



United Way
of Danville Area, Inc.
**Vermilion County
Health Department**



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MENTAL HEALTH
708 BOARD

2022

COMMUNITY HEALTH NEEDS ASSESSMENT

Vermilion County

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Community Health Needs Assessment

2022

Collaboration for sustaining health equity

EXECUTIVE SUMMARY

The Vermilion County Community Health Needs Assessment is a collaborative undertaking by the Vermilion County Executive group (Carle Hoopston Regional Health Center, OSF Sacred Heart Medical Center, United Way of Danville Area, Vermilion County Mental Health Board, and Vermilion County Public Health Department). Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Vermilion County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Vermilion County region, the predictors for and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

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

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

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

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

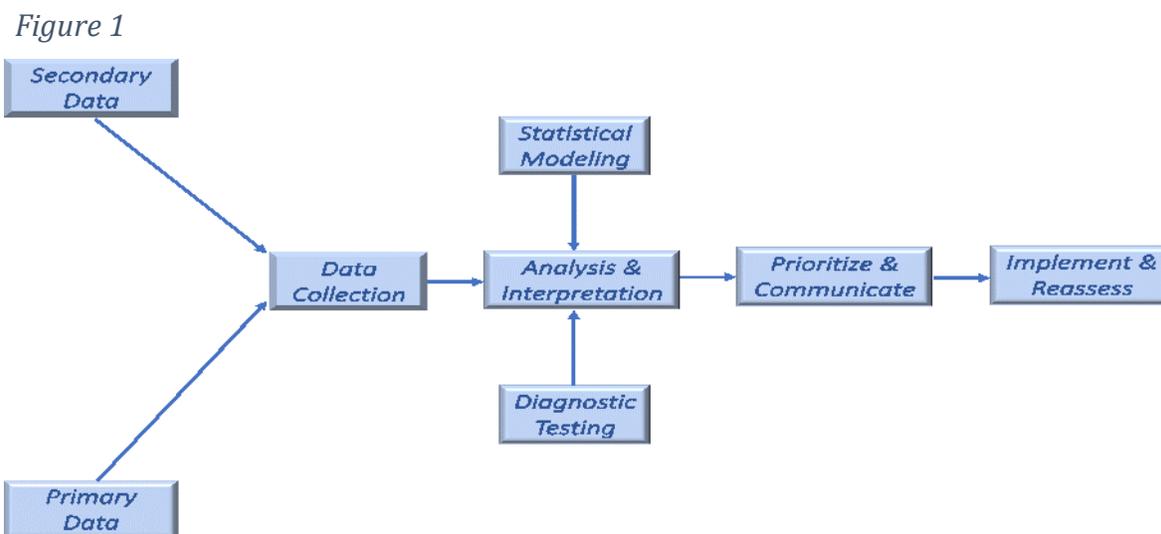
- **Violence**
- **Income/Poverty**
- **Healthy Behaviors**
- **Behavioral Health – including mental health and substance abuse**

I. INTRODUCTION

Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010, added new requirements for tax-exempt charitable hospital organizations to conduct community health needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health needs assessment (CHNA) takes into account input from specific individuals who represent the broad interests of the community served by the Regional Executive Committee including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, create a plan, and act upon unmet community health needs. Results from this assessment will be made widely available to the public. This CHNA Report was approved by the OSF HealthCare System’s Board of Directors on July 25, 2022 and the Carle Hoopeson Regional Health Center Board on October 27, 2022.

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



Collaborative Team and Community Engagement

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members of the collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included Carle Hoopeson Regional Health Center, OSF HealthCare Sacred Heart Medical Center, United Way of Danville Area, Vermilion County Health Department, and the Vermilion County Mental Health 708 Board. Because Carle and OSF have locations in Champaign, the Champaign-Urbana Public Health District

and United Way of Champaign County are included in the Executive Committee. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met in the first and second quarter of 2022. Additionally, numerous meetings were held between the facilitators and specific individuals during the process.

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

The Vermilion Regional Executive Committee would like to acknowledge and thank the many individuals and organizations that contributed their valuable time and expertise to this report. Community organizations and individuals outside of the REC providing critical and experienced feedback include Carle Health, Vermilion County Public Health District, Danville Mass Transit, Rosecrance, OSF Healthcare, United Way of Danville, Vermilion County Sheriff's Office, Vermilion County Coroner's Office.

Definition of the Community

Vermilion County is located in east central Illinois and is 899 square miles with a population of 73,095 (2021 estimated). Vermilion County has had a long history of challenges facing it as a community. Vermilion County has been ranked in the bottom quartile of the County Health Rankings (Robert Wood Johnson Foundation) since the rankings were presented in 2010.

Analyses were completed to identify the percentage of inpatient and outpatient activity represented by Vermilion County residents in area hospitals. Specifically, data show that Vermilion County represents approximately 80% of all patient activity for OSF HealthCare Sacred Heart Medical Center and Carle Hoopes Regional Health Center.

In addition to defining the community by geographic boundaries, this study targets the at-risk population as an area of potential opportunity to improve the health of the community. Note that the at-risk population was defined as those individuals who were eligible to receive Medicaid based on the State of Illinois guidelines using household size and income level.

Purpose of the Community Health Needs Assessment

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

Community Feedback from Previous Assessments

The 2020 CHNA and implementation plan were made widely available to the community to allow for feedback. Specifically, the hospital posted both a full version and a summary version of the 2020 CHNA on its website. In order to encourage written feedback, the hospital specifically included a section labeled

Share Your Feedback and provided instructions regarding how individuals from the community could provide comments to the CHNA. While no written feedback was received by individuals from the community via the available mechanism for the CHNA or implementation plan, verbal feedback was provided by key stakeholders from community-service organizations and incorporated as part of the collaborative process.

