# Community Health Needs Assessment 2019



PEORIA COUNTY

TAZEWELL COUNTY

WOODFORD COUNTY

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Community
Health Needs
Assessment

2019

Collaboration for sustaining health equity

# **Executive Summary**

The Partnership for a Healthy Community spearheaded a collaborative approach in conducting a Community Health-Needs Assessment (CHNA) for the Tri-county region. The Partnership for a Healthy Community (hereafter referred to as PFHC) is a multi-sector community partnership working to improve population health. The PFHC formed an ad Hoc committee creating a collaborative team to facilitate the CHNA. This collaborative team included members from: Advocate Eureka Hospital, Bradley University, Heart of Illinois United Way, Heartland Health Services, Hopedale Medical Complex, OSF Saint Francis Medical Center (OSF), Peoria City/County Health Department, Tazewell County Health Department, UnityPoint Health – Central IL (UnityPoint), and Woodford County Health Department. They conducted the Tri-County Community Health-Needs Assessment (CHNA) to highlight the health needs and well-being of residents in the Tri-County region.

Several themes are prevalent in the collaborative CHNA – the demographic composition of the Tri-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 PFHC stakeholders, 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 significant health needs in the Tri-County region were identified. Consideration was given to 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, four significant health needs were identified and determined to have equal priority:

- Healthy Eating/Active Living defined as active living and healthy eating, and their impact on obesity, access to food and food insecurity
- Cancer defined as incidence of breast, lung and colorectal cancer and cancer screenings
- Mental Health defined as depression, anxiety and suicide
- Substance Use defined as abuse of illegal and legal drugs, alcohol and tobacco/vaping use

# I. INTRODUCTION

# **Background**

The Partnership for a Healthy Community (PFHC) is a community-driven effort to improve health and wellness in the Central Illinois Tri-County region. Multiple organizations, sectors, and the public participate in population health planning to identify and prioritize health needs and quality of life issues, map and leverage community resources, and form effective partnerships to implement health improvement strategies in Peoria, Tazewell, and Woodford Counties. Using actionable data to identify health needs and priorities, including those related to health disparities, health inequities, and the social determinants of health, members of the PFHC develop subsequent Community Health Improvement Plans. This collaborative effort allows members of the PFHC to share resources, to align strategies to address health needs and to work as partners in improving community health.

The current structure of the PFHC, as shown below, creates the organizational capacity for multiple stakeholders as well as fostering partnerships to address key strategic health priorities.

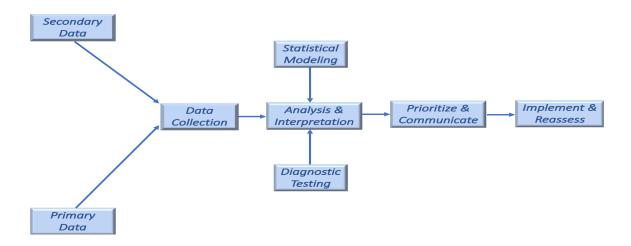


All members of the PFHC CHNA collaborative team used the collaborative CHNA to prepare Community Health-Needs Assessment Reports. OSF and UnityPoint used the CHNA to prepare and adopt a joint CHNA Report in compliance with Internal Revenue Code Section §501(r) and the final regulations published on December 31, 2014 to implement §501(r). These requirements are imposed on §501(c)(3) tax-exempt hospitals. Additionally, Hopedale Medical Complex and Advocate Eureka Hospital used the CHNA to support the specific populations they serve.

Illinois law requires certified local health departments to conduct a CHNA and to complete a community health plan. Peoria City/County Health Department, Tazewell County Health Department, and Woodford

County Health Department used the CHNA to satisfy the requirements imposed on health departments under 77 Ill. Adm. Code 600 to prepare an IPLAN. In addition, other PFHC stakeholders used the CHNA to support health identification and improvement planning strategies.

The collaborative CHNA takes into account input from specific individuals who represent the broad interests of the community, including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, create a plan, and act upon unmet community health needs. Results from this assessment will be made widely available to the public. The fundamental areas of the CHNA are illustrated below.



# **Collaborative Team and Community Engagement**

The PFHC ad-hoc collaborative team was created to guide the CHNA process. Members of the ad-hoc collaborative team consisted of individuals with special knowledge of and expertise in the health of the community. Team members were carefully selected to ensure representation of the broad interests of the community. The team met in the third and fourth quarters of 2018 and in the first quarter of 2019. Additionally, a data-action team was created to focus on CHNA data and this team met monthly. Individuals, affiliations, titles and expertise can be found in Appendix 1 to this CHNA report.

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

The collaborative CHNA has been designed to provide necessary information to the PFHC, which includes hospitals, local health departments, clinics and community agencies, in order to create strategic plans in program design, access and delivery. Results of this study will act as a platform that allows healthcare organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, hospitals, clinics, community agencies and health departments will use this CHNA to improve the quality of health in the Tri-County region. 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 PFHC, hospitals, local health departments and the PFHC agencies posted both a full version and a summary version of the Hospitals' joint 2016 CHNA Report on their websites. While no written feedback was received to the 2016 CHNA 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 in conducting the 2019 CHNA.

# **Community Health Needs Assessment Report Approval**

OSF, UnityPoint, and Advocate Eureka Hospital-used the collaborative CHNA to prepare their 2019 CHNA Reports and to adopt implementation strategies to address the significant health needs identified. The Peoria City/County Health Department, Tazewell County Health Department, and the Woodford County Health Department used the collaborative CHNA to adopt community health plans to meet IPLAN requirements for local health department certification by the Illinois Department of Public Health (IDPH). The Partnership for a Healthy Community is not required to perform a community health needs assessment; however, they are collaborating with the above organizations and using the collaborative CHNA in order to better serve the health needs of the Tri-County region. Hopedale Medical Complex has already completed its Community Health Needs Assessment; however, they are collaborating with the above organizations and using the collaborative CHNA in order to better serve the health needs of the Tri-County region.

OSF, UnityPoint, Advocate Eureka Hospital, Hopedale Medical Complex, the Peoria City/County Health Department, the Tazewell County Health Department, the Woodford County Health Department and the Partnership for a Healthy Community are the primary organizations responsible for conducting the CHNA. Implementation strategies will be developed in coordination with other community social service agencies and organizations to address the significant health needs identified.

This CHNA Report was approved by the PFHC Board on July 25, 2019.

# 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, 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 team of health professionals 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 Tri-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 the Tri-County was 15.9% in Peoria County, 8.0% in Tazewell County, and 7.4% in Woodford County for 2017. The populations used for the calculation were 183,011, 133,526 and 38,726 respectively, yielding total residents living in poverty in the three counties at 29,099, 10,682, and 2,866.

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

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

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 Tri-County area, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 1,149. The data collection effort for this CHNA yielded a total of 1,887 usable responses. This exceeded the threshold of the desired 90% confidence interval.

To provide a representative profile when assessing the aggregated population for the Tri-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 county-specific samples were aligned with population demographics according to

U.S. Census data. This provided a total usable sample of 1,376 respondents for analyzing the aggregate population. Sample characteristics can be seen in Appendix 4.

#### **Data Collection**

Survey data were collected in the 3<sup>rd</sup> quarter of 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,  $x^2$  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

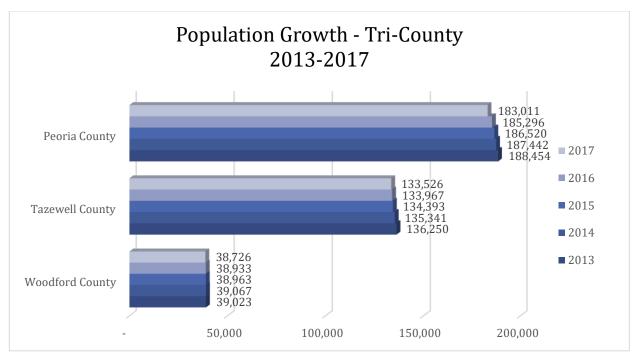
# CHAPTER 1 DEMOGRAPHY AND SOCIAL DETERMINANTS

# 1.1 Population

*Importance of the measure:* Population data characterize individuals residing in Peoria County, Tazewell County, and Woodford 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 Peoria County has decreased (2.9%) between 2013 and 2017. During the same time period, the populations of Tazewell County and Woodford County also decreased 2.0% and 0.8% respectively.

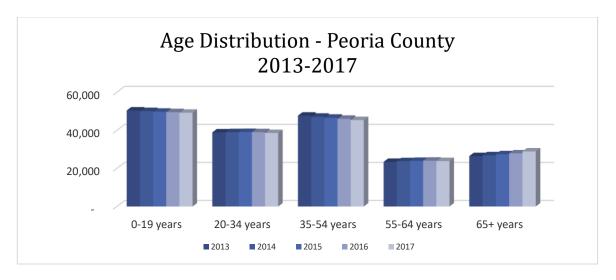


# 1.2 Age, Gender and Race Distribution

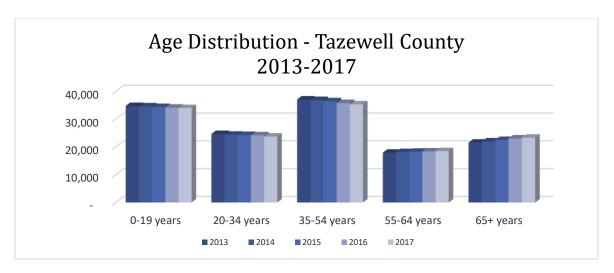
*Importance of the measure:* Population data broken down by age, gender, and race groups provide a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of healthcare services. Understanding the cultural diversity of communities is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

# Age

As indicated in the graph below, for the years 2013 to 2017, the percentage of individuals in Peoria County aged 35-54 declined 4.8%, and the percentage of individuals aged 65 and older increased 9.3%. The percentage of individuals in Tazewell County aged 35-54 declined 4.7%, and the percentage of individuals aged 65 and older increased 8.3%. The percentage of individuals in Woodford County aged 35-54 declined 5.8%, and the percentage of individuals aged 65 and older increased 8.7%.

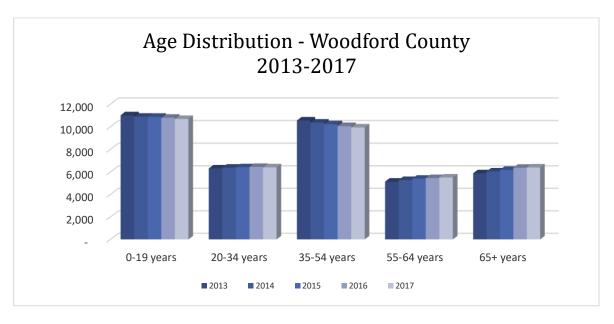


Age	2013	2014	2015	2016	2017
0-19 years	50,458	50,159	49,831	49,603	49,261
20-34 years	38,955	39,078	39,142	39,074	38,615
35-54 years	47,758	47,197	46,685	46,117	45,442
55-64 years	23,462	23,816	23,977	24,084	23,882
65+ years	26,484	26,947	27,477	27,940	28,945



Age	2013	2014	2015	2016	2017
0-19 years	34,711	34,600	34,342	34,130	33,972
20-34 years	24,609	24,359	24,269	24,154	23,701
35-54 years	37,073	36,873	36,410	35,794	35,313
55-64 years	17,868	18,095	18,225	18,324	18,436
65+ years	21,486	21,945	22,451	22,998	23,273

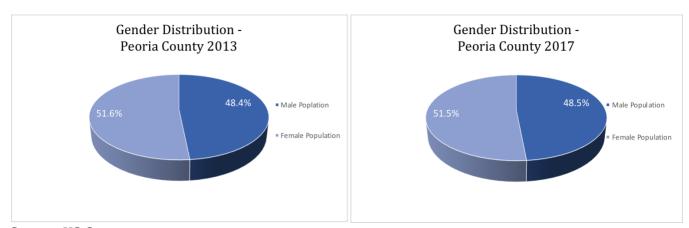
Source: US Census



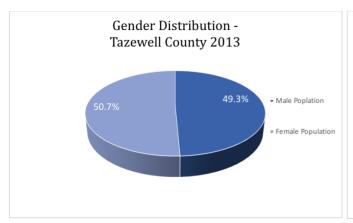
Age	2013	2014	2015	2016	2017
0-19 years	11,013	10,886	10,877	10,795	10,688
20-34 years	6,310	6,385	6,418	6,443	6,409
35-54 years	10,552	10,366	10,220	10,057	9,939
55-64 years	5,141	5,282	5,401	5,456	5,509
65+ years	5,887	6,046	6,190	6,372	6,397

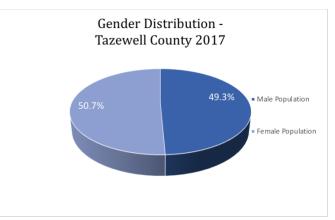
#### Gender

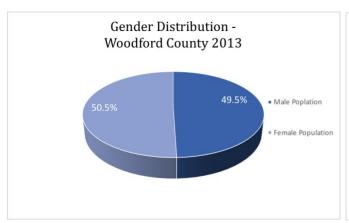
The gender distribution of Peoria, Tazewell, and Woodford County residents has remained relatively consistent between 2013 and 2017.

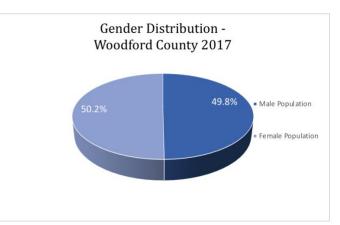


Source: US Census





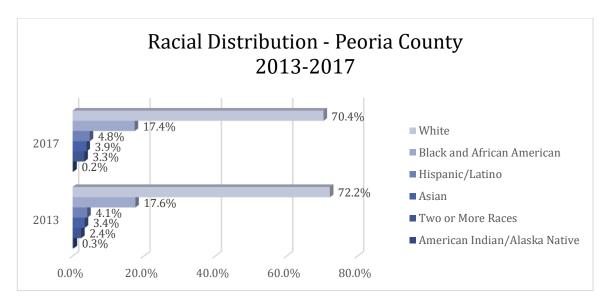


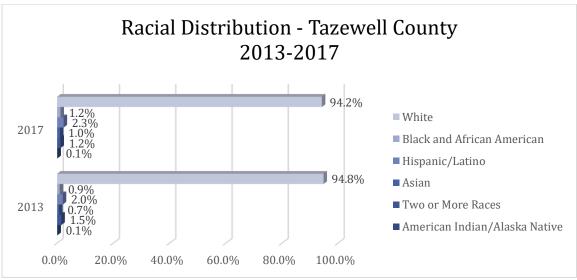


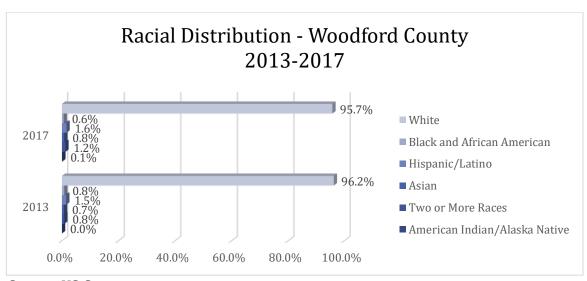
Source: US Census

#### Race

With regard to race and ethnic background, Peoria County is relatively diverse. Data from 2017 shows that the White population is 70.4%, Black population is 17.4%, and Latino population is 4.8%. Data from 2017 show that both Tazewell and Woodford Counties are largely homogeneous. Data from 2017 suggest that White ethnicity comprises 94.2% of the population in Tazewell County and 95.7% of the population in Woodford County. However, the non-White population is increasing in Tazewell County (5.2% to 5.8% in 2017) and Woodford County (3.8% to 4.3% in 2017).



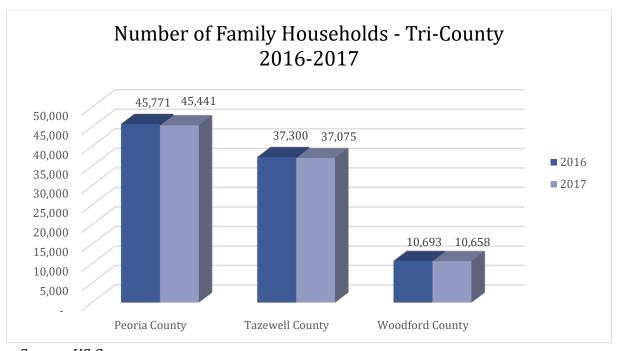




# 1.3 Household/Family

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

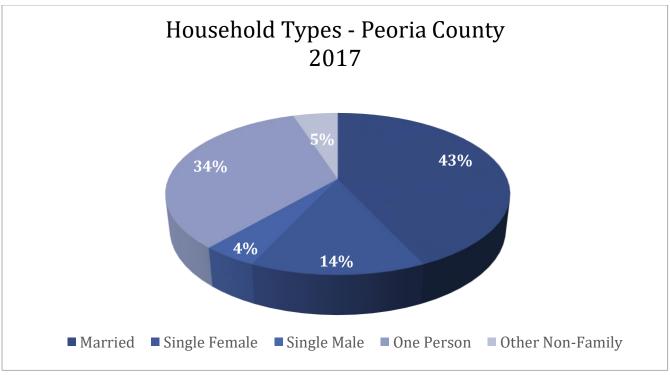
As indicated in the graph below, the number of family households in the Tri-County area decreased slightly from 2016 to 2017.



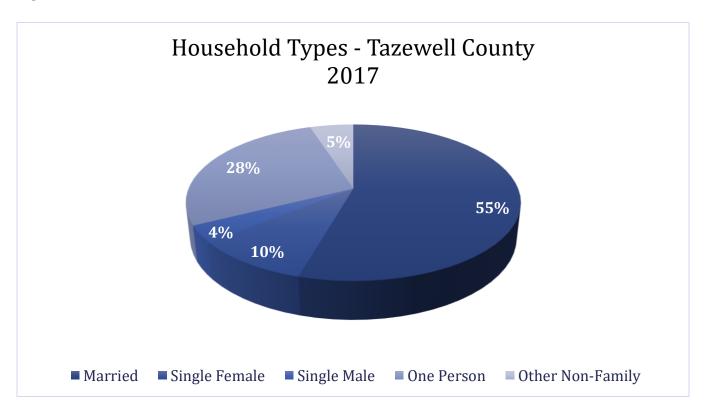
Source: US Census

# **Family Composition**

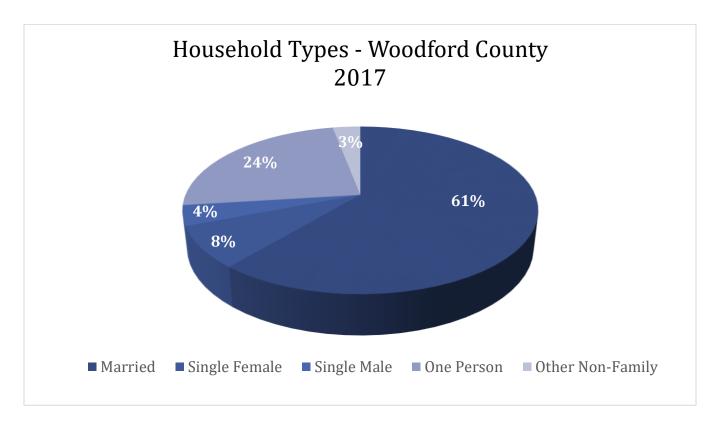
In Peoria County, data from 2017 suggest the percentage of two-parent families is 43%, one-person households represent 34% of the county population, and single-female households represent 14%.



In Tazewell County, data from 2017 suggest the percentage of two-parent families is 55%, one-person households represent 28% of the county population, and single-female households represent 10%.

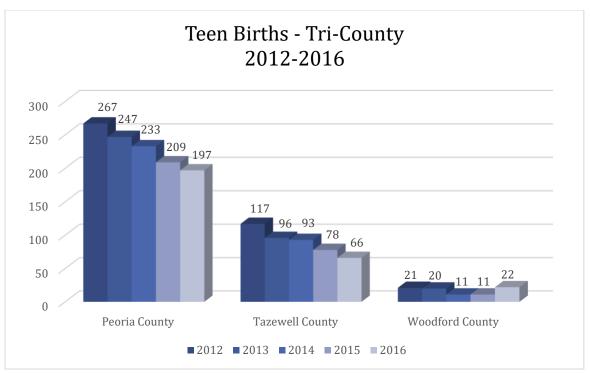


In Woodford County, data from 2017 suggest the percentage of two-parent families is 61%, one-person households represent 24% of the county population, and single-female households represent 8%.



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

Peoria and Tazewell County both experienced a decline in teenage birth count for years 2012 to 2016. The teen birth rate for Woodford County fluctuated from 2012-2016, but has remained relatively stable over time.



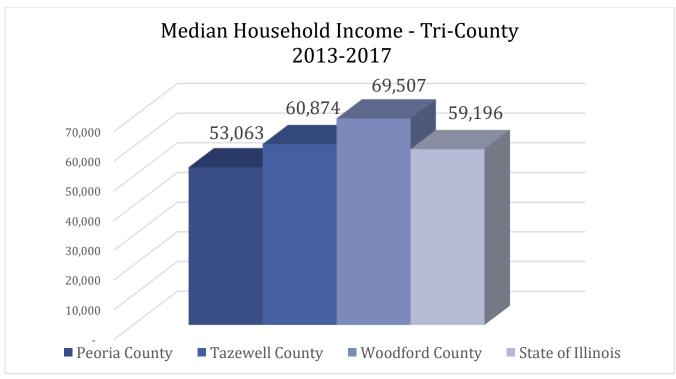
Source: Illinois Department of Public Health

# 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.

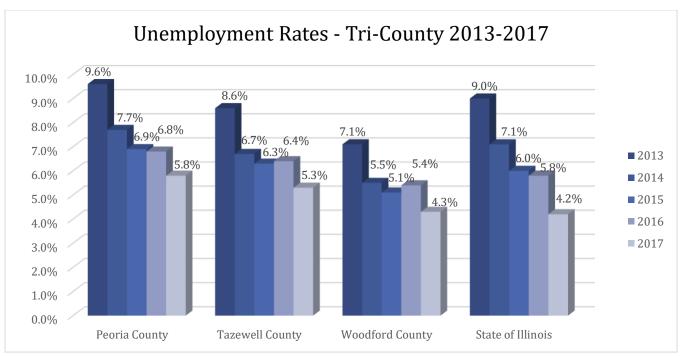
#### **Median Income Level**

For 2013-2017, the median household income in Peoria County was lower than the State of Illinois. However, both Tazewell and Woodford Counties had median household incomes above the State of Illinois median.



# Unemployment

For the years 2013 to 2017, the Peoria County unemployment rate was higher than the State of Illinois unemployment rate. For the years 2013 and 2014, the Tazewell County unemployment rate was lower than the State of Illinois unemployment rate, but for the years 2015 to 2017, the Tazewell County unemployment rate was higher than the State of Illinois unemployment rate. Woodford County maintained an unemployment rate below the State of Illinois unemployment rate for the years 2013 to 2016, but experienced a slightly higher unemployment rate in 2017.

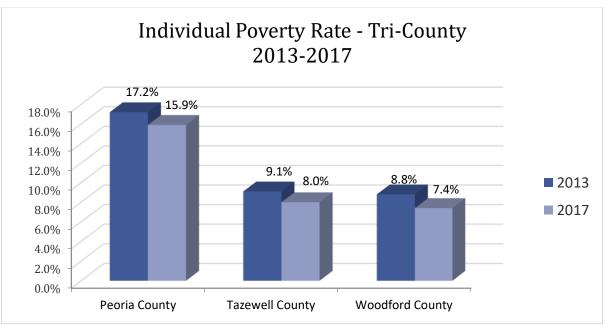


Source: Bureau of Labor Statistics

# **Individuals in Poverty**

The poverty rate for individuals decreased across all counties in the Tri-County area between 2013 and 2017. In Peoria County, the percentage of individuals living in poverty between 2013 and 2017 decreased by 1.3%. The poverty rate for individuals is 15.9%, which is higher than the State of Illinois individual poverty rate of 13.5%. In Tazewell County, the percentage of individuals living in poverty between 2013 and 2017 decreased by 1.1%. The poverty rate for individuals living in Tazewell County is 8.0%, which is significantly lower than the State of Illinois poverty rate of 13.5%. In Woodford County, the percentage of individuals living in poverty between 2013 and 2017 decreased by 1.4%. The poverty rate for individuals living in Woodford County is 7.4%, which is also significantly lower than the State of Illinois 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 Peoria County (11.3%) was higher than the State of Illinois family poverty rate (9.8%). Tazewell County and Woodford County reported significantly lower family poverty rates in 2017 (5.6% and 5.8%, respectively) compared to the State of Illinois family poverty rate (9.8%).



# 1.5 Education

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

# **Truancy**

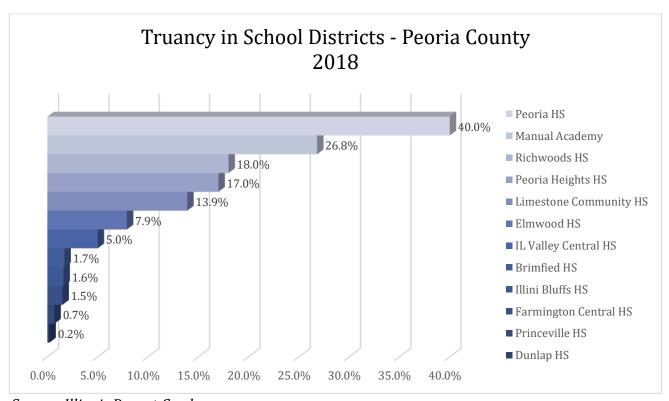
Chronic truancy is a major challenge to the academic progress of children and young adults. The causes of truancy vary considerably for young children. Truancy of middle- and high-school students is more likely a result of the inappropriate behavior and decisions of individual students. Primary school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

Peoria High School and Manual Academy in Peoria County have the largest percentage of students who were chronically truant in 2018.

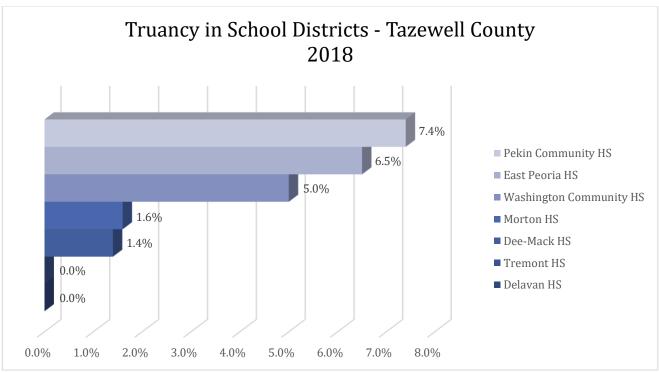
<sup>&</sup>lt;sup>1</sup> NCES 2005

Pekin Community High School and East Peoria High School in Tazewell County have the largest percentage of students who were chronically truant in 2018.

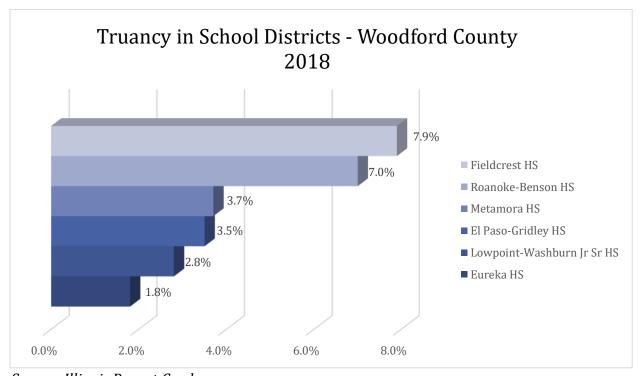
Fieldcrest High School and Roanoke-Benson High School in Woodford County have the largest percentage of students who were chronically truant in 2018.



Source: Illinois Report Card



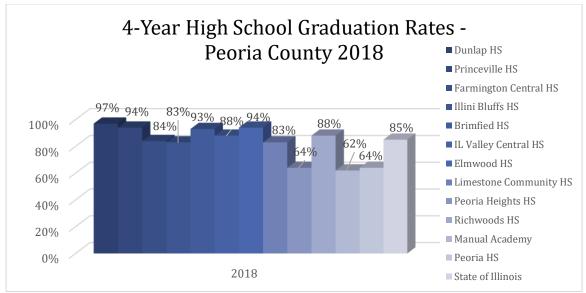
Source: Illinois Report Card



Source: Illinois Report Card

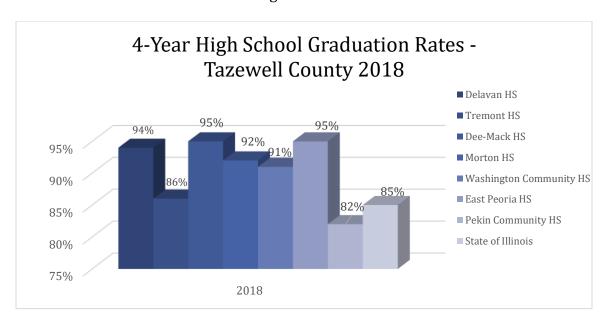
# **High School Graduation Rates**

In 2018, Farmington Central high school, Illini Bluffs high school, Limestone Community high school, Peoria Heights high school, Manual Academy, and Peoria high school in Peoria County reported high school graduation rates that were below the State average of 85%.

