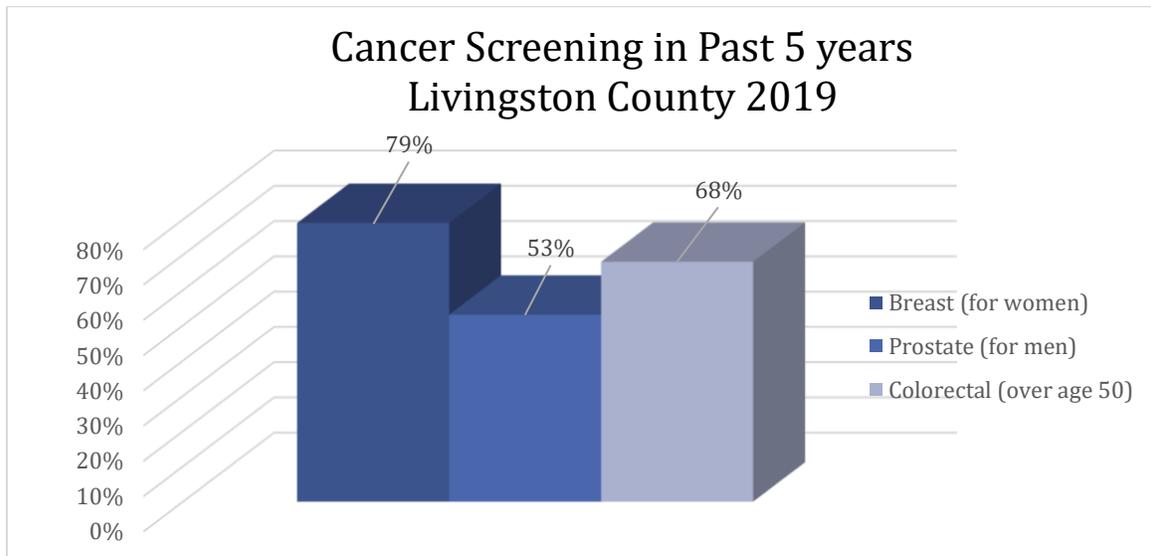
Multiple characteristics show significant relationships with having a personal physician. The following relationships were found using correlational analyses:

Having a personal physician tends to be higher for older people, women and those with a stable housing environment.

Cancer Screening

Early detection of cancer may greatly improve the probability of successful treatment. In the case of colorectal cancer, early detection of precancerous polyps can prevent cancer. **Cancer screening is a new section to the 2019 CHNA.** Specifically, three types of cancer screening were measured: breast, prostate and colorectal.

Results from the CHNA survey show that 79% of women had a breast screening in the past five years. For men, 53% had a prostate screening in the past five years. For women and men over the age of 50, 68% had a colorectal screening in the last five years.



Source: CHNA Survey

Social Determinants Related to Cancer Screenings

Multiple characteristics show significant relationships with cancer screening. The following relationships were found using correlational analyses:

Breast screening tends to be more likely women, those with a higher level of education and higher income.

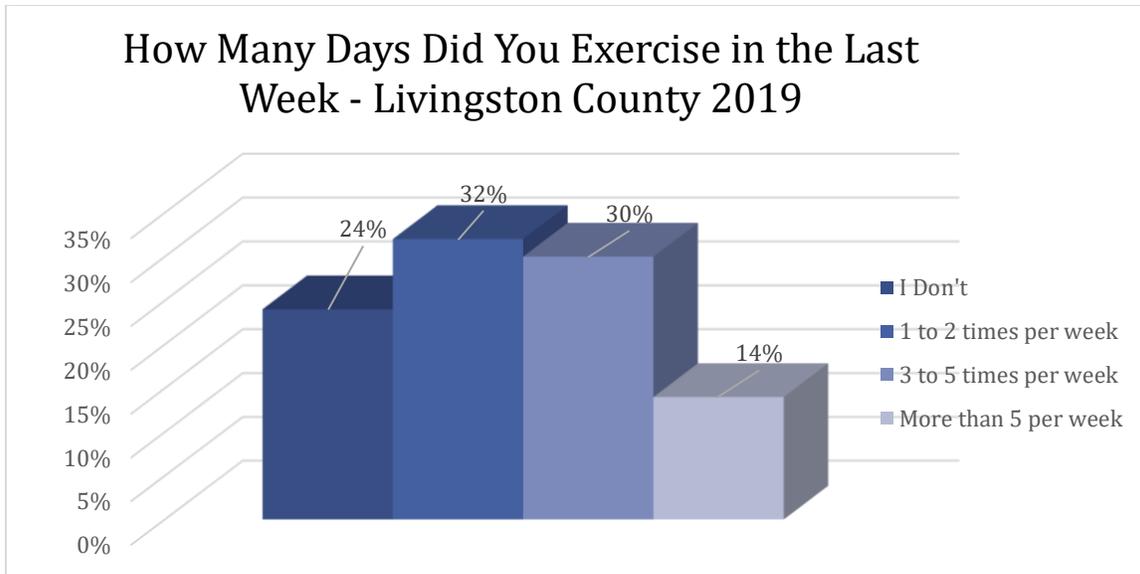
Prostate screening had no significant correlate other than men.

Colorectal screening had no significant correlates.

Physical Exercise

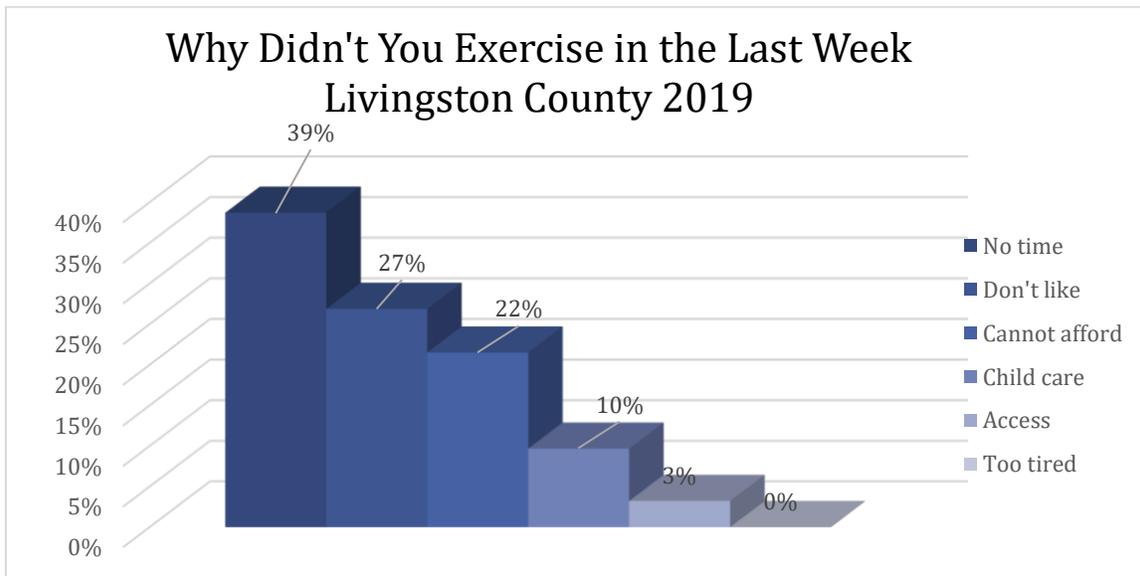
A healthy lifestyle, comprised of regular physical activity, has been shown to increase physical, mental, and emotional well-being.

CHNA survey data allow for a more detailed assessment of exercise. Specifically, 24% of respondents indicated that they do not exercise at all, while the majority (62%) of residents exercise 1-5 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 reason for not exercising was no time (39%).



Source: CHNA Survey

Comparison to 2016 CHNA

There has been a significant decrease in the number of people that do not exercise. In 2016, 30% of residents indicated they did not exercise at all and only 24% indicated they did not exercise in 2019.

Social Determinants Related to Exercise

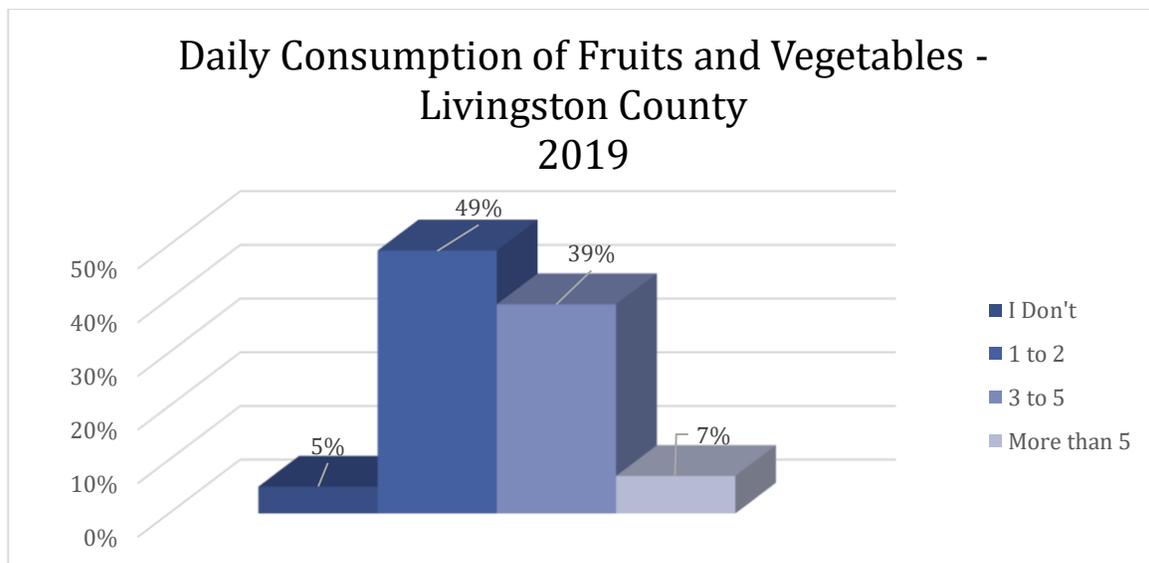
There were no significant relationships with frequency of exercise.

Frequency of exercise had no significant correlates.

Healthy Eating

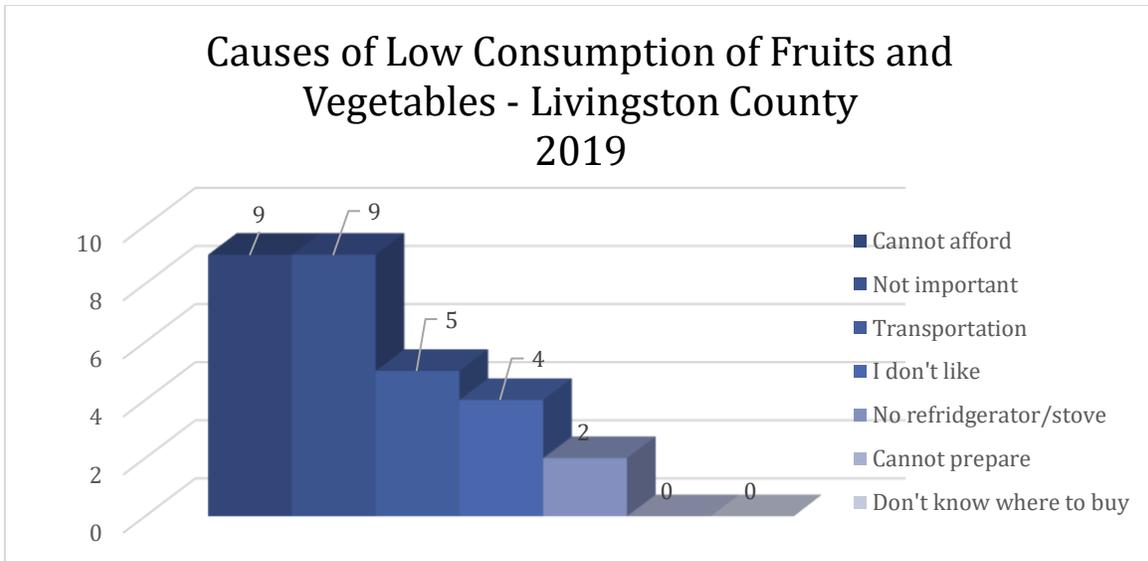
A healthy lifestyle, comprised of a proper diet, has been shown to increase physical, mental, and emotional well-being. Consequently, nutrition and diet are critical to preventative care.

Over half (54%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 7%.



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 affordability (9), and not important (9). Note that these data are displayed in frequencies rather than percentages given the low number of responses.



Source: CHNA Survey

Comparison to 2016 CHNA

Results of the 2019 CHNA show improvement compared to the 2016 CHNA, where 61% of respondents indicated they had two or fewer servings of fruits and vegetables per day compared to 2019 (54%).

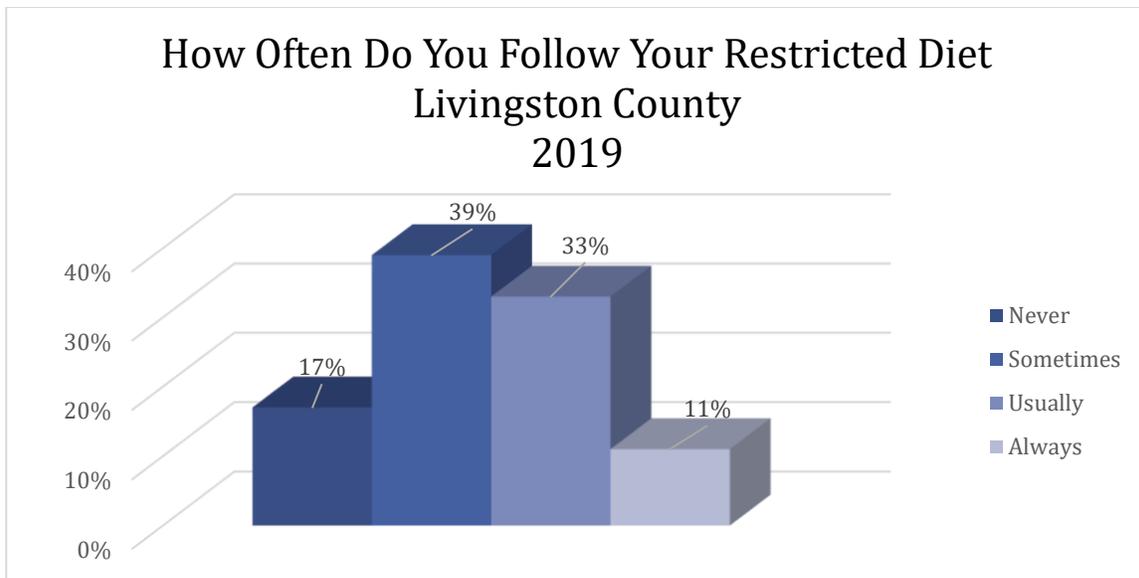
Social Determinants Related to Healthy Eating

Multiple characteristics show significant relationships with healthy eating. The following relationships were found using correlational analyses:

Consumption of fruits and vegetables tends to be more likely for women, White people and those with higher income.

Restricted Diet

Respondents were also asked if they followed a restricted diet if recently diagnosed with a morbidity. Of respondents, 44% usually or always follow a restricted diet. **This is a new question to the 2019 CHNA.**



Source: CHNA Survey

Morbidities related to following a restricted diet

Individuals with certain morbidities may show significant relationships with following a restricted diet. No relationships were found using correlational analyses:

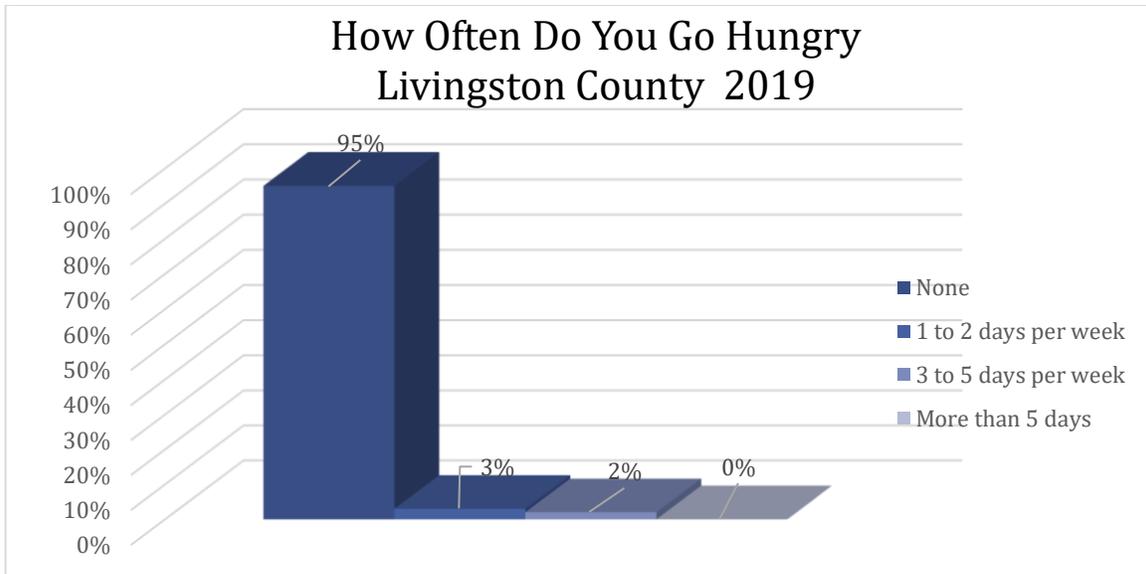
Following a restricted diet showed no significant correlates.

2.3 Understanding Food Insecurity

Importance of the measure: It is essential that everyone has access to food and drink necessary for living healthy lives. Food insecurity exists when people don't have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs for a healthy life. **This is a new section to the 2019 CHNA.**

Prevalence of Hunger

Respondents were asked, "How many days a week do you or your family members go hungry?" The vast majority of respondents indicated they do not go hungry, however, 5% indicated they go hungry.



Source: CHNA Survey

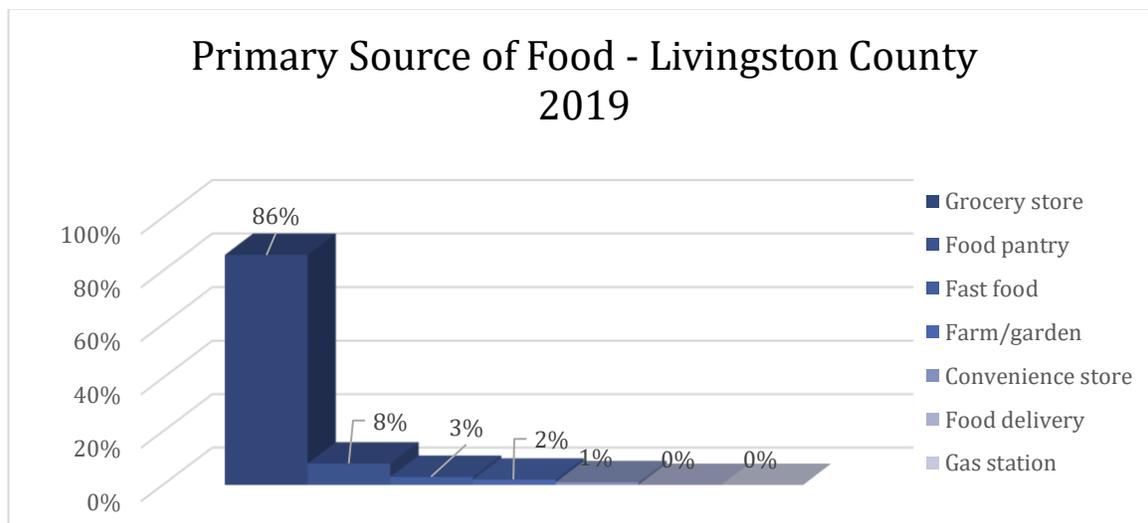
Social Determinants Related to Prevalence of Hunger

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

Prevalence of Hunger tends to be more likely for younger people, those with less income and those in an unstable (e.g., homeless) housing environment.