2020 CHNA Health Needs and Implementation Plans

The 2020 CHNA for Vermilion County identified three significant health needs. These included: Behavioral Health, including mental health; and substance abuse; Income/Poverty; and Violence. Specific actions were taken to address these needs. Detailed discussions of goals and strategies to improve these health needs can be seen in APPENDIX 2: ACTIVITIES RELATED TO 2020 CHNA PRIORITIZED NEEDS. Note that numerous challenges associated with the COVID-19 pandemic had significant impact on the activities discussed in appendix 2.



Social Determinants of Health

This CHNA incorporates important factors associated with Social Determinants of Health (SDOH). SDOH are important environmental factors, such as where people are born, live, work and play, that affect people's well-being, physical and mental health, and quality of life. According to research conducted by the U.S. Department of Health and Human Services, *Healthy People 2030* has identified five SDOH that should be included in assessing community health (Figure 2).

Figure 2

Social Determinants of Health



Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved January 15, 2022, from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

Assessment of SDOH is included in the CHNA, as social determinants help contribute to health inequities and disparities. Simply creating interventions without incorporating SDOH will have limited impact on improving community health for people living in underserved or at-risk areas.

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

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

Based on several retreats, a separate OSF Collaborative Team used COMPdata Informatics (affiliated with Illinois Health and Hospital Association (IHA)) to identify six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, diabetes and infections. In order to define each disease category, modified definitions developed by Sg2 were used. Sg2 specializes in consulting for health-care organizations. Their team of experts includes MDs, PhDs, RNs and health-care 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, 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, a new survey in 2021 was 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 medication.
- **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. A copy of the final survey is included in APPENDIX 3: SURVEY.

Sample Size

In order to identify our potential population, we first identified the percentage of the Vermilion 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 Vermilion County is 18.6 percent. The population used for the calculation was 73,870 yielding a total of 13,723 residents living in poverty in the Vermilion County area.

A normal approximation to the hypergeometric distribution was assumed given the targeted sample size.

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

where:

n = the required sample size

N = the population size

z = the value that specified the confidence interval (use 95% CI)

pq = population proportions (set at .05)

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

For the total Vermilion County area, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 384. The data collection effort for this CHNA yielded a total of 599 usable responses. This exceeded the threshold of the desired 95% confidence interval.

To provide a representative profile when assessing the aggregated population for the Vermilion County region, the general population was combined with a portion of the at-risk population. To represent the at-risk population as a percentage of the aggregate population, a random-number generator was used to select at-risk cases to include in the general sample. Additionally, efforts were made to ensure that the demography of the sample was aligned with population demographics according to U.S. Census data. This provided a total usable sample of 561 respondents for analyzing the aggregate population. Sample

characteristics can be seen in APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS. Counties were then weighted based on population size.

Data Collection

Survey data were collected in the 3rd and 4th quarter of 2021. 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 the at-risk population was specifically targeted as part of the data collection effort, this became a stratified sample, as other groups were not specifically targeted 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, several different analytic techniques were used. 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, Pearson correlations, X^2 tests and tetrachoric correlations were used 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 Internet Accessibility
- 1.7 Key Takeaways from Chapter 1

CHAPTER 1: DEMOGRAPHY AND SOCIAL DETERMINANTS

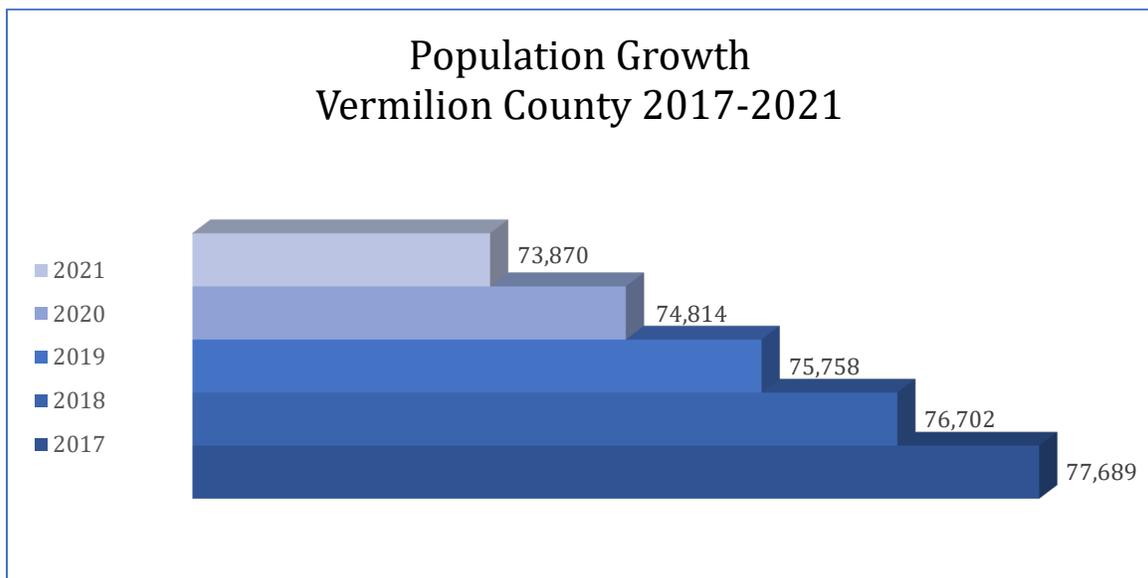
1.1 Population

Importance of the measure: Population data characterize individuals residing in Vermilion 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 Vermilion County has decreased nearly 5% between 2017 and 2021 (Figure 3).