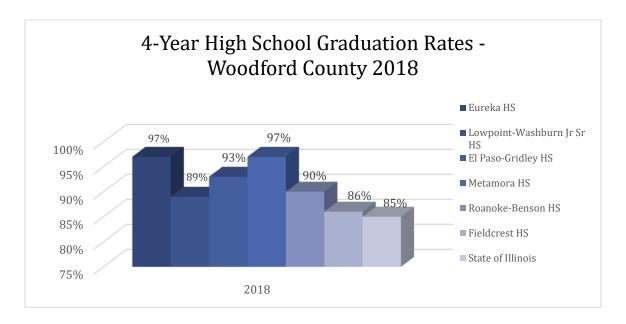


Source: Illinois Report Card

In 2018, Pekin Community high school in Tazewell County reported high school graduation rates that were below the State average of 85%.

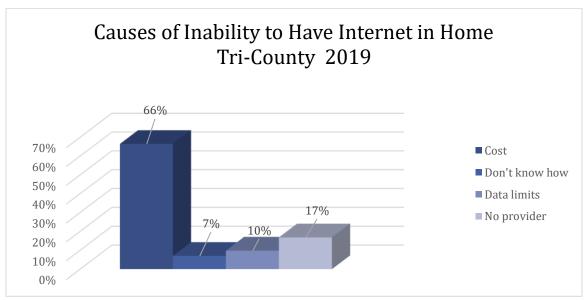


In 2018, none of the schools in Woodford County reported high school graduation rates that were below the State average of 85%.



### 1.6 Internet Access

CHNA survey respondents were asked if they had access to the Internet. In terms of accessibility, 91% of respondents indicated they had access to free public Internet, and 90% 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 Internet Access**

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

**Access to Internet** tends to be rated higher for White people, those with higher education, those with higher income and those in Woodford County. Black people and those in Peoria County report lower access to Internet.

# 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 RANGED FROM 8%-14% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.
- ✓ TRUANCY AND GRADUATION RATES IN PEORIA COUNTY (SPECIFICALLY PEORIA PUBLIC SCHOOLS) ARE CONCERNING RELATIVE TO OTHER AREAS IN THE TRI-COUNTY REGION.
- ✓ 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

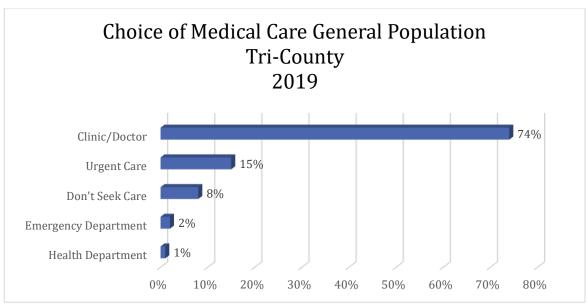
# 2.1 Accessibility

*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 74% of survey respondents. This was followed by urgent care (15%), not seeking medical attention (8%), the emergency department at a hospital (2%), and the health department (1%).



Source: CHNA Survey

#### **Comparison to 2016 CHNA**

Clinic/doctor's office increased from 71% in 2016 to 74% in 2019, resulting in a decrease in use of emergency departments from 6% in 2016 to 2% 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, those with higher education and those with higher income. Clinic/Doctor's office tends to be used less often by Latino people and people with an unstable (e.g., homeless) housing environment.

**Urgent Care** tends to be used more by younger people.

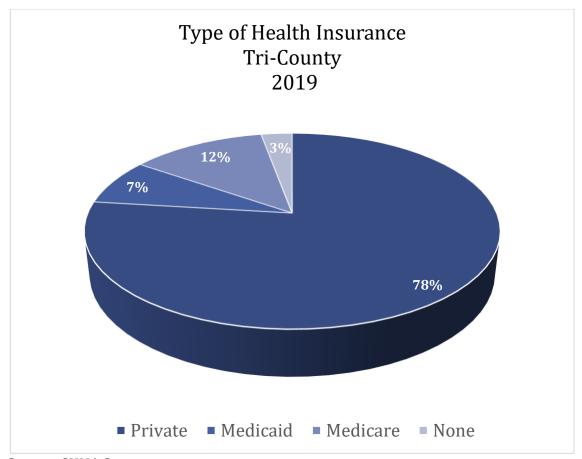
**Emergency Department** tends to be used more often by Black people, less educated people, those with lower incomes, Peoria County residents, and people with an unstable (e.g., homeless) housing environment. Emergency departments tend to be used less by White people as a primary source of healthcare.

**Do Not Seek Medical Care** tends to be rated higher by younger people, men, those with an unstable (e.g., homeless) housing environment and Peoria County residents. Not seeking medical care tends to be rated lower for Woodford County residents.

**Health Department** tends to be rated lower by White people, and those with higher income.

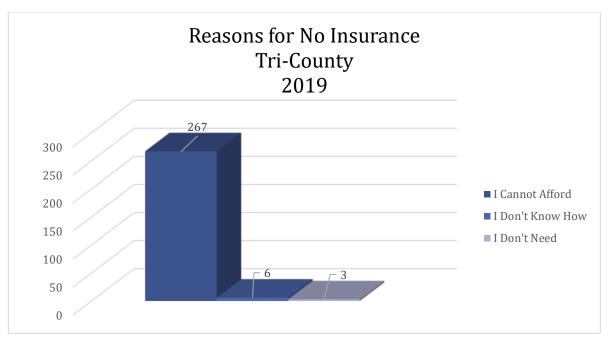
# **Insurance Coverage**

According to survey data, 78% of the residents are covered by private insurance, followed by Medicare (12%), and Medicaid (7%). 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 the percentage of the population with private insurance from 70% in 2016 to 80% in 2019. This has resulted in a decrease in the percentage of individuals with Medicaid from 12% in 2016 to 8% in 2019, and a decrease in those with no insurance from 5% in 2016 to 3% 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, men, Black people, Peoria County residents and those with lower education and income. Medicare is used less often by White people.

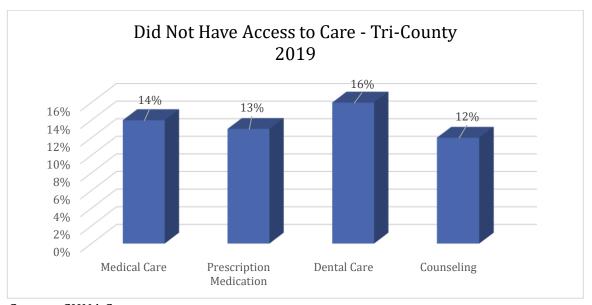
**Medicaid** tends to be used more frequently by Black people, Latino people, those with lower income, Peoria County residents, and people with an unstable (e.g., homeless) housing environment. Medicaid is used less by White people, and Woodford County residents.

**Private Insurance** is used more often by younger people, women, White people, and those with higher education, Tazewell County residents and those with higher income. Private insurance is used less by Black people, Latino people and Peoria County residents.

**No Insurance** tends to be reported more often by Latino people, those with lower education, those with lower income, and people with an unstable (e.g., homeless) housing environment.

#### **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 14% of the population did not have access to medical care when needed; 13% of the population did not have access to prescription medications when needed; 16% of the population did not have access to dental care when needed; and 12% 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 White people, those with higher education, those with higher income, Tazewell County residents and those with a stable housing environment. Access to medical care tends to be lower for Black people and Peoria County residents.

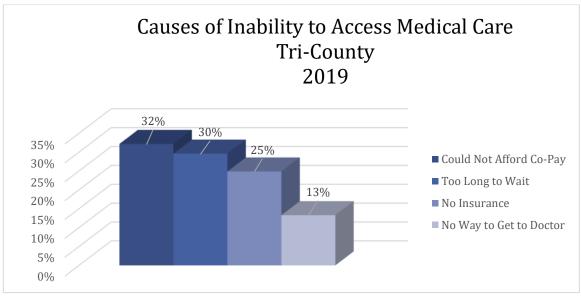
**Access to prescription medications** tends to be higher for White people, those with higher education, those with higher income, and those with a stable housing environment. Access to prescription medications tends to be lower for Black people and Peoria County residents.

**Access to dental care** 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 lower for Black people, Latino people and Peoria County residents.

**Access to counseling** tends to be higher for White people, those with higher education, those with higher income, and those with a stable housing environment. Access to counseling tends to be lower for Black people.

#### Reasons for No Access - Medical Care

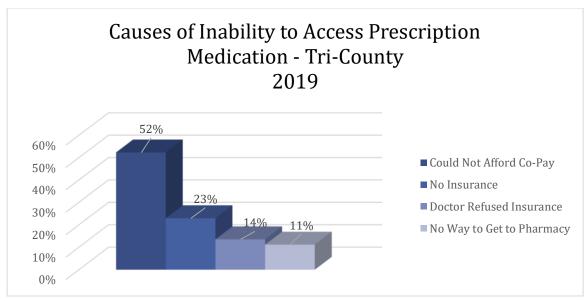
Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. The leading causes of the inability to gain access to medical care were the inability to afford the copay (32%), too long to wait for an appointment (30%), no insurance (25%) and no way to get to the doctor (13%).



Source: CHNA Survey

# **Reasons for No Access - Prescription Medication**

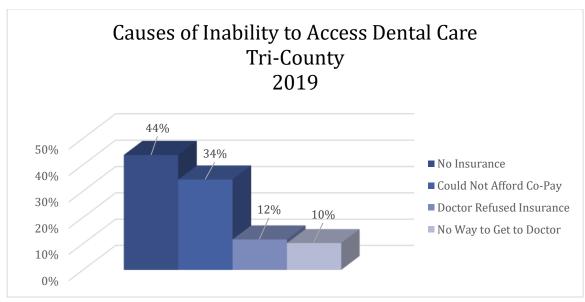
Survey respondents who reported they were not able to get prescription medications when needed were asked a follow-up question. The leading causes of the inability to gain access to prescription medicine were the inability to afford copayments or deductibles (52%) and no insurance (23%).



Source: CHNA Survey

#### Reasons for No Access - Dental Care

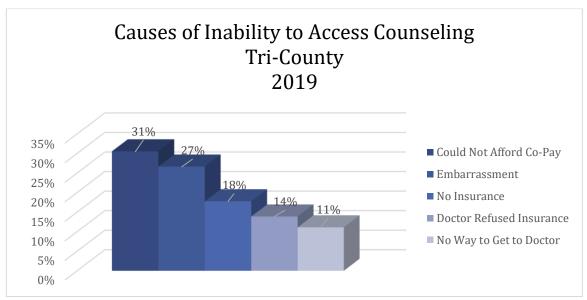
Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading causes of inability to gain access to dental care were no insurance (44%), the inability to afford copayments or deductibles (34%).



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 causes of the inability to gain access to counseling were the inability to afford co-pay (31%), embarrassment (27%), lack of insurance (18%), doctor refused insurance (14%) and no way to get to the counselor (11%).



Source: CHNA Survey

## **Comparison to 2016 CHNA**

**Access to Medical Care** – Compared to 2016, survey results were the same at 14%.

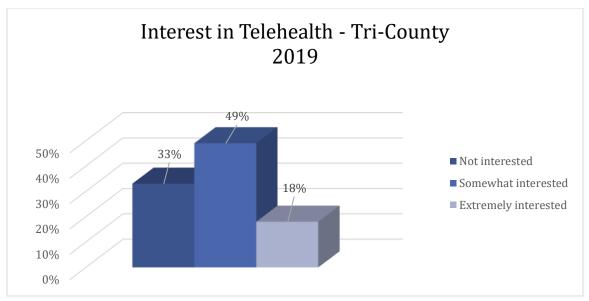
**Access to Prescription Medications** – Compared to 2016, results show a decrease (2%) in those that were not able to get prescription medications when needed.

**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 an increase (3%) in those that were not able to get counseling when needed.

## Interest in Telehealth

Survey respondents were asked *How interested would you be in health services provided through Internet or phone?* Of respondents, 67% indicated they would be either somewhat or extremely interested. **This is a new section to the 2019 CHNA.** 



#### Social Determinants Related to Telehealth

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

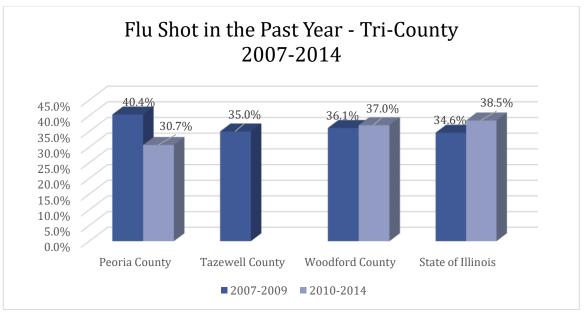
**Interest in telehealth** tends to be rated higher by younger people.

## 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**

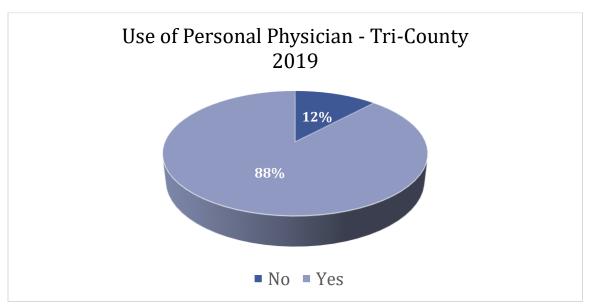
The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The chart below shows that the percentage of people who have had a flu shot in the past year decreased for Peoria County (30.7%) for 2010-2014 compared to 40.4% for 2009. Woodford County experienced a minimal increase from 2009 (36.1%) to 2010-2014 (37.0%). During the same timeframe, the State of Illinois realized an increase of flu immunizations. No updated data were available for Tazewell County for 2010-2014. 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, 88% of residents have a personal physician.



Source: CHNA Survey

#### Comparison to 2016 CHNA

The 2019 CHNA survey results for having a personal physician were the same as the 2016 CHNA, where 88% of respondents indicated they had a personal physician.

# Social Determinants Related to Having a Personal Physician

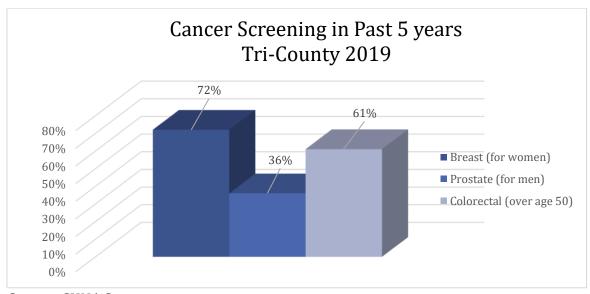
Multiple characteristics show significant relationships with having a personal physician. The following relationships were found using correlational analyses:

**Having a personal physician** tends to be higher for those with higher education, those with higher income, 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 72% of women had a breast screening in the past five years. For men, 36% had a prostate screening in the past five years. For women and men over the age of 50, 61% 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 for women, those with a higher level of education, those with higher income and those in a stable housing environment.

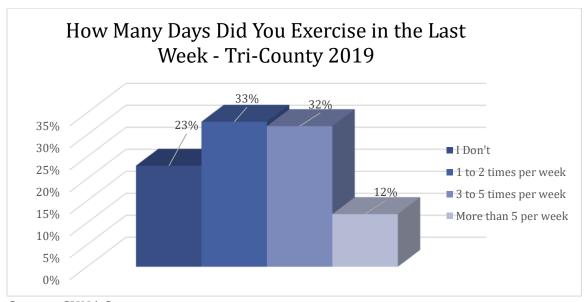
**Prostate screening** tends to be more likely for older men and those with higher education.

**Colorectal screening** had no significant correlates.

## **Physical Exercise**

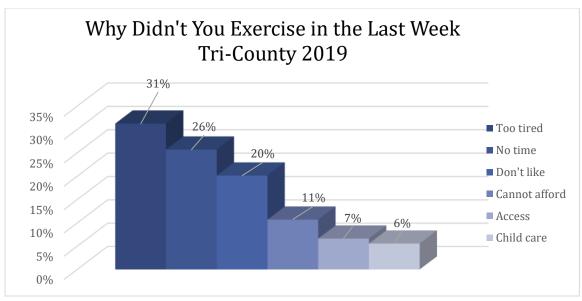
A healthy lifestyle, comprised of regular physical activity, has been shown to increase physical, mental, and emotional well-being.

Specifically, 23% of respondents indicated that they do not exercise at all, while the majority (65%) 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. Similar to the 2016 CHNA, the most common reasons for not exercising are not having enough energy (31%) or time (26%) and a dislike of exercise (20%).



#### **Comparison to 2016 CHNA**

There has not been a significant change in the frequency of exercise in 2019 compared to data from the 2016 CHNA

#### Social Determinants Related to Exercise

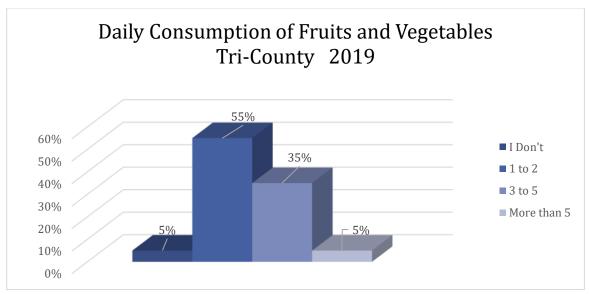
There were no significant relationships with frequency of exercise.

**Frequency of exercise** had no significant correlates.

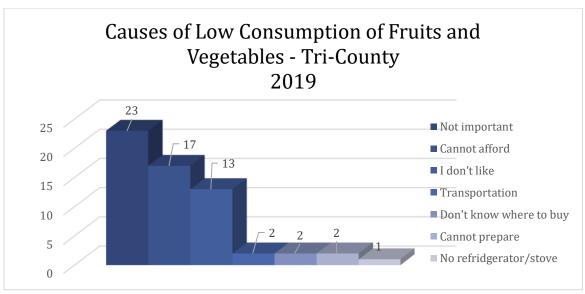
# **Healthy Eating**

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.

Almost two-thirds (60%) 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 5%.



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 a lack of importance (23), and the expense involved (17) and dislike (13). 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 in 2016, 65% of respondents indicated they had two or fewer servings of fruits and vegetables per day and in 2019, 60% indicated the had two or fewer servings of fruits and vegetables per day.

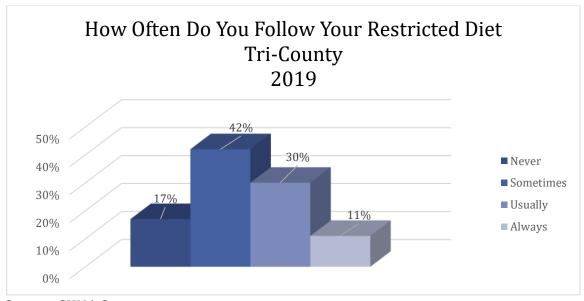
## **Social Determinants Related to Healthy Eating**

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

#### **Restricted Diet**

Respondents were also asked if they followed a restricted diet if recently diagnosed with a morbidity. Of respondents, 41% 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 show significant relationships with following a restricted diet. The following relationships were found using correlational analyses:

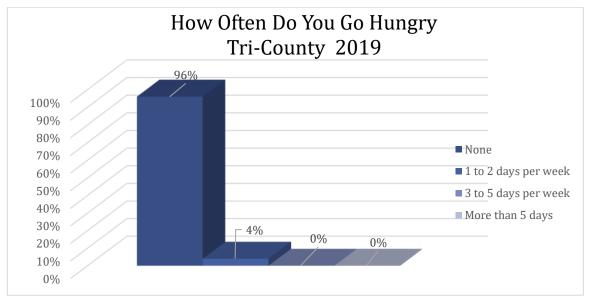
**Following a restricted diet** tends to be more likely for those diagnosed with diabetes and strokes. Those diagnosed with being overweight or obese are less likely to follow a restricted diet.

# 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, 4% indicated they go hungry 1-to-2 days per week.



Source: CHNA Survey

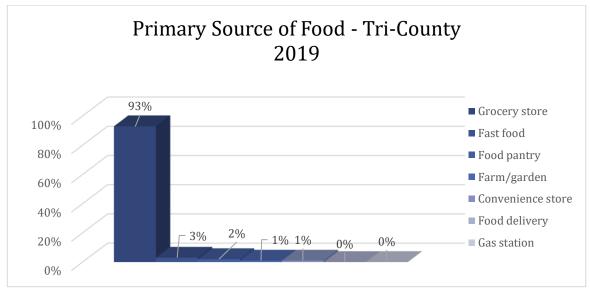
# **Social Determinants Related to Prevalence of Hunger**

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

**Prevalence of Hunger** tends to be more likely for Black people, those with less education, less income, Peoria County residents and those in an unstable (e.g., homeless) housing environment. White people are less likely to go hungry.

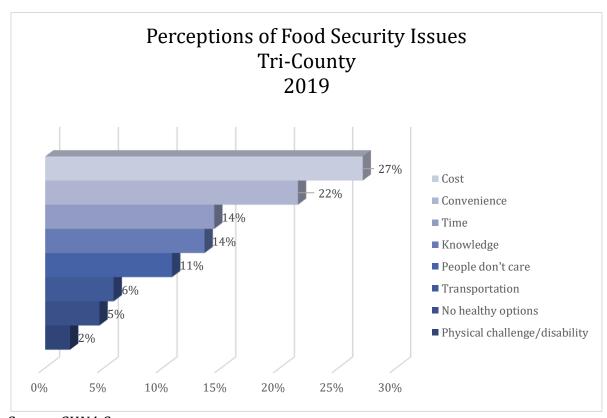
# **Primary Source of Food**

Respondents were asked to identify their primary source of food. It can be seen that the majority (93%) identified a grocery store. **This is a new section in the 2019 CHNA.** 



# **Community Perceptions of Causes for Food Insecurity**

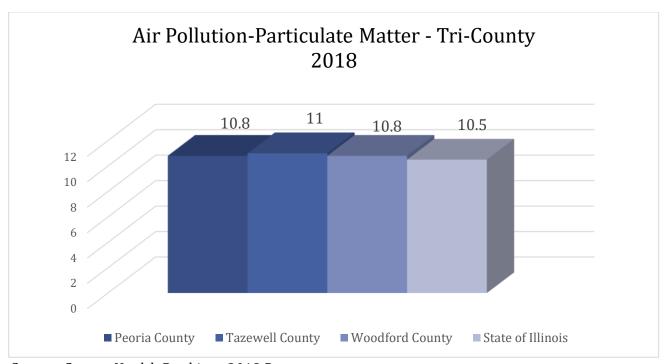
Respondents were asked to identify issues with food insecurity. The most prevalent answer was cost (27%), followed by convenience (22%). **This is a new section to the 2019 CHNA.** 



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 the Tri-County is slightly higher than the State average of 10.5.



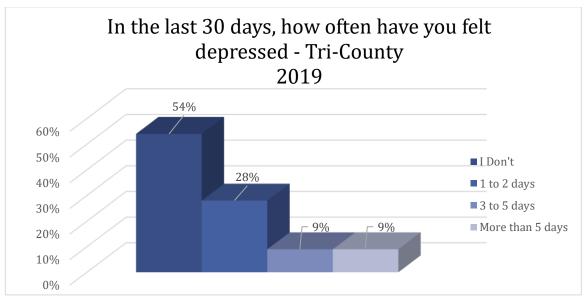
Source: County Health Rankings 2018 Data

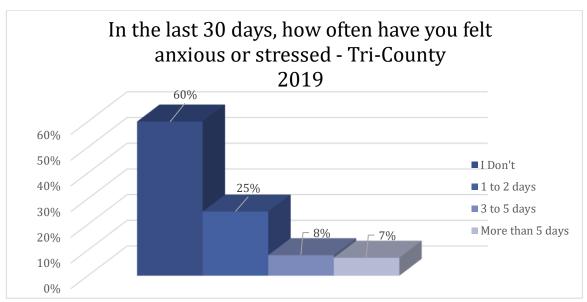
# 2.5 Health Status

*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, 54% indicated they did not feel depressed in the last 30 days and 60% indicated they did not feel anxious or stressed. **This is a new section to the 2019 CHNA.** 





Source: CHNA Survey

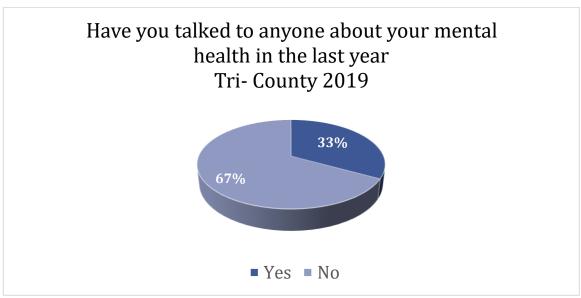
## **Social Determinants Related to Behavioral Health**

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

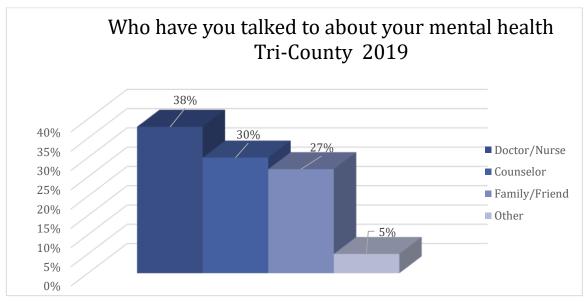
**Depression** tends to be rated higher for those with less education, those with less income, Peoria County residents, and those in an unstable (e.g., homeless) housing environment. Depression tends to be rated lower by Woodford County residents.

**Stress and anxiety** tends to be rated higher for younger people, those with less education, 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 last year. Of respondents 33% indicated that they spoke to someone, the most common response was a doctor/nurse (38%).



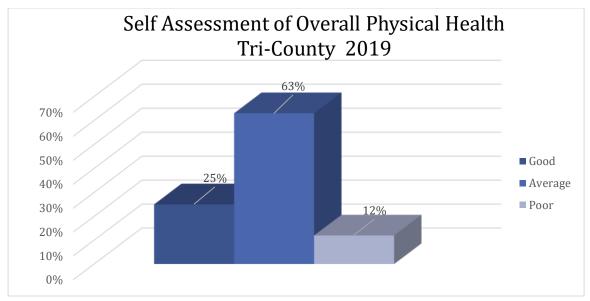
Source: CHNA Survey



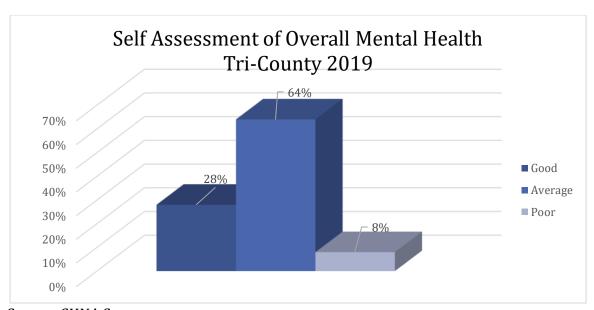
Source: CHNA Survey

# **Self-Perceptions of Overall Health**

In regard to self-assessment of overall physical health, 12% of respondents report having poor overall physical health.



In regard to self-assessment of overall mental health, 8% 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 (10%) than 2016 (4%). With regard to mental health, more people see themselves in poor health in 2019 (5%) than 2016 (1%).

# 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 those with higher education, those with higher income and those with a stable housing environment. Perceptions of physical health tend to be rated lower by Black people.

**Perceptions of mental health** tend to be higher for older people, those with higher education and those with higher income and those with a stable housing environment. Women were less likely to report good mental health.

# 2.6 Key Takeaways from Chapter 2

- ✓ DECREASED UTILIZATION OF EMERGENCY DEPARTMENTS AS A PRIMARY SOURCE OF HEALTHCARE.
- ✓ INCREASED RATE OF PEOPLE THAT DO NOT HAVE ACCESS TO COUNSELING.
- ✓ INCREASE IN PRIVATE INSURANCE COVERAGE.
- ✓ PROSTATE SCREENING IS RELATIVELY LOW COMPARED TO BREAST AND COLORECTAL SCREENING.
- ✓ 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

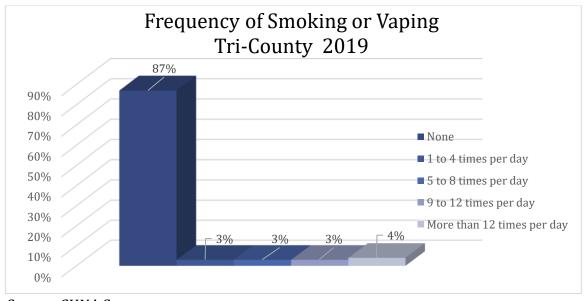
- 3.1 Tobacco Use
- 3.2 Drug and Alcohol Use
- 3.3 Overweight and Obesity
- 3.4 Predictors of Heart Disease
- 3.5 Key Takeaways from Chapter 3

# 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 87% of respondents do not smoke and only 4% state they smoke or vape more than 12 times per day.