Primary Source of Food

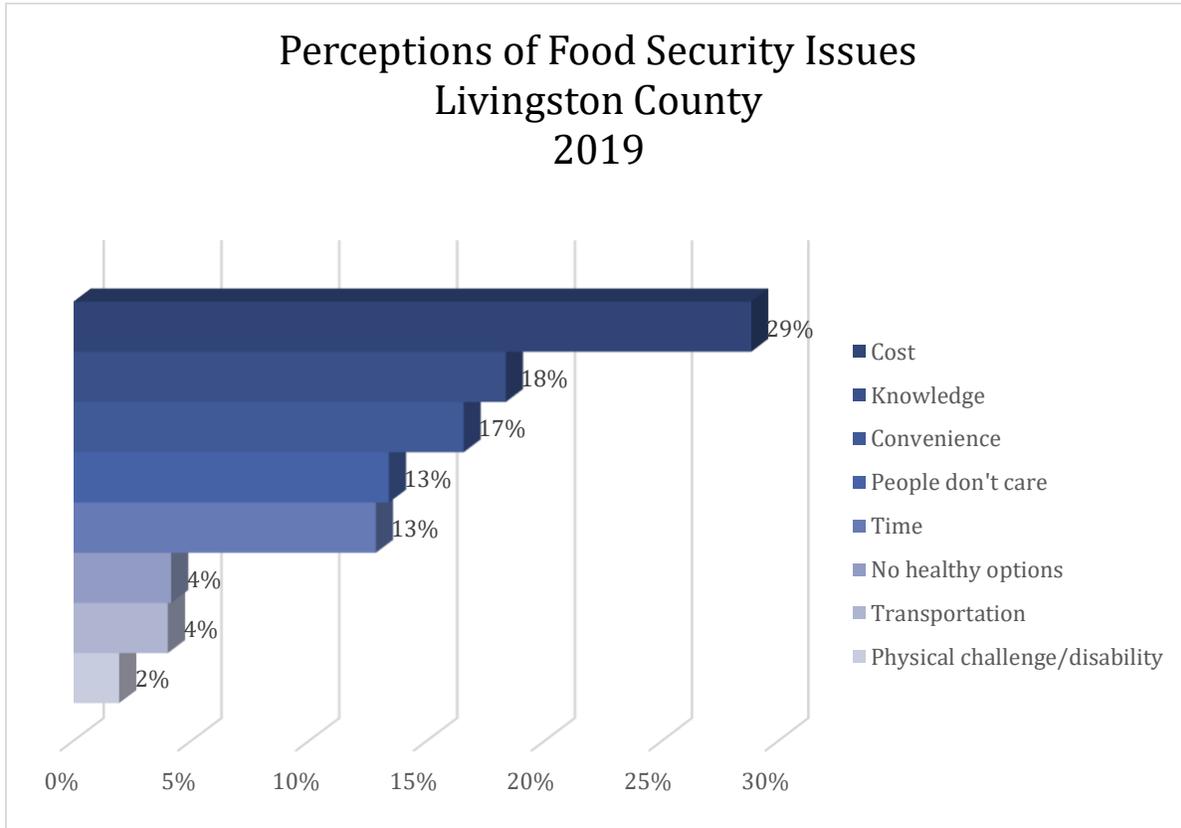
Respondents were asked to identify their primary source of food. It can be seen that the majority (86%) identified a grocery store. **This is a new section in the 2019 CHNA.**



Source: CHNA Survey

Community Perceptions of Causes for Food Insecurity

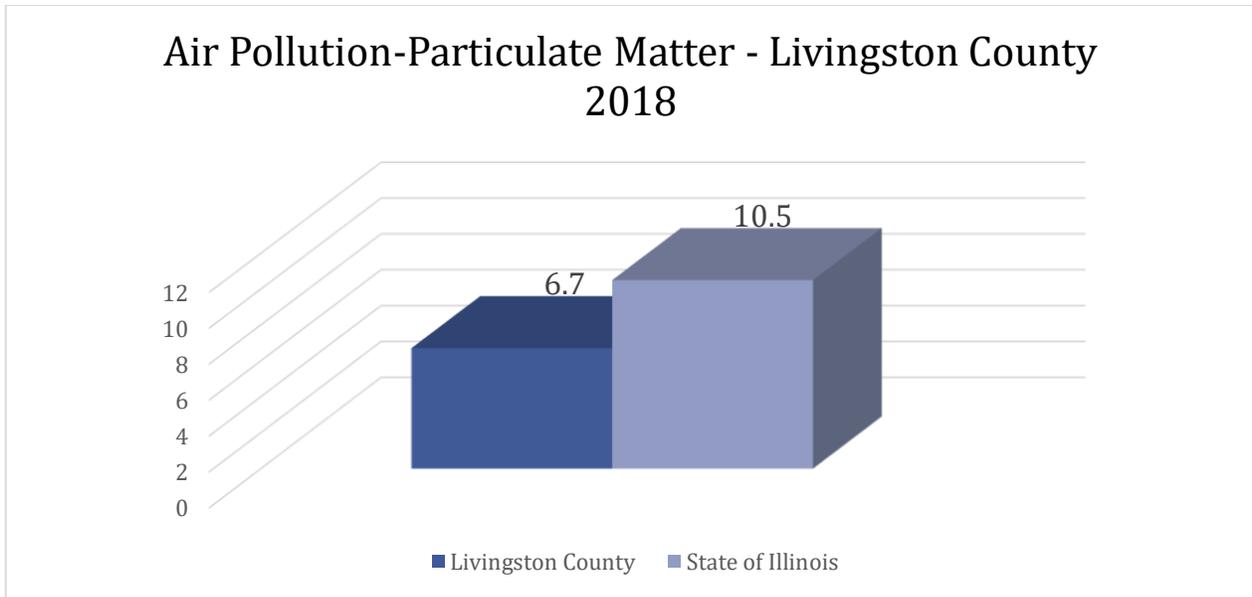
Respondents were asked to identify issues with food insecurity. The most prevalent answer was cost (29%), followed by knowledge (18%) and convenience (17%). **This is a new section to the 2019 CHNA.**



Source: CHNA Survey

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 (PM2.5) 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 Livingston County (6.7) is significantly lower than the State average of 10.5.



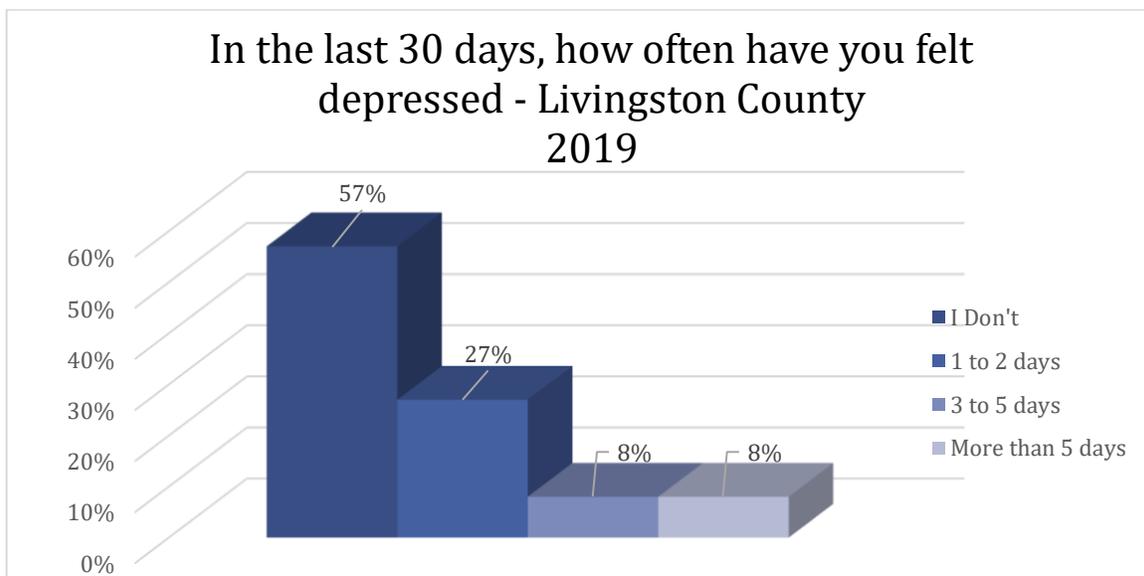
Source: County Health Rankings 2018 Data

2.5 Health Status

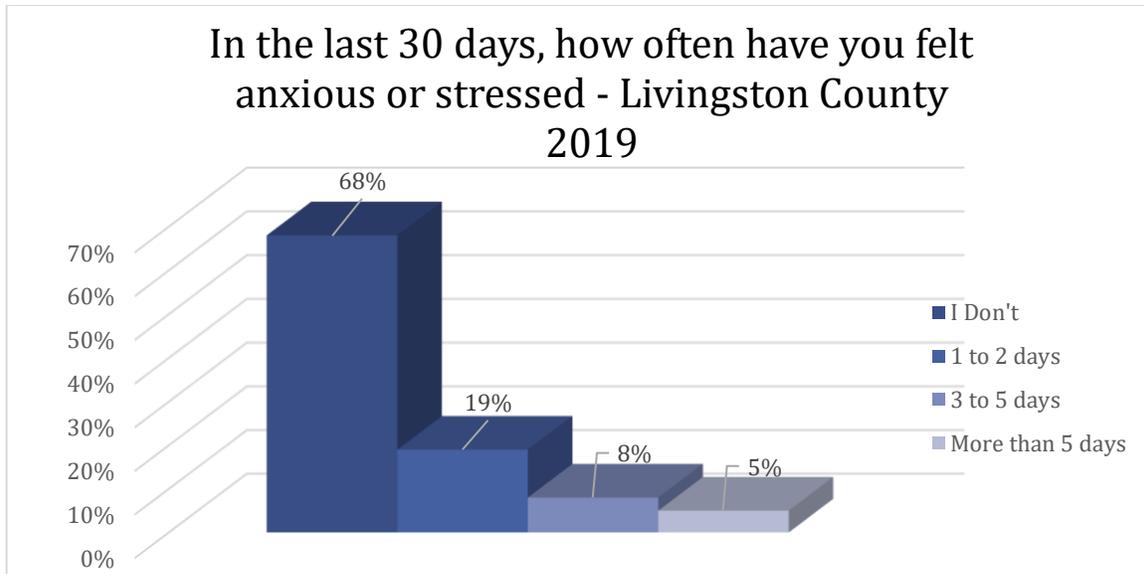
Importance of the measure: Self-perceptions of health can provide important insights to help manage population health. Not only do self-perceptions provide benchmarks regarding health status, but they can also provide insights into how accurately people perceive their own health.

Mental Health

The survey asked respondents to indicate specific issues, such as depression and stress/anxiety. Of respondents, 57% indicated they did not feel depressed in the last 30 days and 68% indicated they did not feel anxious or stressed. **This is a new section to the 2019 CHNA.**



Source: CHNA Survey



Source: CHNA Survey

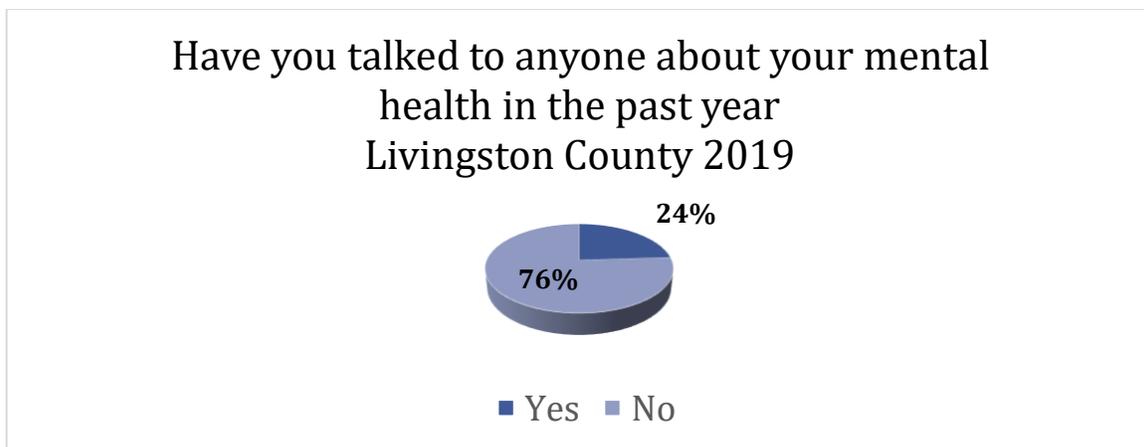
Social Determinants Related to Behavioral Health

Multiple characteristics show significant relationships with behavioral health. The following relationships were found using correlational analyses:

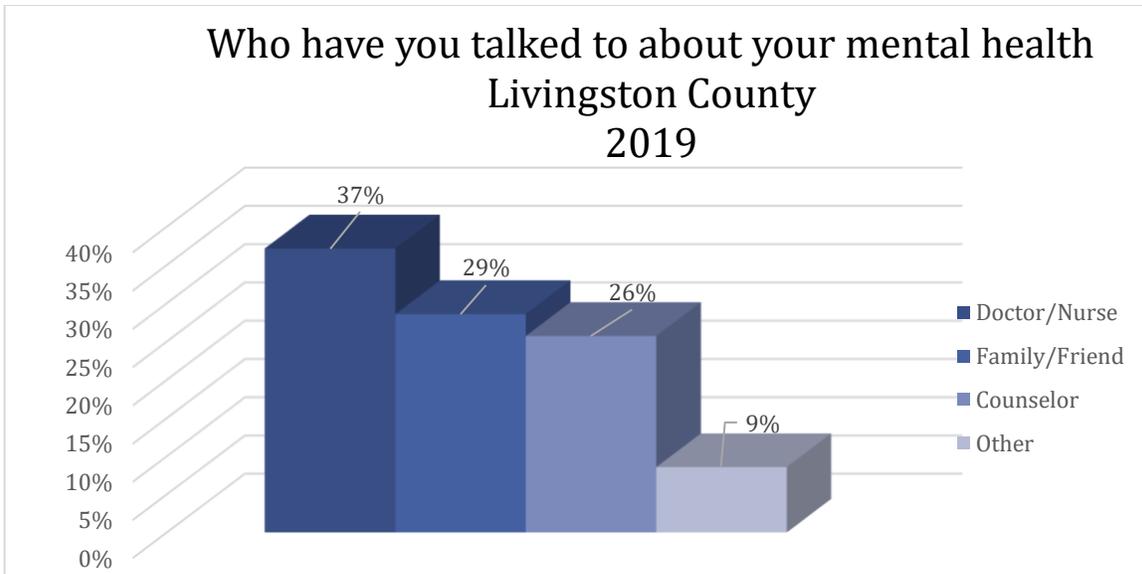
Depression tends to be rated higher for those with less income and those in an unstable (e.g., homeless) housing environment.

Stress and anxiety tends to be rated higher for younger people, those with less income and those in an unstable (e.g., homeless) housing environment.

Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents 24% indicated that they spoke to someone, the most common response was a doctor/nurse (37%).



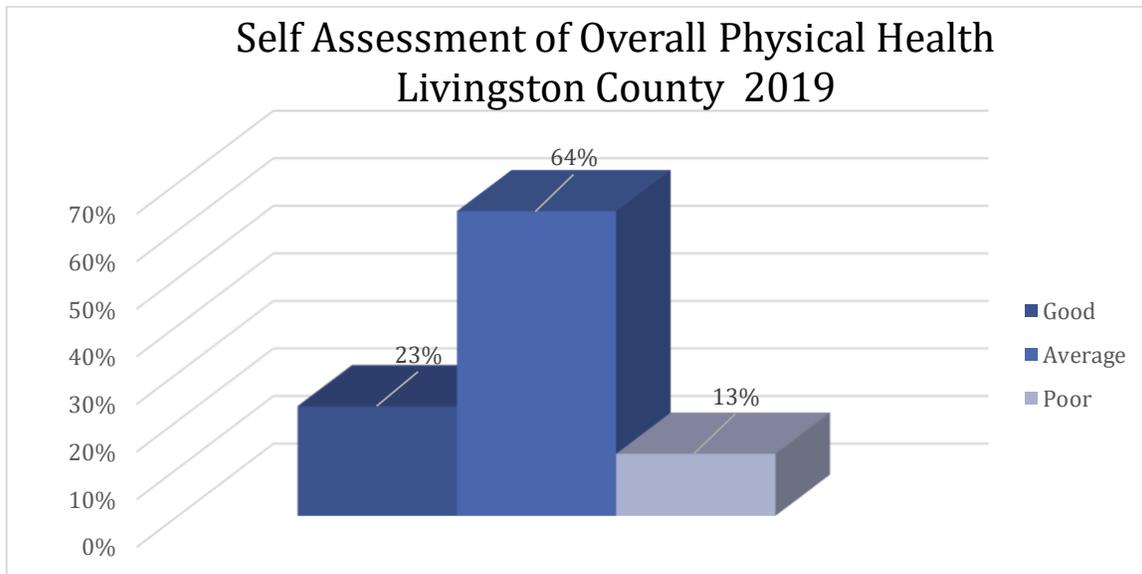
Source: CHNA Survey



Source: CHNA Survey

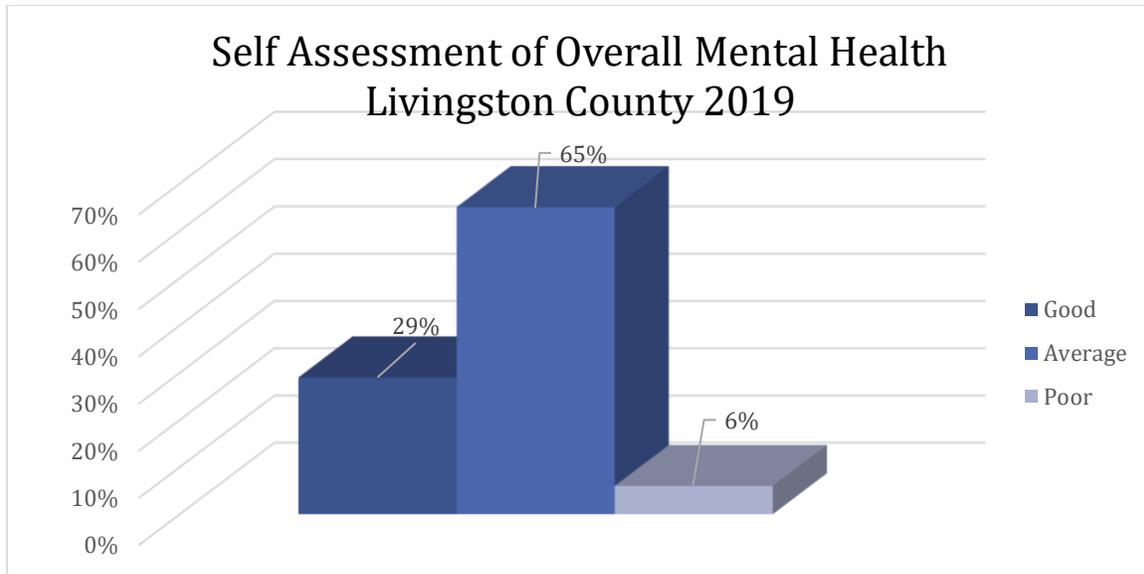
Self-Perceptions of Overall Health

In regard to self-assessment of overall physical health, 13% of respondents report having poor overall physical health.



Source: CHNA Survey

In regard to self-assessment of overall mental health, 6% of respondents stated they have poor overall mental health.



Source: CHNA Survey

Comparison to 2016 CHNA

With regard to physical health, more people see themselves in poor health in 2019 (13%) than 2016 (6%). With regard to mental health, more people see themselves in poor health in 2019 (6%) than 2016 (4%).

Social Determinants Related to Self-Perceptions of Health

Multiple 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 older people, and those with higher income.

Perceptions of mental tend to be higher for older people, men, those with higher income and those with a stable housing environment.

2.6 Key Takeaways from Chapter 2

- ✓ **SIGNIFICANT INCREASED UTILIZATION OF MEDICARE.**
- ✓ **CANCER SCREENING IS RELATIVELY HIGH COMPARED TO OTHER OSF COMMUNITIES.**
- ✓ **WHILE IMPROVING, THE MAJORITY OF PEOPLE EXERCISE LESS THAN 2 TIMES PER WEEK AND CONSUME 2 OR FEWER SERVINGS OF FRUITS/VEGETABLES PER DAY.**
- ✓ **APPROXIMATELY 1/3 OF RESPONDENTS EXPERIENCED DEPRESSION OR STRESS IN THE LAST 30 DAYS.**

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

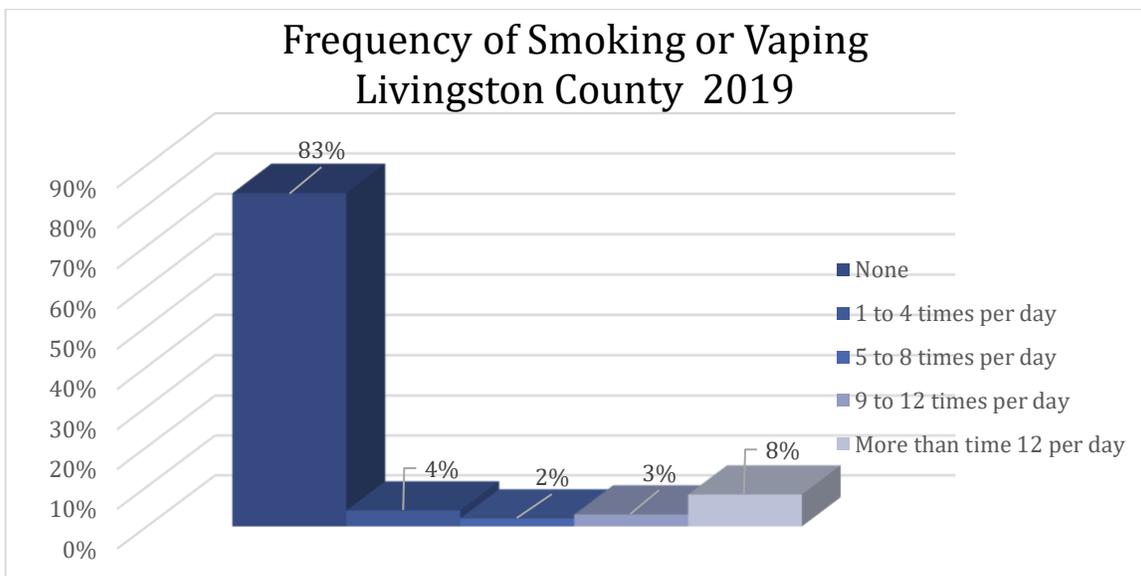
CHAPTER 3

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.