Figure 3



Source: US Census

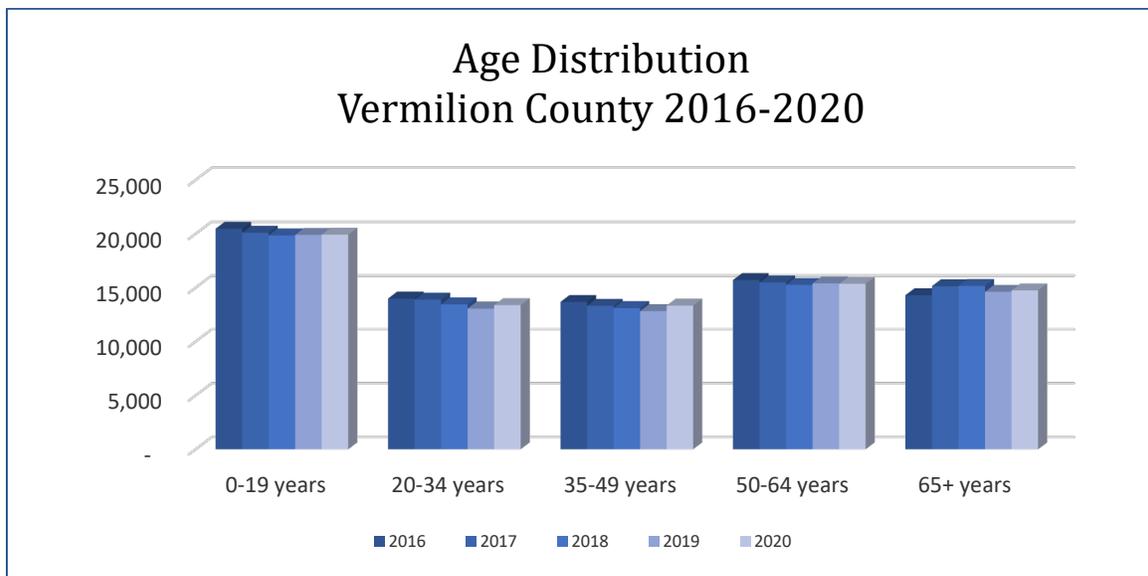
1.2 Age, Gender and Race Distribution

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

Age

Figure 4 illustrates the percentage of individuals in Vermilion County in each age group. Of note, the 20-34 years group decreased 4.38%, the 35-49 years group decreased 2.5%, while the elderly population (residents aged 65+ years) increased 3.12% between 2016 and 2020.

Figure 4

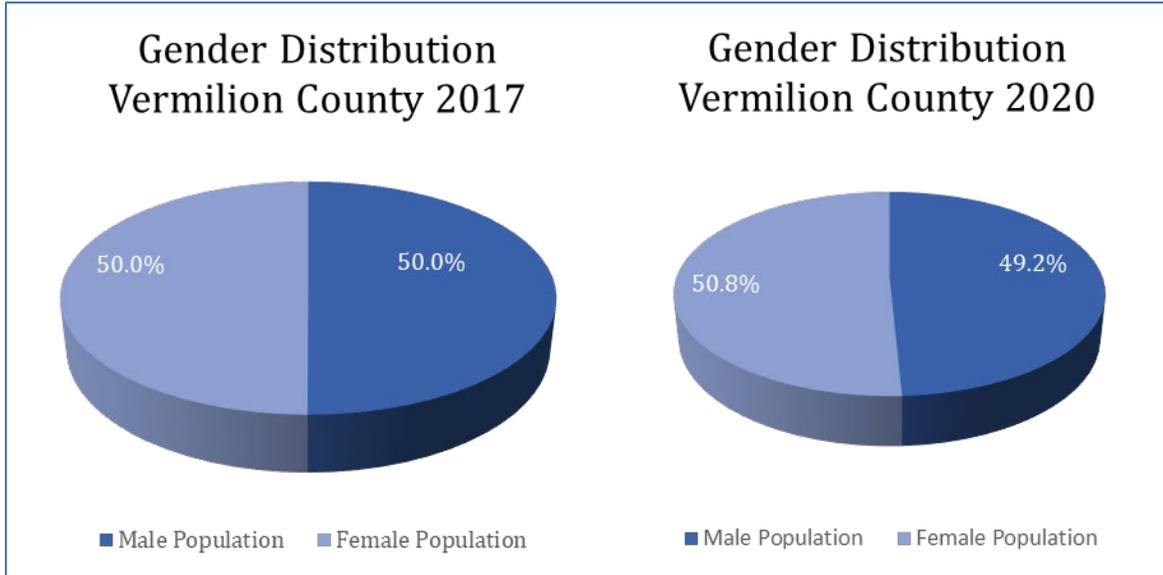


Source: US Census

Gender

The gender distribution of Vermilion County (Figure 5) residents has remained relatively consistent between 2017 and 2020.