Source: CHNA Survey

#### **Comparison to 2016 CHNA**

Results improved for the percentage of people that smoke/vape, where 81% of people did not smoke/vape in 2016 and 87% do not smoke/vape in 2019

## Social Determinants Related to Smoking or Vaping

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

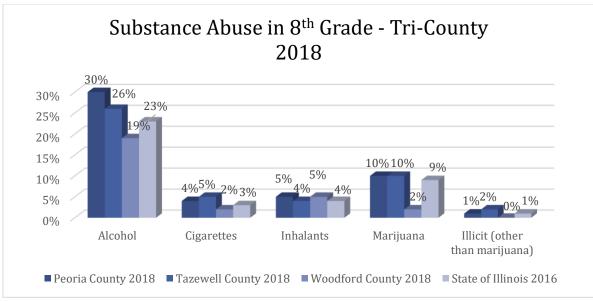
**Smoking/vaping** tends to be rated higher by men, Black people, those with less education, those with lower income, and those in an unstable (e.g., homeless) housing environment.

# 3.2 Drug and Alcohol Abuse

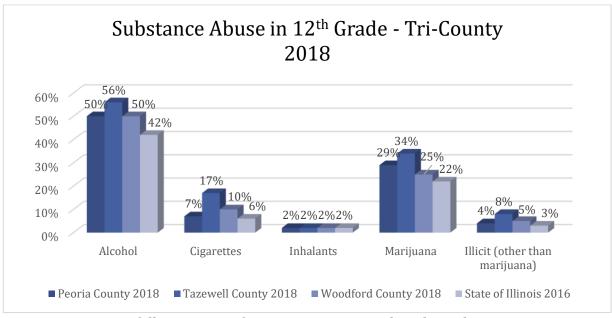
*Importance of the measure:* Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors 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. Peoria County is at or above State averages in all categories among 8th and 12th graders. Tazewell County is at or above State averages in all categories among 8th and 12th graders. Woodford County is below state averages in all categories among 8th graders except for one category: inhalants. Among 12th graders, Woodford County is at or above State averages in all categories.



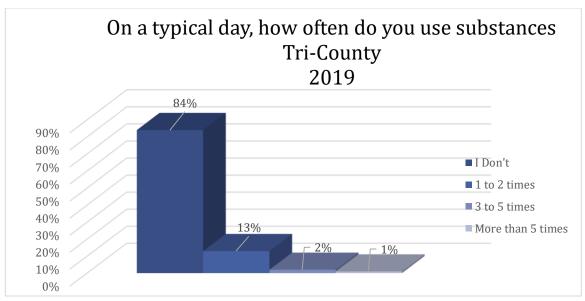
Source: University of Illinois Center for Prevention Research and Development



Source: University of Illinois Center for Prevention Research and Development

#### **Adult Substance Use**

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, 84% indicated they do not use substances to make themselves feel better. **This is a new section to the 2019 CHNA**.



## Social Determinants Related to Substance Use

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

**Use of substances** tends to be rated higher by Latino people, those with less education, those with lower income and those in an unstable (e.g., homeless) housing environment.

# 3.3 Overweight and Obesity

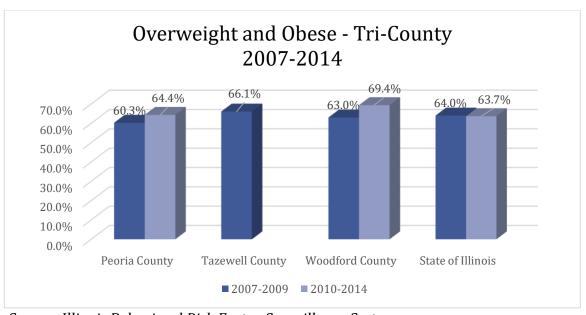
Importance of the measure: Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Tri-County.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

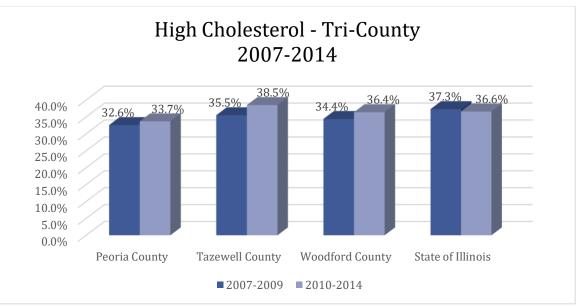
In Peoria County and Woodford County, the number of people diagnosed with obesity and being overweight has increased over the years from 2007-2009 to 2010-2014. Note specifically that the percentage of obese and overweight people has increased from 60.3% to 64.4% in Peoria County and from 63% to 69.4% in Woodford County. Data are not available for Tazewell County in 2007-2009, but current percentages of overweight and obese residents are similar. 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

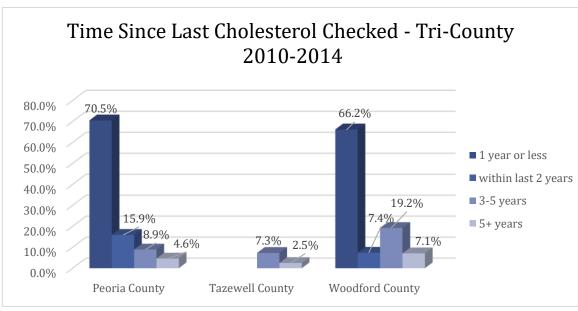
# 3.4 Predictors of Heart Disease

Residents in the Tri-County report a higher than State average prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is higher in Tazewell County (38.5%) than the State of Illinois average of 36.6%. Peoria County (33.7%) and Woodford County (36.4%) are below the State average. Note that data have not been updated by the Illinois Department of Public Health.



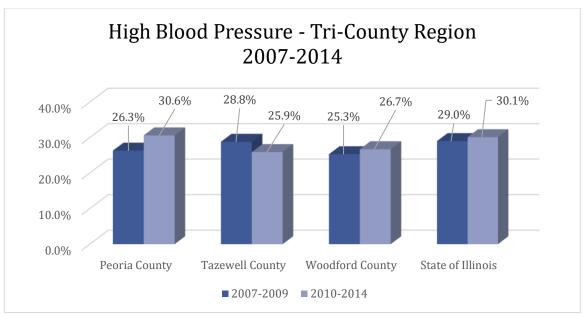
Source: Illinois Behavioral Risk Factor Surveillance System

However, most residents of the Tri-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, Peoria County has a higher percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Peoria County residents reporting they have high blood pressure in 2014 increased from 26.3% to 30.6%, in Woodford County, the increase was from 25.3% to 26.7%. Tazewell County saw a decline from 28.8% to 25.9%. 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

- ✓ SUBSTANCE USE AMONG 8<sup>TH</sup> AND 12<sup>TH</sup> GRADERS IS AT OR ABOVE STATE AVERAGES IN MOST CATEGORIES, PARTICULARLY IN PEORIA AND TAZEWELL COUNTIES.
- ✓ THE PERCENTAGE OF PEOPLE WHO ARE OVERWEIGHT AND OBESE HAS INCREASED.
- ✓ RISK FACTORS FOR HEART DISEASE ARE INCREASING.

#### CHAPTER 4 OUTLINE

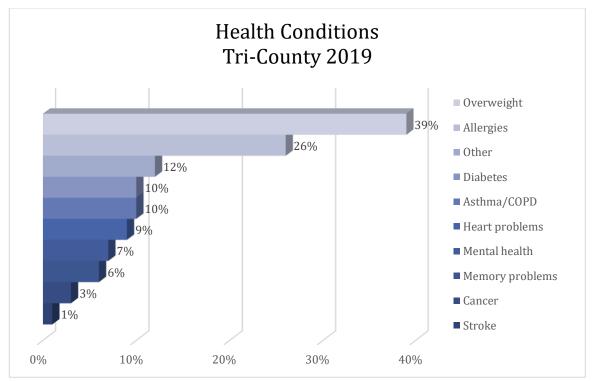
- 4.1 Self-Identified Health Conditions
- 4.2 Healthy Babies
- 4.3 Cardiovascular
- 4.4 Respiratory
- 4.5 Cancer
- 4.6 Diabetes
- 4.7 Infectious Disease
- 4.8 Injuries
- 4.9 Mortality
- 4.10 Key Takeaways from Chapter 4

# 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 Tri-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 (39%) 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 10%). **This is a new section to the 2019 CHNA.** 

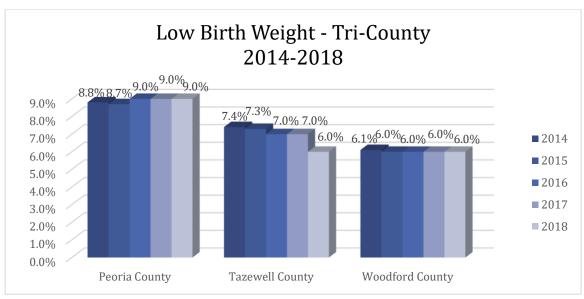


# 4.2 Healthy Babies

*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 Peoria County increased from 2014 (8.8%) to 2018 (9.0%). The percentage of babies born with low birth weight in Tazewell County decreased from 2014 (7.4%) to 2018 (6.0%). The percentage of babies born with low birth weight in Woodford County has remained stable (6.0%) between 2014 and 2018.



Source: http://www.countyhealthrankings.org

# 4.3 Cardiovascular Disease

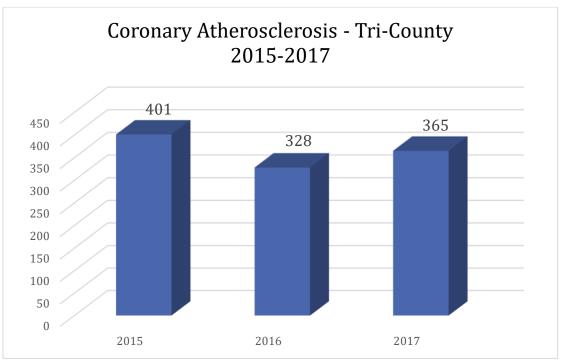
*Importance of the measure:* Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease, and atherosclerosis.

# **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.

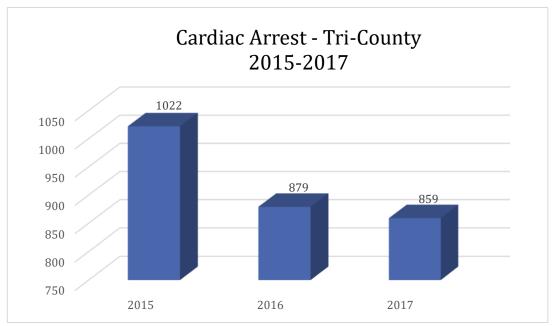
The number of cases of coronary atherosclerosis complication at Tri-County area hospitals has fluctuated between FY 2015 and FY 2017. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



Source: COMPdata 2017

#### **Cardiac Arrest**

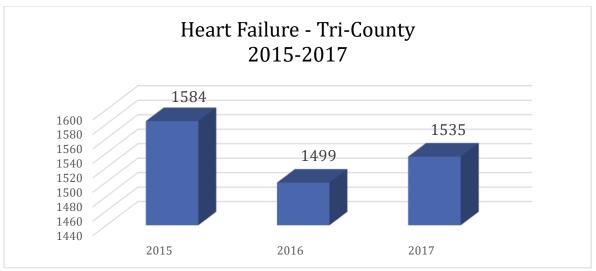
Cases of dysrhythmia and cardiac arrest at Tri-County area hospitals decreased by 163 cases between FY15 and FY17. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

#### **Heart Failure**

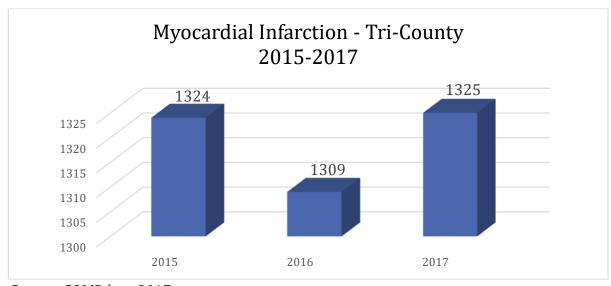
The number of treated cases of heart failure at Tri-County area hospitals fluctuated. In FY 2015, 1584 cases were reported, and in FY 2016, there were 1499 cases reported. However, there was an increase in FY 2017 (1535 cases). Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

# **Myocardial Infarction**

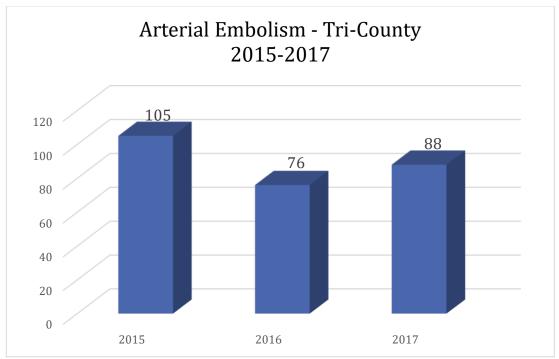
The number of treated cases of myocardial infarction at area hospitals in the Tri-County decreased from 1324 in 2015 to 1309 in 2016. The number of cases of myocardial infarction then increased to 1325 in 2017. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

#### **Arterial Embolism**

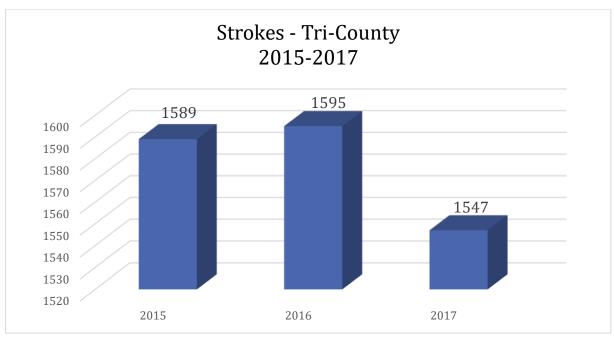
There number of treated cases of arterial embolism at Tri-County area hospitals declined between FY 2015 (105) and FY 2016 (76). However, the number of cases of arterial embolism increased in FY 2017 (88). Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

### **Strokes**

The number of treated cases of stroke at Tri-County area hospitals increased slightly between FY 2015 and FY 2016 but significantly decreased in FY 2017. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.



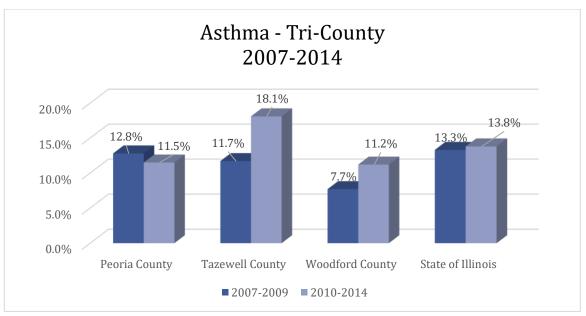
Source: COMPdata 2017

# 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.

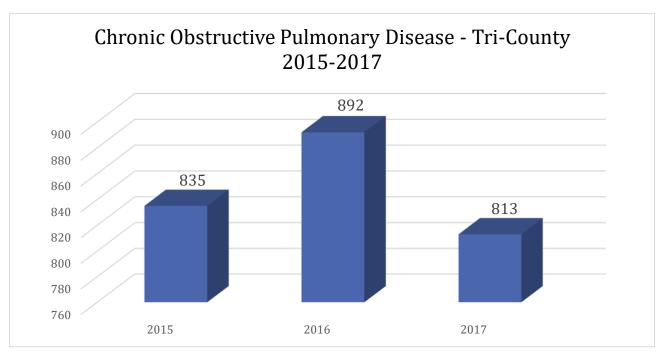
## **Asthma**

The percentage of residents that have asthma in the Tri-County area has decreased in Peoria and increased in Tazewell and Woodford County between 2007-2009 and 2010-2014, while State averages are increasing slightly. According to the Illinois BRFSS, asthma rates in Peoria County (11.5%) and Woodford County (11.2%) are lower than the State of Illinois (13.8%), while Tazewell County is now higher (18.1%). 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 Tri-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. Note that data have not been updated by the Illinois Department of Public Health.

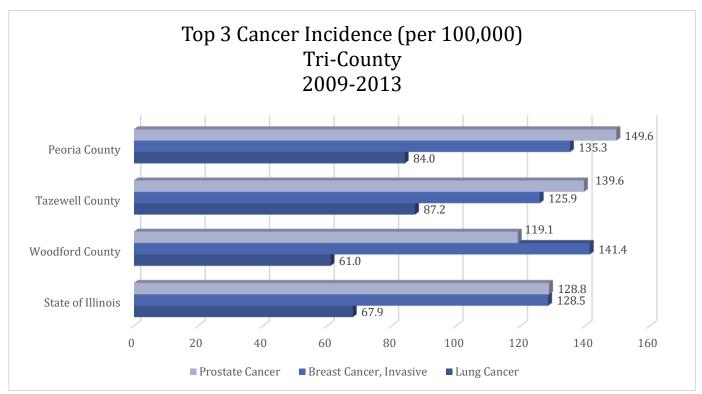


Source: COMPdata 2017

# 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 the Tri-County.

For the top three prevalent cancers in the Tri-County, comparisons can be seen below. Specifically, all cancer rates in Peoria County are higher than the State of Illinois. Tazewell County reports significantly higher rates of prostate and lung cancer compared to the State of Illinois. Woodford County reports significantly higher rates of breast cancer than the state of Illinois

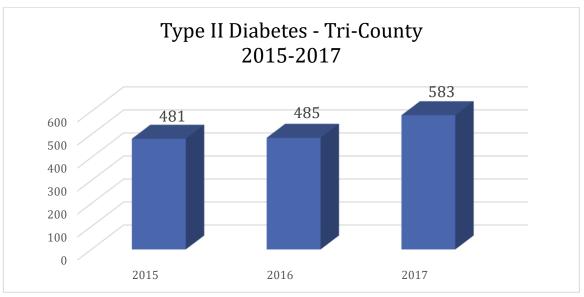


Source: http://dph.illinois.gov/sites/default/files/publications/County-Sec1-Site-Specific-Cancer-Incdence-ers1605.pdf

# 4.6 Diabetes

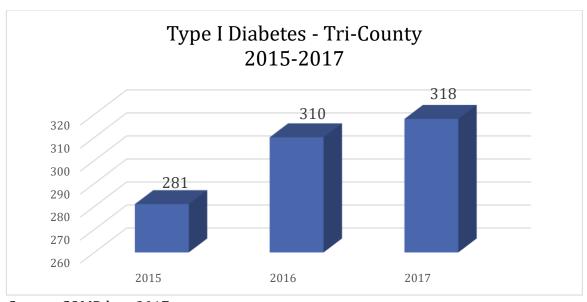
*Importance of the measure:* Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 5-10%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

Inpatient cases of Type II diabetes from the Tri-County increased between FY 2015 (481 cases) and FY 2017 (583 cases). Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.



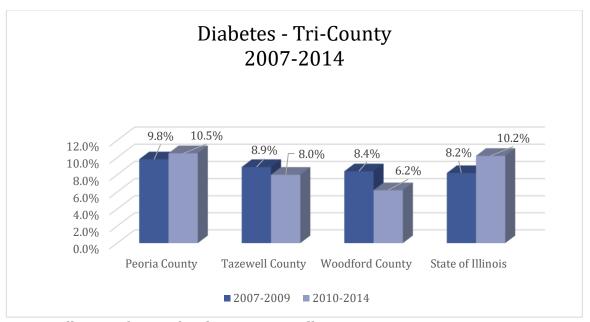
Source: COMPdata 2017

Inpatient cases of Type I diabetes show an increase from 2015 (281) to 2017 (318) for the Tri-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 10.5% of Peoria County residents have diabetes, 8% of Tazewell County residents have diabetes, and 6.2% of Woodford County residents have diabetes. Trends are concerning in Peoria County, as the prevalence of diabetes is increasing and now higher compared to data from the State of Illinois. Note that data have not been updated by the Illinois Department of Public Health.



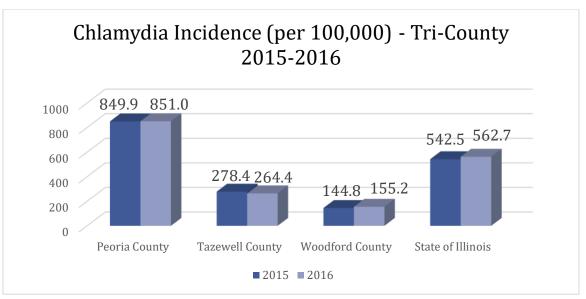
Source: Illinois Behavioral Risk Factor Surveillance System

# 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.

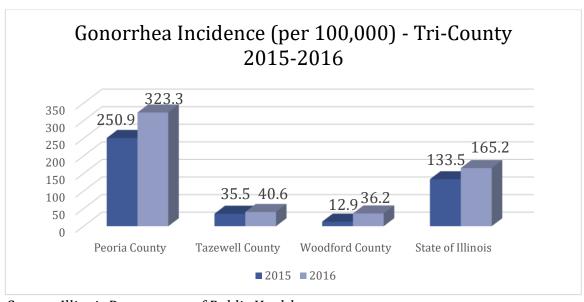
## **Chlamydia and Gonorrhea Cases**

The data for the number of infections of chlamydia in Peoria and Woodford County from 2015-2016 indicate an increase. There is a decrease of incidence of chlamydia in Tazewell County. Across the State of Illinois, incidence of chlamydia increased. Note that rates of chlamydia in Peoria County are significantly higher than State rates.



Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in the Tri-County indicate an increase in 2015-2016, while the State of Illinois also experienced a significant increase from 2015-2016. Note that the rates of gonorrhea in Peoria County are significantly higher than State rates.



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. Tri-County has shown no significant outbreaks compared to state statistics, but there are limited data available.<sup>2</sup>

#### Vaccine Preventable Diseases 2013-2016 Tri-County Region

Mumps	2013	2014	2015	2016
Peoria County	0	0	0	0
Tazewell	0	0	1	1
Woodford County	0	0	0	0
State of Illinois	26	142	430	333

Pertussis	2013	2014	2015	2016
Peoria County	8	12	3	4
Tazewell	1	10	10	2
Woodford County	0	2	4	1
State of Illinois	785	764	718	1034

Varicella	2013	2014	2015	2016
Peoria County	9	7	4	3
Tazewell	10	11	14	7
Woodford County	5	8	2	0
State of Illinois	731	596	443	469

Source: <a href="http://iquery.illinois.gov/DataQuery/Default.aspx">http://iquery.illinois.gov/DataQuery/Default.aspx</a>

 $<sup>{\</sup>it 2 Source: http://www.idph.state.il.us/about/vpcd.htm}$ 

#### **Tuberculosis 2014-2017 Tri-County Region**

Tuberculosis	2014	2015	2016	2017
Peoria County	0	1	1	3
Tazewell	1	0	0	0
Woodford County	0	0	0	0
State of Illinois	320	343	341	336

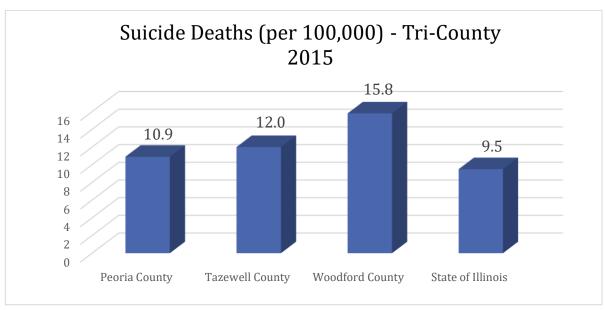
Source: http://iquery.illinois.gov/DataQuery/Default.aspx

# 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**

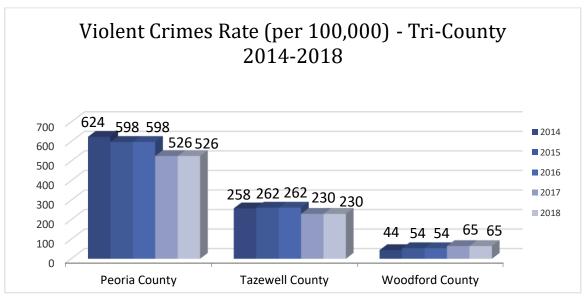
The number of suicides in the Tri-County indicate higher incidence than State of Illinois averages for 2015.



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 decreased significantly for 2014-2018 in Peoria County. The number of violent crimes fluctuated in Tazewell County, but have declined overall. The number of violent crimes in Woodford County increased for 2014-2018.



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 the Tri-County are similar as a percentage of total deaths in 2017. Diseases of the Heart are the cause of 20.1% of deaths and Cancer is the cause of 20.9% of deaths in Peoria County. Diseases of the Heart are the cause of 25.4% of deaths and Cancer is the cause of 21.7% of deaths in Tazewell County. Diseases of the Heart are the cause of 23.4% of deaths and Cancer is the cause of 20.9% of deaths in Woodford County. Additional mortality data can be found in Appendix 2.

	Top 5 Lead	ing Causes of Death for	all Races by County, 202	17
Rank	Peoria County	Tazewell County	Woodford County	State of Illinois
1	Malignant Neoplasm (20.9%)	Diseases of Heart (25.4%)	Diseases of Heart (23.4%)	Diseases of Heart
2	Diseases of Heart (20.1%)	Malignant Neoplasm (21.7%)	Malignant Neoplasm (20.9%)	Malignant Neoplasm
3	Accidents (6.4%)	Chronic Lower Respiratory Disease (5.6%)	Alzheimer's Disease (8.0%)	Cerebrovascular Disease
4	Chronic Lower Respiratory Disease (6.4%)	Accidents (4.8%)	Chronic Lower Respiratory Disease (6.0%)	Accidents
5	Stroke (5.0%)	Stroke (4.3%)	Stroke (4.5%)	Chronic Lower Respiratory Disease

Source: Illinois Department of Public Health

# 4.10 Key Takeaways from Chapter 4

- ✓ PROSTATE, BREAST AND LUNG CANCER RATES ARE HIGHER THAN STATE AVERAGES IN AT LEAST ONE-OR-MORE COUNTIES.
- ✓ WHILE STATE AVERAGES HAVE ONLY SEEN A SLIGHT INCREASE, DIABETES IS TRENDING UPWARD SIGNIFICANTLY IN THE TRI-COUNTY REGION AND IS APPROACHING STATE AVERAGES.
- ✓ SEXUALLY TRANSMITTED INFECTIONS IN PEORIA COUNTY ARE INCREASING AND SIGNIFICANTLY HIGHER THAN THE OTHER COUNTIES AND STATE AVERAGES.
- ✓ CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF MORTALITY.

#### CHAPTER 5 OUTLINE

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

# CHAPTER 5 PRIORITIZATION OF HEALTH-RELATED ISSUES

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

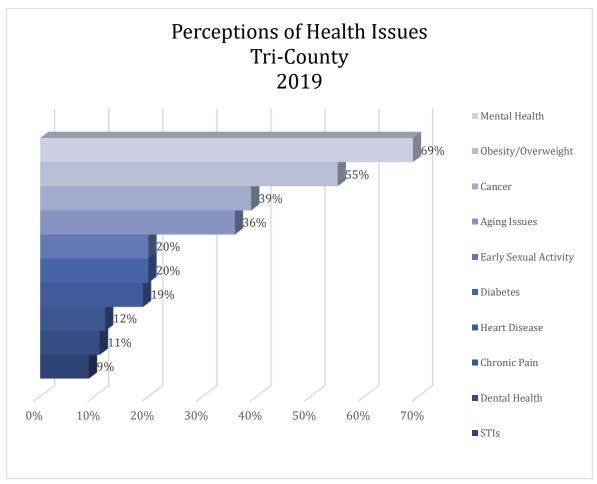
Specific criteria used to identify these issues included: (1) magnitude in the community; (2) severity in the community; (3) potential for impact to the community.

# **5.1 Perceptions of Health Issues**

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 10 different options. Note that respondents could choose up to three health issues, so total percentages are greater than 100.