CHNA survey data show 83% of respondents do not smoke and 8% state they smoke or vape more than 12 times per day.



Source: CHNA Survey

Comparison to 2016 CHNA

Results improved between 2016 and 2019, where 80% of people did not smoke/vape in 2016 and 83% do not smoke/vape in 2019. However in 2019, 8% of people smoke/vape 12 or more times per day.

Social Determinants Related to Smoking or Vaping

Multiple characteristics show significant relationships with smoking or vaping. The following relationships were found using correlational analyses:

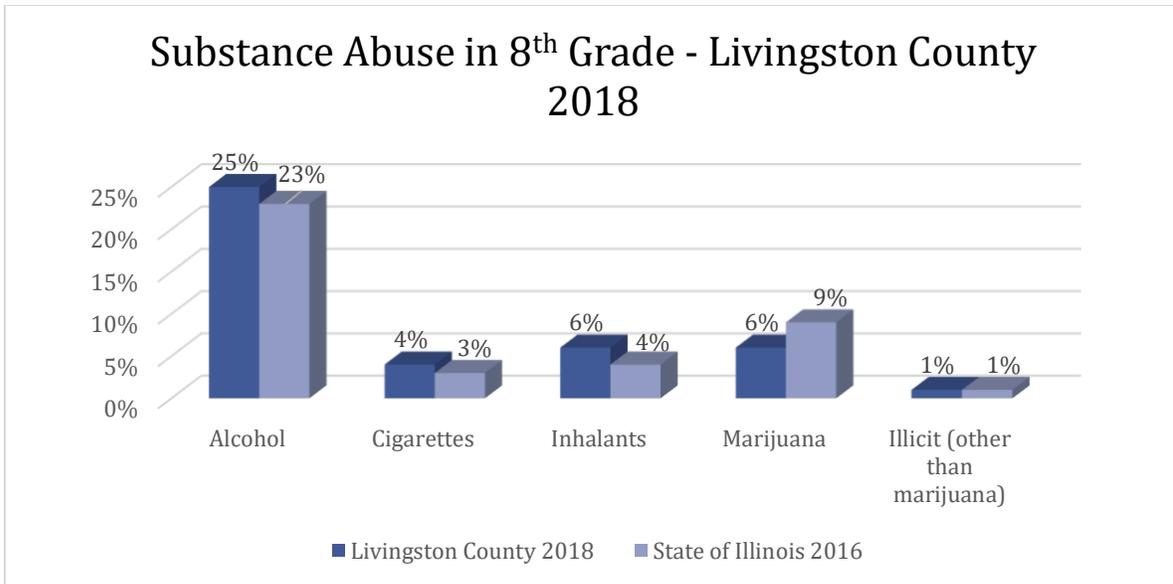
Smoking/vaping tends to be rated higher by younger people, non-White people, those with less education and a lower income, and those in an unstable (e.g., homeless) housing environment.

3.2 Drug and Alcohol Abuse

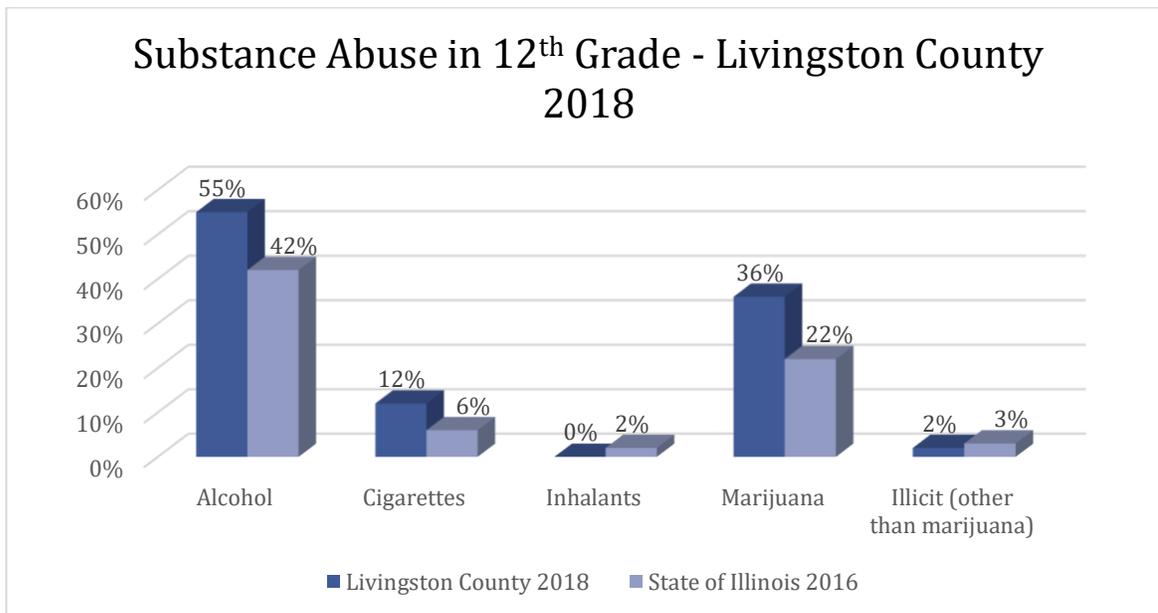
Importance of the measure: Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors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

Youth Substance Abuse

Data from the 2018 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Livingston County is at or above State averages in all categories among 8th graders except for one category: marijuana. Among 12th graders, Livingston County is at or above State averages in all categories except for inhalants and illicit drugs.



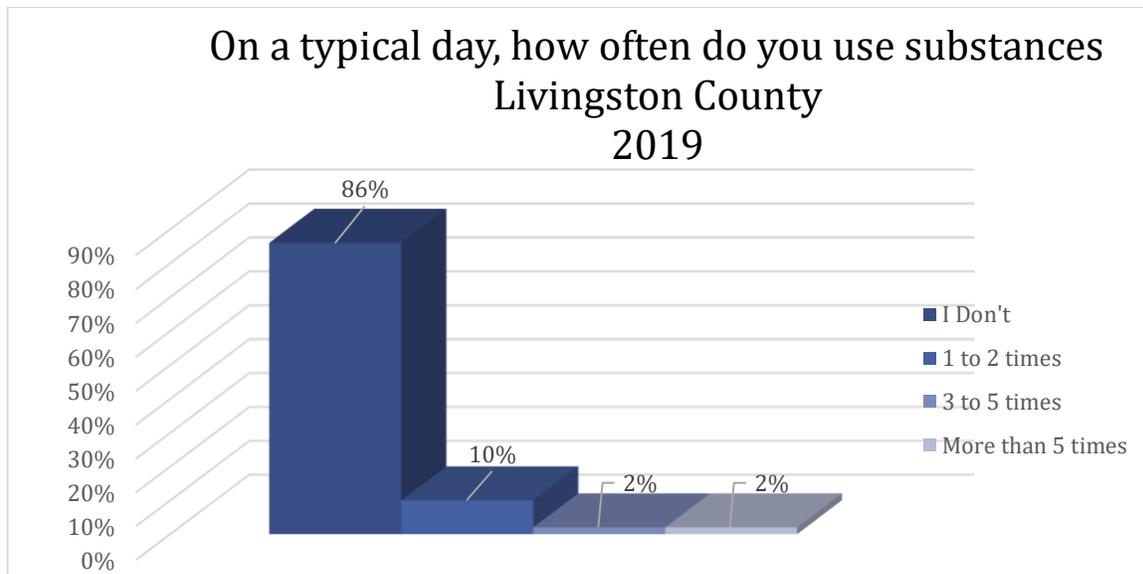
Source: University of Illinois Center for Prevention Research and Development



Source: University of Illinois Center for Prevention Research and Development

Adult Substance Abuse

Survey respondents were asked “On a typical DAY, how often to do you use substances (either legal or illegal) to make yourself feel better?” Note given the increase in opioid abuse, use of legal drugs was included in the question. Of respondents, 86% indicated they do not use substances to make themselves feel better. **This is a new section to the 2019 CHNA.**



Source: CHNA Survey

Social Determinants Related to Substance Abuse

Multiple characteristics show significant relationships with substance abuse. The following relationships were found using correlational analyses:

Use of substances tends to be rated higher by non-White people and those in an unstable (e.g., homeless) housing environment.

3.3 Overweight and Obesity

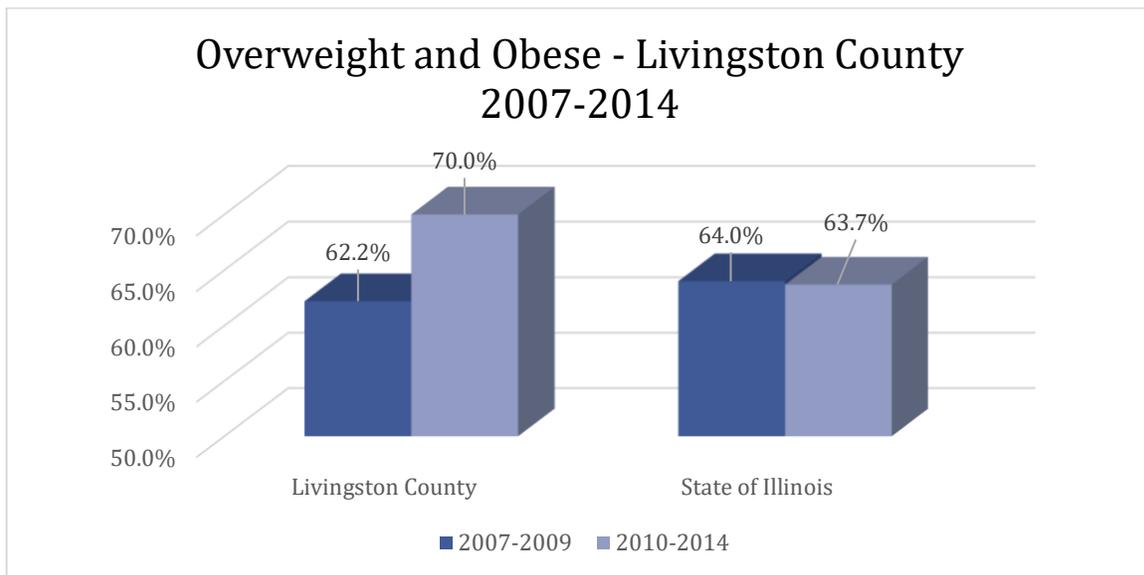
Importance of the measure: Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Livingston 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 6th 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.

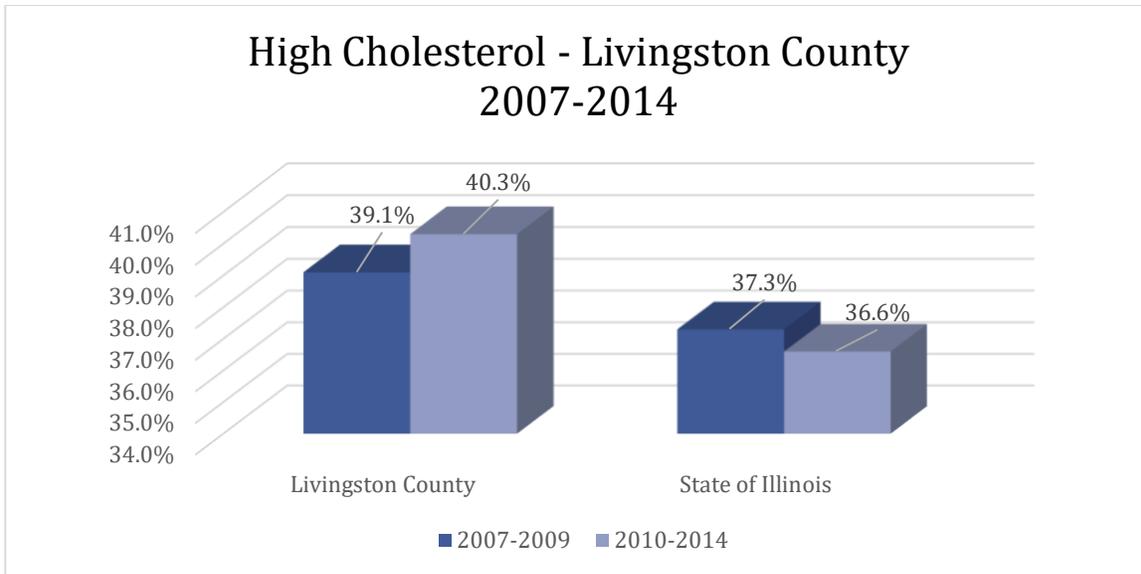
In Livingston County, the number of people diagnosed with obesity and being overweight has increased over the years from 2007-2009 to 2010-2014. Note specifically that the percentage of obese and overweight people has increased from 62.2% to 70.0%. Overweight and obesity rates in Illinois have decreased from 2009 (64.0%) to 2014 (63.7%). Note that data have not been updated by the Illinois Department of Public Health. However, note in the 2019 CHNA survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.



Source: Illinois Behavioral Risk Factor Surveillance System

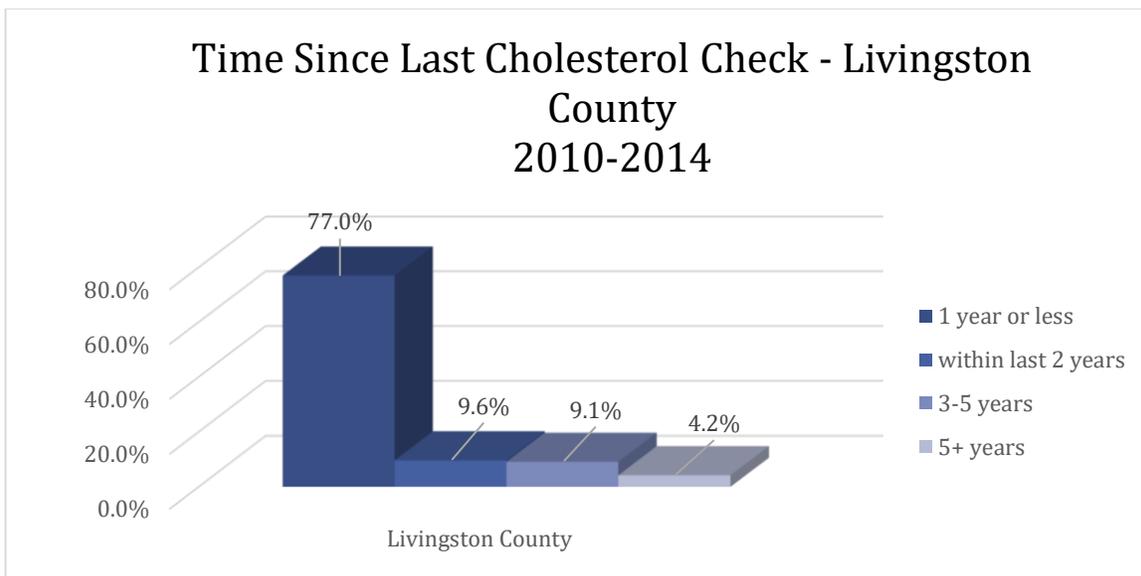
3.4 Predictors of Heart Disease

Residents in Livingston County report a higher than State average prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is higher in Livingston County (40.3%) than the State of Illinois average of 36.6%. Note that data have not been updated by the Illinois Department of Public Health.



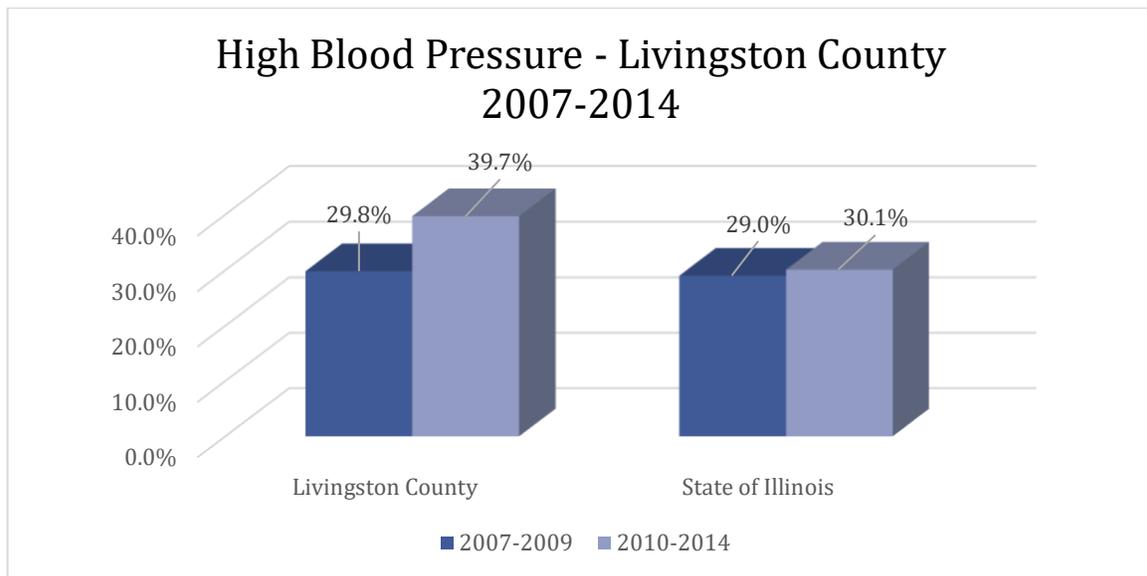
Source: Illinois Behavioral Risk Factor Surveillance System

However, most residents of Livingston County report having their cholesterol checked recently. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Livingston County has a higher percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Livingston County residents reporting they have high blood pressure in 2014 increased from 29.8% to 39.7%. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

3.5 Key Takeaways from Chapter 3

- ✓ WHILE OVERALL TOBACCO USAGE HAS DECREASED SLIGHTLY, THOSE THAT SMOKE/VAPE 12 OR MORE TIMES PER DAY IS SIGNIFICANT.
- ✓ SUBSTANCE ABUSE AMONG 8TH AND 12TH GRADERS FOR MOST CATEGORIES IS HIGHER THAN STATE AVERAGES.
- ✓ THE PERCENTAGE OF PEOPLE WHO ARE OVERWEIGHT AND OBESE HAS INCREASED.
- ✓ RISK FACTORS FOR HEART DISEASE ARE INCREASING.