Figure 5

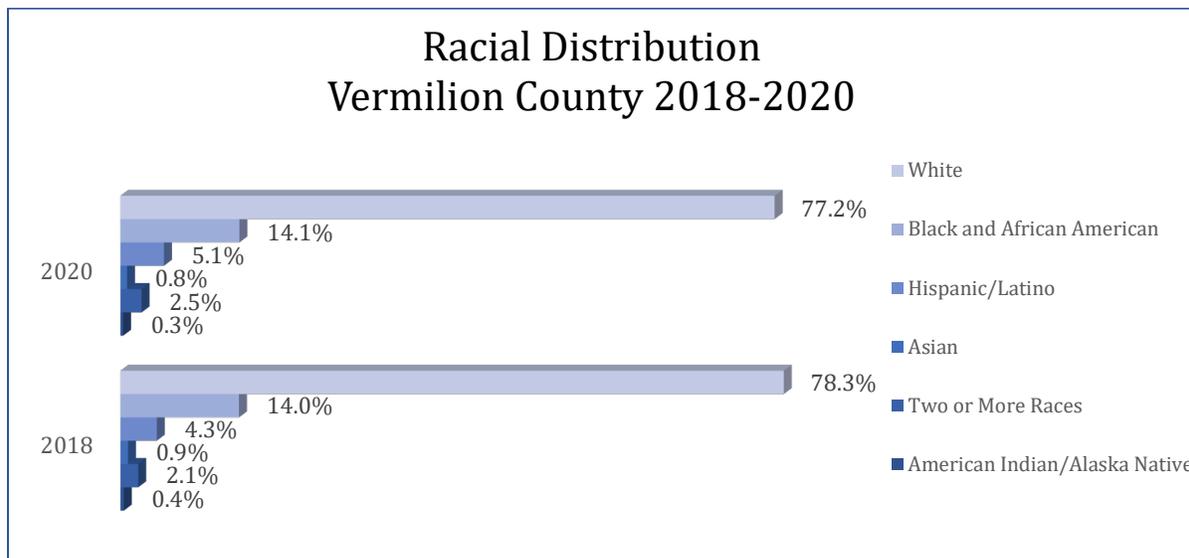


Source: US Census

Race

With regard to race and ethnic background, Vermilion County is largely homogenous. Data from 2020 suggest that White ethnicity comprises 77.2% of the population in Vermilion County. However, the non-White population of Vermilion County has slightly increased (from 21.7% to 22.8% in 2020), with Black ethnicity comprising 14.1% of the population, multi-racial ethnicity comprising 2.5% of the population, and Hispanic/Latino ethnicity comprising 5.1% of the population in 2020 (Figure 6).

Figure 6



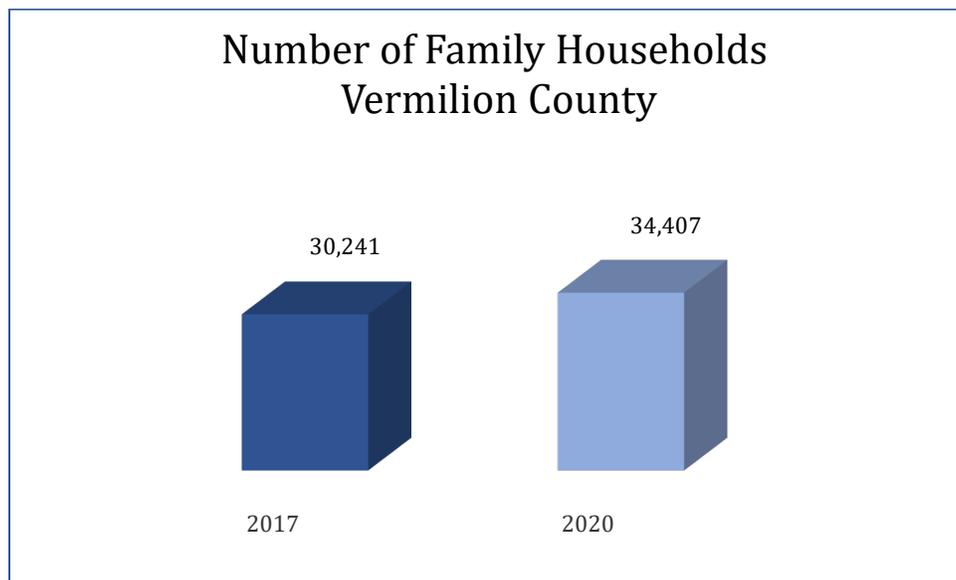
Source: US Census

1.3 Household/Family

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

As indicated in Figure 7, the number of family households in Vermilion County increased from 2017 to 2020.