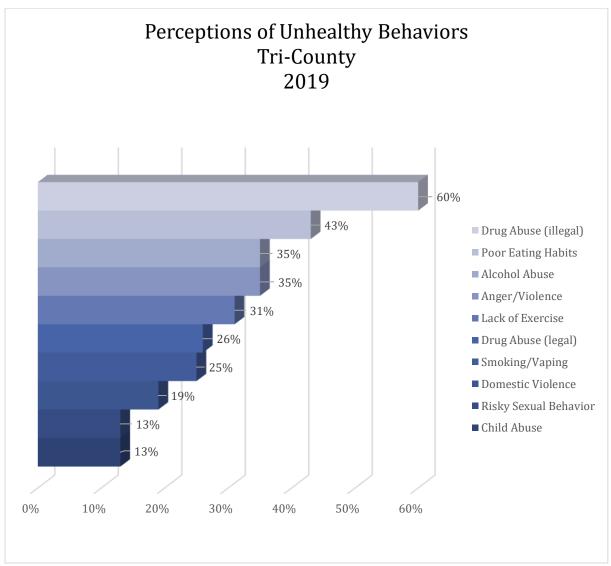
The health issue that rated highest was mental health (69%), followed by obesity/overweight (55%), cancer (39%), and aging issues (36%). These four factors were significantly higher than other categories based on *t-tests* between sample means.

Note that perceptions of the community were accurate in some cases. For example, cancer is a leading cause of mortality. Also, obesity is an important concern and the survey respondents accurately identified these as important health issues. However, some perceptions were inaccurate. For example, while heart disease is a leading cause of mortality, it is ranked relatively low.



# **5.2 Perceptions of Unhealthy Behaviors**

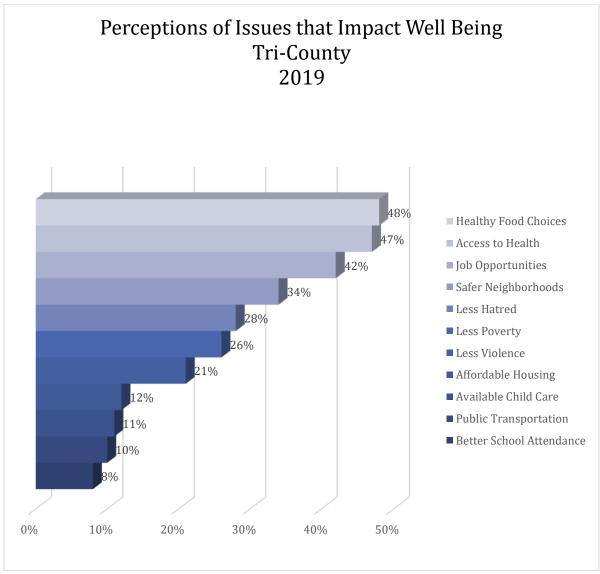
Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 10 choices. The two unhealthy behaviors that rated highest were drug abuse (illegal) at 60% and poor eating habits (43%). Note that drug abuse (legal) rated relatively high given the increase, in part, of opioid abuse.



# 5.3 Perceptions of Issues Impacting Well Being

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

The issue impacting well-being that rated highest was healthy food choices (48%), followed by access to health (47%). Other highly rated issues included job opportunities (42%) and safer neighborhoods (34%).



# **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)** – Six 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-house-household represents 8%-14% of the population
- Telehealth
- Changing population increasing Latino population
- Truancy and graduation rates are concerning in Peoria County.

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

- Decreased utilization of emergency departments
- Access to counseling decreased
- Prostate screening is relatively low
- Exercise and healthy eating behaviors
- Depression and stress/anxiety

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

- Substance use
- Overweight and obesity
- Risk factors for heart disease

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

- Cancer
- Diabetes is trending upward
- Cancer and heart disease are the leading causes of mortality
- Sexually transmitted infections (in Peoria County)

# Potential Health-Related Needs Considered for Prioritization

Before the prioritization of significant community health-related needs was performed, results were aggregated into 9 potential categories. Based on similarities and duplication, the 9 potential areas considered are:

- Access to care
- Aging issues
- Asthma
- Cancer
- Gun-related deaths
- Healthy living-obesity
- Mental health (including anxiety and depression)/suicides
- Reproductive health
- Substance use

# **5.5 Community Resources**

After summarizing potential categories for prioritization in the Community Health Needs Assessment, the PFHC ad-hoc CHNA team reduced the list of 9 potential health needs to 7 potential health using the *PEARL* approach from the Hanlon Method. A comprehensive analysis of existing community resources was performed to identify the efficacy to which these 7 health-related areas were being addressed. A resource matrix can be seen in Appendix 5 relating to the 7 health-related issues.

There are numerous forms of resources in the community. They are categorized as 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, based on the size of issue based on percentage of the population was impacted by the issue); (2) **seriousness** of the issues, based seriousness of outcomes, economic impact, urgency and future trends and forecasts; (3) **effectiveness considerations**, based on potential impact through collaboration, community support, and measurement of impact. Using a modified version of the Hanlon Method (as seen in Appendix 7), and supplementary information on health needs (as seen in Appendix 8), the collaborative team identified four significant health needs and considered them equal priorities:

- **Healthy Eating/Active Living** defined as active living and healthy eating, and their impact on obesity, access to food and food insecurity
- Cancer defined as incidence of breast, lung and colorectal cancer and cancer screenings
- **Mental Health** defined as depression, anxiety and suicide
- Substance Use defined as abuse of illegal and legal drugs, alcohol and tobacco/vaping use

# **HEALTHY EATING / ACTIVE LIVING**

In the Tri-County region, the number of people diagnosed with obesity and being overweight has increased from 2009 to 2014. Note specifically that the percentage of obese and overweight people is higher than State averages in all counties, ranging from 64.4% to 69.4%. Overweight and obesity rates in Illinois have decreased from 64% in 2009 to 63.7% in 2014. Moreover, survey respondents were asked to self-identify any health conditions. Note that being overweight (39%) was significantly higher than any other health conditions.

**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 23% of respondents in the Tri-County region indicated that they do not exercise at all, and 33% of residents exercise only 1-2 times per week.

**HEALTHY EATING.** Almost two-thirds (60%) of Tri-County residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of Tri-County residents who consume five or more servings per day is only 5%.

**Access to Food and Food Insecurity.** 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. In the Tri-County region, approximately 4% of residents go hungry 1-2 times per week.

#### CANCER

Cancer is the first or second leading cause of mortality in all three counties in the Tri-County region. Breast, lung and colorectal cancer are more prevalent in the Tri-County region when compared with the State of Illinois.

**Breast Cancer**. Breast cancer is the most common cancer in women in Illinois. The incidence of breast cancer per 100,000 residents in the Tri-County region is 134.2 people per 100,000 compared to Illinois State average of 128.5.

**LUNG CANCER.** Lung cancer is second most common cancer among men and women in Illinois. The incidence of lung cancer per 100,000 residents in the Tri-County region is 79.7 people per 100,000 compared to Illinois State average of 67.9. Incidence of smoking in the Tri-County area (19.1%), is higher than State of Illinois averages (18.4%). Moreover, in 2018, 10% of the Tri-County population smoked and/or vaped 5 or more time per day.

**COLORECTAL CANCER.** Colorectal cancer is the third most common cancer among men and women in Illinois. All three counties in the Tri-County area report higher incident and age-adjusted death rates for colorectal cancer compared to the State of Illinois, the U.S. and are above the are 3-6% higher then the *Healthy People 2020* target. While early detection of precancerous polyps can prevent colorectal cancer, 39% of the population over 50 years old in the Tri-County area has not had a colorectal screening in the past five years.

# MENTAL HEALTH

According to the CHNA survey, 33% of respondents talked to someone about their mental health in the last 30 days. In the Tri-County area, almost 1/3 (31.3%) of  $10^{th}$  grade students indicated that in the past 12 months they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped some usual activities. Mental health was rated as the most important health issue in the community by 69% of survey respondents.

**DEPRESSION.** According to the CHNA survey, 46% of respondents felt depressed in the last 30 days. Specifically, 28% of respondents felt depressed 1-2 days and 18% felt depressed 3 or more days in the last 30 days.

**ANXIETY.** According to the CHNA survey, 40% of respondents felt anxious in the last 30 days. Specifically, 25% of respondents felt depressed 1-2 days and 15% felt anxious 3 or more days in the last 30 days.

**SUICIDE.** In the Tri-County region, all three counties had higher suicide rates than State of Illinois averages. Specifically, suicide rates per 100,000 residents were 10.9 in Peoria County, 12.0 in Tazewell County and 15.8 in Woodford County. The State of Illinois average was 9.5 suicide deaths per 100,000 residents. In the Tri-County area, 16.7% of 10<sup>th</sup> graders indicated they seriously considered attempting suicide in the past 12 months.

#### SUBSTANCE USE

SUBSTANCE USE. Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests substance use values and behaviors of students is a leading indicator of adult substance use in later years. Data from the 2018 Illinois Youth Survey measures illegal substance use for alcohol, cigarettes, inhalants, marijuana and other illicit drugs among adolescents. For all three counties, 12th graders are at or above State averages in all categories. Moreover, CHNA survey results show that 16% of the Tri-County population uses substances (either legal or illegal) on a typical day to make themselves feel better.

# **APPENDIX 1. Members of Collaborative Team**

Members of the Partnership for a Healthy Community ad-hoc CHNA data-action team consisted of individuals with special knowledge of and expertise in the healthcare of the community. Individuals, affiliations, titles and expertise are as follows:

**Melissa Adamson** was the Director of Community Health Policy & Planning/Assistant Administrator at the Peoria City/County Health Department. She holds a MPH in Health Education from Emory University, Rollins School of Public Health and has over 20 years' experience in public health. Melissa is passionate about improving population health through investing in programs and advocating for policies that address the underlying causes of disease and build capacity to respond effectively to changing needs. We would like to thank her for the work she has done to drive this community approach as she has moved into a new role.

Hillary Aggertt is the Administrator at the Woodford County Health Department. She holds a Bachelor's Degree in Community Health/Health Education from Southern Illinois University and a Master's Degree in Prevention Science from the University of Oklahoma. Hillary has ten years of public health experience including emergency preparedness, health education, grant writing and community collaboration. She is passionate in improving health outcomes. Ms. Aggertt is also currently president-elect for Illinois Association of Public Health Administrators and currently the co-chair of the Partnership for a Healthy Community Board.

**Karla Burress** is currently the Assistant Administrator for Tazewell County Health Department (TCHD). Ms. Burress has been leading the performance management/quality improvement program throughout the department for the last 6 years. She is currently a member of the Bradley Department of Nursing Council. Ms. Burress has worked in Public Health for 28 years and started her career as a nutritionist for WIC in Danville Illinois. She moved to Tazewell County Illinois in 1994 and continued her Public Health career at TCHD as a Nutritionist eventually becoming the Director of the Maternal Child Health programs. Karla holds a Bachelor of Science degree in Food/Nutrition/Dietetics from Illinois State University in Normal Illinois.

**Michelle A. Carrothers** 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 Michigan Hospital Association committees.

**Greg Eberle** is the Community Health Coordinator for Hopedale Medical Complex where he leads community health initiatives and related programs. He is passionate about creating healthy environments, enhancing the places where people live, work and play so that they promote health and well-being. Greg graduated with a BS in physical education and athletic training from Illinois State University. He is currently a certified athletic trainer.

**Taylor Eisele, MPH** has been the Epidemiologist at Tazewell County Health Department since May 2018. Ms. Eisele received her MPH in 2018 from Indiana University Purdue University Indianapolis and a BS in 2016 from the University of Illinois Urbana-Champaign. Ms. Eisele has previously worked in the areas of occupational health, vector-borne disease, and health promotion.

**Amy Fox** is the administrator at Tazewell County Health Department. Ms. Fox has worked in public health for over 28 years in areas of community health improvement planning, health promotion, substance abuse prevention, coalition development and emergency preparedness. Currently, in addition to responsibilities in Tazewell County, Ms. Fox is the Co-Chair of the Public Health Committee of the Illinois Terrorism Task Force and the Co-Chair of PHIST- Public Health is Stronger Together, a statewide group made up of all associations that work in governmental public health.

**Lisa Fuller, MS, MHA**, is the Vice President of Outpatient and Ancillary Services at OSF Healthcare, Saint Francis Medical Center. She is responsible for Saint Francis Medical Center Outpatient Departments, including, but not limited to outpatient services at the Centers for Health Rt 91, Morton Center for Health, Washington Outpatient Center, Glen Park Center for Health, Sleep Lab, Cancer Services, Sisters' Clinic, SFMC Imaging, Lab Services, RiverPlex and Behavioral Health. She is currently the co-chair for the Partnership for a Healthy Community Board.

Sally Gambacorta (MS, Illinois State University; MA, University of Iowa) is the Community Health Director at Advocate BroMenn Medical Center and Advocate Eureka Hospital. Both hospitals are located in Central Illinois. She has worked for Advocate Aurora Health for 25 years in Wellness and Community Health. Sally hold a Bachelor's of Science degree in Business Administration from Augustana College, a Master's of Science degree in Industrial/Organizational Science from Illinois State University and a Master's of Arts degree in Leisure Studies with a concentration in Corporate Fitness and Health Promotion from the University of Iowa. In her community health role, Sally is responsible for the Community Health Needs Assessment and Community Benefits at both hospitals. She has extensive experience in collaborating with community partners to improve the health of the community. Sally is a member of the McLean County Community Health Council Executive Steering Committee and facilitates the McLean County Behavioral Health Improvement Plan Priority Action Team. She also serves on the leadership committee for the McLean County Wellness Coalition, is a member of the McLean County Mental Health First Aid Collaborative and is on the Partnership for a Healthy Community Board for Woodford, Tazewell and Peoria County.

**Tim Heth** currently serves as the Manager of Planning and Property Management for UnityPoint Health's Central IL Region. Mr. Heth was first employed by the Methodist Medical Center in 1985 in Laboratory Medicine and Toxicology Services and later joined the administration in a planning capacity in 2000. Mr. Heth is accountable for all aspects of planning and property management for UPH Methodist | Proctor | Pekin. He earned his Master's Degree in Business Administration from Bradley University in 1996 and is a former Baldrige National Quality Award Examiner.

**Monica Hendrickson**, **MPH** is currently the Public Health Administrator for the Peoria City/County Health Department primarily working on fulfilling the mission of engaging, educating, and promoting health, preventing disease, and providing for a safe environment through collaborative partnerships, leveraging of resources, and Health in All Policy advocacy. Most recently, Ms. Hendrickson was the Epidemiologist at Peoria City/County Health Department from 2013-2017 and the Director of Health

Protection at Knox County Health Department from 2010-2013. Ms. Hendrickson graduated with a MPH in from the University of Michigan and a BS from the University of Illinois Urbana-Champaign. She currently facilitates the Behavioral Health Committee for the Partnership for a Healthy Community Tri-County Improvement Plan, as well as a Board Member for WTVP and on the Solution Council for Heart of Illinois United Way.

**Gregg D. Stoner, M.D.** Chief Medical Officer of Heartland Health Services and Clinical Professor of Family and Community Medicine, University of Illinois, College of Medicine. Heartland Health Services is a federally qualified health center which provides primary medical care to patients in Central Illinois through their seven clinics located in Peoria.

**Dawn Tuley** 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.

#### **FACILITATOR**

**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. ADDITIONAL MORTALITY DATA**

Number of Deaths by Resident County and Select Demographics, Illinois Residents, 2017

	Total	S	ex		Race/E	thnicity					Age Gro	up		
Resident County	Deaths	Male	Female	NH White	NH Black	NH Other	Hispanic	Infants	1-17	18- 24	25- 44	45-64	65-84	85+
ILLINOIS	109,726	54,930	54,796	84,466	17,515	2,252	5,493	912	606	1,157	5,080	20,126	45,739	36,106
Adams	814	405	409	786	23	1	4	4	4	6	31	113	337	319
Alexander	96	57	39	75	21	0	0	0	0	0	1	21	52	22
Bond	174	91	83	169	2	1	2	0	2	0	7	36	78	51
Boone	431	226	205	398	4	4	25	1	3	2	20	83	193	129
Brown	71	42	29	69	2	0	0	0	1	1	1	12	34	22
Bureau	387	206	181	376	3	0	8	0	1	3	9	69	160	145
Calhoun	51	26	25	51	0	0	0	0	0	0	1	5	29	16
Carroll	194	100	94	192	1	0	1	0	0	4	4	20	99	67
Cass	138	63	75	132	2	0	4	0	0	1	5	21	55	56
Champaign	1,368	683	685	1,140	191	26	11	15	13	21	50	243	567	459
Christian	408	198	210	407	1	0	0	2	1	1	10	67	181	146
Clark	185	93	92	184	0	1	0	0	1	0	5	25	92	62
Clay	155	77	78	155	0	0	0	0	0	1	2	19	78	55
Clinton	382	183	199	374	6	1	1	2	2	7	9	67	160	135
Coles	464	214	250	450	10	2	2	2	4	4	17	72	206	159
Cook Chicago Suburban Cook	41,266 19,742 21,524	20,806 10,359 10,447	20,460 9,383 11,077	22,895 6,922 15,973	13,223 9,579 3,644	1,387 664 723	3,761 2,577 1,184	394 241 153	235 152 83	576 367 209	2,207 1,373 834	8,324 4,764 3,560	16,594 7,862 8,732	12,936 4,983 7,953
Crawford	225	103	122	223	1	1	0	1	4	1	9	32	103	7,555
Cumberland	127	56	71	126	1	0	0	0	0	0	3	21	55	48
DeKalb	759	376	383	703	29	9	18	6	4	7	35	128	297	282
DeWitt	203	99	104	202	0	1	0	0	1	1	6	41	88	66
Douglas	232	113	119	230	0	0	2	0	4	2	8	45	98	75
DuPage	6.305	3.031	3.274	5.532	224	299	250	38	23	56	229	981	2.472	2.506
Edgar	228	108	120	226	0	1	1	2	1	0	3	37	103	82
Edwards	82	41	41	80	1	1	0	0	o	0	2	14	39	27

Effingham	363	150	213	360	2	0	1	0	2	1	10	51	145	154
Fayette	227	124	103	227	0	0	Ö	1	0	0	5	44	103	74
Ford	203	92	111	199	3	0	1	0	0	1	6	38	87	71
Franklin	515	269	246	512	3	0	o o	3	1	4	20	101	253	133
Fulton	467	232	235	459	5	2	1	1	3	3	15	86	198	161
Gallatin	85	36	49	85	0	0	0	1	0	0	3	18	34	29
Greene	164	69	95	163	1	0	0	1	4	3	7	27	72	50
Grundy	429	207	222	415	3	3	8	4	3	1	13	81	207	120
Hamilton	117	54	63	116	0	1	0	1	0	1	2	19	57	37
Hancock	222	98	124	220	1	1	0	1	1	1	5	33	98	83
Hardin	80	43	37	79	1	0	0	2	0	0	3	13	48	14
Henderson	88	39	49	87	0	1	0	0	1	0	4	13	51	19
Henry	522	244	278	509	7	1	5	0	2	1	13	88	232	186
Iroquois	386	200	186	381	3	0	2	1	2	4	14	73	170	122
Jackson	499	243	256	442	51	3	3	3	6	1	30	93	214	152
Jasper	100	47	53	99	0	0	1	1	0	1	0	13	43	42
Jefferson	472	238	234	449	21	1	1	7	1	4	16	73	226	145
Jersey	303	142	161	299	1	2	1	0	2	1	14	68	116	102
Jo Daviess	259	129	130	254	1	1	3	3	0	2	6	32	113	103
Johnson	149	64	85	142	6	1	0	0	1	0	1	33	70	44
Kane	3,351	1,702	1,649	2,779	170	79	323	19	28	46	165	569	1,422	1,102
Kankakee	1,225	639	586	1,027	165	2	31	15	2	6	74	223	502	403
Kendall	561	311	250	493	29	7	32	11	5	6	29	90	277	143
Knox	670	330	340	626	30	1	13	3	3	4	12	101	313	234
Lake	4,693	2,284	2,409	3,908	335	128	322	38	23	38	215	797	1,881	1,701
LaSalle	1,354	734	620	1,313	15	2	24	8	4	6	66	233	548	489
Lawrence	194	97	97	191	3	0	0	1	1	2	9	41	80	60
Lee	392	224	168	377	7	0	8	1	5	2	10	76	180	118
Livingston	456	209	247	445	4	1	6	0	1	2	20	71	205	157
Logan	331	153	178	320	7	2	2	2	2	1	11	60	137	118
McDonough	316	150	166	309	6	1	0	7	1	1	11	42	145	109
McHenry	2,194	1,140	1,054	2,072	14	30	78	9	12	27	117	388	960	681
McLean	1,217	572	645	1,146	56	8	7	16	5	11	55	204	503	423
Macon	1,256	608	648	1,094	153	4	5	10	7	10	38	199	548	444
Macoupin	573	287	286	568	4	0	1	3	5	5	15	100	236	209
Madison	2,944	1,424	1,520	2,727	189	7	21	23	11	31	149	521	1,252	957

Marion	534	268	266	516	16	2	0	1	6	4	29	101	227	166
Marshall	185	101	84	183	0	0	2	1	0	1	4	40	70	69
Mason	204	103	101	202	0	2	0	0	0	2	4	28	104	66
Massac	217	111	106	206	9	0	2	1	1	1	6	43	93	72
Menard	139	65	74	139	0	0	0	2	0	1	5	20	58	53
Mercer	203	116	87	203	0	0	0	2	1	0	5	39	81	75
Monroe	302	143	159	300	1	1	0	0	0	1	6	35	146	114
Montgomery	354	180	174	350	1	3	0	1	0	2	7	49	158	137
Morgan	396	216	180	378	16	1	1	4	2	3	15	60	171	141
Moultrie	172	70	102	168	4	0	0	1	1	3	3	17	73	74
Ogle	541	284	257	530	1	1	9	3	5	4	15	85	257	172
Peoria	1,848	894	954	1,537	284	14	13	28	7	19	87	372	744	591
Perry	237	125	112	231	6	0	0	1	0	1	4	42	114	75
Piatt	181	97	84	180	0	0	1	1	3	1	8	31	78	59
Pike	216	111	105	215	0	0	1	4	0	1	7	31	97	76
Pope	62	35	27	62	0	0	0	0	0	0	0	10	38	14
Pulaski	67	33	34	48	19	0	0	0	0	0	4	16	33	14
Putnam	68	37	31	66	0	0	2	0	0	0	3	11	30	24
Randolph	371	196	175	352	18	1	0	1	2	0	20	62	153	133
Richland	206	97	109	204	1	0	1	2	1	2	9	32	73	87
Rock Island	1,633	819	814	1,438	130	15	50	14	6	9	65	285	680	574
St. Clair	2,674	1,392	1,282	1,839	798	17	20	37	20	34	179	553	1,075	776
Saline	395	198	197	377	17	0	1	4	1	3	9	66	204	108
Sangamon	2,059	1,032	1,027	1,868	166	18	7	14	11	14	84	375	849	712
Schuyler	89	47	42	89	0	0	0	1	1	0	1	16	45	25
Scott	65	36	29	64	0	0	1	0	0	2	3	13	33	14
Shelby	227	116	111	226	1	0	0	4	1	2	3	28	124	65
Stark	73	39	34	71	0	0	2	0	1	2	4	12	34	20
Stephenson	575	283	292	539	32	1	3	5	2	0	11	84	222	251
Tazewell	1,404	700	704	1,384	12	2	6	5	5	12	59	229	608	486
Union	226	116	110	222	4	0	0	1	6	2	7	45	102	63
Vermilion	1,008	534	474	874	113	8	13	11	4	7	51	189	474	272
Wabash	127	63	64	125	1	0	1	0	0	1	5	18	54	49
Warren	178	81	97	172	1	1	4	2	0	1	7	33	72	63
Washington	140	72	68	140	0	0	0	1	0	2	6	23	54	54
Wayne	204	102	102	204	0	0	0	3	1	2	5	33	87	73

White	253	137	116	251	2	0	0	0	1	1	5	43	108	95
Whiteside	716	350	366	683	6	2	25	6	1	4	22	112	284	287
Will	4,776	2,425	2,351	3,964	470	94	248	41	36	57	252	863	2,092	1,435
Williamson	807	416	391	792	13	1	1	9	5	6	27	136	391	233
Winnebago	3,056	1,527	1,529	2,595	329	43	89	35	22	27	166	585	1,298	923
Woodford	402	172	230	399	2	1	0	1	5	2	6	48	153	187

### Statewide Leading Causes of Death by Resident County, Illinois Residents, 2017

					State	ewide Leadin	g Causes of D	eath			
Resident County	Total Deaths	Diseases of heart (heart disease)	Malignant neoplasms (cancer)	Cerebro- vascular diseases (stroke)	Accidents (unintentional injuries)	Chronic lower respiratory diseases	Alzheimer's disease	Diabetes mellitus (diabetes)	Nephritis, nephrotic syndrome and nephrosis (kidney disease)	Influenza and pneumonia	Septicemia
ILLINOIS	109,726	25,393	24,147	6,021	6,017	5,734	4,021	2,927	2,566	2,402	1,815
Adams	814	193	170	39	26	44	48	24	21	24	28
Alexander	96	21	20	8	1	12	4	4	4	2	3
Bond	174	48	41	6	10	5	7	4	3	2	3
Boone	431	95	85	22	26	29	17	15	10	5	3
Brown	71	13	18	7	2	2	2	2	2	0	2
Bureau	387	94	95	21	20	27	8	4	15	18	8
Calhoun	51	12	14	1	3	4	4	2	2	0	1
Carroll	194	44	52	11	9	13	2	6	5	3	1
Cass	138	38	19	7	6	10	2	5	7	5	1
Champaign	1,368	281	310	53	85	68	74	25	23	34	18
Christian	408	99	91	16	23	23	8	14	14	8	8
Clark	185	53	40	13	7	7	8	4	4	2	2
Clay	155	37	28	6	6	11	4	5	14	6	0
Clinton	382	111	61	25	20	22	11	6	13	9	8
Coles	464	125	75	30	25	30	14	13	12	15	8
Cook Chicago	41,266 19,742	9,906 4,784	9,159 <i>4</i> ,268	2,506 1,195	2,258 1,261	1,685 <i>734</i>	1,352 538	1,161 <i>617</i>	951 <i>45</i> 2	908 <i>4</i> 36	621 313
Suburban Cook	21,524	5,122	4,891	1,311	997	951	814	544	499	472	308
Crawford	225	53	47	10	14	14	11	2	3	6	5
Cumberland	127	29	34	8	3	9	3	1	1	2	4

DeKalb	759	159	167	42	36	38	32	20	19	17	6
DeWitt	203	48	36	9	11	23	11	4	3	2	7
Douglas	232	54	54	14	12	17	13	2	8	1	4
DuPage	6,305	1,388	1,468	382	295	274	254	134	135	124	78
Edgar	228	45	37	12	11	28	5	7	6	4	2
Edwards	82	24	17	7	4	5	0	1	5	3	0
Effingham	363	92	49	24	13	26	23	13	6	9	5
Fayette	227	47	56	9	10	15	11	14	4	7	5
Ford	203	54	38	7	7	15	20	6	3	2	3
Franklin	515	115	114	23	32	41	30	16	5	15	13
Fulton	467	99	97	19	26	34	26	12	11	12	5
Gallatin	85	23	22	4	3	5	6	0	2	4	2
Greene	164	37	28	7	18	16	5	11	1	7	3
Grundy	429	84	105	11	15	39	10	15	6	15	8
Hamilton	117	32	24	6	4	12	6	3	3	2	1
Hancock	222	56	40	10	12	12	7	7	4	5	7
Hardin	80	18	23	1	3	6	2	3	4	1	1
Henderson	88	16	22	5	5	8	4	2	0	1	2
Henry	522	137	104	24	18	43	16	15	13	14	9
Iroquois	386	93	92	13	23	27	21	7	12	8	9
Jackson	499	113	104	24	35	28	12	21	13	11	11
Jasper	100	34	13	6	5	9	5	4	1	3	1
Jefferson	472	121	94	22	29	35	26	8	10	13	4
Jersey	303	73	44	14	25	22	17	14	8	5	6
Jo Daviess	259	63	76	13	16	8	9	5	5	1	4
Johnson	149	29	38	4	8	13	2	4	3	2	9
Kane	3,351	679	786	186	187	148	84	89	88	76	66
Kankakee	1,225	273	272	75	76	57	66	26	31	41	21
Kendall	561	113	143	33	43	30	12	18	15	11	5
Knox	670	166	148	32	23	66	31	17	10	17	13
Lake	4,693	932	1,165	216	235	227	192	145	97	74	89
LaSalle	1,354	317	281	53	95	85	69	39	27	38	13
Lawrence	194	46	31	8	8	11	14	8	7	4	6
Lee	392	90	96	27	17	32	17	8	8	9	5
Livingston	456	107	87	25	24	33	32	11	9	9	6
Logan	331	57	69	15	18	34	22	10	10	11	7

McDonough	316	74	71	22	15	16	9	4	9	8	6
McHenry	2,194	483	539	112	185	108	74	76	38	31	36
McLean	1,217	289	273	42	80	71	78	22	18	23	16
Macon	1,256	248	268	77	54	64	43	26	36	35	25
Macoupin	573	143	132	39	31	29	17	14	8	8	11
Madison	2,944	742	605	158	203	151	149	71	61	67	43
Marion	534	141	125	17	28	44	21	9	20	8	16
Marshall	185	44	47	15	8	4	9	3	4	6	4
Mason	204	38	49	8	10	16	12	9	9	4	4
Massac	217	57	36	13	9	19	14	3	11	4	3
Menard	139	28	28	4	7	9	1	5	4	4	4
Mercer	203	42	49	14	8	14	5	10	3	2	2
Monroe	302	73	56	23	10	8	7	9	9	7	10
Montgomery	354	80	79	17	20	27	24	6	8	7	4
Morgan	396	128	93	18	22	18	5	8	8	3	8
Moultrie	172	26	31	7	6	16	9	4	5	10	2
Ogle	541	125	123	43	28	44	33	10	15	2	4
Peoria	1,848	371	387	92	118	118	55	43	33	61	35
Perry	237	55	48	12	12	14	8	6	13	6	7
Piatt	181	45	32	12	12	13	8	4	1	4	4
Pike	216	39	41	14	10	25	0	8	3	7	8
Pope	62	20	16	0	3	6	1	2	2	3	2
Pulaski	67	22	14	1	1	5	3	1	3	2	1
Putnam	68	20	11	5	6	6	2	2	0	5	2
Randolph	371	91	69	31	22	26	6	11	10	7	7
Richland	206	51	31	7	9	16	0	6	11	8	4
Rock Island	1,633	400	333	65	74	104	41	27	38	41	38
St. Clair	2,674	624	533	140	162	168	80	83	72	48	72
Saline	395	62	88	21	18	38	8	7	20	16	11
Sangamon	2,059	440	426	108	121	94	60	55	33	48	45
Schuyler	89	24	24	7	5	3	0	2	0	6	0
Scott	65	11	18	2	4	3	1	1	2	4	0
Shelby	227	65	43	13	11	10	5	10	5	3	2
Stark	73	15	15	2	9	4	4	2	2	1	2
Stephenson	575	109	123	27	37	34	24	29	17	12	8
Tazewell	1,404	357	304	60	68	78	52	42	21	34	16

Union	226	59	53	9	7	8	3	0	6	10	7
Vermilion	1,008	230	215	54	62	95	14	36	31	21	14
Wabash	127	20	32	6	5	11	6	6	5	0	4
Warren	178	50	34	13	7	16	4	2	2	2	2
Washington	140	41	26	6	9	7	5	2	0	4	3
Wayne	204	53	39	12	13	15	4	6	5	1	2
White	253	62	51	6	9	25	18	2	13	6	6
Whiteside	716	198	132	34	20	59	35	14	11	16	9
Will	4,776	1,073	1,094	267	254	257	157	117	130	89	74
Williamson	807	153	166	32	41	61	25	23	23	20	35
Winnebago	3,056	689	661	145	196	196	159	64	88	45	33
Woodford	402	94	84	18	16	24	32	9	4	16	4

# **APPENDIX 3. SURVEY**

# **COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY**

#### **INSTRUCTIONS**

We want to know how you view our community, so we are inviting you to participate in a research study 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 Copyright 2018 by Laurence G. Weinzimmer. All rights reserved.