CHAPTER 4 OUTLINE

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

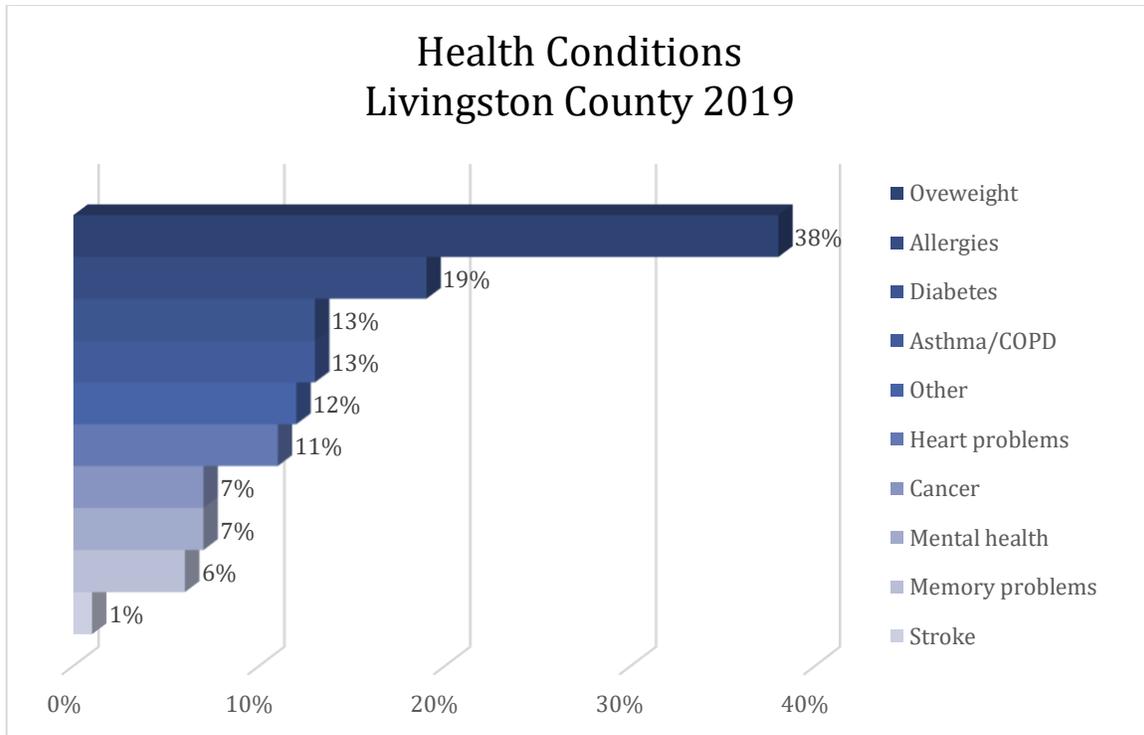
CHAPTER 4

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 Livingston County hospitals using COMP data. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

4.1 Self-Identified Health Conditions

Survey respondents were asked to self-identify any health conditions. Note that being overweight (38%) was significantly higher than any other health conditions. This percentage is significantly lower than secondary sources. Specifically, BRFSS data indicate that roughly two-thirds of the population is overweight or obese. Most other self-identified morbidities reflected existing sources of secondary data accurately (e.g., diabetes 13%). **This is a new section to the 2019 CHNA.**



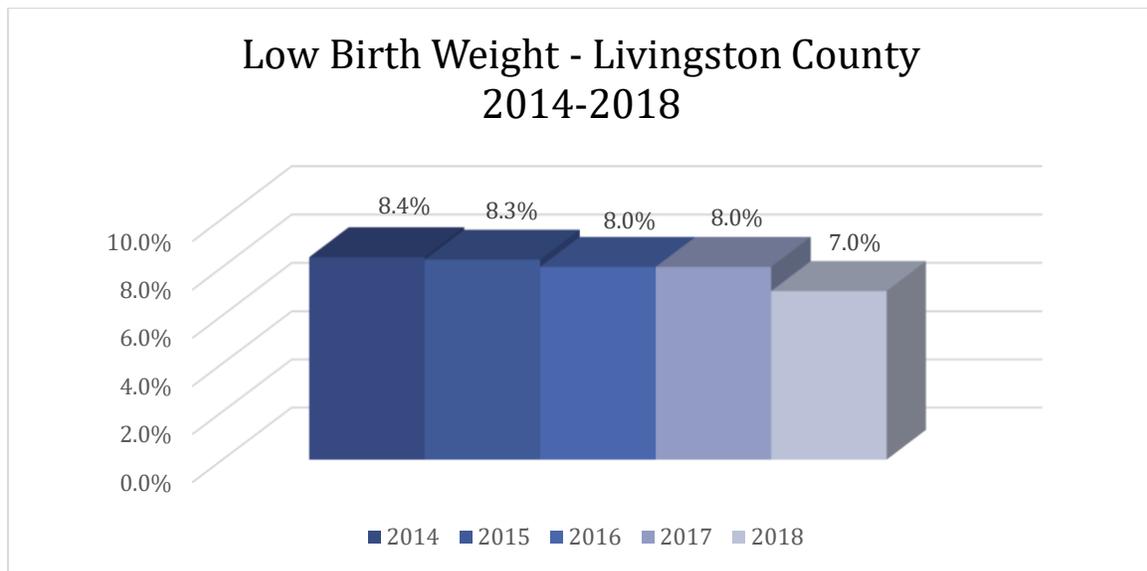
Source: CHNA Survey

4.2 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 healthy babies. 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.

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 Livingston County decreased from 2014 (8.4%) to 2018 (7.0%).



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

4.3 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

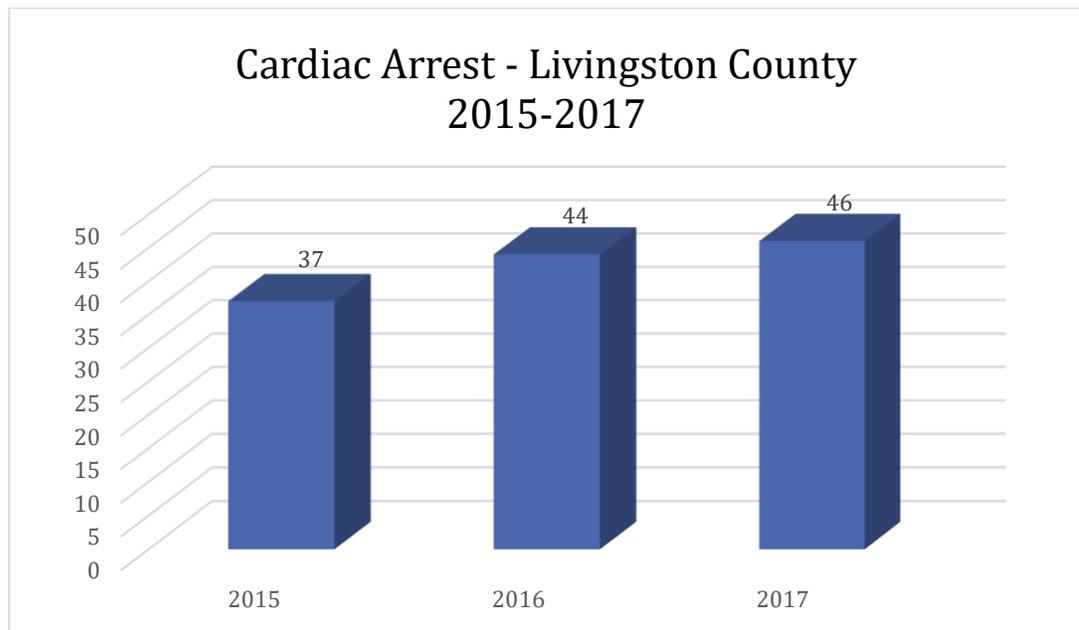
Coronary Atherosclerosis, sometimes-called hardening of the arteries, can slowly narrow and harden the arteries throughout the body. When atherosclerosis affects the arteries of the heart, it is called coronary artery disease.

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 Livingston County area hospitals has been low, with 2 cases reported in both 2015 and 2016 and 1 case reported in 2017. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Cardiac Arrest

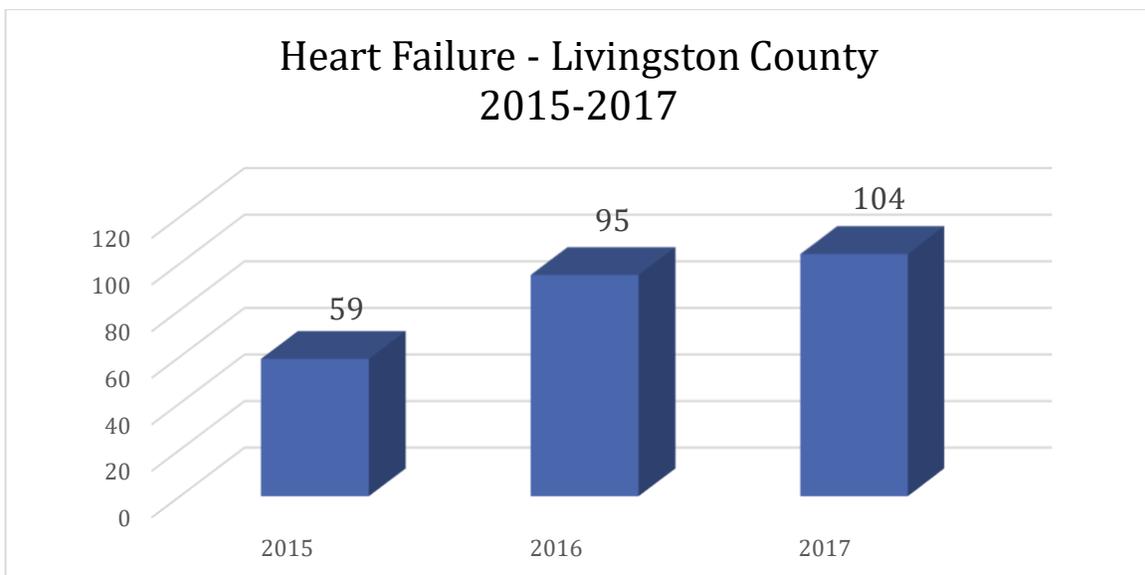
Cases of dysrhythmia and cardiac arrest at Livingston County area hospitals increased by 9 cases between FY15 and FY17. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

Heart Failure

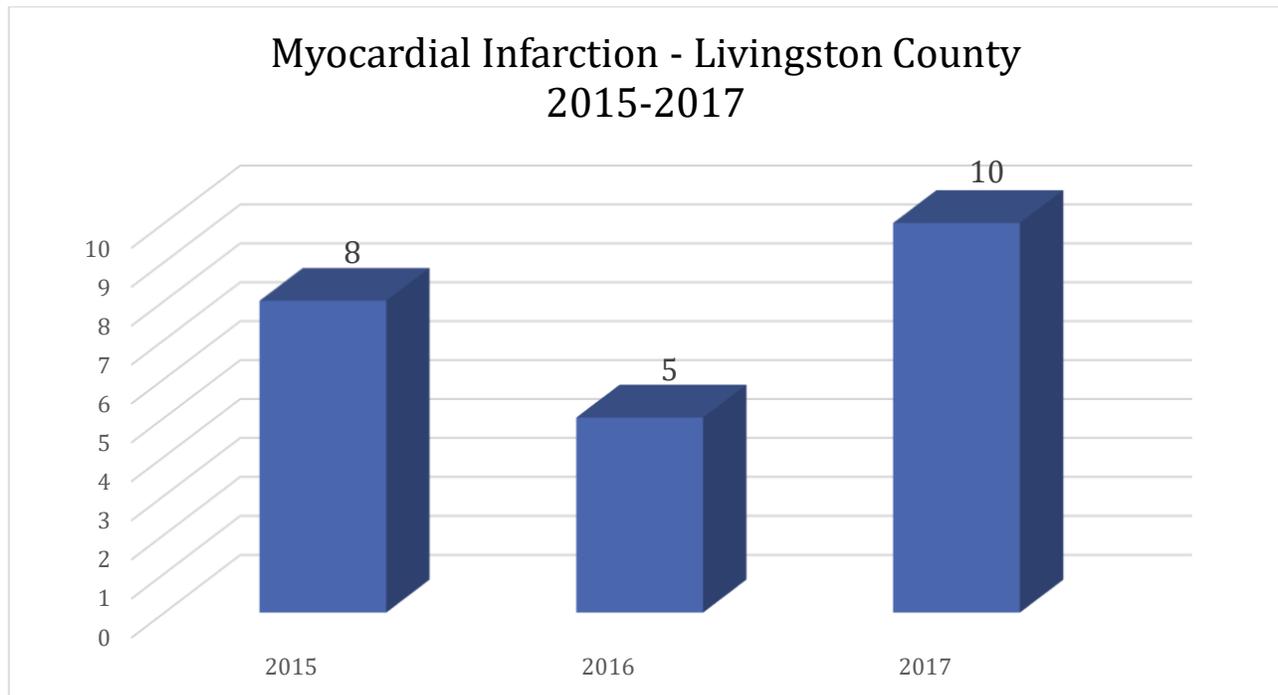
The number of treated cases of heart failure at Livingston County area hospitals increased. In FY 2015, 59 cases were reported, and in FY 2017, there were 104 cases reported. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

Myocardial Infarction

The number of treated cases of myocardial infarction at area hospitals in Livingston County decreased from 8 in 2015 to 5 in 2016. The number of cases of myocardial infarction then increased to 10 in 2017. Note that hospital-level data only show hospital admissions.



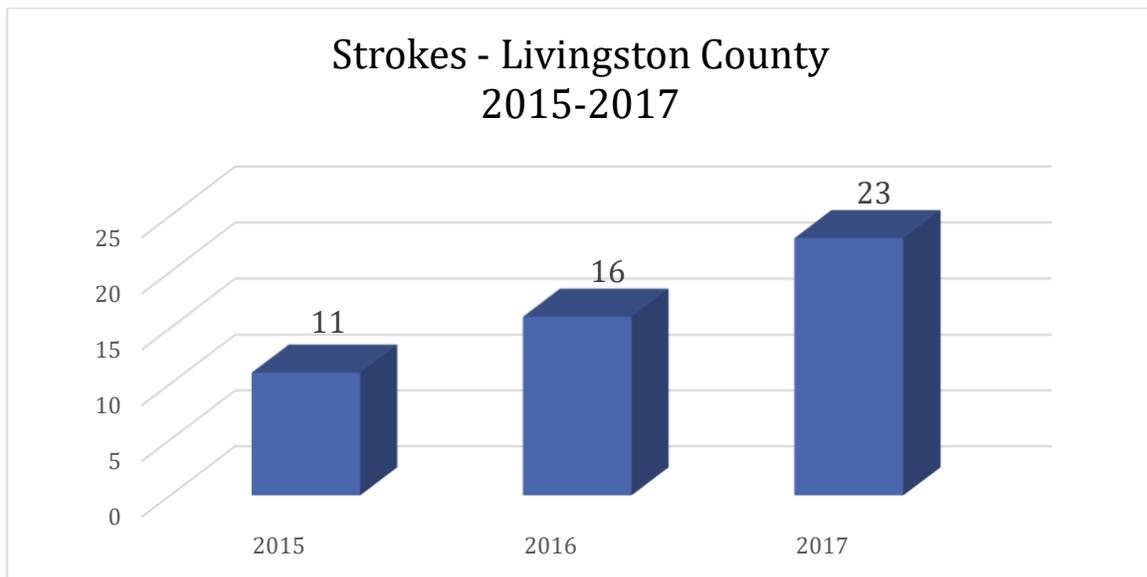
Source: COMPdata 2017

Arterial Embolism

There were no treated cases of arterial embolism at Livingston County area hospitals between 2015 and 2017. Note that hospital-level data only show hospital admissions.

Strokes

The number of treated cases of stroke at Livingston County area hospitals increased between FY 2015 and FY 2017. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.



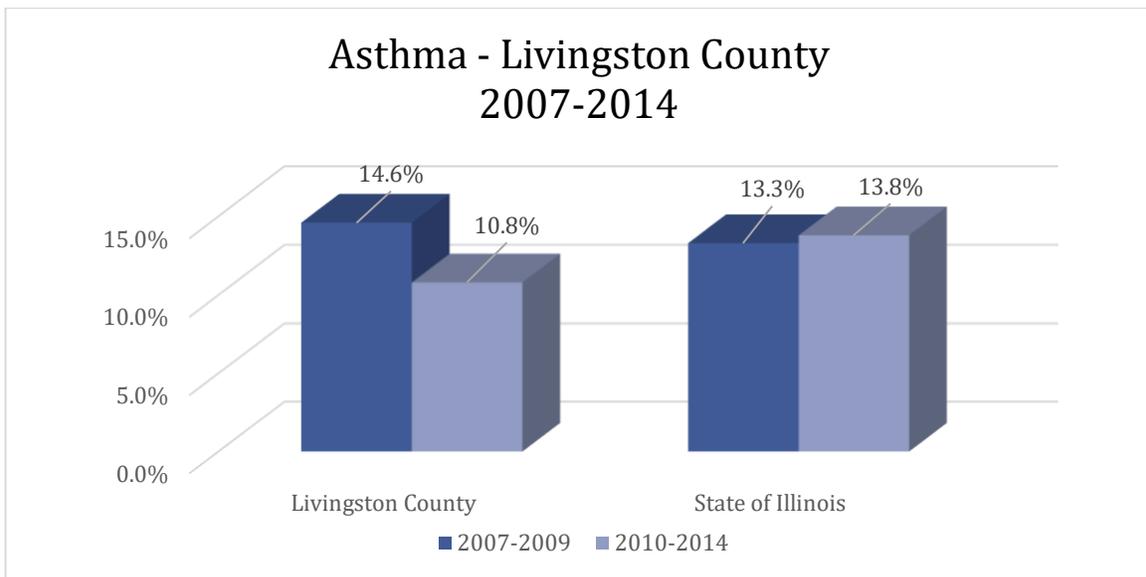
Source: COMPdata 2017

4.4 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.

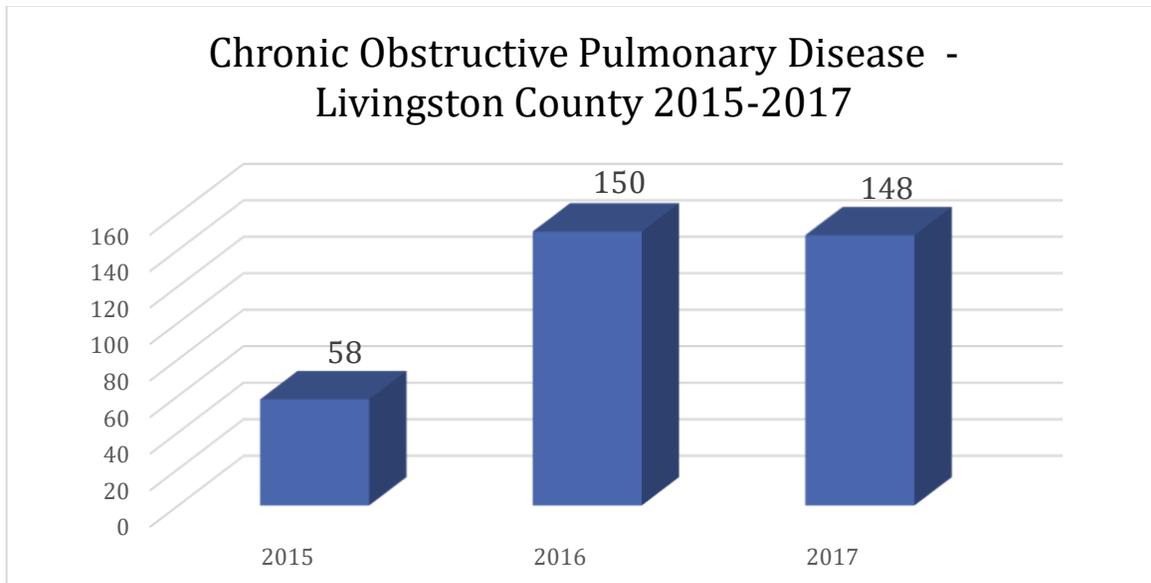
Asthma

The percentage of residents that have asthma in Livingston County has decreased between 2007-2009 and 2010-2014, while State averages are increasing slightly. According to the Illinois BRFSS, asthma rates in Livingston County (10.8%) are lower than the State of Illinois (13.8%). Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

Treated cases of COPD at Livingston County area hospitals fluctuated between FY 2015 and FY 2017, with a significant incline in FY16. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

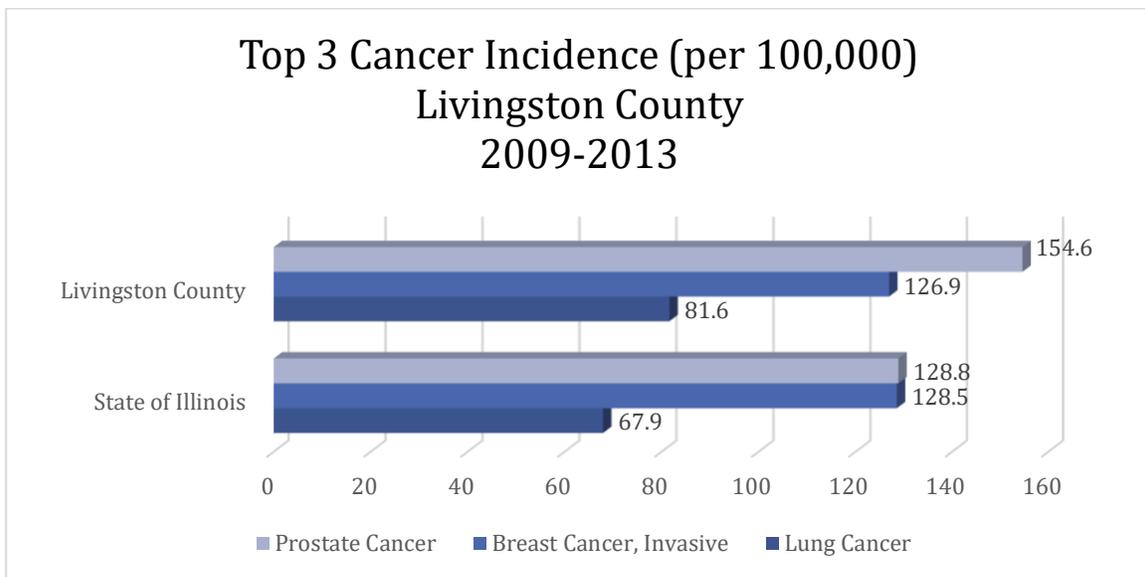


Source: COMPdata 2017

4.5 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 Livingston County.