Figure 7

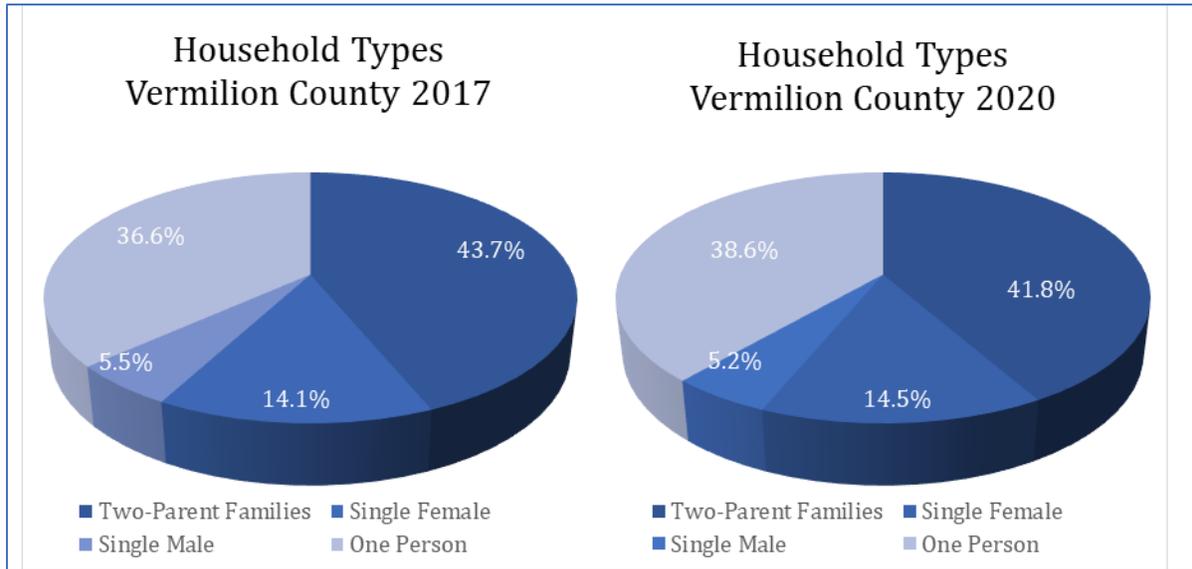


Source: US Census

Family Composition

In Vermilion County, data from 2020 suggests that the percentage of two-parent families has decreased from 2017 at 43.7% to 41.8% in 2020. One-person households have increased from 36.6% to 38.6%, single female households increased from 14.1% to 14.5%, and single-male households decreased from 5.5% to 5.2% in 2020 (Figure 8).

Figure 8

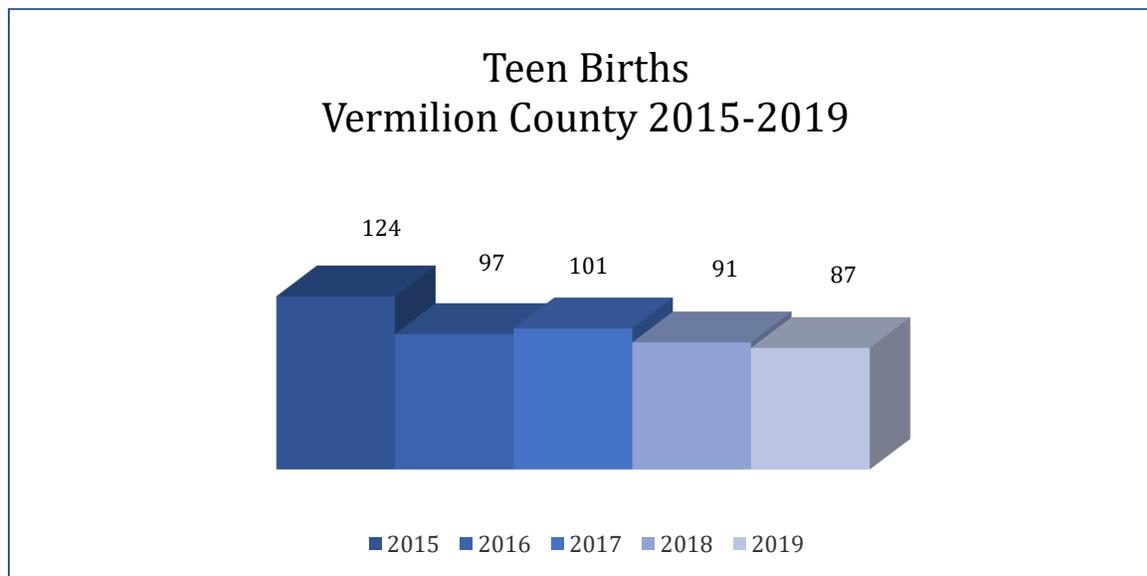


Source: US Census

Early Sexual Activity Leading to Births from Teenage Mothers

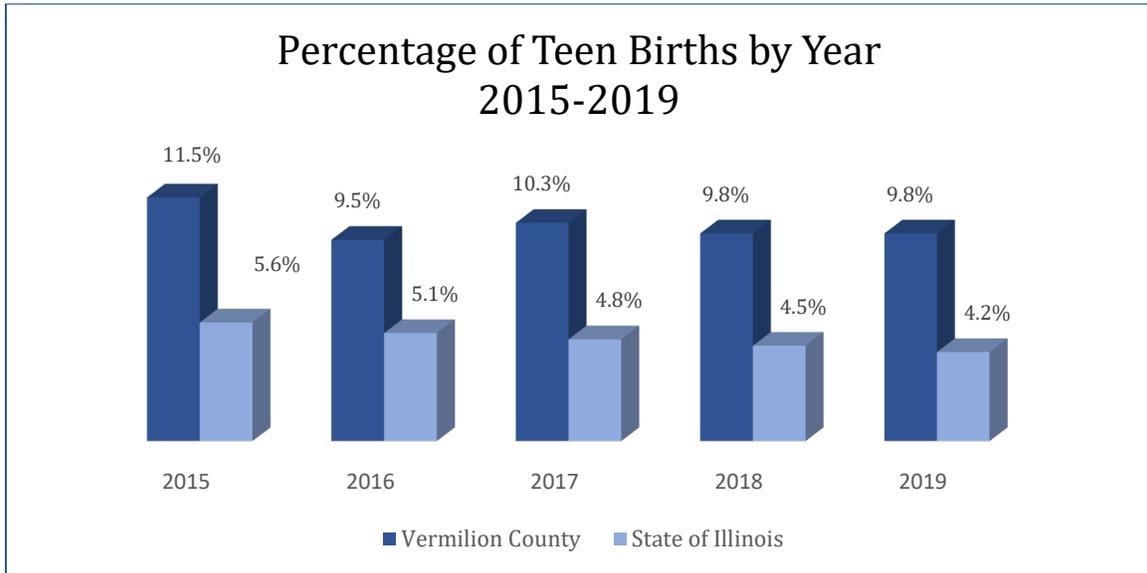
Vermilion County has experienced a fluctuation in teenage birth count. The teen birth count declined since 2015, but experienced a slight increase in 2017 followed by decreases in 2018 and 2019 (Figure 9). Vermilion County percentage of teen births is nearly double the State of Illinois year over year 2015-2019 (Figure 10).