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# **COMMUNITY PERCEPTIONS**

1. W	hat would you say are the thr	ree (3) biggest <b>HEALTH ISS</b>	SUES	in our community?
	Aging issues, such as Alzheime	er's disease,		Early sexual activity
	hearing loss, memory loss, arth	hritis		Heart disease/heart attack
	Cancer			Mental health issues, such as
	Chronic pain			depression, hopelessness, anger
	Dental health (including tooth	pain)		Obesity/overweight
	Diabetes			Sexually transmitted infections
	Other			
2. W	hat would you say are the thr	ree (3) most UNHEALTHY	BEH <i>A</i>	AVIORS in our community?
	Angry behavior/violence			Drug abuse (legal drugs)
	Alcohol abuse			Lack of exercise
	Child abuse			Poor eating habits
	Domestic violence			Risky sexual behavior
	Drug abuse (illegal drugs)			Smoking
	Other			
3. W	Access to health services Affordable clean housing Availability of child care Better school attendance Good public transportation Healthy food choices	ee (3) most important factors	s that v	Job opportunities Less hatred & more social acceptance Less poverty Less violence Safer neighborhoods/schools Other
AC	CESS TO CARE			
	Collowing questions ask about any way.	your own health and health c	hoices.	Remember, this survey will not be linked to
	<b>lical Care</b> When you get sick, where do y	you go? (Please choose only	y one a	answer).
	linic/Doctor's office rgent Care Center	☐ Emergency Department ☐ Health Department		☐ I don't seek medical attention ☐ Other
2. In	the last YEAR, was there a t	time when you needed medic	cal care	e but were not able to get it?
	es (please answer #3)	☐ No (please go to #4: Prescr	ription	Medicine)

3. If you were not able to get med	ical care, why no	t? (Please choose all that apply).
☐ Didn't have health insurance. ☐ Couldn't afford to pay my co-pay Are there any other reasons why you of		☐ Too long to wait for appointment. ☐ Didn't have a way to get to the doctor edical care?
Prescription Medicine 4. In the last YEAR, was there a ti	ime when you ne	eded 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 preso	cription medicine	e, why not? (Please choose all that apply).
☐ Didn't have health insurance. ☐ Couldn't afford to pay my co-pay Are there any other reasons why you of		☐ The pharmacy refused to take my insurance or Medicaid. ☐ Didn't have a way to get to the pharmacy. rescription medicine?
<b>Dental Care</b> 6. In the last YEAR, was there a ti	ime when you ne	eded 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 denta	al care, why not?	(Please choose all that apply).
☐ Didn't have dental insurance. ☐ Couldn't afford to pay my co-pay Are there any other reasons why you of		☐ The dentist refused my insurance/Medicaid ☐ Didn't have a way to get to the dentist. dentist?
Mental-Health Counseling 8. In the last YEAR, was there a ti		eded 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 men	tal-health counse	ling, why not? (Please choose all that apply).
☐ Didn't have insurance. ☐ Couldn't afford to pay my co-pay ☐ Didn't have a way to get to a coun Are there any other reasons why you or	selor.	☐ The counselor refused to take my insurance/Medicaid ☐ Embarrassment.  mental-health counselor?
HEALTHY BEHAVIORS The following questions ask about y you in any way.	our own health a	nd health choices. Remember, this survey will not be linked to
<b>Exercise</b> 1. In the last WEEK how many tir lifting, fitness classes) that lasted f	• •	cipate in exercise, (such as jogging, walking, golf, weightnutes?
☐ None (please answer #2)	$\Box$ 1 – 2 times	3 - 5 times More than 5 times

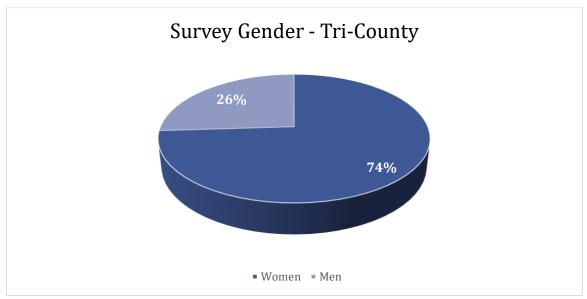
2. If you answer choose all that ap	-	estion about exercise	e, why didn't you	u exercise in the past week? (Please
	e fees to exercise. ess to an exercise fac		Γoo tired.	ise. are while I exercise.
	AY, how many ser	rvings/separate port t banana flavored puo		d/or vegetables did you have? An
☐ None (please a	answer #4)	1-2 3-5	☐ More than 5	
4. If you answer (Please choose al		nestions about fruits a	and vegetables, v	why didn't you eat fruits/vegetables?
☐ It is not import☐ Don't know ho☐ Don't know wh	w to prepare fruits/veg	egetables	Don't like fruits/ve Can't afford fruits/ Don't have a refrig bles?	vegetables
5. Where is your	primary source of	food? (Please choose	only one answe	r).
Grocery store Food pantry	☐ Fast food ☐ Farm/gard	Gas sta	tion	Food delivery program Other
6. What are the b	iggest challenges to	o eating healthy in or	ır community? (	Please choose all that apply).
☐ Knowledge ☐ Cost	Convenience Time	People don't care No healthy options	Physical cha	ullenge/Disability on
	•		•	e. (Please choose all that apply). go to question #9: Smoking.
☐ I do not have a☐ Allergy☐ Asthma/COPD☐ Cancer	ny health conditions	☐ Diabetes ☐ Heart pro ☐ Overweig ☐ Memory	ght	☐ Mental-health conditions ☐ Stroke ☐ Other
8. If you identified condition(s)?		n Question #7, how o	often do you follo	ow an eating plan to manage your Always Not applicable
<b>Smoking</b> 9. On a typical D	AY, how many cig	arettes do you smok	e, or how many t	imes do you use electronic vaping?
None	<u> </u>	<u> 5 - 8</u>	9 - 12	More than 12
<b>General Heal</b> 10. Where do yo		medical information	? (Please choose	only one answer).
Doctor	☐ Friends/family	☐ Internet	Pharmacy	☐ Nurse at my church

11. Do you have a personal physician/doctor?
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?
$\square$ None $\square$ 1–2 days $\square$ 3 – 5 days $\square$ 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?
$\square$ None $\square$ 1–2 days $\square$ 3 - 5 days $\square$ 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?
20. In the past 5 years, have you had a:  Breast/mammography exam
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
<ul><li>INTERNET</li><li>1. How interested would you be in health services provided through Internet or phone?</li></ul>
☐ 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?

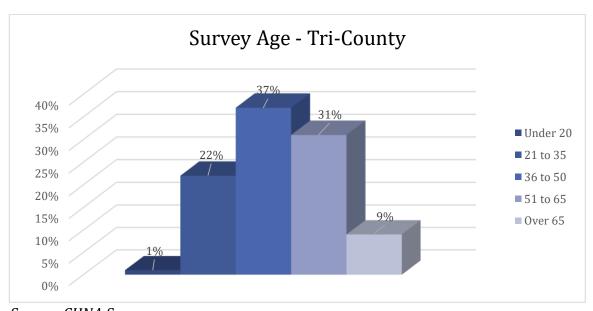
#### **BACKGROUND INFORMATION** 1. What county do you live in? Other ☐ Woodford Peoria ☐ Tazewell 2. What is your Zip Code? \_ 3. What type of health insurance do you have? (Please choose all that apply). ☐ Medicare Medicaid None (Please answer #4) Private/Commercial 4. If you answered "none" to the 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?

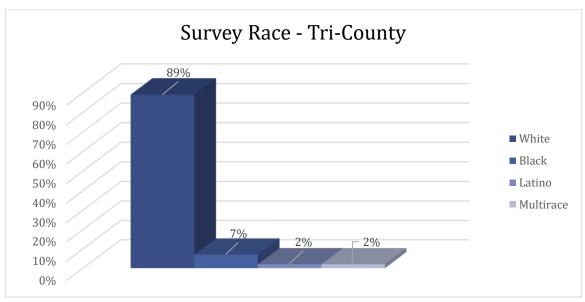
Thank you very much for sharing your views with us!

# **APPENDIX 4. CHARACTERISTICS OF SURVEY RESPONDENTS**

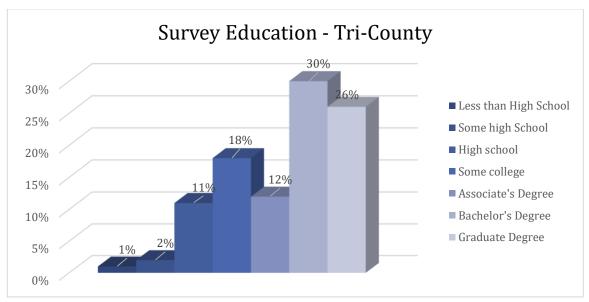


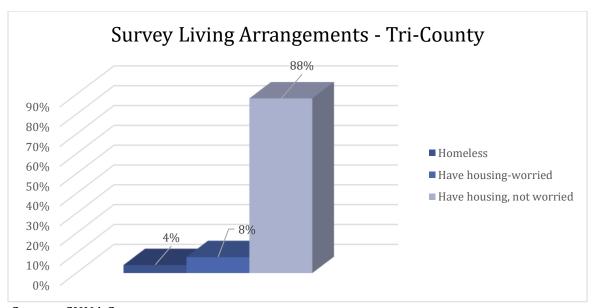
Source: CHNA Survey



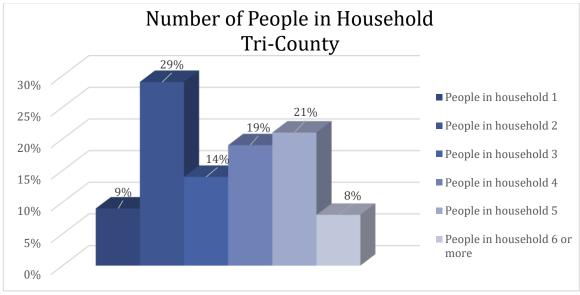


Source: CHNA Survey





Source: CHNA Survey



# **APPENDIX 5. RESOURCE MATRIX\***

	Access to Health Services	Aging Issues	Cancer	Healthy Eating/Active Living	Mental Health	Reproductive Health	Substance Use
Health Departments							
Peoria County Health Department	S (2); T (2)	S(1)	T(1);S(2)	T(3); S (3)	T(2) S(3)	T(3) S(3)	T(2) S(3)
Tazewell County Health Department	T (2); S (1)	S(1)	T(3); S(3)	T(3); S (3)	T(2) S(2)	T(1) S(2)	T(2) S(2)
Woodford County Health Department	S (1); T(1)	S(1)	T(1);S(2)	T(3); S (3)	T(1) S(2)	T(1) S(1)	T(1) S(2)
Hospital/Clinics							
Advocate Eureka Hospital	S(3) T (3)	S (1)	T(2) S(2)	T(2) S( 2)	T(3) S(3)	T(1) S(1)	T(1) S(2)
Heartland Health Services	S(3);T(3)	S(1)	S(2);T(3)	S(2):T(2)	S(3);T(3)	S(2);T(2)	S(3);T(3)
Hopedale Medical Complex	S(3) T (3)	S (1)	T(2) S(2)	T(2) S( 2)	T(3) S(3)	T(1) S(1)	T(1) S(2)
OSF Saint Francis Medical Center	S(3);T(3)	S(2);T(3)	S(3);T(3)	S(2);T(2)	S(3);T(3)	S(2);T(2)	S(3);T(3)
UnityPoint Pekin Campus	S(3); T(3)	S(1)	S(1);T(1)	S(3); T(3)	S(1);T(1)	S(1); T(1)	S(1); T(1)
UnityPoint Peoria Campus	S(3); T(3)	S(1); T(1)	S(3);T(3)	S(3); T(3)	S(3);T(3)	S(1); T(2)	S(3); T(3)
Community Agencies							
Heart of Illinois United Way	S(3); T(3)	S(3)	S(3)	S(3)	S(3)	S(3)	S(3)

<sup>\*</sup>Note: S - indicates strategic focus, T- indicates tactical focus

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

# **APPENDIX 6. DESCRIPTION OF COMMUNITY RESOURCES**

#### **Health Departments**

### **Peoria City/County Health Department**

The goal of the Peoria City/County Health Department is to protect and promote health and prevent disease, illness and injury. Public health interventions range from preventing diseases to promoting healthy lifestyles and from providing sanitary conditions to ensuring safe food and water.

#### **Tazewell County Health Department:**

The Tazewell County Health Department promotes and protects the public's health and wellbeing through programs targeting the following concerns: dental, emergency planning, environmental, health promotion, MCH/WIC, nursing, and concerns for the 21<sup>st</sup> century.

### **Woodford County Health Department**

The Woodford County Health Department sponsors programs in the following areas: maternal and child health, infectious diseases, environmental health, health education, and emergency preparedness.

#### **Hospitals/Clinics**

#### **Advocate Eureka Hospital (Eureka Hospital)**

Advocate Eureka Hospital is one of 27 hospitals in the Advocate Aurora Health system. Advocate Aurora Health is the 10th largest not-for-profit, integrated health system in the United States.

As an Advocate Aurora Health Hospital, Eureka Hospital embraces the system purpose of "We help people live well". Eureka Hospital is a 25-bed facility that has served and cared for the people of Woodford County and the surrounding area since 1901. Eureka Hospital is the only hospital in Woodford County and is a critical access hospital as certified by the Centers for Medicare and Medicaid Services. By functioning in this capacity, Eureka Hospital plays a vital role in serving the health needs of a primarily rural area.

#### **Heartland Health Services**

The Heartland Health Services is a Federally Qualified Health Clinic which provides accessible, high quality, comprehensive primary health care services for the medically underserved, regardless of ability to pay, and to conduct high quality programs in health professions education through collaborative community partnerships.

#### **Hopedale Medical Complex**

Hopedale Hospital is a Critical Access Hospital with a total of 25 beds that are interchangeable between our acute care and swing bed services. Hopedale Hospital offers 24 hour emergency services, an intensive care unit, general and advanced vascular surgery, orthopedic surgery, cardiopulmonary services, diagnostic radiology imaging services, and numerous outpatient services.

#### **OSF Healthcare Saint Francis Medical Center**

OSF Saint Francis Medical Center is the fourth largest medical center in the state of Illinois. With a medical staff of more than 800 physician and 616 patient beds, it is a major teaching affiliate of the University of Illinois College of Medicine at Peoria, the area's only Level 1 Trauma Center and tertiary care medical center, and home to the Children's Hospital of Illinois. Specific centers of interest include the Pediatric Diabetes Resource Center at the Children's Hospital, Joslin Diabetes Center Affiliate, Saint Francis Community Clinic, Mobile MRI/PET, community screenings, Faith Community Nursing and the CARE-A-VAN.

# UnityPoint Health - Central IL (including Methodist, Proctor and Pekin campuses, UnityPlace, and UnityPoint Clinics]

UnityPoint Health – Central IL includes 646 licensed beds across three hospital campuses with over 5,000 employees and over 750 participating board-certified providers in the Tri-County area; UnityPlace including UPH Behavioral Health Services, the Human Service Center, and Tazewood Center for Wellness; and UnityPoint Clinic including over 50 clinical sites, seven urgent care centers, and over 250 employed physician and advanced practitioner providers. UPH – Central IL also includes two University of Illinois College of Medicine programs in Family Practice and Psychiatry; Methodist College with over 600 students in baccalaureate, masters and certification programs; UnityPoint at Home home health, hospice and DME services; HULT Center for Healthy Living; Illinois Institute for Addiction Recovery; and other OP services, joint ventures, and partnerships throughout the community. Specific centers of interest for the community impact include UPH Methodist Wellmobile, UPH Mammography and High Risk Breast Clinics, UPH Wellness Center programs, HULT Center for Healthy Living educational programs; and UnityPoint Health In-School Health programs at over 25 locations.

#### **Community Agencies**

#### **Heart of Illinois United Way**

The Heart of Illinois United Way brings together people from business, labor, government, health and human services to address community's needs. Money raised through the Heart of Illinois United Way campaign stays in community funding programs and services in Marshall, Peoria, Putnam, Stark, Tazewell and Woodford Counties.

# **APPENDIX 7. PRIORITIZATION METHODOLOGY**

#### 5-STEP PRIORITIZATION OF COMMUNITY HEALTH ISSUES

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

### Step 2. Briefly Discuss Relationships Among Issues

#### Step 3. Apply "PEARL" Test from Hanlon Method<sup>3</sup>

Screen out health problems based on the following feasibility factors:

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

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

Acceptability - Will a community accept the program? Is it wanted?

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

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

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

# <u>Step 5.</u> Prioritize Issues. Use a weighted-scale approach (1-10 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
- **2. Seriousness** 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
  - Economic impact of the issue for the community
  - Urgency of issue to improve population health
  - Future trends and forecasts
- 3. Effectiveness can management of the issue make a difference in the community?

Considerations include, but are not limited to:

- Potential for impact through collaboration
- Community support for the issue
- Is the issue measurable to assess impact

<sup>3 &</sup>quot;Guide to Prioritization Techniques." National Connection for Local Public Health (NACCHO)

# **APPENDIX 8: ADDITIONAL INFORMATION FOR PRIORITIZATION**

20%

 $15\% \\ 10\%$ 

5%

14%

#### Access to Care:

#### **CHNA:**

Respondents were asked, "Was there a time when you needed care but were not able to get it?" Survey results are shown to the right.

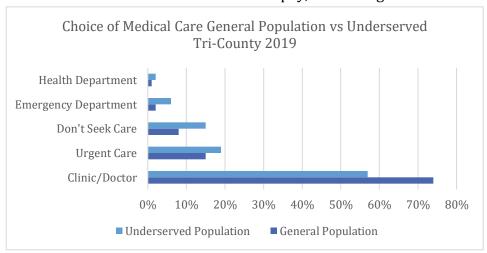
When selecting the three most important issues impacting well-being in

the community, access to health was the second highest rated with 47% of respondents.

The top reasons that people were unable to access care were cost of co-pay, not having insurance or

having insurance that the doctor would not accept, and transportation.

When comparing the general population to the underserved population on the source of medical care respondents use when sick, results show a large decrease in Clinic/Doctor use for underserved



Did Not Have Access to Care Tri-County 2019

13%

16%

12%

individuals with an increase in all other sources including not seeking care at all.

# **County Health Rankings:**

County Health Rankings looks at the ratio of population to primary care physicians, dentists, and mental health providers. Tazewell and Woodford counties were worse than the state of Illinois in every category of provider.

Location	Primary Care	Dentists (2016)	Mental Health
	Providers (2015)		Providers (2017)
Illinois	1240:1	1330:1	530:1
	Range 12760:1 - 750:1	Range 16380:1 - 620:1	Range 19630:1 - 150:1
Peoria	850:1	1280:1	470:1
Tazewell	2070:1	2100:1	620:1
Woodford	1780:1	5590:1	4890:1

#### **Peoria Economic Scorecard:**

When comparing Peoria to 11 similar Midwest cities an Economic scorecard and ranking was developed from 2013-2017. While Peoria ranked  $1^{st}$  in these cities for health care access in the 2013 scorecard, by 2017 they had dropped to the  $7^{th}$  place rank.

### **Community Commons:**

The Federally Qualified Health Centers (FQHCs) are community assets that provide health care to vulnerable populations and receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved. The table below shows the low rates of FQHCs that the tri-county as a whole has compared to the state and national levels as of 2018.

Report Area	Population	# FQHCs	Rate of FQHCs per 100,000 Population
Tri-County	360,552	8	2.22
Peoria	186,494	6	3.22
Tazewell	135,394	2	1.48
Woodford	38,664	0	0
Illinois	12,830,632	364	2.84
United States	312,471,327	8,329	2.67

### **Economic Impact:**

Nationally, the average E.R. visit costs **\$580**, whereas the average doctor's office visit costs **\$130** (Blue Cross Blue Shield)

#### **Social Determinants:**

In the CHNA access to medical care and prescription medications tends to be lower for Black people and Peoria county residents. Access to dental care tends to be lower for Black people, Latino people, and Peoria county residents. Access to counseling tends to be lower for Black people.

# **Healthy People 2020 Interventions:**

There are **24** evidence-based interventions listed pertaining to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to use.

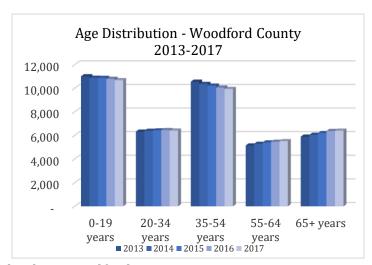
Respondents selecting health access to be an important health issue, Tazewell and Woodford counties having worse provider ratios than Illinois, the low rate of FQHCs in the tri-county compared to Illinois and the nation, and the varying use of different medical care in the underserved populations caused Access to Care to come forward as a top priority.

# **Aging Issues:**

#### **CHNA:**

The age distribution in the tri-county has shown a steady increase in individuals in the age groups of 55-64 and 65+ since 2013 according to US Census.

Survey respondents were asked to self-identify any health conditions, of which 6% reported memory problems.



Alzheimer's disease was the 3<sup>rd</sup> leading cause of death in Woodford county in 2017.

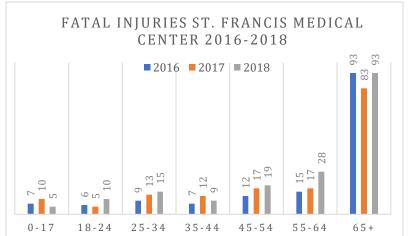
36% of respondents identified aging issues as among their top 3 concerns for health issues facing the community.

#### **OSF SFMC EPIC:**

As shown in the graph to the right, fatal injuries increase over the age of 44 with a large increase for individuals 65 and older.

#### Alzheimer's Association:

Illinois is projected to see an 18.2% increase in Alzheimer's disease incidence between 2018 and 2025.



#### **IDPH:**

According to IDPH data from 2016-2017 show that the tri-county region's Alzheimer's rates are similar to that of Illinois.

# **County Health Rankings:**

Based on 2016 data, the percent of the population over age 65 is higher in the tri-county than in Illinois: Illinois 14.6%, Peoria 15.7%, Tazewell 18%, and Woodford 17.2%.

Area	Year	Count	Rate	
Illinois	2016	19,350	1.7	
Peoria	2016	309	1.6	
Tazewell	2016	227	1.6	
Woodford	2016	49	1.9	
Illinois	2017	19,265	1.6	
Peoria	2017	331	1.7	
Tazewell	2017	233	1.7	
Woodford	2017	33	1.3	

### **Economic Impact:**

Alzheimer's and dementia care in the U.S. will cost an estimated \$277 billion. According to a 2015 study, the average cost of dementia care (over a five-year period) was \$287,038, compared to \$175,136 (heart disease) and \$173,383 (cancer).

## **Healthy People 2020 Interventions:**

There are **21** evidence-based interventions listed that would pertain to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to implementation.

Due to the increase of the tri-county population over the age of 65, the increased concern from the community about aging issues, the high incidence of fatal injuries in this population, and the projected increase in Alzheimer's disease and dementia, Aging Populations has come forward as a top priority.

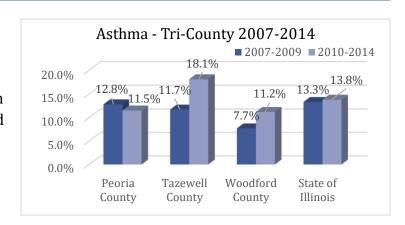
#### **Asthma:**

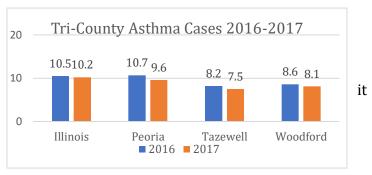
#### **CHNA:**

The percentage of residents that have asthma in the Tri-County area has decreased in Peoria and increased in Tazewell and Woodford County. According to the Illinois BRFSS, asthma rates in Peoria County (11.5%) and Woodford County (11.2%) are lower than the State of Illinois (13.8%), while Tazewell County is now higher (18.1%).



Using ICD-10 codes from IDPH discharge data can be seen that in all counties of the tricounty chronic asthma conditions have decreased from 2016-2017 causing all three counties to now be under state averages.





### **OSF SFMC EPIC:**

HP2020 objectives break the issue of asthma down by age, deaths, and type of visit. The table to the right shows the current OSF rates based on the HP2020 objectives.

### **National Economic Impact:**

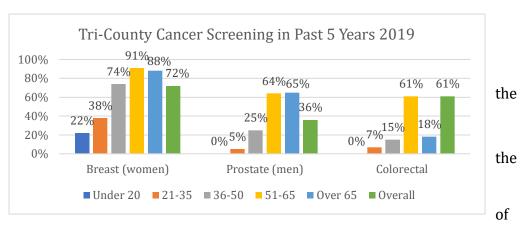
The yearly cost of asthma in the U.S. is around **\$56 billion**. The direct costs make up almost **\$50.1 billion**. Hospital stays are the largest part of that cost. Indirect costs make up **\$5.9 billion**. This includes lost pay from sickness or death and lost work output from missed school or work days (EPA).

Deaths	2016	2017	2018
0-34			
Asthma			
Rate	6.6%	1.8%	3.8%
35-64			
Asthma			
Rate	7.2%	4.9%	5.6%
65+			
Asthma			
Rate	4.3%	3.4%	3.2%
<b>ED Visits</b>	2016	2017	2018
0-5 Asthma			
Rate	0.6%	0.6%	0.5%
6-64			
Asthma			
Rate	0.4%	0.3%	0.3%
65+			
Asthma			
Rate	0.01%	0.01%	0.01%

#### Cancer:

#### **CHNA:**

Malignant Neoplasms were  $1^{st}$  or  $2^{nd}$  top leading causes of death in the tricounty in 2017 as well as  $2^{nd}$  leading in Illinois.