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

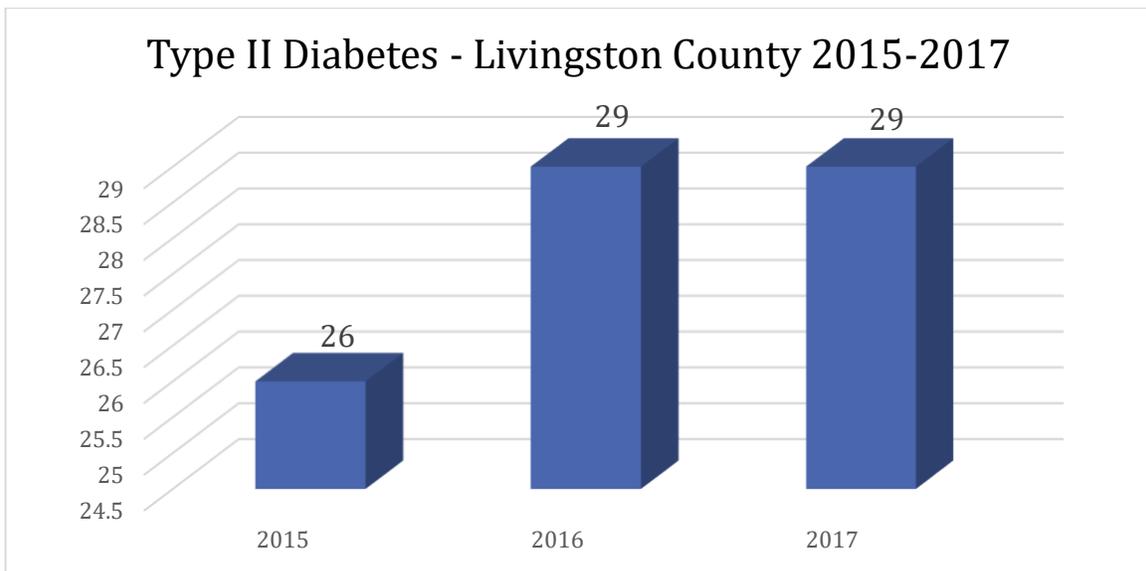


Source: <http://dph.illinois.gov/sites/default/files/publications/County-Sec1-Site-Specific-Cancer-Incidence-ers1605.pdf>

4.6 Diabetes

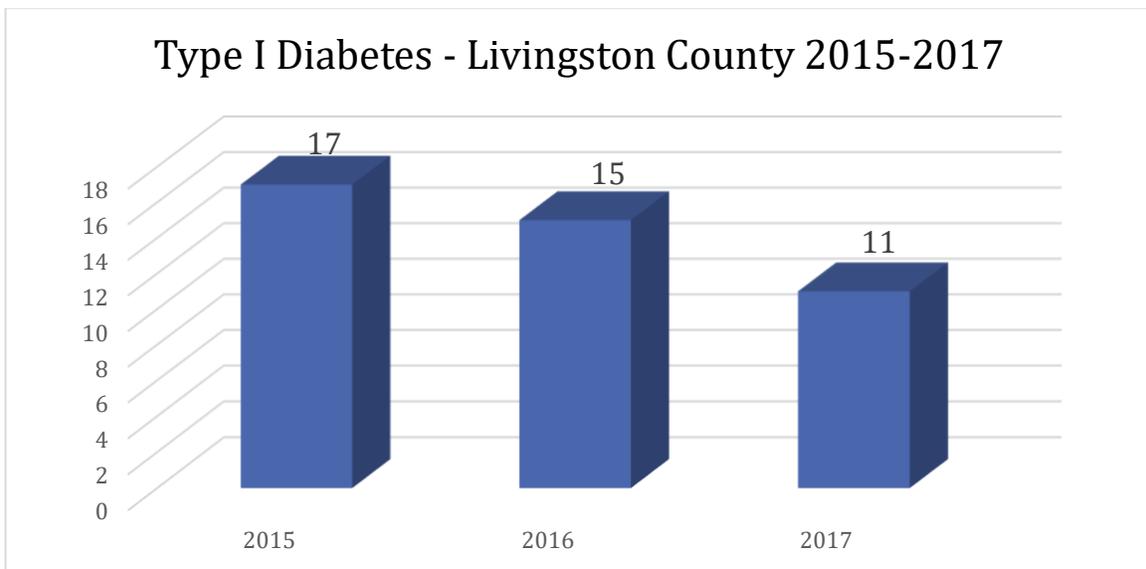
Importance of the measure: Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 5-10%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

Inpatient cases of Type II diabetes from Livingston County increased between FY 2015 (26 cases) and FY 2017 (29 cases). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



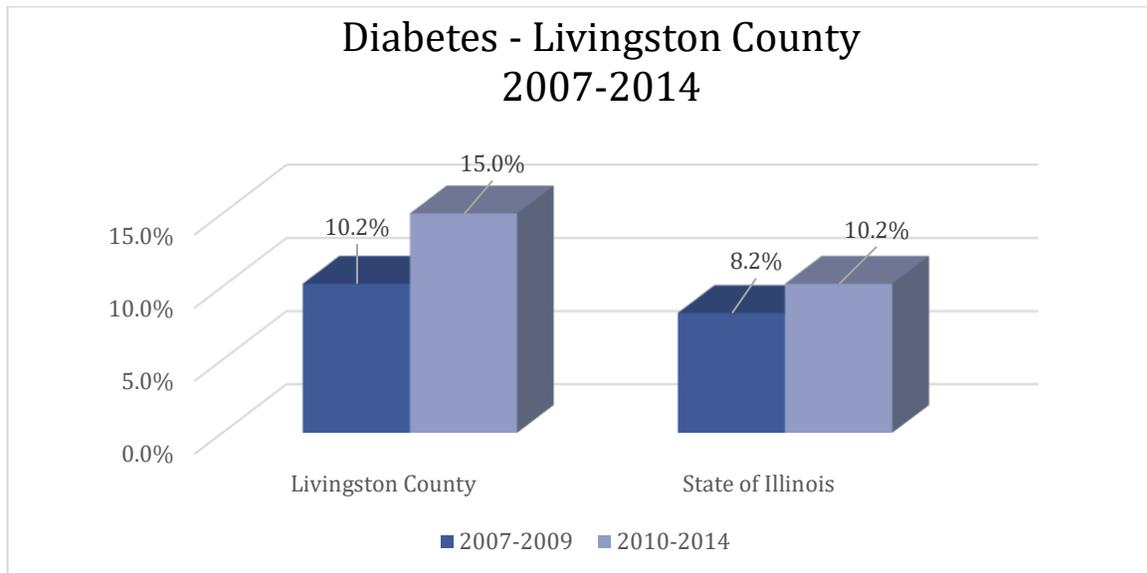
Source: COMPdata 2017

Inpatient cases of Type I diabetes show a decrease from 2015 (17) to 2017 (11) for Livingston County. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



Source: COMPdata 2017

Data from the Illinois BRFSS indicate that 15.0% of Livingston County residents have diabetes. Trends are concerning, as the prevalence of diabetes is increasing and higher in Livingston County compared to data from the State of Illinois. Note that data have not been updated by the Illinois Department of Public Health.



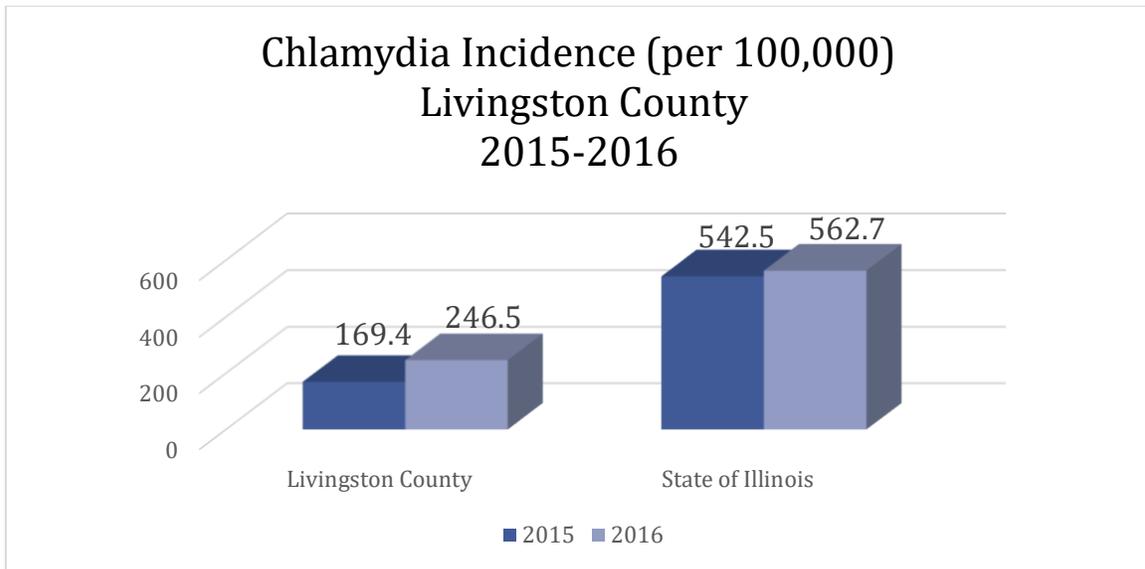
Source: Illinois Behavioral Risk Factor Surveillance System

4.7 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.

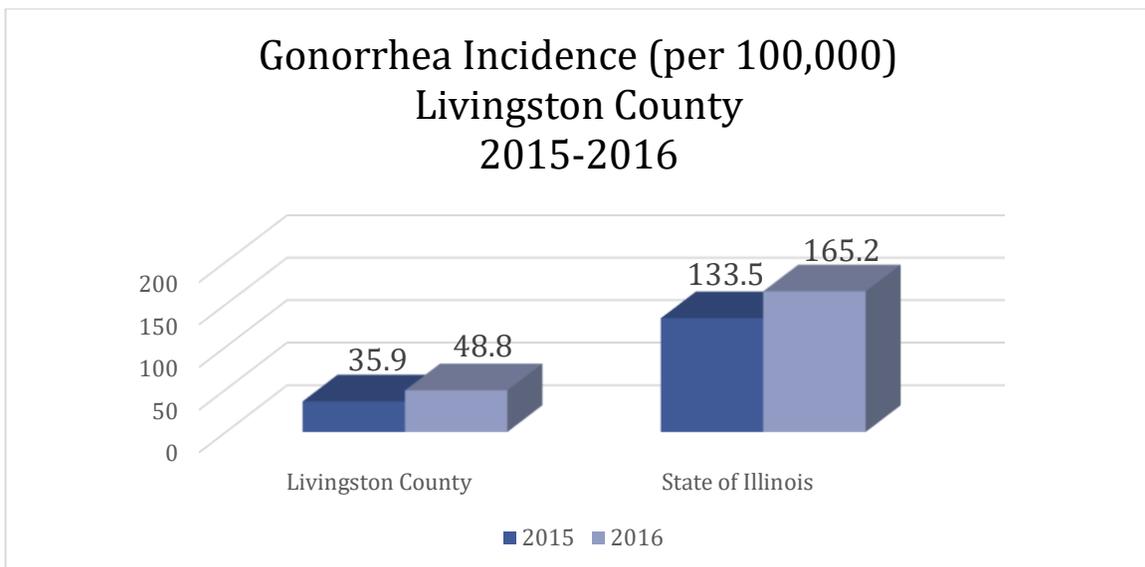
Chlamydia and Gonorrhea Cases

The data for the number of infections of chlamydia in Livingston County from 2015-2016 indicate a significant increase. There is also an increase of incidence of chlamydia across the State of Illinois. Rates of chlamydia in Livingston County are lower than State averages.



Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in Livingston County indicate an increase from 2015-2016. Rates of gonorrhea infections in Livingston County remain significantly lower than state averages for 2015-2016.



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 (Rubeola), 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. Livingston County has shown no significant outbreaks compared to state statistics, but there are limited data available.²

Vaccine Preventable Diseases 2013-2016 Livingston County Region

Mumps	2013	2014	2015	2016
Livingston County	0	1	1	0
State of Illinois	26	142	430	333

Pertussis	2013	2014	2015	2016
Livingston County	0	1	0	5
State of Illinois	785	764	718	1034

Varicella	2013	2014	2015	2016
Livingston County	8	1	4	4
State of Illinois	731	596	443	469

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

Tuberculosis 2002-2012 Livingston County Region

Tuberculosis	2002	2006	2008	2012
Livingston County	1	1	1	1
State of Illinois	320	343	341	336

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

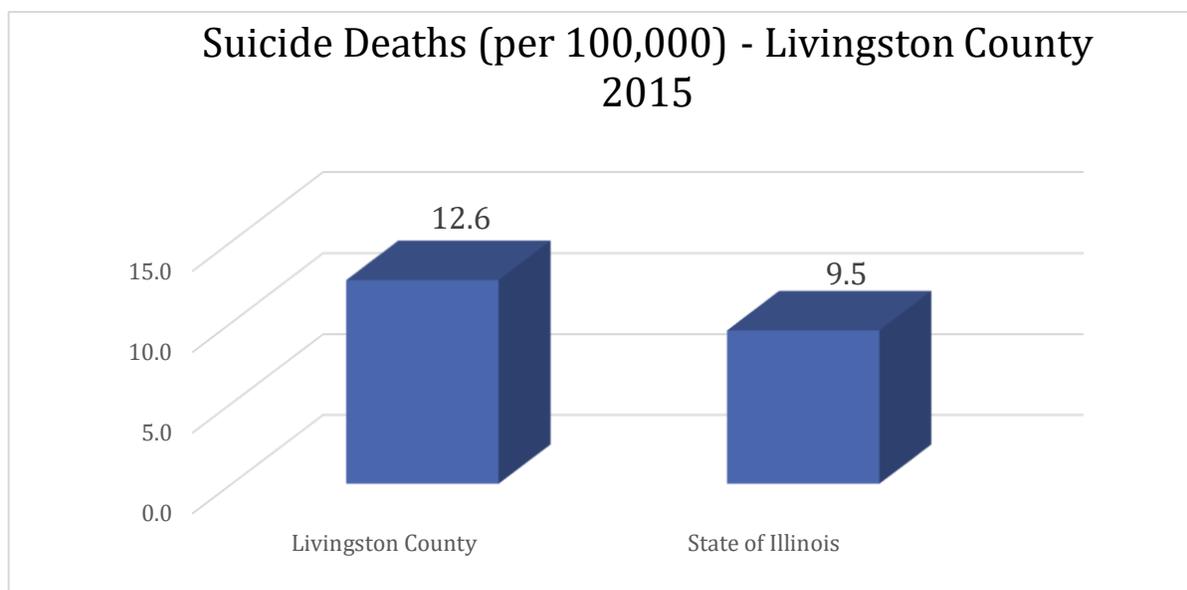
² Source: <http://www.idph.state.il.us/about/vpcd.htm>

4.8 Injuries

Importance of the measure: 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. Unintentional injuries can occur, in part, from violent crimes.

Suicide

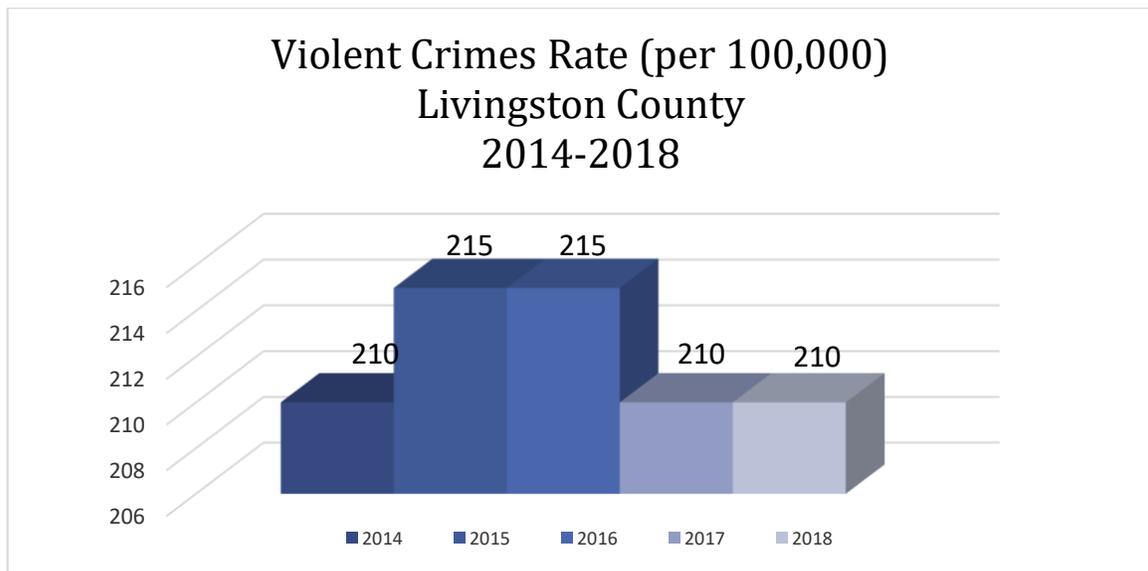
The number of suicides in Livingston County indicate higher incidence than State of Illinois averages, as there were approximately 12.6 per 100,000 people in Livingston County in 2015.



Source: Illinois Department of Public Health

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 been variable for 2014-2018 in Livingston County.



Source: Illinois County Health Rankings and Roadmaps

4.9 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 Livingston County are similar as a percentage of total deaths in 2017. Diseases of the Heart are the cause of 23.5% of deaths and Cancer is the cause of 19.1% of deaths in Livingston County.

Top 5 Leading Causes of Death for all Races by County, 2017		
Rank	Livingston County	State of Illinois
1	Diseases of Heart (23.5%)	Diseases of Heart
2	Malignant Neoplasm (19.1%)	Malignant Neoplasm
3	Chronic Lower Respiratory Disease (7.2%)	Cerebrovascular Disease
4	Alzheimer's Disease (7.0%)	Accidents
5	Stroke (5.5%)	Chronic Lower Respiratory Disease

Source: Illinois Department of Public Health

4.10 Key Takeaways from Chapter 4

- ✓ PROSTATE CANCER RATES IN LIVINGSTON COUNTY ARE SIGNIFICANTLY HIGHER THAN STATE AVERAGES.
- ✓ LUNG CANCER RATES IN LIVINGSTON COUNTY ARE SLIGHTLY HIGHER THAN STATE AVERAGES.
- ✓ INCIDENCE OF HEART DISEASE HAS INCREASED.
- ✓ WHILE STATE AVERAGES HAVE ONLY SEEN A SLIGHT INCREASE, DIABETES IS TRENDING UPWARD SIGNIFICANTLY IN LIVINGSTON COUNTY AND IS HIGHER THAN STATE AVERAGES.
- ✓ CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF MORTALITY IN LIVINGSTON 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.

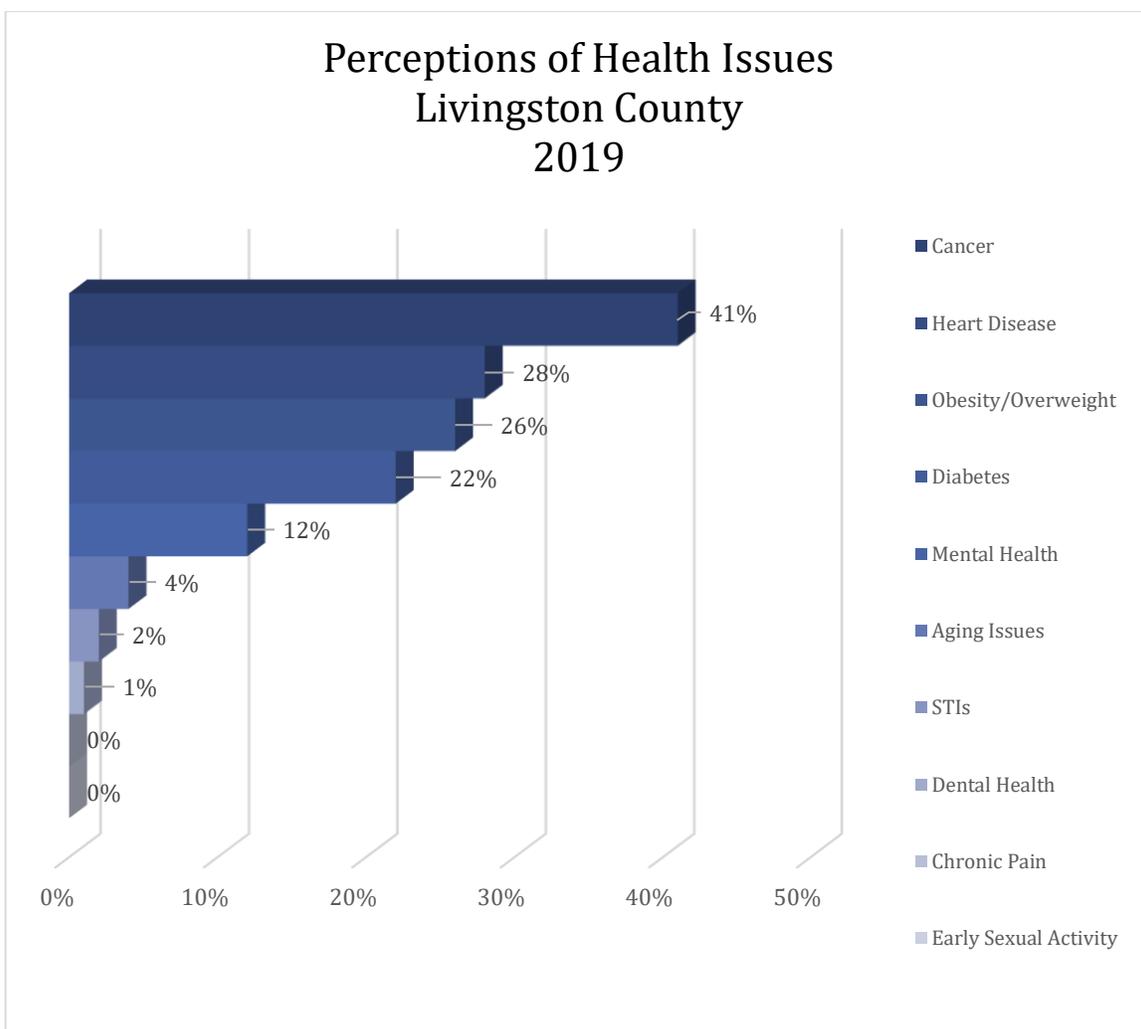
Specific criteria used to identify these issues included: (1) magnitude in the community; (2) severity in the community; (3) potential for impact to the community.