Figure 9



Source: Illinois Department of Public Health

Figure 10



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.

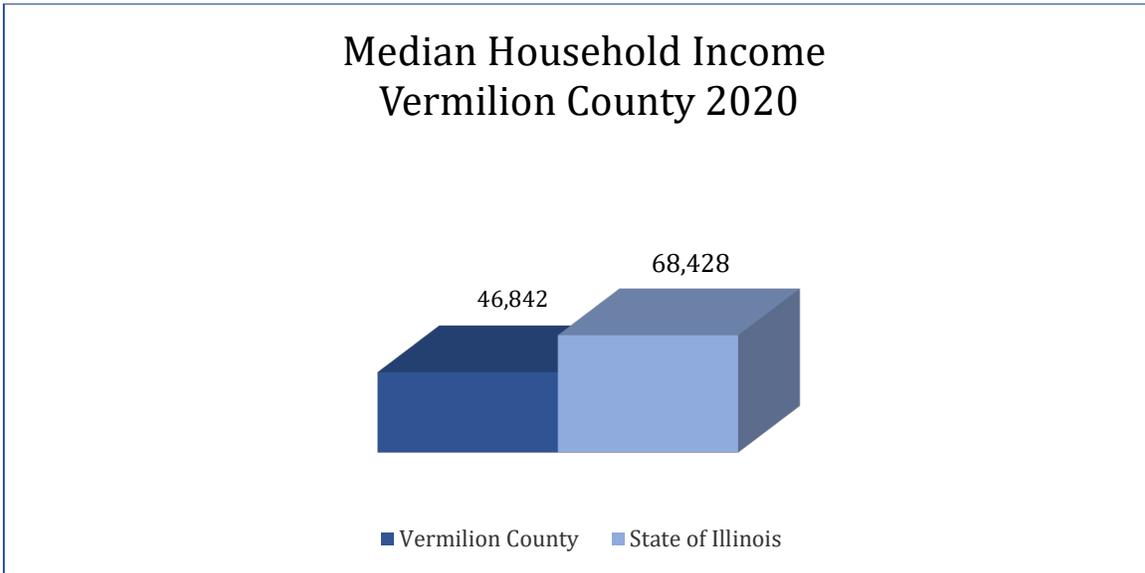
Economic Climate

Economic climate is a measure of a community’s financial resources and resiliency. Key risk influencers include income, cost of living and opportunity. For Vermilion County, 25% of the population is at elevated risk for economic climate. This is lower than the State of Illinois average of 35% (SocialScape® powered by SociallyDetermined®, 2022).

Median Income Level

For 2019, the median household income in Vermilion County was lower than the State of Illinois (Figure 11).

Figure 11

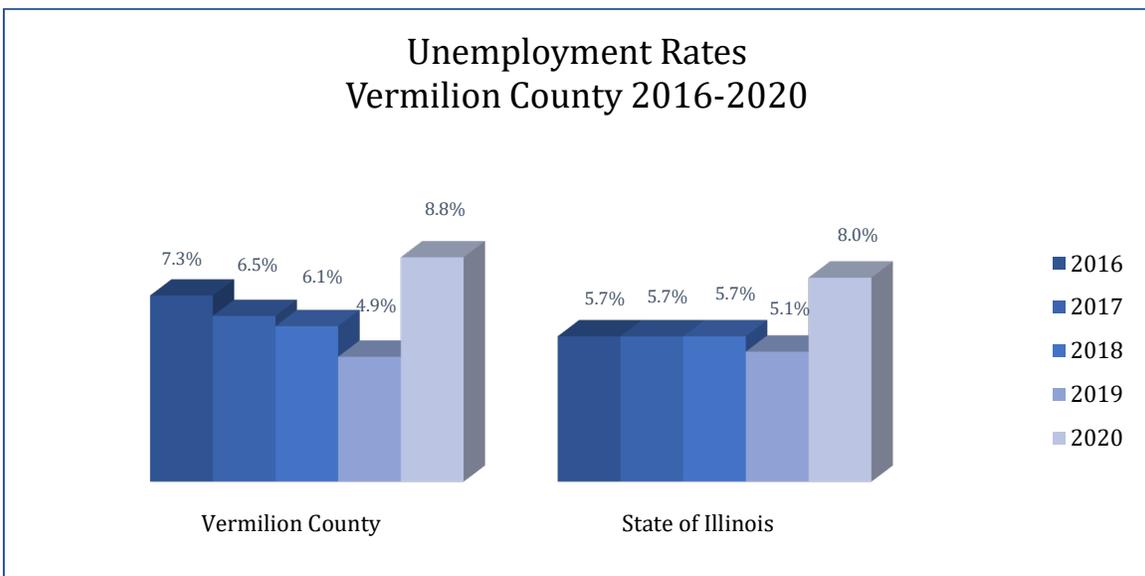


Source: US Census

Unemployment

For the years 2016 to 2018, the Vermilion County unemployment rate remained higher than the State of Illinois unemployment rate. However, in 2019 the rate dropped lower than the State of Illinois and then exceeded the State with an increase in 2020. Some of the increase in unemployment in 2020 may be attributed to the COVID-19 pandemic (Figure 12).