In the past five years 72%

women had a breast screening, 36% of men had a prostate screening, and 61% women and men over the age of 50 had a colorectal screening. After stratifying based on screening recommended ages by the American Cancer Association in which women should receive breast cancer screenings by 45, men should start receiving prostate screenings at 50, and everyone over the age of 45 should receive colorectal screenings, percentages of screening increased as shown.

### **Lung Cancer:**

#### **IDPH:**

Lung cancer is the number two most common cancer among men and women in Illinois. While Woodford County's rate is below Illinois's rate, both Peoria and Tazewell counties are above it.

Lung & Bronchus Cancer Incidence Rates 2011-2015		
Illinois 66		
Peoria	86.9	
Tazewell	84.3	
Woodford	56.5	

### **Community Commons:**

As of 2014 the tri-county was above the state and national levels of cigarette expenditures as a percentage of total household expenditures. While state and national levels are between 1.5-1.56%, the tri-county is at 1.88%.

The table shows the estimated percent population over 18 that were currently smoking cigarettes between 2006-2012. The tri-county and all individual counties are above the national ageadjusted percentage while only Woodford county is below the state percentage.

Report Area	% Population Smoking	
	Cigarettes (Age-Adjusted)	
Tri-County	19.1%	
Peoria	18.6%	
Tazewell	19.9%	
Woodford	18.3%	
Illinois	18.4%	
United States	18.1%	

### **Breast Cancer:**

#### **IDPH:**

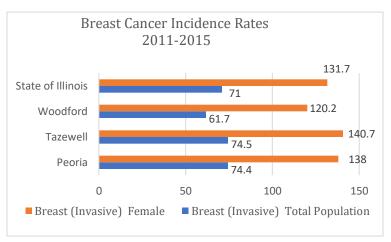
Breast cancer is the most common cancer in women in Illinois. Woodford county is below the state rate.

## **Partnership-Cancer Priority:**

The Partnership for a Healthy Community Breast Cancer group has

increased screenings by 1.98% from 2017-2018 with a total of 41,113 screenings in 2018. The highest

number of screenings occurred between the ages of 50-69 years. Of the 41,113 screenings in 2018, 574 of these individuals received a cancer diagnosis and referred to providers.



#### **National Cancer Institute:**

Both Peoria and Woodford are above the state and national breast cancer mortality rates from 2011-2015.

Breast Cancer Age-Adjusted		
<b>Death Rates 2011-2015</b>		
Peoria	22.7	
Tazewell	18.7	
Woodford	24.4	
Illinois	22.4	
HP2020	20.7	
National	20.9	

#### **Colorectal Cancer:**

#### **IDPH:**

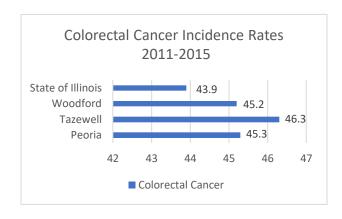
Colorectal cancer is the third most common cancer among men and women in Illinois. While Woodford County's incidence rate is below Illinois's rate, both Peoria and Tazewell counties are above it.

#### **National Cancer Institute:**

All three counties are above the state, national, and HP2020 age-adjusted colorectal cancer death rates as shown in the table.

Colorectal Cancer Age-Adjusted Death Rates 2011-2015

Peoria	17.6
Tazewell	17.6
Woodford	20.7
Illinois	15.6
HP2020	14.5
National	14.5



#### **Prostate Cancer:**

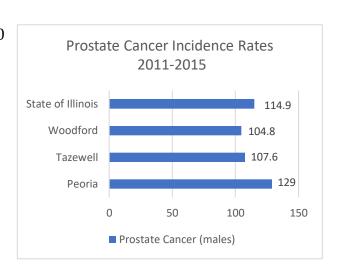
#### **IDPH:**

Prostate cancer is the most common cancer for men in Illinois. Peoria county's incidence rate for prostate cancer is higher than that of the state of Illinois.

### **National Cancer Institute:**

The tri-county is below the state, national, and HP2020 age-adjusted death rates for prostate cancer. Woodford county rates are not shown in the table below due to insufficient number of deaths.

Prostate Cancer Age-Adjusted Death Rates 2011-2015		
Peoria	19.8	
Tazewell	14.9	
Woodford	-	
Illinois	20.5	
HP2020	21.8	
National	19.5	



# **Economic Impact:**

The direct medical costs (total of all health care costs) for cancer in the US in 2015 were **\$80.2 billion** (Agency for Healthcare research and Quality).

## **Healthy People 2020 Interventions:**

There are **74** evidence-based interventions listed pertaining to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to use.

Lung cancer incidence rates that are higher than the state of Illinois, Breast cancer and Colorectal cancer incidence and death rates that are higher than state or national rates, and screening or smoking interventions being available caused Cancer to come forward as a top priority.

### **Gun Related Death:**

#### **OSF SFMC EPIC:**

Using the ICD-10 codes that reflect the HP2020 objectives OSF St. Francis Medical Center looked at firearm deaths from 2016-2018. The HP2020 baseline data for reducing firearm-related deaths is 10.3 deaths per 100,000 population in 2007 with a target of 9.3 deaths per 100,000. The table below shows OSF current rates are rising but are still at very low percentages.

	2016	2017	2018
Deaths	6	7	12
<b>Total Population</b>	188528	194580	195893
Rate	0.003%	0.004%	0.006%

## **County Health Rankings:**

According to 2012-2016 County Health Ranking data the number of deaths due to firearms per 100,000 population in Illinois counties ranges from 3-22 with the average rate in Illinois being 10. Rates and number of fatalities are shown in the table below.

Location	# Firearm Fatalities	Firearm Fatality Rate
Illinois		10 (Range 3-22)
Peoria	104	11
Tazewell	48	7
Woodford	18	9

# **National Economic Impact:**

More than 100,000 people are shot each year in the US at a total cost of \$2.8 billion in hospital charges, a recent study. If lost wages and hospital charges are considered together the annual cost of shootings in the US could be as high as \$45 billion (Journal of Health Affairs.

# **Healthy Living - Obesity:**

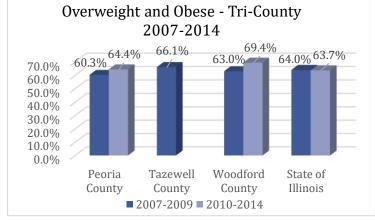
# **Obesity:**

### **CHNA:**

Being Overweight was the number one health condition that people reported having on the 2019 CHNA with 39% of individuals.

#### **BRFSS**:

In the tri-county the number of individuals



diagnosed as obese or overweight has increased from 2007-2009 and 2010-2014. Between the years of 2010-2014 all three counties in the tri-county had higher percentages of obesity and being overweight compared to the state of Illinois.

## **Illinois Youth Survey:**

Between 11-17% of  $8^{th}$  to  $12^{th}$  graders who participated in the 2018 Illinois Youth Survey reported a BMI in the category of "Overweight" while 6-13% of  $8^{th}$  to  $12^{th}$  graders reported a BMI in the category of "Obese". The prevalence of obesity in Illinois students in 2016 was 11%.

# **County Health Rankings:**

28% of adults in Illinois have adult obesity (report a BMI of 30 or more) compared to 30-32% of people in Peoria, Tazewell, and Woodford counties according to County Health Rankings.

# **Community Commons:**

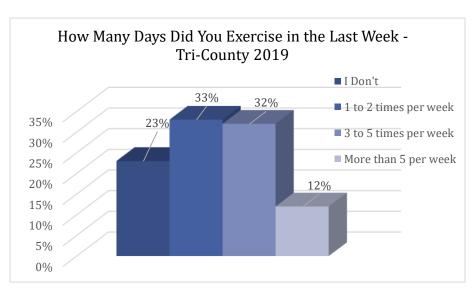
In 2015 31.8% of tri-county adults were obese (BMI>30). This is higher than the state and national obesity percentages. Woodford county is the only county within the tri-county that was below the state and national percentages as shown in the table.

Report Area	Percent Adults with BMI >30 (Obese)
Tri-County	31.8%
Peoria	32.5%
Tazewell	32.2%
Woodford	27.3%
Illinois	28.4%
United States	28.3%

# **Physical Activity:**

#### **CHNA:**

When asked "How Many Days Did You Exercise in the Last Week" 23% of respondents answered that they did not exercise at all while 12% indicated that they exercise more than 5 days a week.



## **Illinois Youth Survey:**

The percentage of students reporting that they exercised at least 60 minutes DAILY in the past week in the tri-county ranged from 22-37% depending on county and grade compared to Illinois students in 2016 that ranged between 22-29%.

## **County Health Rankings:**

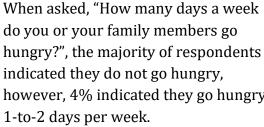
Physical inactivity or the percentage of adults 20 and over reporting no leisure-time physical activity is 22% in Illinois compared to 24-26% of adults in Peoria, Tazewell, and Woodford counties.

### **Nutrition**

# **Food Insecurity:**

#### **CHNA:**

do vou or vour family members go hungry?", the majority of respondents indicated they do not go hungry, however, 4% indicated they go hungry 1-to-2 days per week.



### Free and Reduced Price Meal Eligibility 65% 60% 55% 50% 45% 40% 35% 30% 25% 20% 15% 10% 5%

Tazewell

**2016** 

**2017** 

How Often Do You Go Hungry Tri-County 2019

4%

0%

■ None

0%

■ 1 to 2 days per week ■ 3 to 5 days per week

■ More than 5 days

Woodford

96%

100%

80%

60%

40%

20%

0%

### **State Board of Education:**

The Illinois State Board of Education data shows the percentage of students that are eligible for free or reduced price meals in schools in the tri-county. As shown in the graph while little change has occurred, similar trends are found in each of the counties with the highest percent of eligible students is in Peoria county.

### **WIC Survey:**

Of WIC participants surveyed within the three counties, 53.8% answered "Never True" when asked how often the statement "We run out of food every month" is true. This was followed by 36.5% of participants saying this is "Sometimes True" and 7.4% responding "Often True."

Peoria

**2015** 

0%

Answer Choice	Peoria (399)	Tazewell (99)	Woodford (50)	Tri-County (548)	Averages
A.	11.0% (44)	7.1% (7)	4.0% (2)	9.7% (53)	7.4%
В.	36.8% (147)	33.3% (33)	40.0% (20)	36.5% (200)	36.7%
C.	52.1% (208)	59.6% (59)	56.0% (28)	53.8% (295)	55.9%

## **County Health Rankings:**

While 12% of the Illinois population are considered "Food Insecure" according to County Health Rankings, using the same measurement the population that is considered "Food Insecure" is 16% in Peoria, 10% in Tazewell, and 9% in Woodford County.

## 1. Illinois Youth Survey:

Students were asked, "During the past 30 days, how often did you go hungry because there was not enough food in your home?" They could choose between the answers: Never, Rarely, Sometimes, Most of the time, or Always. 23-39% of students reporting ever going hungry in the last 30 days.

#### Percent of Students Who Reported "Never"



# **Healthy Eating:**

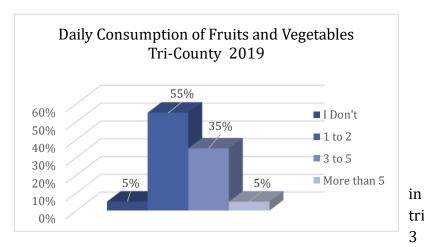
### 2. CHNA:

When asked about consumption of fruits and vegetable servings per day 60% of CHNA survey

respondents reported that they had no consumption or low consumption (1-2 servings) while only 5% reported having more than 5 servings per day.



25-45% of students reported eating 2 or more servings of fruit in the last week compared to 34-44% of Illinois students 2016 among 8th-12th grade youth. The county also had 9-16% reporting eating



tri-

or more servings of vegetables a day in the past week compared to 14-18% of Illinois students in 2016.

# 4. County Health Rankings:

The percentage of the population that are low-income and do not live close to a grocery store and in turn have limited access to healthy foods is 4% in Illinois. In Peoria, Tazewell, and Woodford this percentage ranges between 2-10%.

## 5. Community Commons:

Data from 2014 shows that the tri-county fruit/vegetable expenditure as a percentage of total food-at-home expenditures is 11.42%. This is lower than the 12.52% state percentage and 12.68% national percentage.

## **Economic Impact:**

The estimated annual medical cost of obesity in the U.S. was **\$147 billion** in 2008 (CDC). The medical costs for people who are obese were **\$1,429 higher** than those of normal weight (CDC). Obesity costs the Illinois health care system and taxpayers nearly **\$3.4 billion** per year (Illinois Alliance to Prevent Obesity).

The annual cost of food insecurity is:

- \$130.5 billion due to illness costs linked to hunger and food insecurity
- **\$19.2 billion** value of poor educational outcomes and lower lifetime earnings linked to hunger and food insecurity
- \$17.8 billion charitable contributions to address hunger and food insecurity
- Hunger costs \$542 for every citizen (Center for American Progress, Hunger in America)

#### **Social Determinants:**

In the CHNA the prevalence of hunger has a significant relationship with Black people, those with less education, lower income, Peoria county residents and those in unstable (e.g. homeless) housing environment.

# **Healthy People 2020 Interventions:**

There are **58** evidence-based interventions listed that would pertain to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to implementation.

Obesity being the top health condition respondents reported having, all counties in the tri-county being above the state and national obesity rates, a low percentage of fruit and vegetable consumption in the tri-county, and the high percentages of individuals going hungry or being food insecure all caused Nutrition and Obesity to come forward as top priorities.

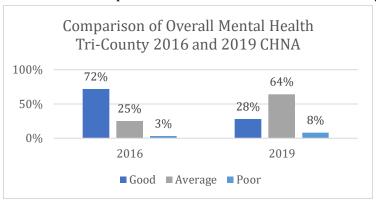
### **Mental Health:**

#### **CHNA:**

The CHNA survey asked respondents to rate the three most important health issues in the community

out of 10 options. An overwhelming 69% rated mental health as an important health issue in the community.

The graph to the right shows a comparison between the 2016 and 2019 CHNA survey results for the self-assessment of overall mental health. In 2016, 72% of survey respondents answered "Good" compared to only 28% of 2019 respondents.



# **Illinois Youth Survey:**

8<sup>th</sup>-12<sup>th</sup> grade students were asked if during the past 12 months if they ever felt so sad or hopeless almost every day for two weeks or more in a row that they stopped some usual activities. As shown in the table between 18-37% of students answered yes.

	8th	10th	12th
Peoria	37%	34%	32%
Tazewell	34%	33%	34%
Woodford	18%	27%	24%

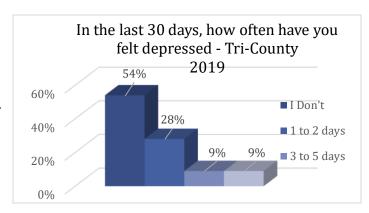
## **County Health Rankings:**

Poor Mental Health Days: Average # of Mentally Unhealthy Days Reported in Past 30 Days		
(Age Adjusted) 2016		
Illinois County Range 3.1-4.7		
Illinois	3.5	
Peoria County	4.0	
Tazewell County	3.5	
Woodford County	3.3	

# **Depression:**

#### **CHNA:**

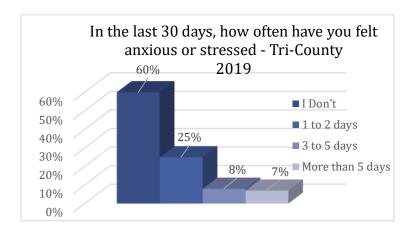
When asked how often they have felt depressed in the past 30 days, 46% of respondents said that they felt depressed at least 1 to 2 days in the past 30 days with 9% of these respondents experiencing depression more than 5 days in the past 30 days.



# **Anxiety:**

#### CHNA:

When asked how often they have felt anxious or stressed in the past 30 days, 40% of respondents said that they felt anxious or stressed at least 1 to 2 days in the past 30 days with 7% of these respondents experiencing anxiety or stress more than 5 days in the past 30 days.



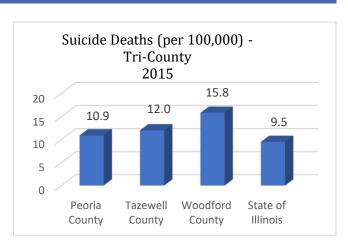
### Suicide:

#### **CHNA:**

There was a higher incidence of suicide in the Tri-County compared to State of Illinois averages in 2015.

## **County Health Rankings:**

While the Illinois suicide rate is 11.7 per 100,000, from 2012-2016 each county had higher rates. Rates within this period were 12.4 in Peoria, 13.5 in Tazewell, and 23.5 in Woodford County.



County Suicides IVDRS 2015-2016			
	2015	2016	
Peoria	32	39	
Tazewell	-	15	

# Illinois Violent Death Reporting System (IVDRS):

During 2015-2016 over 80% of the suicides in the tri-county

occurred over the age of 20. 100% in Tazewell and 77% in Peoria during 2016 were white males.

Firearm related suicides were the number one cause of suicide in 2016 with 36% Peoria, 37.4%

Tazewell, and 45% Woodford county.

# **Illinois Youth Survey:**

In the 2018 Illinois Youth Survey students were asked if they seriously considered attempting suicide in the past 12 months.

Percent of IYS Participants that have Seriously Considered Suicide in Past 12 Months, 2018			
	10 <sup>th</sup> Grade Students	12th Grade Students	
Peoria County	17%	19%	
Tazewell County	19%	20%	
Woodford County	14%	14%	

Results show between 14-20% of students have considered suicide.

# **Community Commons:**

From 2012-2016 the tri-county as a whole and individually all had higher age-adjusted suicide rates than Illinois and all except Peoria county were higher than the national rate as shown in the table.

2012-2016 Suicide Rates		
Report Area	Age-Adjusted Death Rate	
Tri-County	14	
Peoria	12.4	
Tazewell	13.5	
Woodford	23.5	
Illinois	10.26	
United States	13	

### **Economic Impact:**

Each year, serious mental illness costs Americans **\$193 billion** in lost earnings (American Journal of Psychiatry). Much of the economic burden of mental illness is the loss of income due to unemployment, expenses for social supports, and a range of indirect costs due to a chronic disability (NIH). The average cost of one suicide was **\$1,329,553** with 97% being due to lost productivity. Total cost of suicides and suicide attempts costs **\$93.5 billion**.

#### **Social Determinants:**

In the CHNA depression is more likely for those with less education, lower income, Peoria county residents, and those in an unstable (e.g. homeless) housing environment. Stress and anxiety tend to be rated higher for younger individuals, those with less education, those with less income and those in an unstable (e.g. homeless) housing environment. In the tri-county suicide rates tend to be higher for white males over the age of 20.

## **Healthy People 2020 Interventions:**

There are **14** evidence-based interventions listed that would pertain to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to implementation.

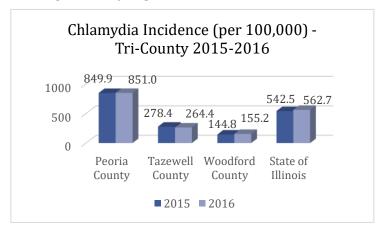
Suicide incidence and rates in the tri-county that are above national and Illinois rates, a decrease in respondents overall mental health, and concerning percentages of depression, anxiety, and thoughts of suicide has caused Mental Health and Suicide to come forward as top priorities.

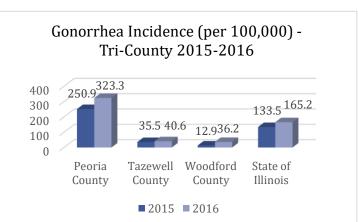
# **Reproductive Health:**

# **Sexually Transmitted Infections:**

#### **CHNA:**

The data for the number of infections of gonorrhea in the Tri-County indicate an increase in 2015-2016, while the State of Illinois also experienced a significant increase. Note that the rates in Peoria County are significantly higher than Illinois.



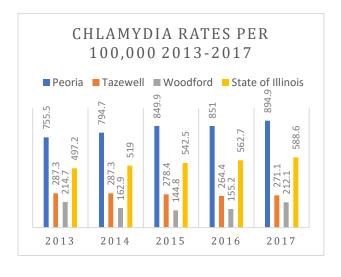


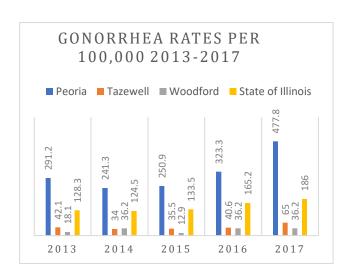
## **County Health Rankings:**

County Health Ranking data looks at chlamydia incidence rates for 2015. The Illinois counties range from 95.5 to 1,450 with the Illinois average being 540.4. For comparison the tri-county range for 215 was 142.9 to 846.2.

#### **IDPH Data:**

Time trend data below shows the increase of STI rates in Peoria and Illinois in the past few years.

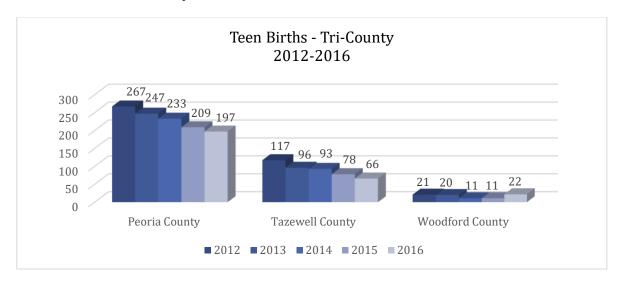




### **Teen Birth Rate:**

#### **CHNA:**

According to IDPH Teen Birth Rates have continued to decrease in Peoria and Tazewell counties between 2012-2016. While Woodford county increased in 2016, the rates are significantly lower than Peoria or Tazewell county.



# **County Health Rankings:**

According to County Health Rankings the number of teen (15-19 years old) births per 1,000 female population from 2010-2016 ranges from 10-64 throughout Illinois with an overall average in Illinois being 26. The tri-county range is between 14-39 with Peoria being at the high end and Woodford county being at the low end and Tazewell county at 25.

# **Low Birth Weight:**

#### **IDPH:**

IDPH breaks low birth weight into very low birth weight (less than 1500 grams), moderately low birth weight (1500-2499 grams) and normal birth weight (2500 grams or greater). The table below shows this breakdown of the two categories or low birth weight per 100 live births in 2016. As shown Peoria has a higher low birth weight than the state of Illinois.

	Very Low Birth Weight		Low Birth Weight	
	Count	Rate	Count	Rate
Illinois	2368	1.5	10620	6.9
Peoria	33	1.3	194	7.6
Tazewell	12	0.8	76	5.1
Woodford	1 to 10		20	4.9

#### **OSF SFMC EPIC:**

OSF St. Francis Medical Center EPIC data was collected using HP2020 data objectives. The HP2020 target is 7.8% for low birth weight with a baseline of 8.2% in 2007. The HP2020 target for very low birth weight had a baseline of 1.5% in 2007 with a target of 1.4 percent. Below shows OSF data for low birth weight and very low birth weight as one group.

	2016	2017	2018
<2500 gms	352	422	406
Live Births	2987	3111	3177
Rate	11.8%	13.6%	12.8%

## **County Health Rankings:**

Data from 2010-2016 looking at the percentage of live births with low birth weight (weight less than 2500 grams) found that Illinois has an average rate of 8% with a county range of 5-11%. Within the tricounty both Tazewell and Woodford county are at 6% with Peoria county above the state average with 9%.

### **Economic Impact:**

Premature birth costs the nation \$26.2 billion each year (March of Dimes). Low birth weight and very low birth weight babies that survive the first year incur medical bills averaging \$93,800 (March of Dimes). The direct cost of STDs, including HIV, among all age-groups was estimated to be \$9.3-15.5 billion in the United States in the mid-1990s, adjusted to year 2000 dollars. Most of the costs of teen childbearing are associated with negative consequences for the children of teen mothers and include: \$1.9 billion for increased public health care costs, \$2.3 billion for increased child welfare costs, \$2.1 billion for increased costs for state prison systems (among adult sons of teen mothers), and \$2.9 billion in lost tax revenue due to lower taxes paid by the children of teen mothers over their own adult lifetimes (CDC).

# **Healthy People 2020 Interventions:**

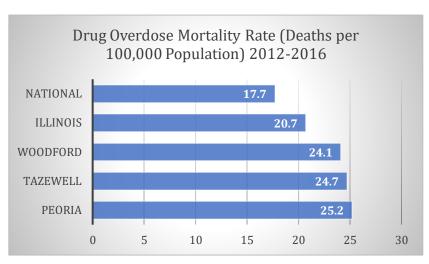
There are **58** evidence-based interventions listed that would pertain to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to implementation.

The high chlamydia and gonorrhea incidence numbers and rates in Peoria county compared to the state, the increasing rates over time as well as Peoria county's high low birth weight rate compared to the state of Illinois caused these STIs and Low Birth Weight to come forward as a top issue in the tri-county.

### **Substance Abuse:**

#### 6. CHNA:

When asked to select the three most important unhealthy behaviors in the community 60% of respondents answered drug abuse (illegal). Alcohol abuse, drug abuse (legal), and smoking/vaping were amongst the top as well.



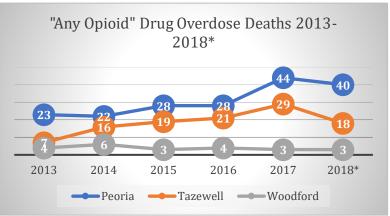
### 6.1.1 Illinois Youth Survey:

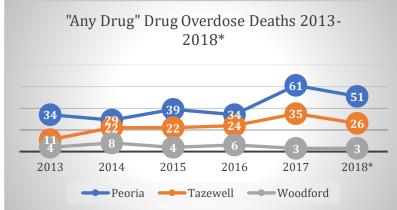
Reports of prescription drug abuse among area youth was above the Illinois average in Peoria 8<sup>th</sup> graders (5% vs. IL 4%). All other groups reported rates that were at or below state averages.

#### **IDPH Data:**

From 2012-2016 the tri-county area has experienced an elevated overdose mortality rate compared to state and national trends.

While 2018 data is provisional as of 2/6/2019 there seems to be an increasing trend in drug overdose deaths for "any drug" in the system as well as "any opioid" for Tazewell and Peoria counties from 2013-2017 with a decrease in 2018. Woodford has persistently been well below the other counties' rates.





# **County Health Rankings:**

According to County Health Rankings the drug overdose mortality rate per 100,000 population from 2014-2016 ranges in Illinois from 8-34 with the Illinois Average being 15 while the tri-county ranges from 15-18.

The percentage of adults reporting binge or heavy drinking as of 2016 is between 20-22% in the tricounty with the Illinois county range between 14-24% and the Illinois average 21%.

## **Economic Impact:**

Alcohol abuse costs the U.S. **\$191.6 billion** and drug abuse costs **\$151.4 billion** (Substance Abuse and Mental Health Services Administration - SAMSHA). Excessive alcohol consumption cost the U.S. **\$223.5 billion** in 2006, or about \$1.90 per drink. Binge drinking is 76% of the costs (CDC).

#### **Social Determinants:**

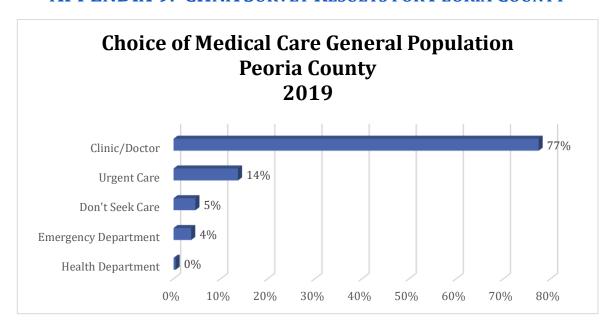
In the CHNA use of substances tends to be rated higher by Latino people, those with less education, those with lower income, and those in an unstable (e.g. homeless) housing environment.

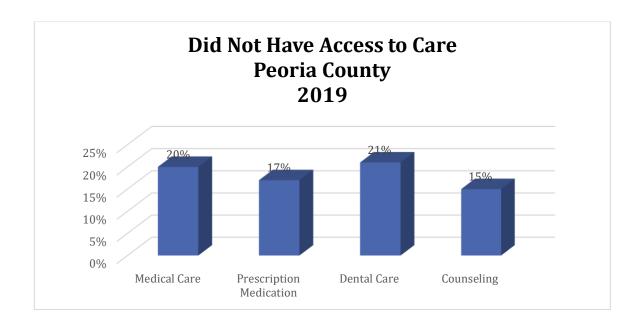
## **Healthy People 2020 Interventions:**

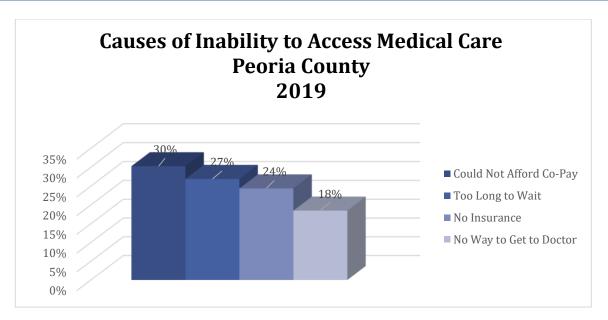
There are **22** evidence-based interventions listed that would pertain to this issue that would need to be looked through to determine community involvement, cost, and feasibility prior to implementation.