5.1 Perceptions of Health Issues

Respondents were presented with an open-ended question for this item, which focused on the three most important health issues in the community. Note that respondents could choose up to three health issues, so total percentages are greater than 100.

The health issue that rated highest was cancer (41%), followed by heart disease (28%), obesity/overweight (26%), diabetes (22%), and opioids (20%). These five factors were significantly higher than other categories based on *t-tests* between sample means.

The focus on opioids supports the finding regarding opioids reported in section 5.2.

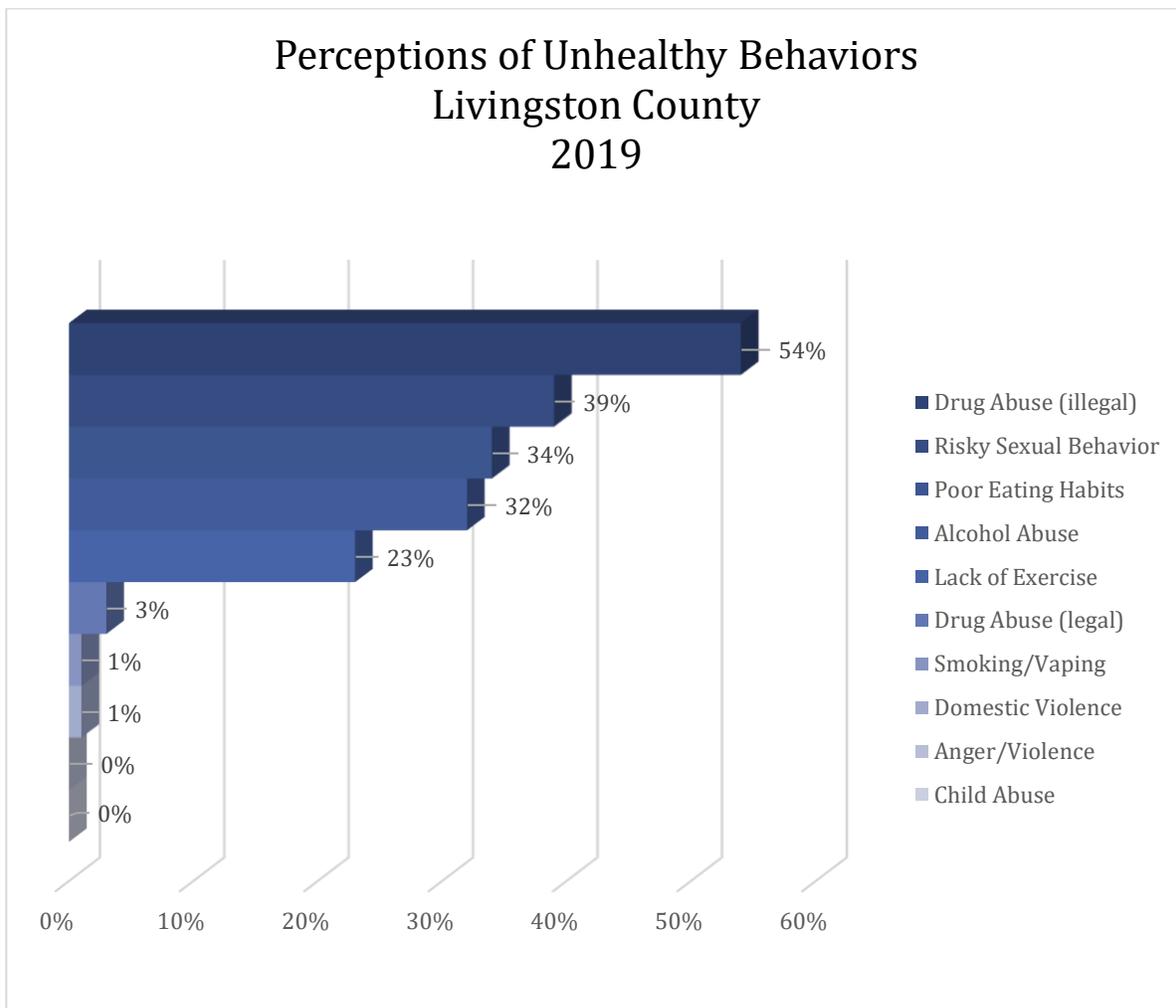


Source: CHNA Survey

5.2 Perceptions of Unhealthy Behaviors

Respondents had an open-ended question for this item, which focused on the three most important unhealthy behaviors in the community. The five unhealthy behaviors that rated highest were drug abuse(illegal) at 54%, risky sexual behavior (39%), poor eating habits (34%), alcohol abuse (32%) and lack of exercise (23%). These five factors were significantly higher than other categories based on *t-tests* between sample means.

No other open-ended responses were identified by at least 10% of the population.



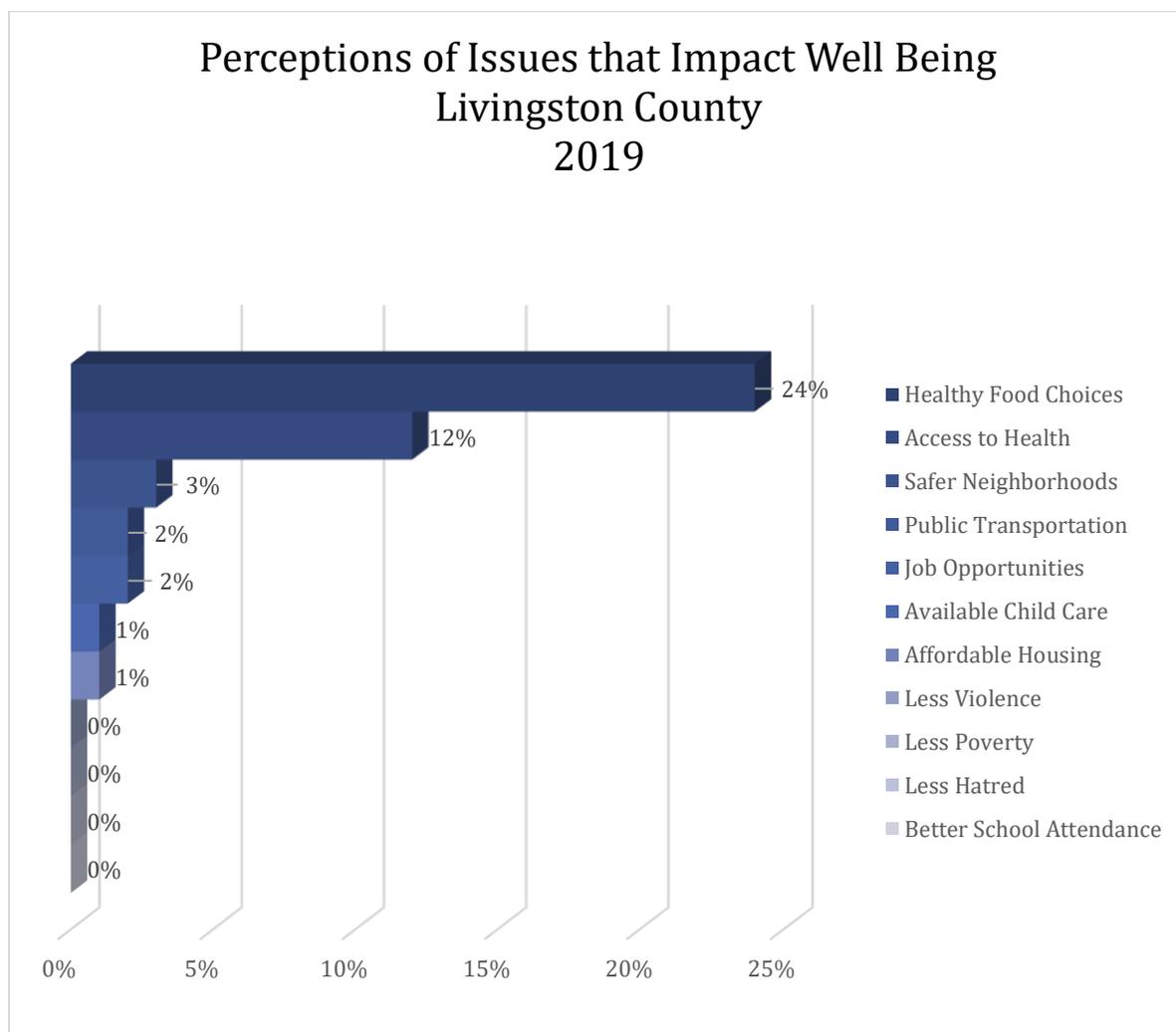
Source: CHNA Survey

5.3 Perceptions of Issues Impacting Well Being

Respondents had an open-ended question for this item, which focused on the three most important issues impacting well-being in the community. The issue impacting well-being that rated highest was exercise (28%), followed by healthy food choices (24%), and access to health (12%). These three factors were significantly higher than other categories based on *t-tests* between sample means.

The focus on exercise supports the finding regarding lack of exercise reported in section 5.2.

No other responses were identified by at least 10% of the population.



Source: CHNA Survey

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:

- Population decreased
- Population over age 65 increased
- Single female head-of-household represents 11% of the population
- Telehealth

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

- Increased utilization of Medicare
- Cancer screenings are relatively high
- Exercise and healthy eating behaviors
- Depression and stress/anxiety

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

- Tobacco/vape usage
- Substance abuse for 8th and 12th graders
- Overweight and obesity
- Risk factors for heart disease

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

- Lung cancer
- Prostate cancer
- Heart disease
- Diabetes is trending upward
- Cancer and heart disease are the leading causes of mortality

Potential Health-Related Needs Considered for Prioritization

Before the prioritization of significant community health-related needs was performed, results were aggregated into 8 potential categories. Based on similarities and duplication, the 8 potential areas considered are:

- **Aging issues**
- **Interest in telehealth**
- **Healthy behaviors – nutrition & exercise**
- **Behavioral health**
- **Overweight/Obesity**
- **Substance abuse**
- **Cancer - lung**
- **Cancer – prostate**

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 8 health-related areas were being addressed. A resource matrix can be seen in Appendix 5 relating to the 8 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 three significant health needs and considered them equal priorities:

- **Healthy Behaviors – defined as active living and healthy eating, and their impact on obesity**
- **Behavioral Health – including mental health**
- **Substance abuse – specific focus not included in Behavioral Health**

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 24% of respondents indicated that they do not exercise at all, while the majority (62%) of residents exercise 1-5 times per week. The most common reasons for not exercising was no time (39%)

HEALTHY EATING. Over half (54%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 7%. The most prevalent reason for failing to eat more fruits and vegetables was expense involved according to survey respondents.

OBESITY. In Livingston County, over two-thirds (70.0%) of residents were diagnosed with obesity and being overweight. In the 2019 CHNA survey, respondents indicated that being overweight was the third most important health issue and was rated as the most prevalently diagnosed health condition. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Livingston 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 6th 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.

BEHAVIORAL HEALTH – MENTAL HEALTH

MENTAL HEALTH. The CHNA survey asked respondents to indicate prevalence of specific issues, namely depression and stress/anxiety. Of respondents, 43% indicated they felt depressed in the last 30 days and 32% indicated they felt anxious or stressed. Respondents were also asked if they spoke with anyone about their mental health in the last 30 days. Of respondents 24% indicated that they spoke to someone, the most common response was to a doctor/nurse (37%). In regard to self-assessment of overall mental health, 6% of respondents stated they have poor overall mental health. In the 2019 CHNA survey, respondents indicated that mental health was the 5th most important health issue.

SUBSTANCE ABUSE

SUBSTANCE ABUSE. Survey respondents were asked “On a typical DAY, how often to do you use substances (either legal or illegal) to make yourself feel better?” Of respondents, 14% indicated they use substances to make themselves feel better. Data from the 2018 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Livingston County is at or above State averages in all categories among 8th graders except for one category: marijuana. Among 12th graders, Livingston County is at or above State averages in all categories except for inhalants and illicit drugs. The 2019 CHNA survey data show 17% of respondents smoke and/or vape and 8% state they smoke and/or vape more than 12 times per day.

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:

Brad Solberg was appointed president of OSF Saint James-John W. Albrecht Medical Center in January, 2015. He most recently served as CEO of Hammond-Henry Hospital in Geneseo, Illinois for nearly 14 years. He has served on numerous boards of community organizations in addition to various committees of the Illinois Hospital Association and the Illinois Critical Access Hospital Network. Brad has a Bachelor's degree from Concordia College, Moorhead, Minnesota and earned his Masters of Healthcare Administration from the University of Minnesota, Minneapolis, Minnesota.

Liz Davidson, DNP, RN is OSF Saint James-John W. Albrecht Medical Center's Vice President Patient Care Services-Chief Nursing Officer, serving in this role since 2008. Liz has a Master of Science in Nursing from Walden University and a Doctorate in Nursing Practice from Wilkes University. She serves on many OSF HealthCare Saint James and OSF HealthCare System Committees and projects.

Tim Johnson is the Director of Facilities and Ancillary Services at OSF Saint James-John W. Albrecht Medical Center. He has served as a member of the administrative team with responsibility for many of the outpatient clinical services since 2008 and in various leadership capacities for OSF Saint James for over 16 years. Tim has a Master's degree in Healthcare Administration from the University of Saint Francis, Joliet, IL. Tim also has a strong connection with the agriculture community of Livingston County as a rural resident and farmer.

Tasha Eggleston, RN, MSN a graduate of Saint Francis College of Nursing, Tasha has a Master's degree in Nurse Management and Leadership. She is certified in case management with nine years case management experience including UMR, Patient Care Facilitator, Case Manager, and Supervisor of Case Management. She has served as the Eastern Region Director of Care Management since February, 2018. In her role as Director of Care Management she is responsible for the strategic and operational direction, development and implementation for entity Case Management functions across the Eastern region which includes OSF HealthCare St. Joseph Medical Center, OSF HealthCare Saint James-John W. Albrecht Medical Center, OSF HealthCare Heart of Mary Medical Center, and OSF HealthCare Sacred Heart Medical Center.

JR Elling, OTR/L, MHA has been with OSF Saint James -John W. Albrecht Medical Center for 21 years during which he has served the Sister's Mission in many different roles. For the last 13 years he has served as a 6 Sigma Black Belt leading performance Improvement initiatives locally and at the Ministry level. During the previous 8 years he served as Director of Complementary Medicine/Occupational Rehab as well as manager of the Occupational Therapy department. In 2001, JR earned a Master's Degree in HealthCare Administration from St. Francis University, Joliet IL, and a Bachelor of Science degree with a specialty in Occupational Therapy (Cleveland State University 1991). Additional community activities includes a current Trustee for the Village of Campus and previously the Secretary for Livingston Family Care Center (2007- 2013).

Erin Fogarty, MPH, CHES is currently the Health Education & Marketing Director at the Livingston County Health Department. Credentialed as a Certified Health Education Specialist and holding an Illinois Initial Level Teaching certificate, Erin completed her Bachelor of Science in Education degree at Illinois State University in school health and physical education, and her Master of Public Health degree at Southern Illinois University in Carbondale with a concentration in Community Health. Erin is currently doctoral candidate working to complete her PhD in Health Behavior, with a minor in Gender Studies, at Indiana University. Erin has taught a variety of health-related curriculums to a wide range of populations, serves as the Public Information Officer for the LCHD, and is active in supporting and maintaining many of the grants and programs at the LCHD. She also serves as a board member for the Livingston Family Care Center – Livingston County’s free clinic.

MaLinda Hillman is the Director of the Livingston County Health Department. A graduate of Northern Illinois University, MaLinda is a registered nurse and a certified public health administrator. She has been employed at the Livingston County Health Department since 1980 in various capacities and has served as the Director since 1996. MaLinda has been instrumental in obtaining funding and implementing many of the programs at the department. She has had an active lead role in the IPLAN (Illinois Project for the Local Assessment of Need) process for the health department. MaLinda is an active member of the Illinois Association of Public Health Administrators along with serving on many committees and boards for public health.

Rhonda Hodges has been a Mission Partner at OSF HealthCare Saint James – John W. Albrecht Medical Center for 34 years. She is the Patient Representative and assists patients and families with any concerns or questions that they have about any part of their hospital experience. She also is the site administrator of their patient experience survey tool, creating and interpreting reports for leadership and all Mission Partners – keeping patient experience in the forefront for everyone.

Deb Howard has been the Executive Director of the United Way of Livingston County for the last 4 years. She was educated in the Catholic school system in Chicago. She went to Wilbur Wright college. She has been on the board at Livingston County Family Care Center, and Good Samaritan Home. She volunteered with Cub Scouts, Girl Scouts, PTA, Pontiac Chamber events, and Saunemin Days. She has a great passion for the community.

Matt Janus is an Exercise Physiologist for Cardiopulmonary Rehabilitation as well as the Wellness Coordinator for OSF HealthCare Saint James – John W. Albrecht Medical Center. Matt obtained his Bachelor of Arts in Psychology and his Bachelor of Science in Exercise Science from Illinois State University. In his 2+ years with OSF HealthCare, Matt has served on numerous OSF HealthCare committees, as well as spearheading several Mission Partner and Community Wellness Projects.

Paulette Krippel, CDM, CFPP is the manager of OSF St. James-John W. Albrecht Medical Center Dietary Department and Volunteer Services. She earned her credentialing from the University of North Dakota and has been with OST St. James since 1986. In her role as manager she serves on various committees both locally and within the OSF Ministry. Paulette is a lifelong resident of the area and is willing to do what she can to serve the community and be an ambassador for the OSF Mission.

Nancy Kuster is the Eastern Region Manager of Cardiopulmonary Rehab Services. She has a Bachelor’s degree from University of Iowa, and Master’s degrees from both Illinois State University and Benedictine

University. She has been working in Cardiac and Pulmonary Rehabilitation the past 25+ years as an Exercise Physiologist. Her role has also included many employee and community wellness initiatives over the years. She currently is involved on many OSF committees and initiatives, along with community boards and groups.

Andrew Larsen is the EMS System Manager for OSF Saint James - John W. Albrecht Medical Center. He is responsible for all operations within the EMS System and providing oversight and assistance to system agencies and providers. He also coordinates Emergency/Disaster Operations for OSF Saint James by conducting drills and exercises as well as ensuring proper policies are in place. Andrew has been in EMS for over 20 years with both rural and urban agencies. Andrew is an EMT-P, Illinois Lead Instructor and an instructor for ACLS, BLS/CPR and PEPP. Andrew has an associate degree in business and a bachelor's degree in health care/EMS Management. He has been with OSF HealthCare since 2015.

Kathy McMillan is the Director of OSF Medical Group Primary and Specialty care offices for the Pontiac area. As such she provides direction and oversight to 10 primary care and 4 specialty care offices located in seven communities in Livingston and surrounding counties. Kathy has a Bachelor of Science in Health Information Management from Illinois State University and a Masters of Health Administration from the University of St. Francis. She is the Chairman of the local OSF Pediatric Council and serves on several OSF Saint James and OSF Medical Group committees and projects. Kathy serves on the Executive Board of the Livingston County Children's Network. She is a past Chairman of the Pontiac Area United Way and has served on the Board of Directors of the Pontiac Area Chamber of Commerce.

Pam Meiner is the OSF HealthCare Community Relations Coordinator for the Pontiac service area, a position she has held since October 2015. Prior to this role, Pam was the Director of Marketing & Communications for OSF St. Joseph Medical Center in Bloomington for 18 years, followed by 10 years as the Director of Marketing & Communications for OSF Saint James – John W. Albrecht Medical Center in Pontiac. She holds a Bachelor of Arts degree in Education from Illinois Wesleyan University and a Master of Business Administration degree from Illinois State University.

Christine Myers is the Executive Director of the Livingston County Mental Health Board and the Livingston County Commission on Children and Youth and has been in that position for over 2 ½ years. Prior to that, she worked as an Independent Service Coordinator with the Mental Health Board for 13 years, which provides advocacy and case management for people with developmental disabilities through funding from the IL Dept. of Human Services/Developmental Disabilities. Chris obtained her Bachelor's degree in Social Work/Therapeutic Recreation from the University of St. Francis in Joliet, IL. Chris serves on the boards of the Homeless Coalition and the Livingston County Family Care Center.

Erin Nimbler, RN, BSN is the manager of OSF St. James John W. Albrecht Medical Center Emergency Department. She graduated from the University of Illinois, and has been working for OSF since 1999. In addition to her past bedside nursing role, she served as a clinical preceptor, six sigma green belt, and unit charge nurse. In her role as manager, she serves on various councils and initiatives, both local and within the OSF ministry, including St. James ethics council, Sepsis local process owner, Livingston County Emergency Response Committee, and PALS instructor. Erin is a life-long Livingston County resident and enjoys being a part of the decisions that affect not only the hospital she works for, but the community she lives in.