Figure 12

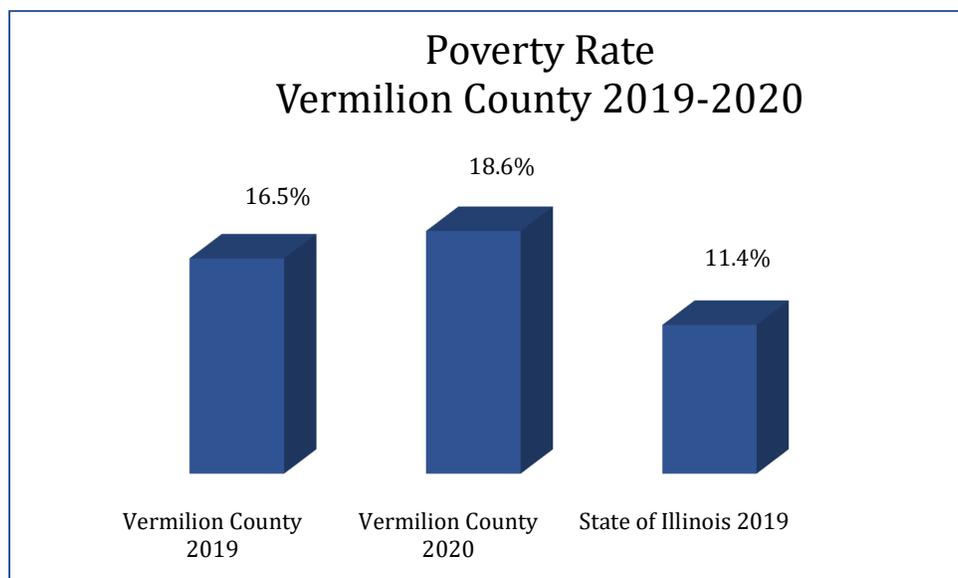


Source: Bureau of Labor Statistics

Individuals in Poverty

In Vermilion County, the percentage of individuals living in poverty between 2019 and 2020 increased by 2.1%. Poverty has a significant impact on the development of children and youth. In 2020 the poverty rate for families living in Vermilion County (18.6%) was significantly higher than the State of Illinois family poverty rate (11.4%) (Figure 13).

Figure 13



Source: US Census

1.5 Education

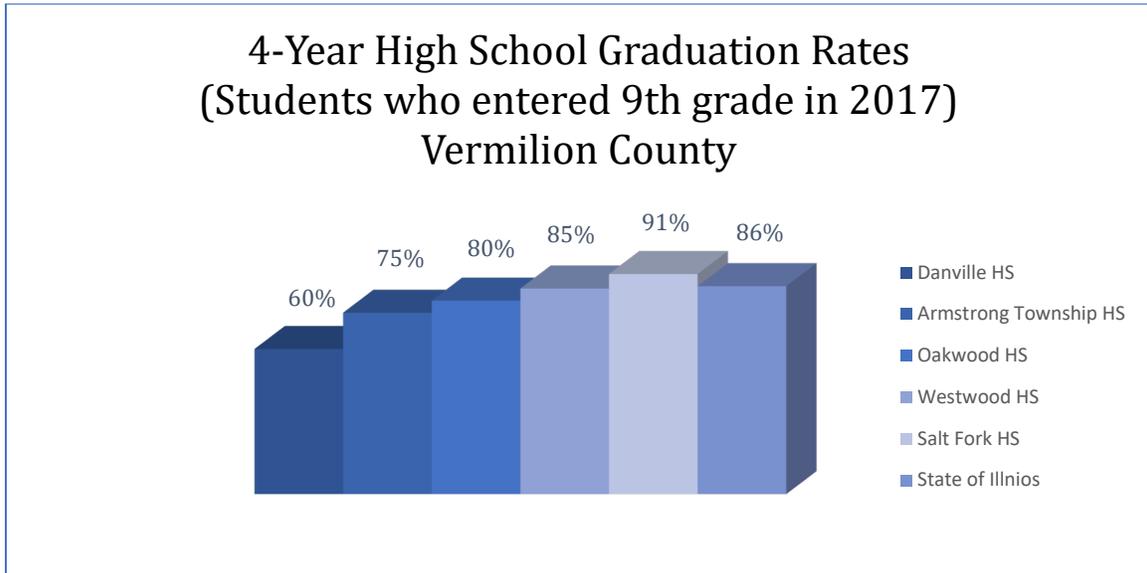
Importance of the measure: According to the National Center for Educational Statistics¹, “The better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income.” Research suggests that the higher the level of educational attainment and the more successful one is in school, the better one’s health will be and the greater likelihood of one selecting healthy lifestyle choices. Accordingly, years of education is strongly related to an individual’s propensity to earn a higher salary, gain better employment, and foster multifaceted success in life.

High School Graduation Rates

Vermilion County has seen improvement in education attainment, but remains below the State of Illinois averages (Figure 14). The 18–24-year-old population enrolled in college or graduate school has decreased since 2012. Of that population 34.2% of the enrollees were female and 13.3% were male. Table 1 illustrates adults over 25 are completing high school, and saw a jump of those enrolled from 2018 to 2019.