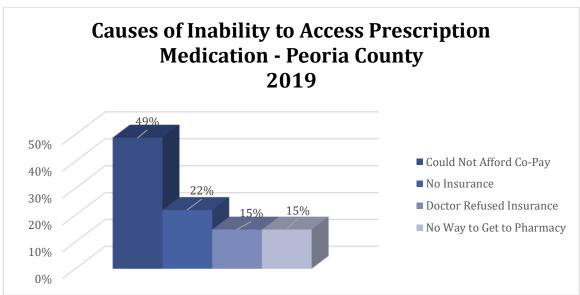
Due to overdose mortality rates in the tri-county that exceed state and national values and the high percentage of CHNA survey respondents that believe the all forms of drug abuse are among the most important unhealthy behaviors, Substance Abuse has come forth as a top priority.

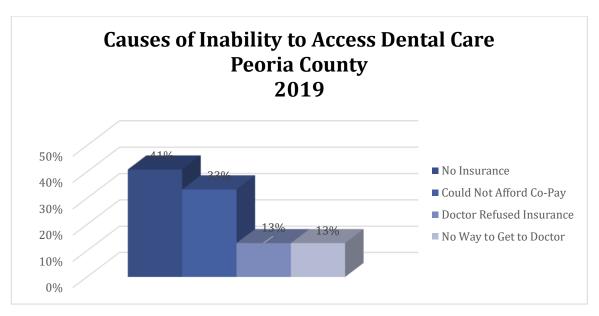
# **APPENDIX 9. CHNA SURVEY RESULTS FOR PEORIA COUNTY**

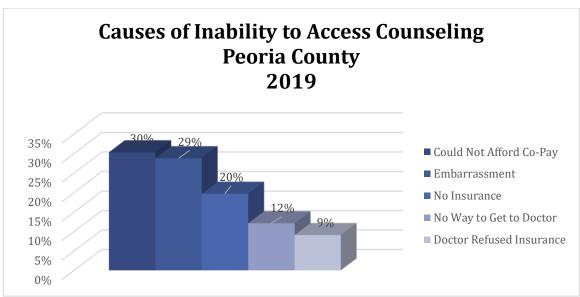


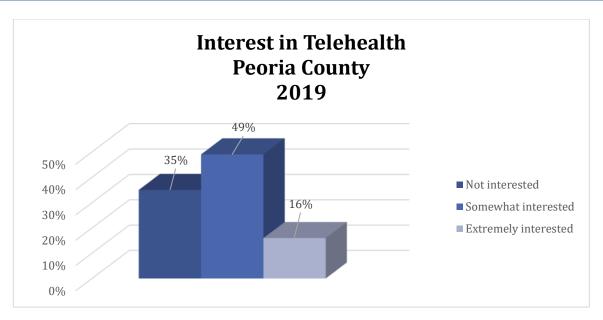


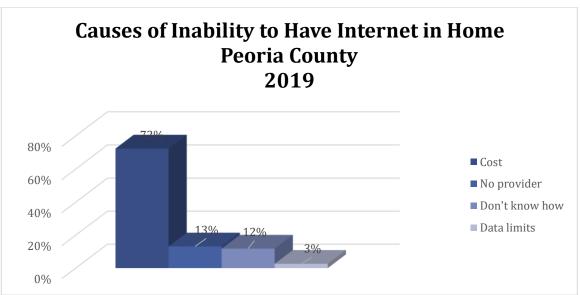










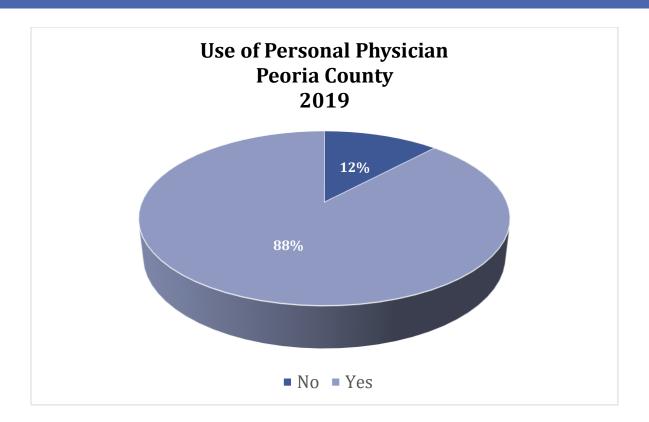


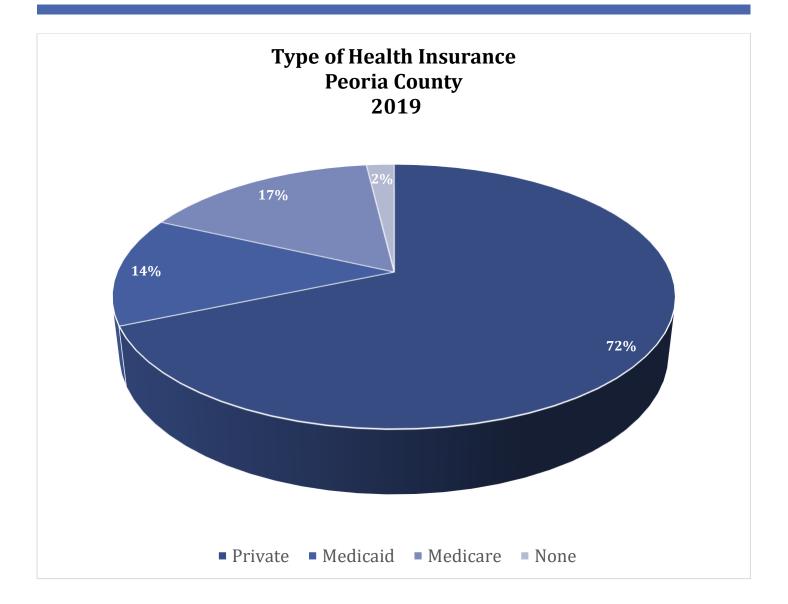
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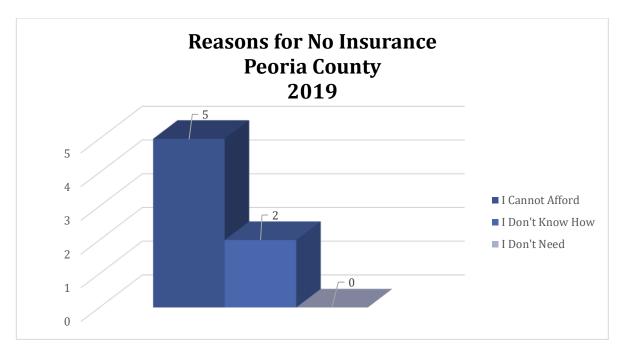
No

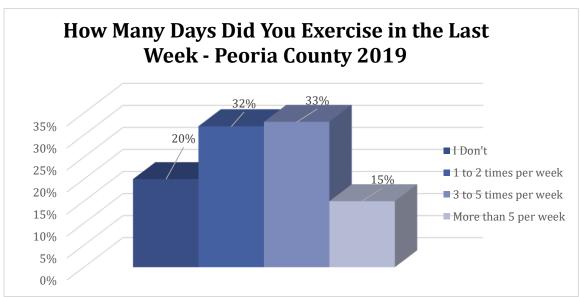
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No	10
Internet in home	
internet in nome	
Yes	84

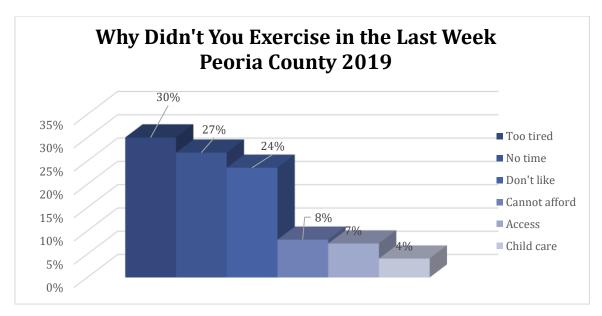
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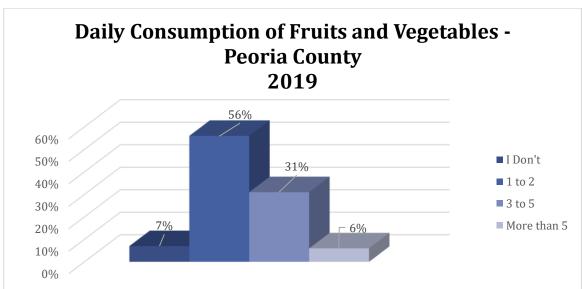


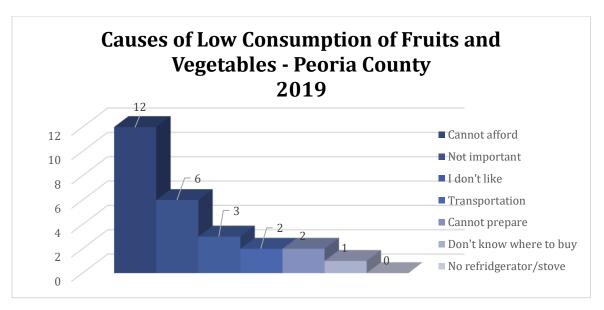


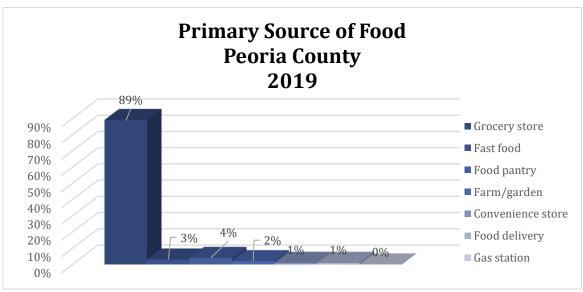


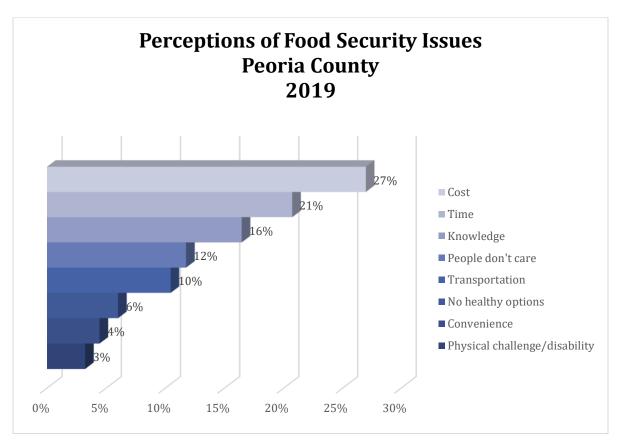


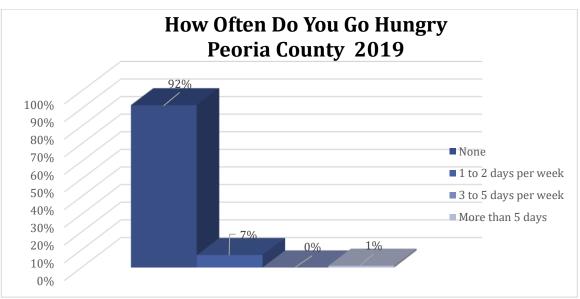


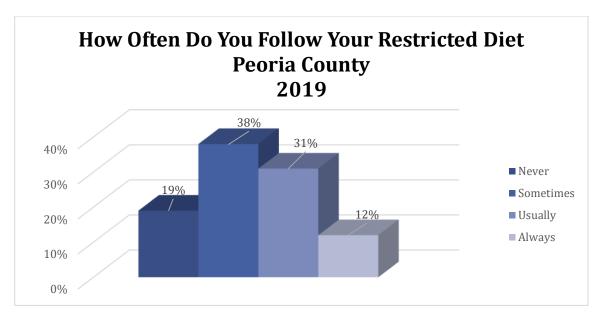


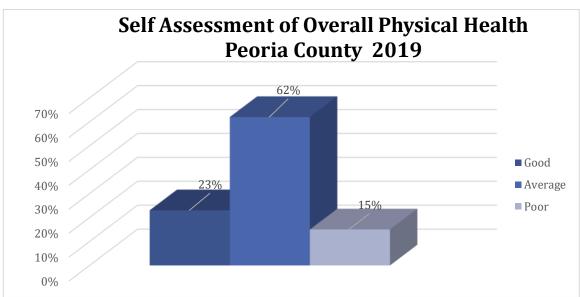


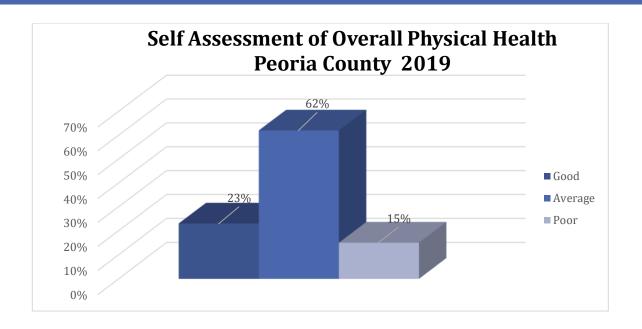


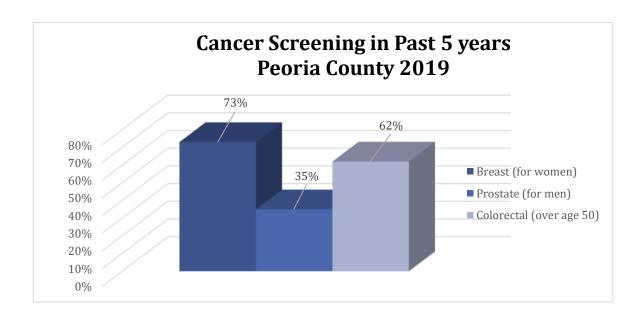


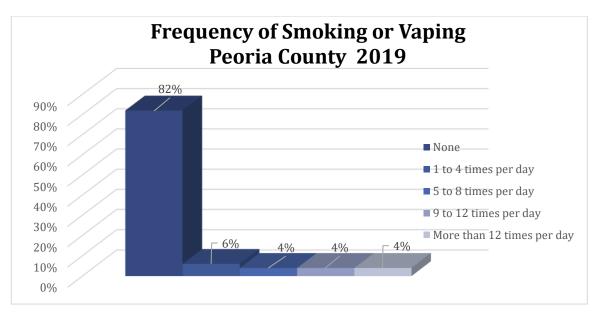


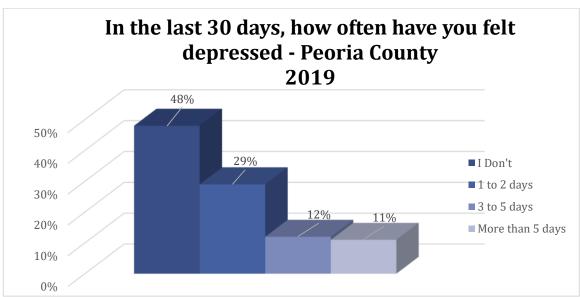


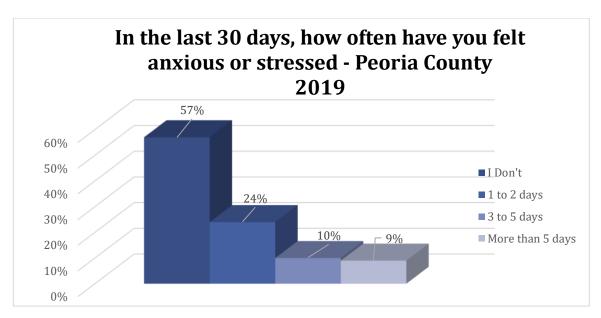


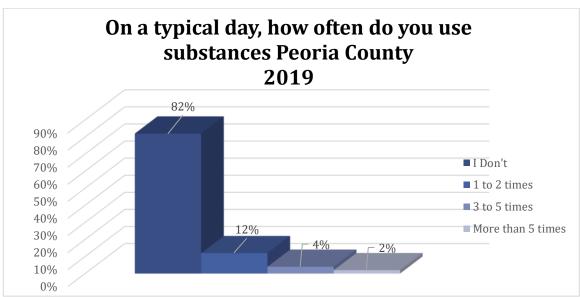


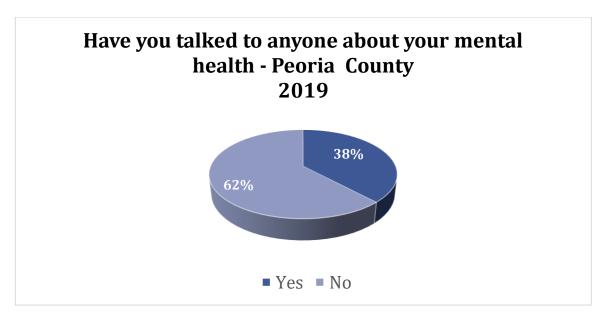


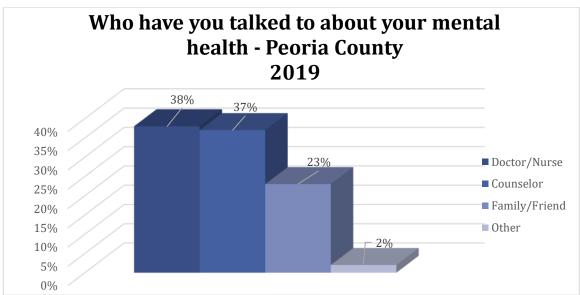


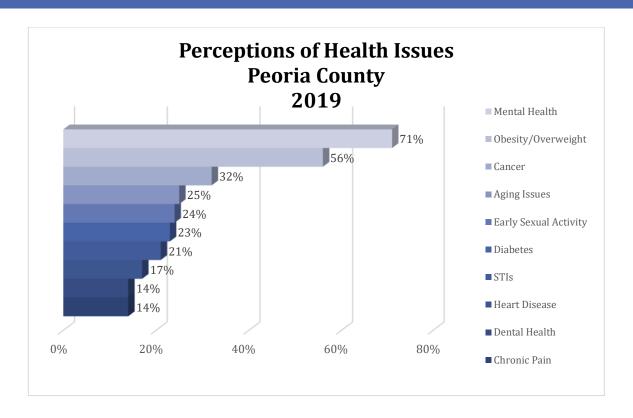


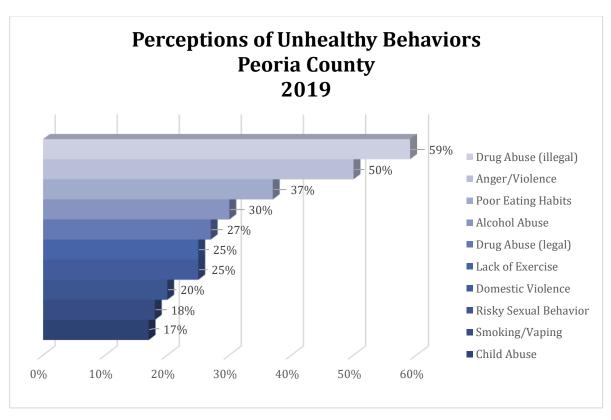


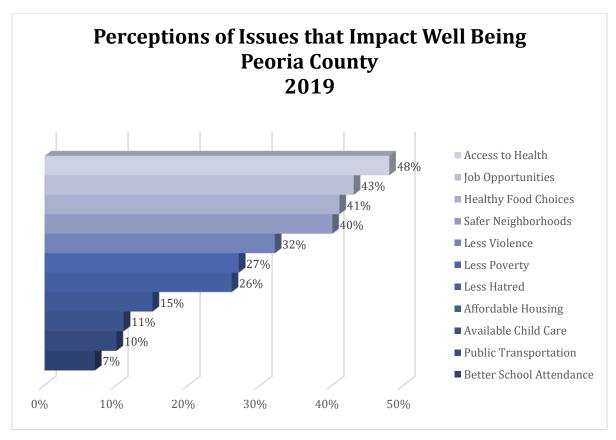


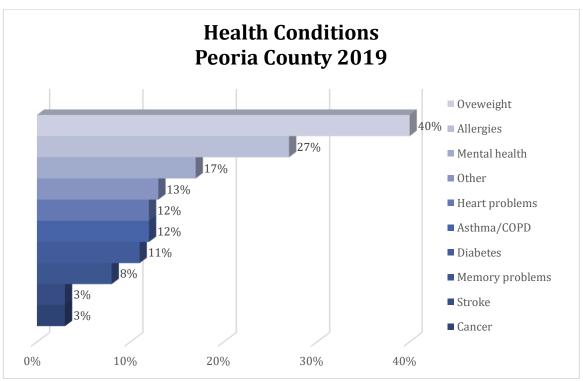


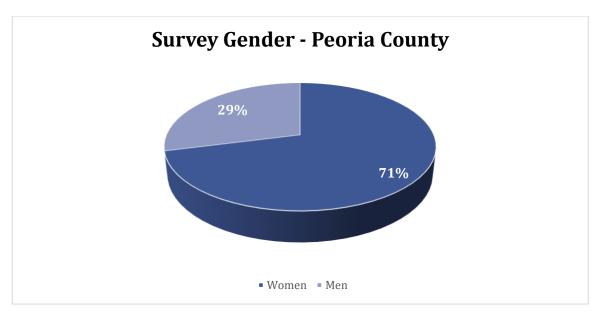


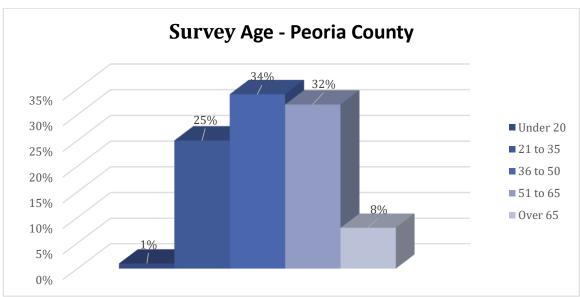


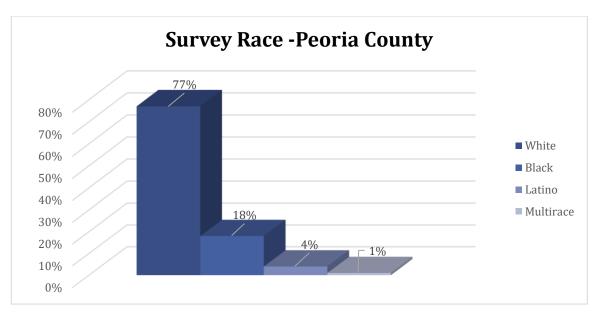


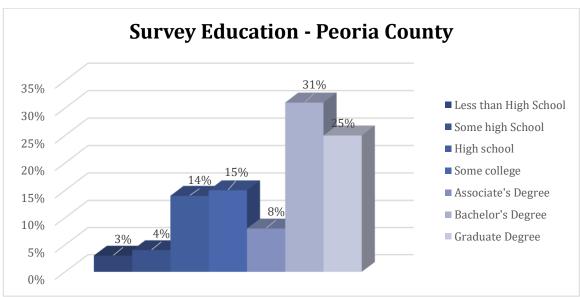


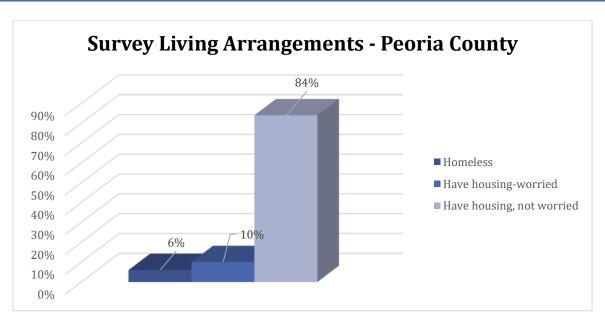


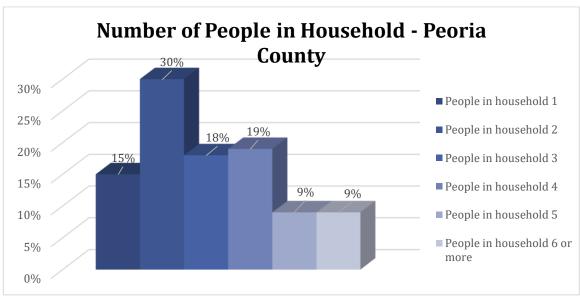




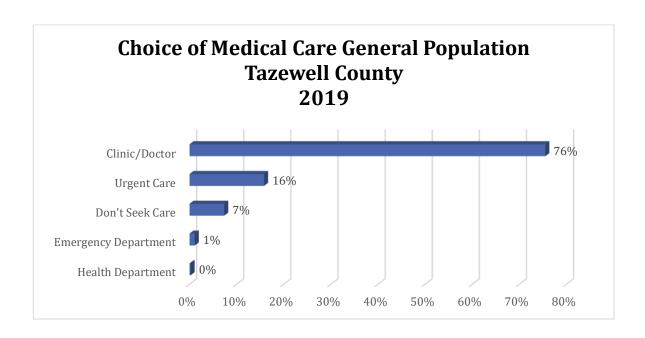


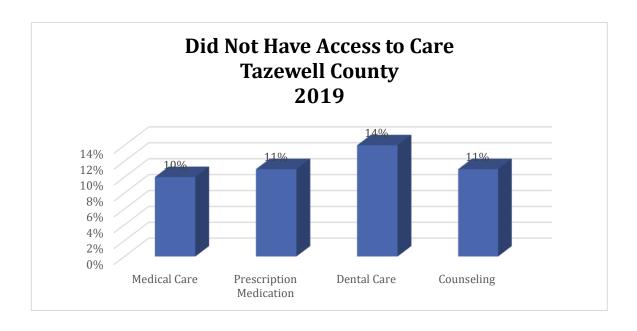


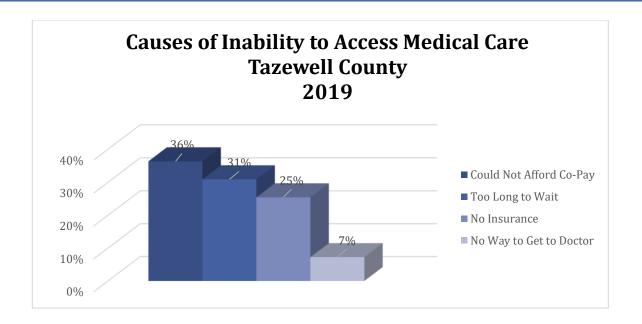


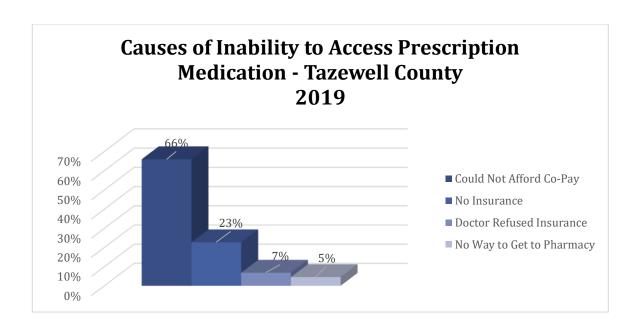


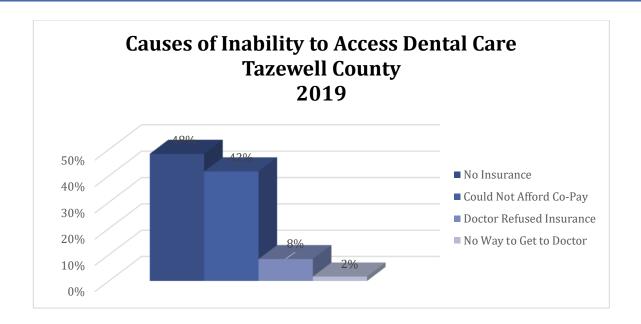
## **APPENDIX 10. CHNA SURVEY RESULTS TAZEWELL COUNTY**