Joe Norris is the Director of Mission Services for OSF Eastern Region. He has a Bachelor's degree from St. Ambrose University, Davenport, Iowa and has earned Masters' Degrees in Theology and Health Care Ethics from the Aquinas Institute of Theology and Saint Louis University, both in St. Louis.

Heather Dameron Schweizer MD, CPE is the Director of Physician Practice for the OSF Medical Group in the Pontiac area. Heather has been a practicing physician with the OSF Medical Group since 1998, with a family medicine practice in Fairbury. She is a board certified family physician with a bachelor's degree from the University of Illinois and a doctorate degree from SIU School of Medicine. She completed her residency in Family Medicine at SIU Decatur Family Medicine in 1998. She earned board certification as a Certified Physician Executive (CPE) from the American Association for Physician Leadership in 2019. She has held several community positions as well including currently serving on the board of directors of Futures Unlimited and serving as an officer of the Prairie Central Music Boosters. She leads a yearly medical mission team out of her home church to serve in Central America.

Dona Tharp has been a Mission Partner at OSF HealthCare Saint James-John W. Albrecht Medical Center for 30 years. She is the Senior Financial Analyst and responsible for the Community Benefit reporting for the Medical Center. In her role as a Financial Analyst she works with Mission Partners at both the local and ministry level, serving on various committees. Dona is also the chair of the United Way committee at OSF Saint James and a board member for United Way of Livingston County.

Vicki Trainor is a Registered Nurse with 35 years of experience. She has a strong Pediatric Background and has worked in Primary Care offices for 15 years. The past 8 years she has worked as Clinical Coordinator for OSF Medical Group in the role of Staff Educator. She is responsible for new employee competency, project support and resource for staff regarding office processes.

Joe Vaughan is the Executive Director of the Institute for Human Resources (IHR). Joe has been with IHR for the past 26 years. Joe was named IHR's Executive Director in 2010. Joe has a psychology degree from Eastern Illinois University and a Master's Degree from the University of Illinois. Joe has been a Licensed Clinical Social Worker since 1998. Joe currently sits on the statewide Community Behavioral Health Association Board, Livingston County Housing Board, and the Livingston County United Way 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 35 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 Tuley (Coordinator) is a Strategic Reimbursement Senior Analyst at OSF Healthcare System. She has worked for OSF Healthcare System since 2004 and has acted as the coordinator for 13 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 served as the Vice President, President-Elect and two terms as a Chapter President on the board of Directors with the McMahon-Illini HFMA Chapter. She currently serves as a Director on the board.

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 principal 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 2016 CHNA PRIORITIZED NEEDS

Two major health needs were identified and prioritized in the Livingston County 2016 CHNA. Below are examples of these activities, measures and impact during the last three years to address these needs.

1. Healthy Behaviors defined as - Active Living, Healthy Eating and Obesity

Goal: *Increased awareness and engagement in reducing obesity and promoting healthy behaviors in order to improve Livingston County residents' overall health.*

Healthy Behaviors Measurement and Impact

Increased participation in local schools to teach children about healthy behaviors.

- Partnered with local schools to educate them on healthy behaviors, dental hygiene and physical activity through various programs throughout the three years. These programs helped over 150 children. In addition, partnership with the Boys and Girls clubs in all Livingston County locations has been increased to provide additional resources.
- Increased participation in the 4-H Fair has given knowledge to over 180 children along with 60 participants who built a fitness tracker at a 4-H science event to help with the benefits of exercise and healthy behaviors.

Increased participation in the percentage of employees who participate in the OSF4Life program. OSF being one of the largest employers allows us to provide education to our employees so they are able to use these skills with others in the Livingston County.

- Through this expanded participation, OSF employees not only joined the program and gained knowledge about healthy behaviors but also participated in annual runs such as "Run for Respect" through Pontiac High School and community walks such as "American Heart Walk."

Provided increased awareness of healthy behavior education and demonstrations to at least six community events annually. This involvement includes:

- Diabetes support group meetings held monthly averaging 10-15 participants per meeting.
- Pre-diabetes classes held throughout the years, these included 5 - 10 participants per session.
- Launching of a new Diabetes Prevention Program. This is an annual program to monitor and help patients avoid getting diabetes. The first session was held, and 24 participants were able to take advantage of this new annual program.
- A Saint James Hospital dietitian has provided nutrition education sessions to various community groups throughout the three years with averages of 75-150 participants per year.
- A program entitled "Life after Loss" held group sessions 2 times per month with 3-10 participants at each session annually.
- Several "We Live" events helping approximately 150 per event. The event has helped woman discuss maintaining health habits during the Holidays. In addition, this program has heart health screenings, eating healthy fun food and education on dance exercises.

- Provided screenings to Ag Health and a Safety Fair. These included wellness checks and safety information to Ag community. Approximately 145 participants annually.
- On the Saint James campus, in collaboration with United Way, established and coordinated the Growing Well Garden with a harvest of approximately 2,400 lbs. of produce distributed to area food pantries.
- Fall of 2018, a Growing Well Orchard was planted.
- Collection drives including food and hygiene products have been ongoing, donating items to local food pantries and community agencies.

2. Behavioral Health defined as – Mental Health and Substance Abuse

Goal: Increase awareness of and access to Behavioral Health services for Livingston County residents. Increase awareness and engagement to decrease instances of risky behavior and substance abuse to protect the health, safety, and quality of life for all in Livingston County, especially children.

Behavioral Health Measurement and Impact

Increased access to OSF on-site location for counseling services.

- Partnered and collaborated with community agencies to provide counselors located in Pontiac, Flanagan, Cullom and Fairbury. Counselors managed over 800 patients.

Increased access to behavioral health patient referrals from OSF to appropriate healthcare providers.

- Counselors were added to Chenoa and the Reynolds Street campus locations.
- Participated in the OSF Pediatrics Council, including collaboration with Livingston County Children's Network (LCCN), gives us the ability to assist with local area grade school student growth and developmental programs. In addition, worked closely with the new Behavioral Health Coordinator for adult resources and placements.

Increased participation with OSF employees and community caregivers involving behavioral health education programs.

- Held Mental Health Training courses for OSF and community Emergency Medical Service providers.
- Education provided by hospital executives on opioid crisis and how OSF is working with Pontiac and Livingston County to increase awareness.
- Education provided to 110 providers on the Silver Cloud mobile app and the services available to community members.
- Developed processes and procedures to reduce the use of opioids and assure all patients have a current Medication Management Agreement. Since these agreements have begun Saint James Hospital has seen a significantly lower opioid prescription usage.

APPENDIX 3. SURVEY



OSF[®] HEALTHCARE

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 about community health needs. Your opinions are important! This survey will take about 10 minutes to complete. All of your individual responses are confidential. We will use the survey results to better understand and address health needs in our community.

This survey was reviewed by the Committee on the Use of Human Subjects and Research, Bradley University Institutional Review Board (IRB) in June, 2018
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COMMUNITY PERCEPTIONS

1. What would you say are the three (3) biggest **HEALTH ISSUES** in our community?
 These could be different diseases or health conditions.

2. What would you say are the three (3) most **UNHEALTHY BEHAVIORS** in our community?
 These are behaviors that are NOT good for people’s health.

3. What would you say are the three (3) most important factors that would improve your **WELL-BEING**?
 These could be types of resources, attitudes or social factors.

ACCESS TO CARE

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

Medical Care

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

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

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

- Yes (please answer #3)
 No (please go to #4: Prescription Medicine)

3. If you were not able to get medical care, why not? (Please choose all that apply).

- Didn't have health insurance. Too long to wait for appointment.
 Couldn't afford to pay my co-pay or deductible. Didn't have a way to get to the doctor.

Are there any other reasons why you could not access medical care?

Prescription Medicine

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

- Yes (please answer #5) No (please go to #6: Dental Care)

5. If you were not able to get prescription medicine, why not? (Please choose all that apply).

- Didn't have health insurance. The pharmacy refused to take my insurance or Medicaid.
 Couldn't afford to pay my co-pay or deductible. Didn't have a way to get to the pharmacy.

Are there any other reasons why you could not access prescription medicine?

Dental Care

6. In the last YEAR, was there a time when you needed dental care but were not able to get it?

- Yes (please answer #7) No (please go to #8: Mental-Health Counseling)

7. If you were not able to get dental care, why not? (Please choose all that apply).

- Didn't have dental insurance. The dentist refused my insurance/Medicaid
 Couldn't afford to pay my co-pay or deductible. Didn't have a way to get to the dentist.

Are there any other reasons why you could not access a dentist?

Mental-Health Counseling

8. In the last YEAR, was there a time when you needed mental-health counseling but could not get it?

- Yes (please answer #9) No (please go to next section – HEALTHY BEHAVIORS)

9. If you were not able to get mental-health counseling, why not? (Please choose all that apply).

- Didn't have insurance. The counselor refused to take my insurance/Medicaid
 Couldn't afford to pay my co-pay or deductible. Embarrassment.
 Didn't have a way to get to a counselor.

Are there any other reasons why you could not access a mental-health counselor?

HEALTHY BEHAVIORS

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

Exercise

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

- None (please answer #2) 1 – 2 times 3 - 5 times More than 5 times

2. If you answered “none” to the question about exercise, why didn’t you exercise in the past week? (Please choose all that apply).

- Don’t have any time to exercise. Don’t like to exercise.
 Can’t afford the fees to exercise. Don’t have child care while I exercise.
 Don’t have access to an exercise facility. Too tired.

Are there any other reasons why you could not exercise in the last week?

Healthy Eating

3. On a typical DAY, how many **servings/separate portions** of fruits and/or vegetables did you have? An example would be a banana (but not banana flavored pudding).

- None (please answer #4) 1 – 2 3 - 5 More than 5

4. If you answered “none” to the questions about fruits and vegetables, why didn’t you eat fruits/vegetables? (Please choose all that apply).

- Don’t have transportation to get fruits/vegetables Don’t like fruits/vegetables
 It is not important to me Can’t afford fruits/vegetables
 Don’t know how to prepare fruits/vegetables Don’t have a refrigerator/stove
 Don’t know where to buy fruits/vegetables

Are there any other reasons why you do not eat fruits/vegetables?

5. Where is your primary source of food? (Please choose only one answer).

- Grocery store Fast food Gas station Food delivery program
 Food pantry Farm/garden Convenience store Other _____

6. What are the biggest challenges to eating healthy in our community? (Please choose all that apply).

- Knowledge Convenience People don’t care Physical challenge/Disability
 Cost Time No healthy options Transportation Other

7. Please check the box next to any of the health conditions that you have. (Please choose all that apply).

If you don’t have any health conditions, please check the first box and go to question #9: Smoking.

- I do not have any health conditions Diabetes Mental-health conditions
 Allergy Heart problems Stroke
 Asthma/COPD Overweight Other _____
 Cancer Memory problems

8. If you identified any conditions in Question #7, how often do you follow an eating plan to manage your condition(s)? Never Sometimes Usually Always Not applicable

Smoking

9. On a typical DAY, how many cigarettes do you smoke, or how many times do you use electronic vaping?

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

General Health

10. Where do you get most of your medical information? (Please choose only one answer).

- Doctor Friends/family Internet Pharmacy Nurse at my church

11. Do you have a personal physician/doctor? Yes No

12. How many days a week do you or your family members go hungry?

None 1–2 days 3–5 days More than 5 days

13. In the last 30 DAYS, how many days have you felt depressed, down, hopeless?

None 1–2 days 3 – 5 days More than 5 days

14. In the last 30 DAYS, how often has your stress and/or anxiety stopped you from your normal daily activities?

None 1–2 days 3 - 5 days More than 5 days

15. In the last YEAR have you talked with anyone about your mental health?

Yes (please answer #16) No (please go to #17)

16. If you talked to anyone about your mental health, who was it?

Doctor/nurse Counselor Family/friend Other _____

17. On a typical DAY, how often to do you use substances (either legal or illegal) to make yourself feel better?

None 1–2 times 3–5 times More than 5 times

18. When you were a child, did a parent or other adult often swear at you, insult you or make you feel afraid?

Yes No

19. Do you feel safe where you live? Yes No

20. In the past 5 years, have you had a:

Breast/mammography exam	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable
Prostate exam	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable
Colonoscopy/colorectal cancer screening	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable

Overall Health Ratings

21. My overall physical health is: Below average Average Above average

22. My overall mental health is: Below average Average Above average

INTERNET

1. How interested would you be in health services provided through Internet or phone?

1 2 3
 Not interested Somewhat interested Extremely interested

2. Can you get free wi-fi in public locations? Yes No

3. Do you have Internet in your home (or where you live)? For example, can you watch Youtube?
 Yes (please go to next section – BACKGROUND INFORMATION) No (please answer #4)

4. If don't have Internet, why not? Cost No available Internet provider Data limits
 I don't know how Other _____

BACKGROUND INFORMATION

1. What county do you live in?

Livingston Other

2. What is your Zip Code? _____

3. What type of health insurance do you have? (Please choose all that apply).

Medicare Medicaid Private/Commercial None (Please answer #4)

4. If you answered “none” to the question about health insurance, why **don’t** you have insurance? (Please choose all that apply).

Can’t afford health insurance Don’t need health insurance
 Don’t know how to get health insurance Other _____

5. What is your gender? Male Female

6. What is your age? Under 20 21-35 36-50 51-65 Over 65

7. What is your racial or ethnic identification? (Please choose only one answer).

White/Caucasian Black/African American Hispanic/Latino
 Pacific Islander Native American Asian/South Asian
 Multiracial Other: _____

8. What is your highest level of education? (Please choose only one answer).

Grade/Junior high school Some high school High school degree (or GED)
 Some college (no degree) Associate’s degree Bachelor’s degree
 Graduate or professional degree Other: _____

9. What was your household/total income last year, before taxes? (Please choose only one answer).

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

10. What is your housing status?

Do not have Have housing, but worried about losing it Have housing, **NOT** worried about losing it

11. How many people live with you? _____

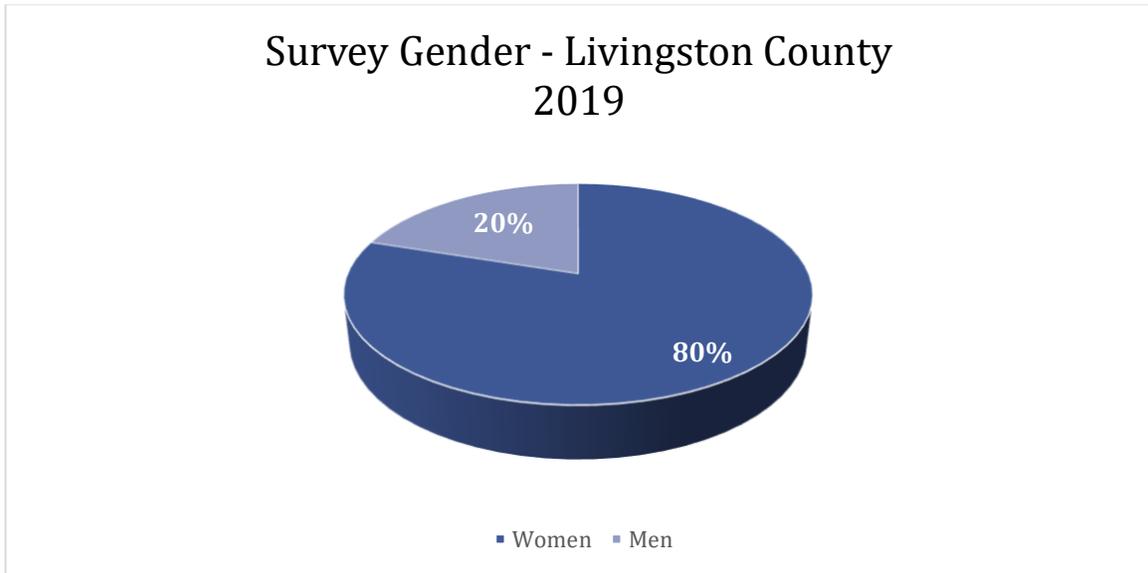
12. What is your job status? (Please choose only one answer).

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

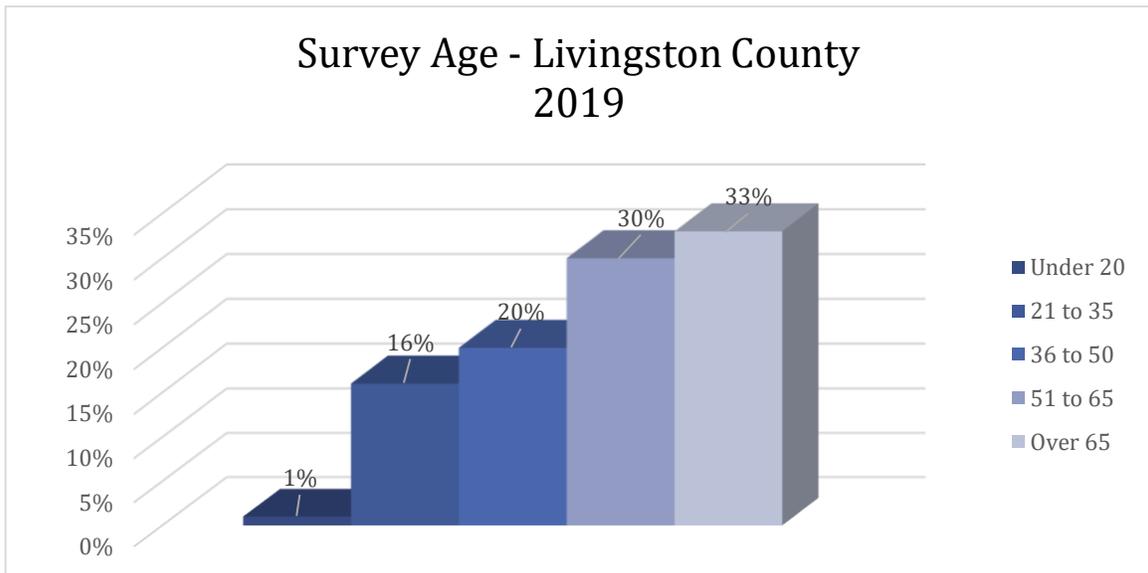
Is there anything else you’d like to share about your own health goals or health issues in our community?

Thank you very much for sharing your views with us!

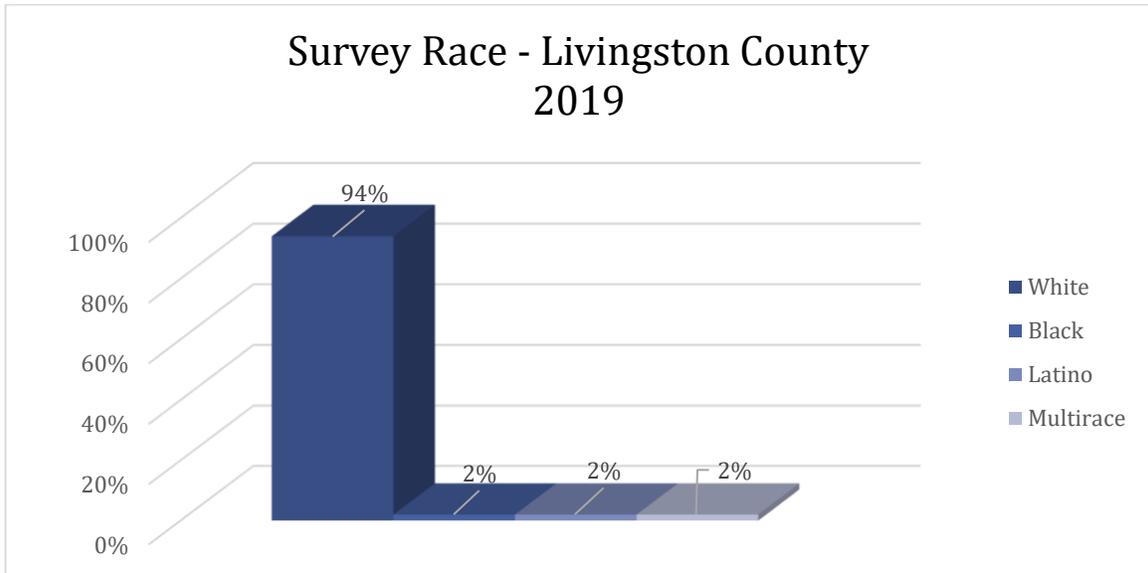
APPENDIX 4. CHARACTERISTICS OF SURVEY RESPONDENTS



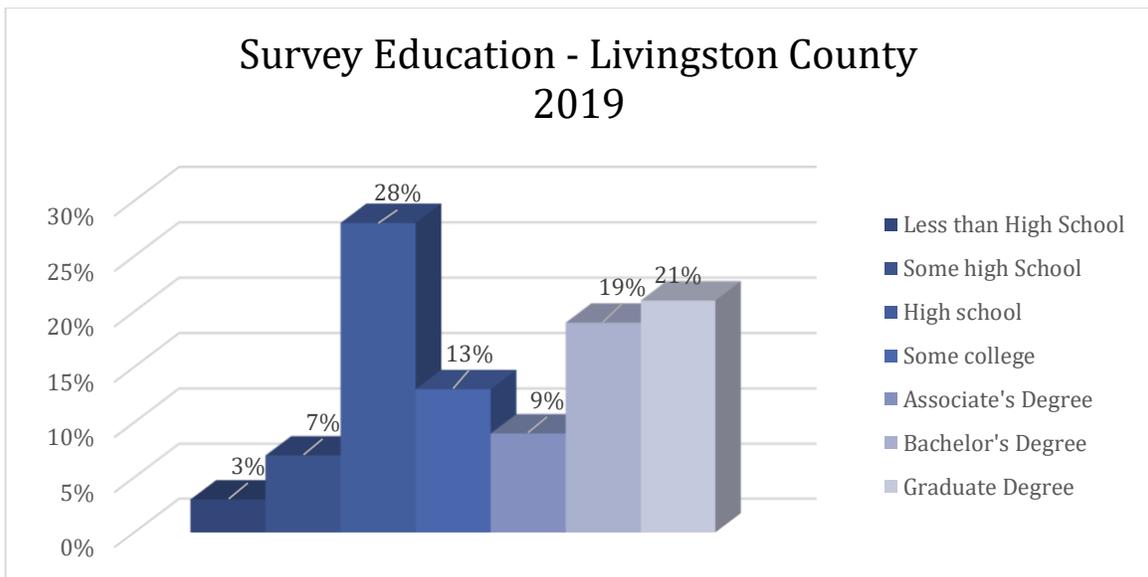
Source: CHNA Survey



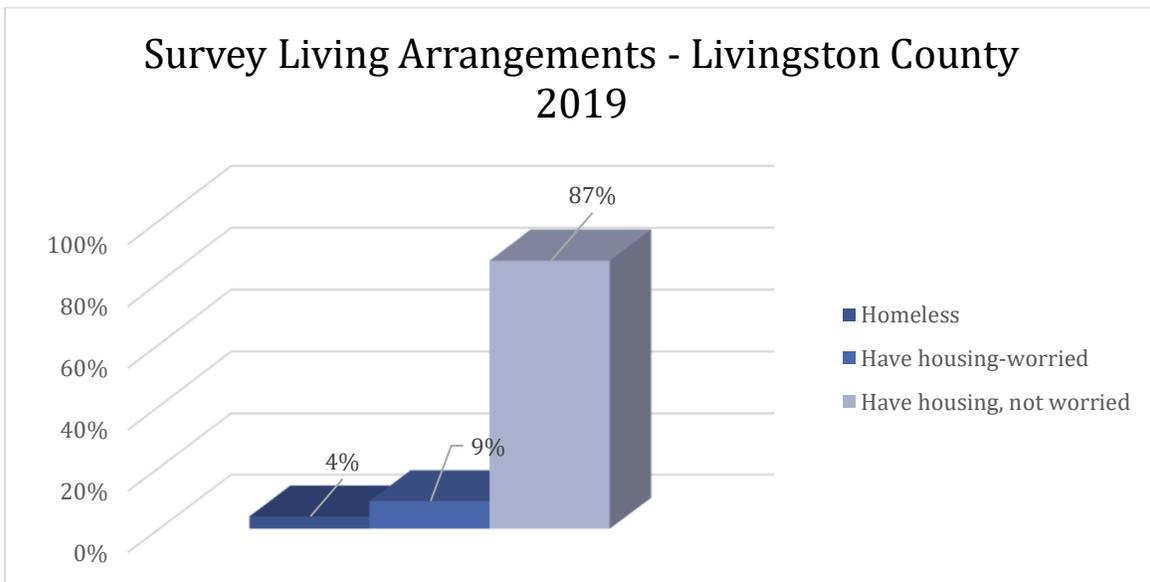
Source: CHNA Survey



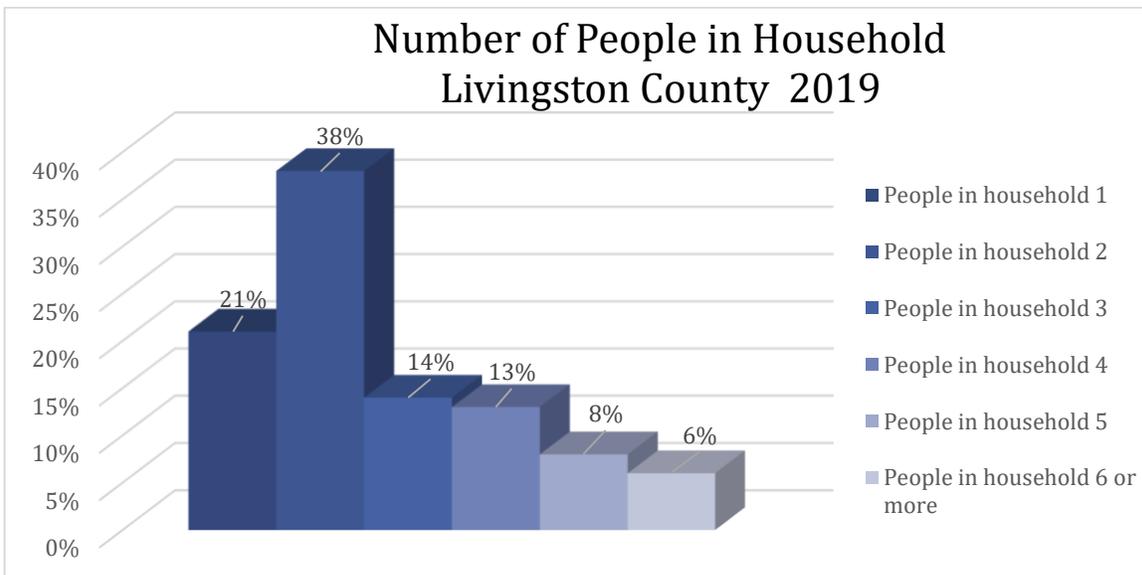
Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey

APPENDIX 5. RESOURCE MATRIX*

	Lung Cancer	Prostate Cancer	Healthy Behaviors Nutrition & Exercise	Behavioral Health	Overweight Obesity	Substance Abuse	Aging Issues	Telehealth
Recreational Facilities								
Pontiac Parks and Recreation			2		2		1	
Chenoa Recreation			2		2		1	
Chatsworth Recreation			2		2		1	
Dwight Recreation			2		2		1	
Fairbury Recreation			2		2		1	
Flanagan Community Park District			2		2		1	
Odell Recreation			2		2		1	
Fugate Woods Nature Preserve			2		2		1	
Health Departments								
Livingston County Health Department	3	3	3	3	3	3	3	3
Community Agencies								
ADV/SAS			2	3	2	3		2
The Baby Fold			3	2	3			
Boys and Girls Clubs Livingston County			3		3			
The Center for Youth and Family Solutions				2	2			
Child and Family Connections				2	2			
Children's Home & Aid				2	2	1		
Hope Pregnancy Center			2		2			
Futures Unlimited				2	2			

	Lung Cancer	Prostate Cancer	Healthy Behaviors Nutrition & Exercise	Behavioral Health	Overweight Obesity	Substance Abuse	Aging Issues	Telehealth
Institute for Human Resources			2	3		3		3
Livingston County Health Department	3	3	3	3	3	3	3	3
Livingston County Children's Network				2	2			
Livingston County Commission on Children and Youth				2	2			
Livingston County Homeless Coalition				1				
Livingston County Housing Authority							2	
Livingston County Ramp Project							2	
Livingston County Veterans Assistance Commission				2	2	2	2	
Mid Central Community Action, INC.				2				
MOSAIC				2				
Providing Access to Help - PATH, INC.				2				
Pregnancy Planning and Family Services								
Resource Link				2				
SALEM 4 Youth			3	2		2		
Salvation Army Red Shield Service Center - Pontiac			2			2	3	
Show Bus			2				3	
Livingston County United Way			3		3		3	2
University of Illinois Livingston County Extension			3		3		3	2
Hospitals / Clinics								
Livingston Family Care Center	3	3	3	3	3	3	3	3
Hubert Wellness Clinic	3	3	3	3	3	3	3	3

	Lung Cancer	Prostate Cancer	Healthy Behaviors Nutrition & Exercise	Behavioral Health	Overweight Obesity	Substance Abuse	Aging Issues	Telehealth
Women's Health Clinic			3	3	3	3	3	3
Pontiac Township High School Student Health Center			3	3	3	3	3	3
Institute for Human Resources			3	3	3	3	3	3
OSF Saint James - John W. Abrecht Medical Center	3	3	3	3	3	3	3	3
OSF Multi-Specialty Group	3	3	3	3	3	3	3	3
OSF HomeCare and Hospice	3	3	3	3	3	3	3	3

***(1)= low; (2)= moderate; (3) = high, in terms of degree to which the need is being addressed**

APPENDIX 6. DESCRIPTION OF COMMUNITY RESOURCES

Recreational Facilities

Pontiac Parks and Recreation

The Pontiac Parks and Recreation Department is proud to offer 11 beautiful parks, state-of-the-art facilities including the Community Recreation Center, access to the Natatorium Pool and splash pad, a variety of programs for all ages and populations, an adaptive recreation program, and much more.

Chatsworth Recreation

Recreation facilities in Chatsworth include: CAPS Recreation Center and Chatsworth Town park.

Chenoa Recreation

Recreation facilities in Chenoa include: Main City Park, Kelleher Park, Red Bird Park, Chenoa Swimming Pool, Silliman Lake Park

Dwight Recreation

Recreation facilities in Dwight include: Dwight Country Club, Lion's Lake, Renfrew Park, Rotary Park, Stevenson Swimming Pool, Victory Lanes, and several organized sports leagues including baseball, softball, basketball, football, and cheerleading.

Fairbury Recreation

Recreation facilities in Fairbury include: Marsh Park, North Park, and the Floyd and Marion Stafford Swimming Pool.

Flanagan Community Park District

The Flanagan Community Park District operates the Flanagan Memorial Pool.

Odell Recreation

Odell Pool Park includes a swimming pool, tennis courts and baseball field.

Fugate Woods Nature Preserve

A 150 acre nature preserve with walking and hiking paths.

Health Departments

Livingston County Public Health Department

The goal of the Livingston County Public Health Department is to assure the conditions in which people can be healthy. Programs offered by the Health Department are designed to provide educational, preventative, and healthcare services for eligible citizens of all ages. Some specific programs and initiatives include:

- Healthy Families Illinois
- Illinois Breast and Cervical Cancer Program
- Livingston/LivingWell
- Stanford University Diabetes Self-Management Program
- Women, Infants, and Children's (WIC) Nutrition Program

Community Agencies/Private Practices

ADV/SAS

ADV/SAS offers a safe atmosphere where survivors of sexual assault and domestic violence can find support, resources and strength including crisis line, safe shelter, legal and medical advocacy, supportive counseling and prevention education. They also offer a 24-hour hotline and emergency shelter.

The Baby Fold

The Baby Fold is a multi-service non-profit agency serving children and families in Illinois. They specialize in caring for young children and youth who have severe emotional and behavioral disabilities, autism spectrum disorders and children at risk for a variety of reasons.

Boys and Girls Club of Livingston County

Boys and Girls Club of Livingston County works to enable all young people to reach their full potential as productive, caring, responsible citizens. They operate two locations in Pontiac and Fairbury, and offer many activities for young people of the Livingston County area including character and leadership development, arts, education and career development, health and life skills and sports fitness and recreation. As a part of these programs, the clubs encourage and educate on healthy behaviors around nutrition and obesity prevention.

The Center for Youth and Family Solutions

The Center for Youth and Family Solutions engages and serves children and families in need with dignity, compassion, and respect by building upon individual and community strengths to resolve life challenges together.

Child and Family Connections

Child and Family Connections assists families with evaluations and assessments of their child, age birth to three years, to determine eligibility for early intervention services. An Individual Family Service Plan (IFSP) is then developed to help the child learn and grow and link them to services.

Children's Home & Aid

Children's Home & Aid is a leading child and family service agency that helps children recover their health, their hope, and their faith in the people around them.

Hope Pregnancy Center

Hope Pregnancy Center offers support and education for those experiencing an unplanned pregnancy including counseling, medical clinic and baby supplies and assistance.

Futures Unlimited, Inc.

Futures Unlimited, Inc., a sheltered workshop for developmentally disabled clients, also receives funding from the Mental Health Board and services include: job placement in the community, supported employment in the community, developmental training, vocational development, facility-based employment, community living support services, and respite support services to give support and relief to families and caregivers by providing temporary, time-limited care and assistance for persons with developmental disabilities.

Institute for Human Resources

Institute for Human Resources provides a continuum of quality recovery based mental health and substance abuse services ranging from education and prevention through treatment and aftercare for residents of Livingston County. IHR also provides outpatient counseling, evaluation services, and education and services within our local schools.

Livingston County Mental Health Board

Livingston County Mental Health Board works assure that a comprehensive and coordinated community based system of effective and efficient mental health, developmental disability and substance abuse services is available to all the residents of Livingston County in need of such services.

Livingston County Children's Network

Livingston County Children's Network focuses on mental health issues of children. Positive parenting program offered through OSF Multi-Specialty Group and other providers including educational materials and plans as well as to referrals to IHA and other mental health professionals as needed.

Livingston County Commission on Children and Youth (LCCCY)

The purpose of the Livingston County Commission on Children and Youth is to promote the development of an integrated, comprehensive community system of services for children and youth in Livingston County, particularly those who have special problems of emotional, physical and intellectual development, or who are not functioning successfully within the life of the family and the community.

Livingston County Homeless Coalition

The Coalition is made up of agencies, churches, and individuals that are concerned about homeless issues in Livingston County. They are the county funding agency for the Humiston Homeless Fund and DHS (Homeless Prevention Funds) which are allocated to the Illinois Continuum of Care (CIOC) of which the coalition is a member.

Livingston County Housing Authority

The Livingston County Housing Authority offers low-income public housing for eligible elderly citizens and for eligible families.

Livingston County Ramp Project

A volunteer based organization established to build ramps for people with mobility disabilities.

Livingston County Veterans Assistance Commission

Provides temporary emergency assistance to qualified indigent veterans and their families. Assists in directing veterans and their families to agencies that they are qualified for, providing rides to VA hospitals, assists in filling out forms to apply for veterans benefits including admittance to VA nursing homes, pensions, government markers, VA home loans, applying for medals, medical and service records and copies of DD-214's, upgrading and correction of discharge papers, and appeals.

Mid Central Community Action, Inc.

A non-profit organization dedicated to building community and combating poverty through programs and through cooperation with other agencies to help families and individuals achieve self-sufficiency. Serves Livingston and McLean Counties.

MOSAIC

Mosaic provides residential training, support, and supervision for developmentally disabled persons. All programs provide clients with care and training through an individual habilitation plan developed by an interdisciplinary team of professionals and other concerned persons. The goal of all programs is to enable each client to reach the highest level of independence of which he or she is capable.

Providing Access to Help – PATH, INC.

Provides services to older adults and persons with disabilities who are abused, neglected or exploited. Services include caseworker support, legal, medical, relocation and counseling.

Pregnancy Planning and Family Services

Operated by Catholic Charities in Bloomington, provides counseling, pregnancy planning, adoption counseling, birthmother support for McLean, Livingston, Logan and DeWitt counties.

Resource Link

Resource Link is a program to assist physicians in the management of child and adolescent mental health. Resource Link provides case management to children and families with behavioral health needs by aiding them in the referral process for appropriate services such as counseling, support, groups, etc. Resource Link also provides on-site training to physician offices regarding mental health diagnosis and treatment as well as community resources. Resource Link can also provide physician offices with psychiatric phone consultation with a child psychiatrist to assist with medication management, diagnosis, or possible one-time psychiatric evaluation.

SALEM 4 Youth

A Christian residential/educational facility for boys who are struggling with issues such as substance abuse, family conflicts, or difficulties in school or the community. A relationship centered approach to treatment allowing children to grow intellectually, spiritually, and socially, enabling them to become productive members of society.

Salvation Army Red Shield Service Center – Pontiac

Provides general and emergency assistance to those in need: food, rent, household items, clothing, utilities, transportation, medication and other miscellaneous services. The Salvation Army also has a food pantry and clothes closet for low-income families.

Show Bus

Show Bus offers public transportation to anyone in Livingston County and seeks to enhance the access of people in non-urban areas to health care, employment, education, public services, shopping and recreation.

Livingston County United Way

The United Way is a convener and collaborating partner with many nonprofit, for-profit, governmental and faith-based organizations – all working to address the most critical needs of Livingston County Residents.

University of Illinois Livingston County Extension

Livingston County Extension office works to enhance the quality of life for rural and urban people through teaching, research, and outreach programs focusing on human activity, food, fiber and natural resources systems.

Hospitals/Clinics**Livingston Family Care Center**

The Livingston Family Care Center provides medical services to those who are uninsured.

Hubert Wellness Clinic

Hubert Wellness Clinic, conducted by the Livingston County Public Health Department, includes screening for waist measurement and provides low-cost screening for risk factors related to prostate cancer and diabetes. The Clinic also provides clients with information regarding colon cancer screening risk/protective factors and screening guideline and low-cost screening for risk factors related to heart disease. The Clinic is also offered at various worksites in rural communities throughout Livingston County.

Pontiac Township High School Student Health Center

The Pontiac Township High School Student Health Center is a collaborative initiative between the school and the Livingston County Public Health Department working to improve the overall physical and emotional health of students working in cooperation with the existing school health education curriculum and community health care services.

Women's Health Clinic

The Women's Health Clinic, operated by the Livingston County Public Health Department, provides care based on a sliding fee basis for women in the county. In addition, the Clinic provides some cancer screenings to eligible women participating in the programs along with education on cancer prevention.

Institute for Human Resources and Mental Health Board

The Institute for Human Resources provides a continuum of quality recovery based mental health and substance abuse services ranging from education and prevention through treatment and aftercare for residents of Livingston County. IHR also provides outpatient counseling and also provides patient evaluation services for OSF Saint James inpatient and emergency patients at time of discharge; as well as referrals from the Livingston County Health Department. The IHR Prevention Specialist conducts ATOD prevention education in schools, and coordinates the local Snow Ball project.

Services provided by the Mental Health Board through the Institute for Human Resources (IHR) include: outpatient counseling, emergency intervention, medication, and aftercare, with a goal of treating clients before problems become severe and to minimize admissions to state mental hospitals; counseling, outreach, hospitalization visits, and aftercare for severely disturbed children; group counseling, leisure activities, recreation, and survival skills training for seriously mentally ill clients; intensive contact with clients suffering from serious and chronic mental illness and discharges from state hospitals, to deflect unnecessary hospitalization, while improving their quality of life in the community; 24-hour crisis response availability; counseling for alcoholics/substance abusers and their families; prevention services for alcohol/drug abuse, AIDS, child abuse, and stress, as well as parenting classes and support groups for parents of hyperactive children and children with disabilities; and independent living for chronically mentally ill clients, who are assisted with shopping and homemaking skills.

OSF HealthCare Saint James – John W. Albrecht Medical Center

OSF Saint James – John W. Albrecht Medical Center is a 42-bed health care facility. OSF Saint James provides a broad range of acute care and outpatient services including a variety of specialist, emergency, rehabilitation, and diagnostic imaging services. OSF Saint James offers the following services: Acute Inpatient Care, Critical Care, eICU, Emergency Care, Skilled Nursing Swing Beds, Advanced Care Planning, Cardiology, Cardiac Rehabilitation, Pulmonary Rehabilitation, Occupational Medicine, Obstetrics/Gynecology, Pediatrics, Anesthesiology, Medical Diagnostic Services (VCT Scanner, MRI, PET, Mammography, Bone Densitometry, Ultrasound, Radiology & Laboratory), Surgery, Internal Medicine, Orthopedics, Family Medicine, Rehabilitation Services (Physical Therapy, Occupational Therapy, Speech Therapy, Sports Medicine, Audiology, Assistive Technology & Pediatric Development), Occupational Health, Sleep Evaluation, Employee Health Screening, Ergonomic Assessment, Home Health, Hospice, Social Services, Education and Training for area EMS professionals, a diabetes education program and an education center. OSF Saint James is a Tier Two Resource Hospital for disaster and bioterrorism preparedness. Medical Education Residency programs in Emergency and Surgical Medicine through the University of Illinois College of Medicine in Peoria are in place. Public education programs are offered at the medical center and in the community on topics ranging from exercise for good health to joint pain, women's wellness, childbirth education, child development & adolescence, and menopause; regular cholesterol and blood glucose screenings; participation in the education of future health professionals by

hosting nursing students, interns and externs, as well as students in radiologic technology, physical therapy, occupational therapy, speech therapy, athletic training, social services and community health education.

Specific centers of interest include: inpatient and outpatient dietician, support groups for grief, gastric bypass and diabetes, community education and outreach sessions, maternity services and an OB Nurse Navigator Program, prescription medication assistance program, pediatric play groups, online health library, OSF Resource Link, OSF Charity Assistance program, Sleep and Lung Center, vaccinations, and through print articles to local media.

OSF HealthCare Multi-Specialty Group

OSF Multi-Specialty Group offers a wide range of medical and surgical care, as well as other specialty and prompt care services, through provider offices located throughout Livingston County.

OSF HealthCare 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.

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 Method³

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*

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