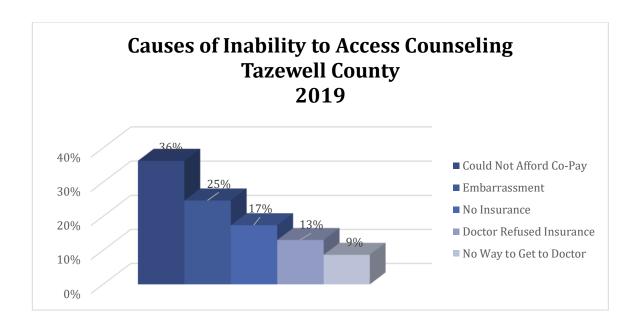


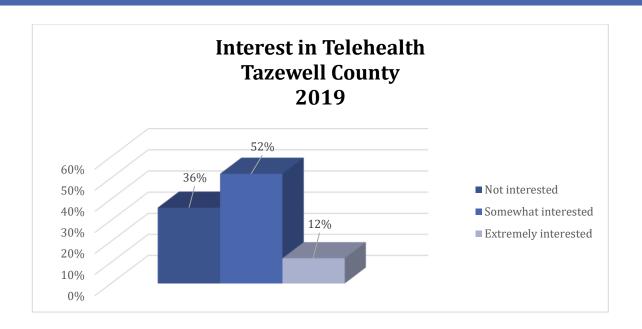


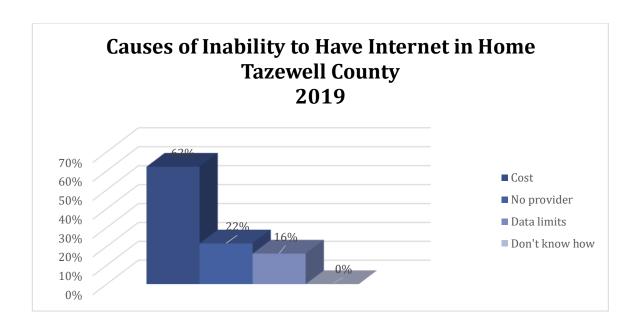




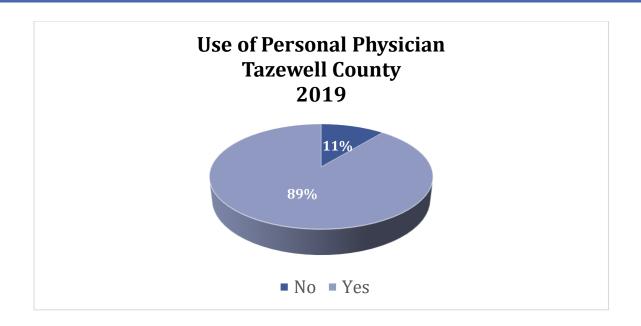


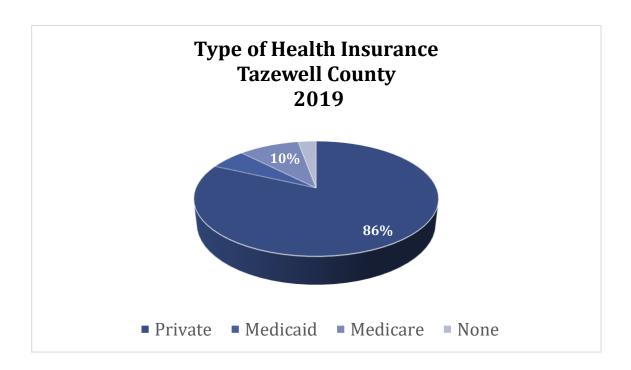


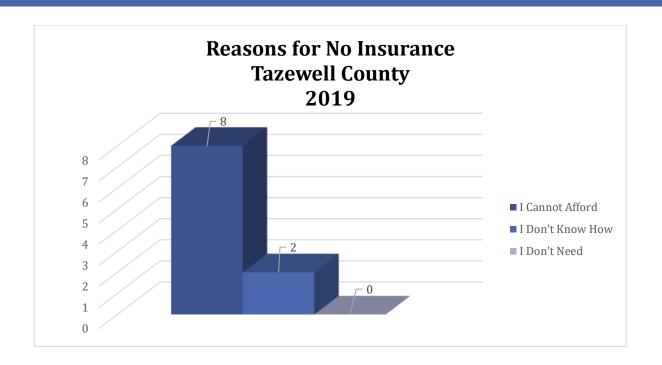


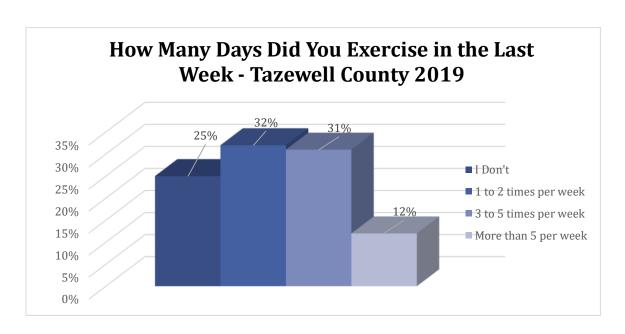


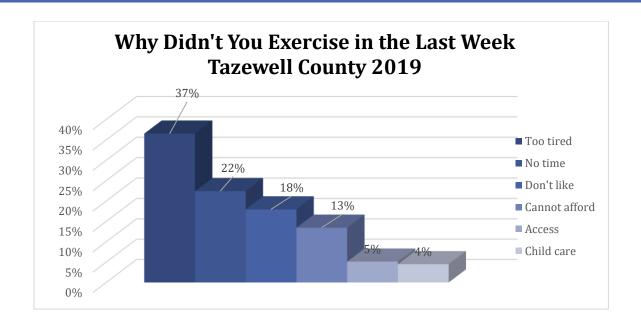
Free public Internet	
Yes	92
No	8
Internet in home	
Yes	92
No	8

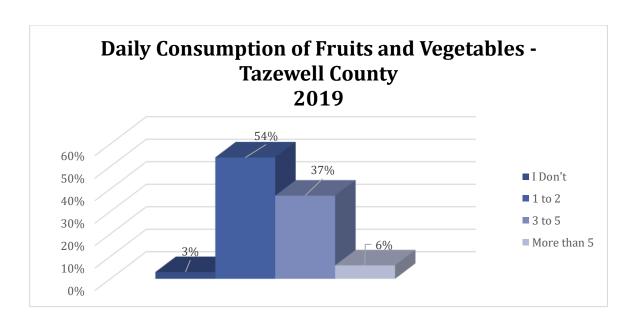


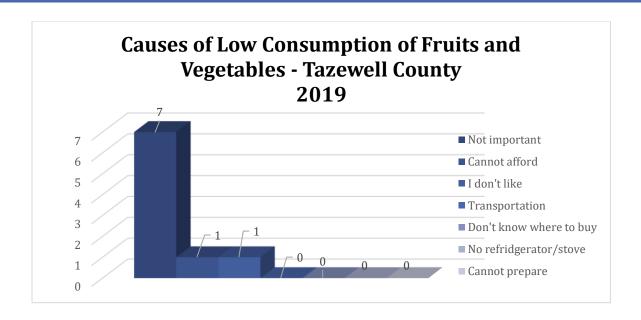


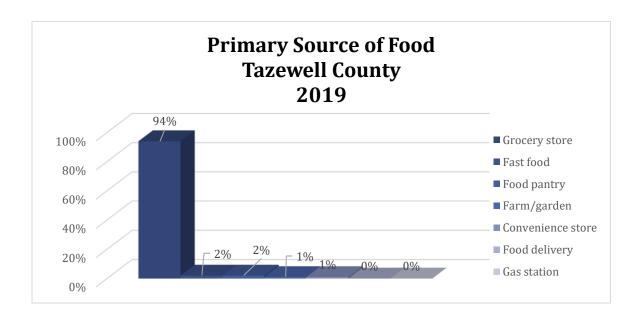


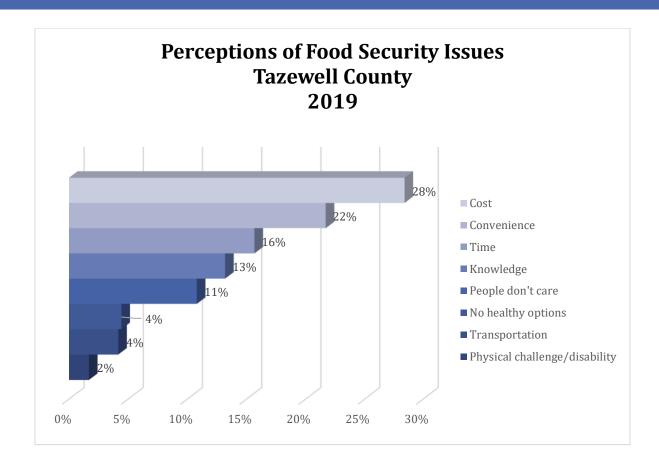


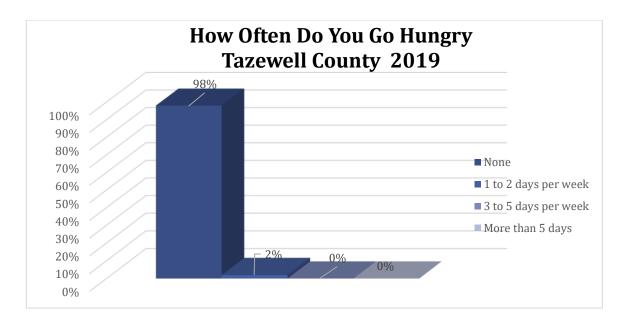


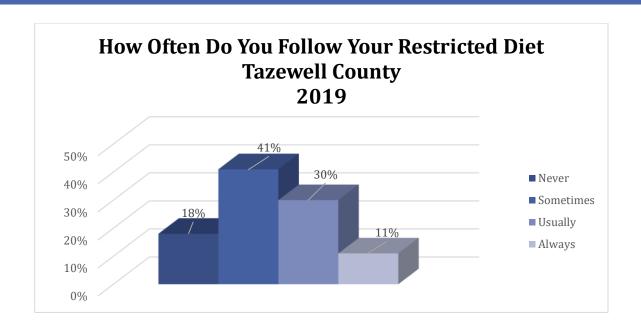


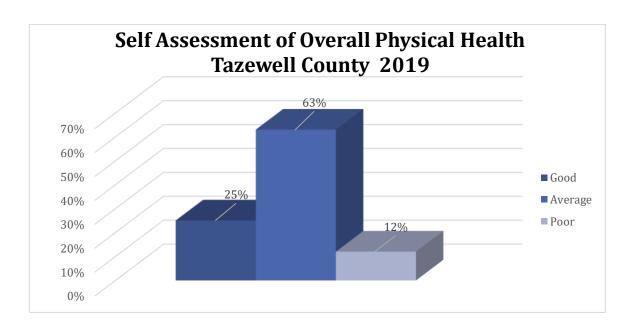


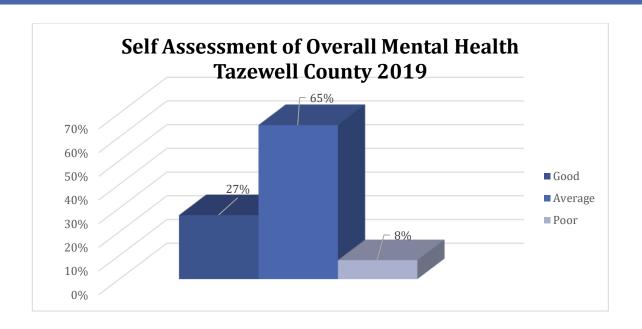


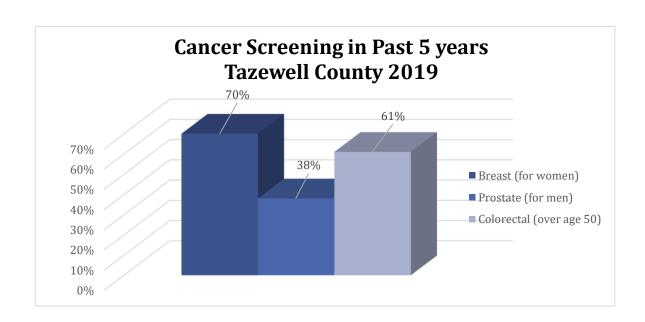


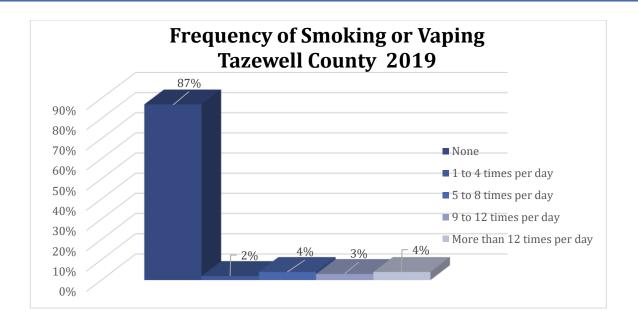


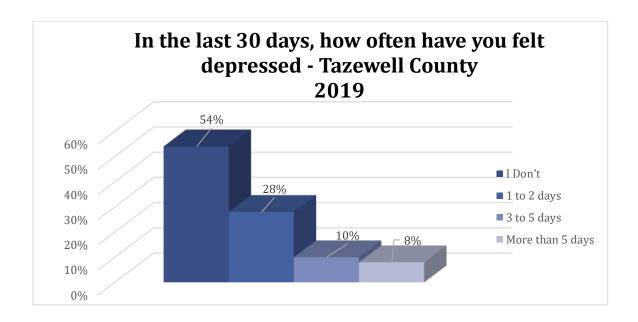


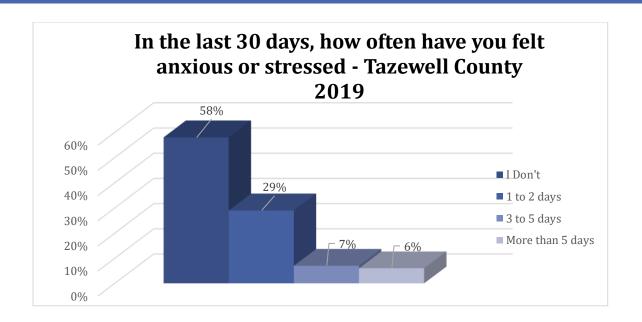


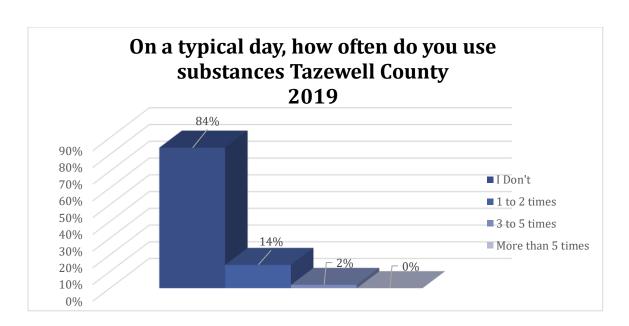


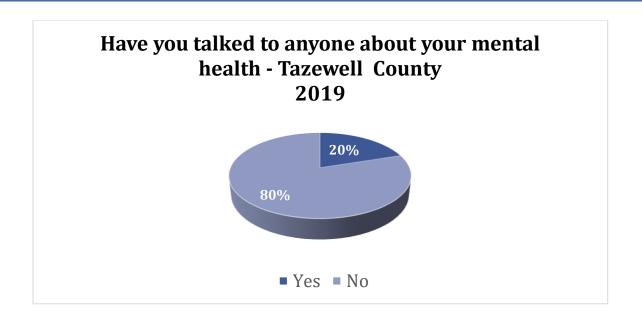


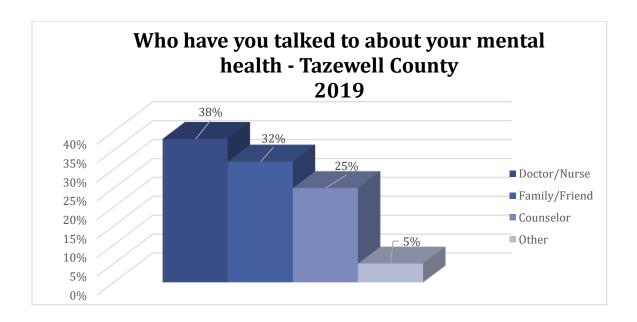


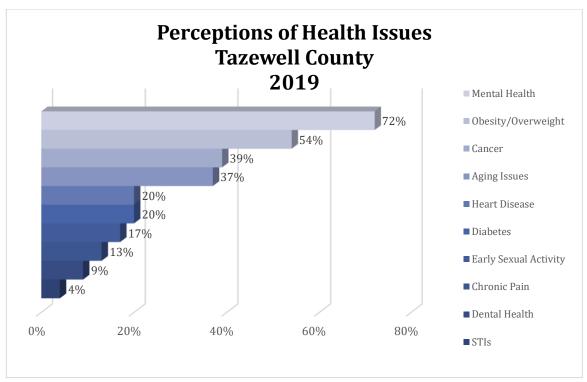


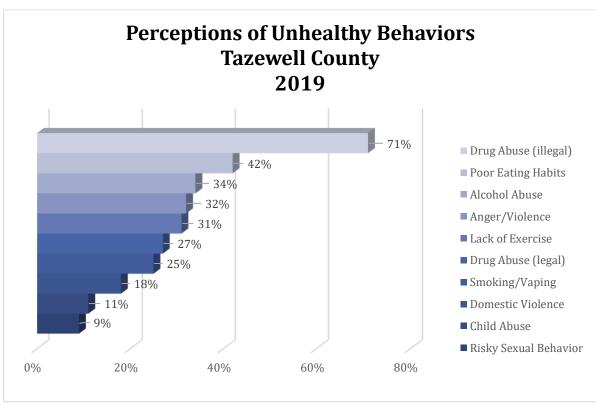


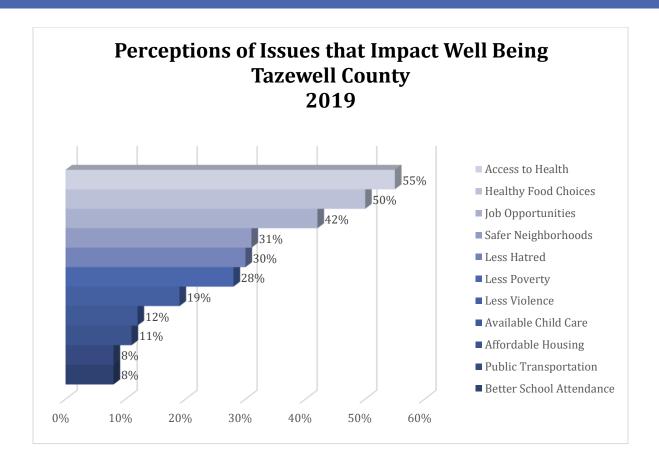


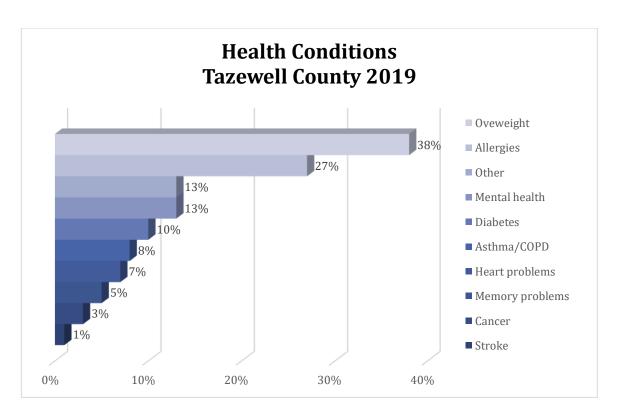


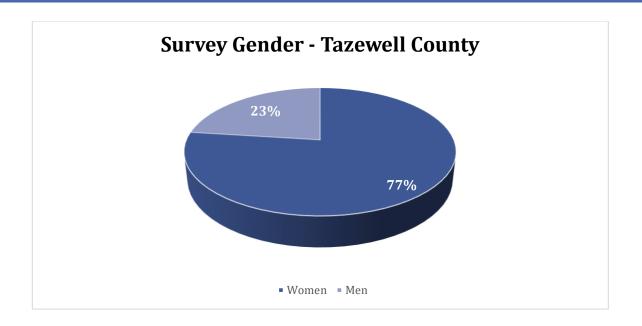


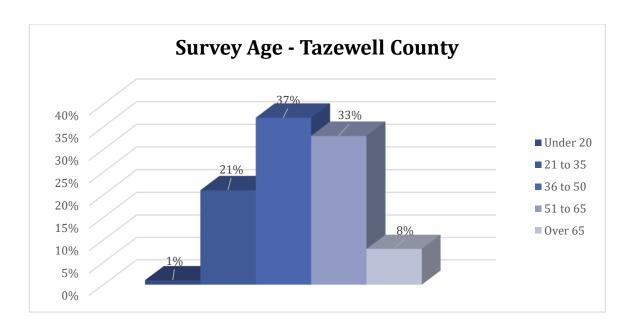


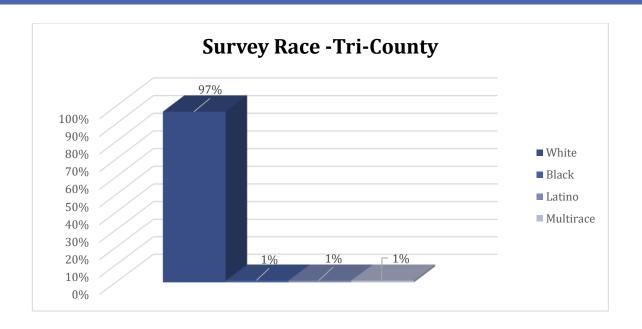


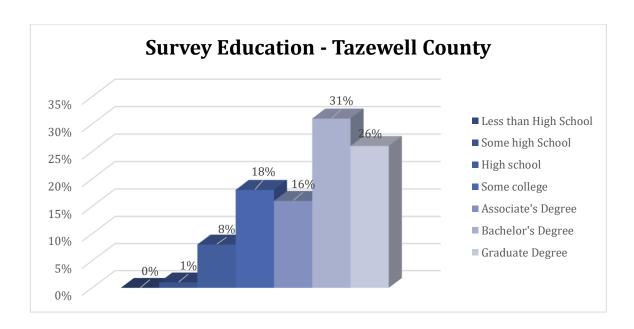


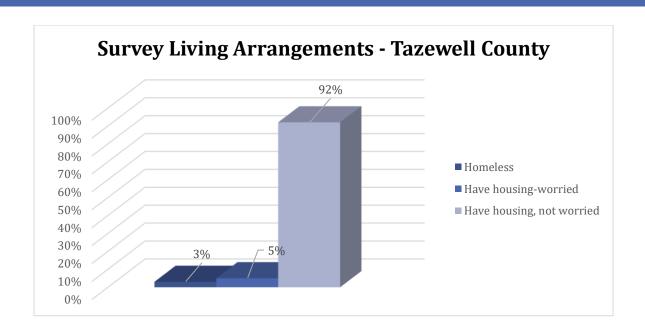


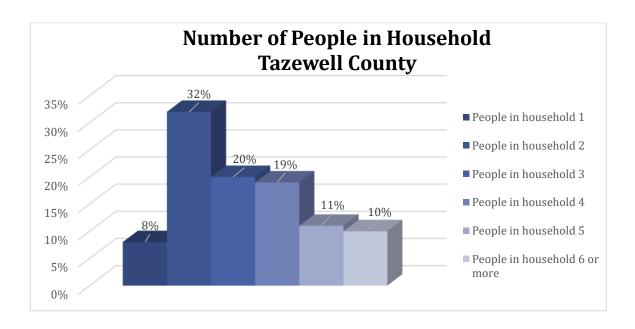




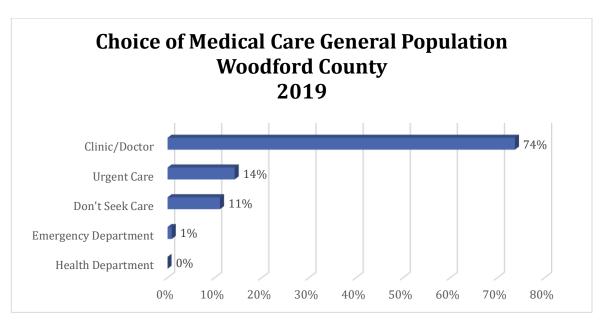


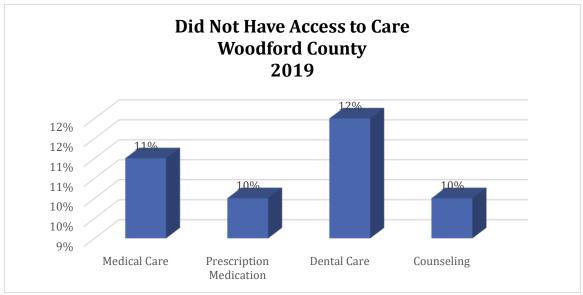


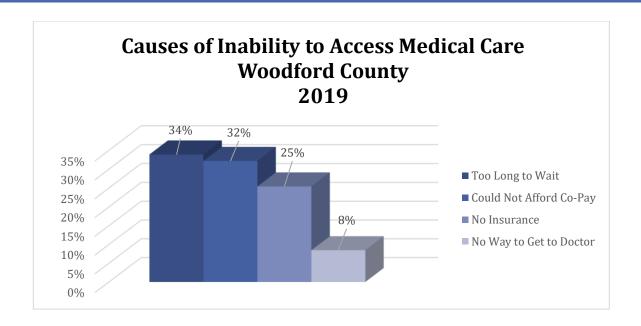


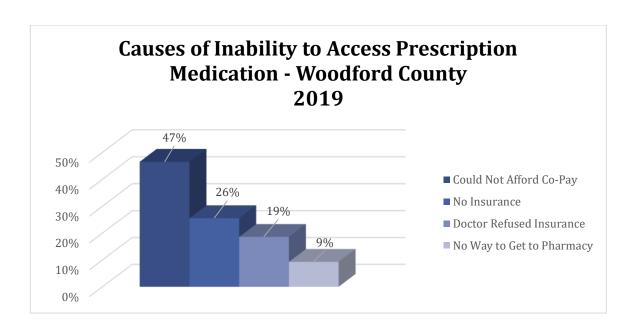


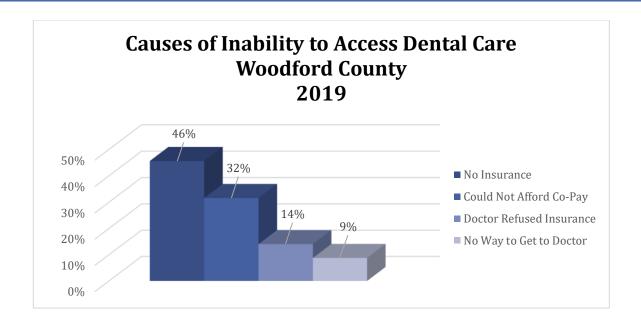
## **APPENDIX 11. CHNA SURVEY RESULTS WOODFORD COUNTY**

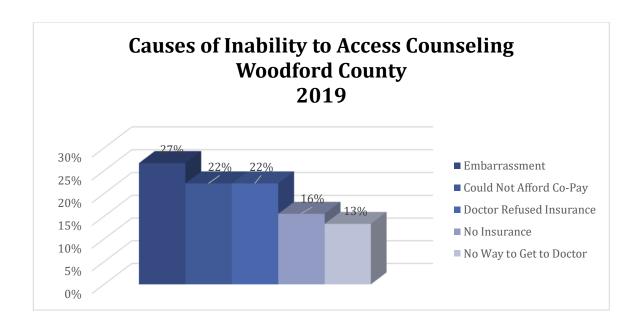


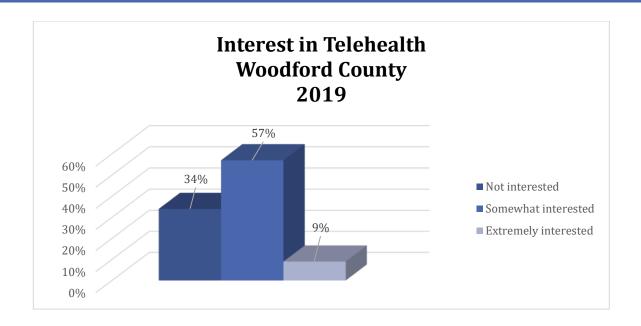


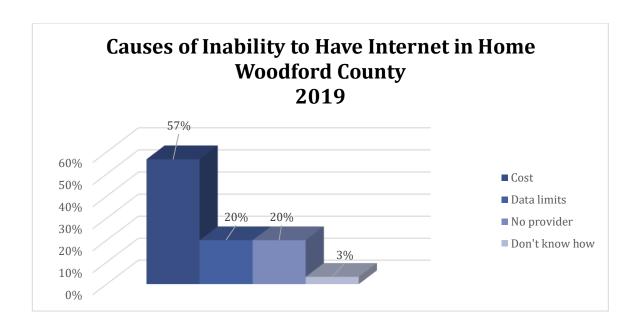












Free public Internet	
Yes	91
No	g
Internet in home	
Yes	95
No	5