¹ NCES 2005

Figure 14



Source: Illinois Report Card

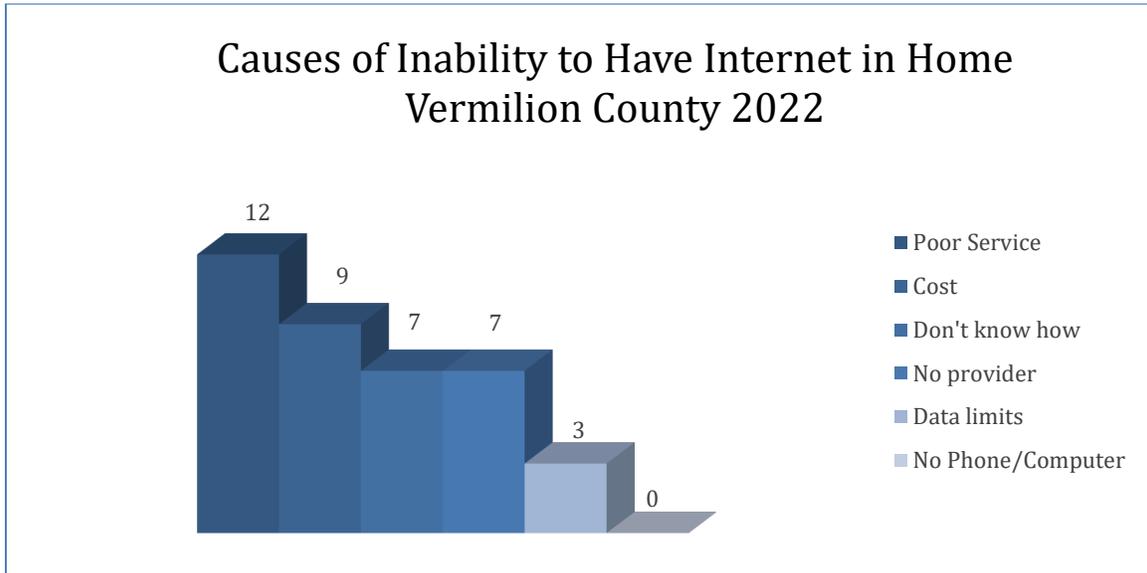
Education Level 25 years and over	2010	2014	2018	2019
High School or less	15.1%	13.7%	9.5%	10.4%
High School Graduate (includes equivalency)	40.3%	40.4%	43.7%	44.5%
Some College and Associate's Degree	30.8%	32.1%	30.7%	33.0%
Bachelor's Degree or higher	13.7%	13.8%	16.1%	12.1%

Students Enrolled in College - 18 to 24 years	2012	2013	2018	2019
Population 18-24 years	7,272	6,912	6,417	6,163
Enrolled in College or Graduate School	27.0%	28.4%	19.9%	23.2%

1.6 Internet Accessibility

Survey respondents were asked if they had Internet access. Of respondents, 95% indicated they had Internet in their homes. For those who did not have Internet in their home, poor service was the most frequently cited reason (Figure 15). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 15



Source: CHNA Survey

Digital Landscape

Digital landscape is a community’s access to digital tools and the digital literacy to use them. Key risk influencers include affordability, accessibility and digital literacy. For Vermilion County, 15% of the population is at elevated risk for digital landscape. This is higher than the State of Illinois average of 9% (SocialScape® powered by SociallyDetermined®, 2022).



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 younger people, those with higher income. Access to Internet tends to be rated lower Black people.

1.7 Key Takeaways from Chapter 1

- ✓ POPULATION DECREASED OVER THE LAST 5 YEARS.
- ✓ POPULATION OVER AGE 65 IS INCREASING.
- ✓ SINGLE FEMALE HEAD-OF-HOUSE-HOUSEHOLD REPRESENTS 14% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.
- ✓ POVERTY RATES REMAIN SIGNIFICANTLY HIGHER THAN STATE AVERAGES.

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

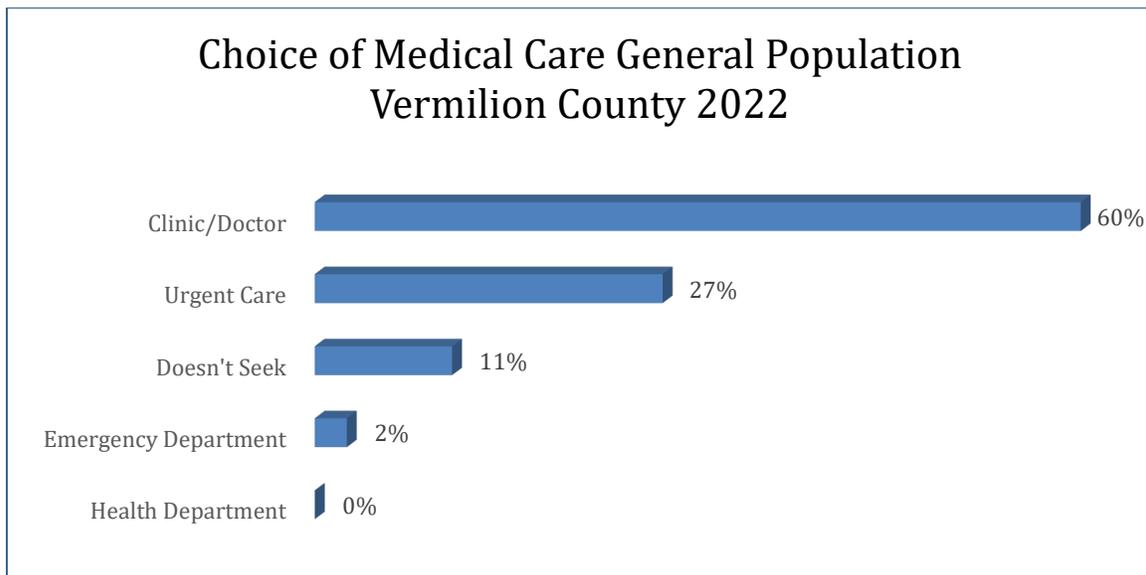
2.1 Accessibility

Importance of the measure: It is critical for health-care 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 health-care 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 60% of survey respondents. This was followed by urgent care (27%), not seeking medical attention (11%), the emergency department at a hospital (2%), and the health department (0%) (Figure 16).

Figure 16



Source: CHNA Survey

Social Determinants Related to Choice of Medical Care



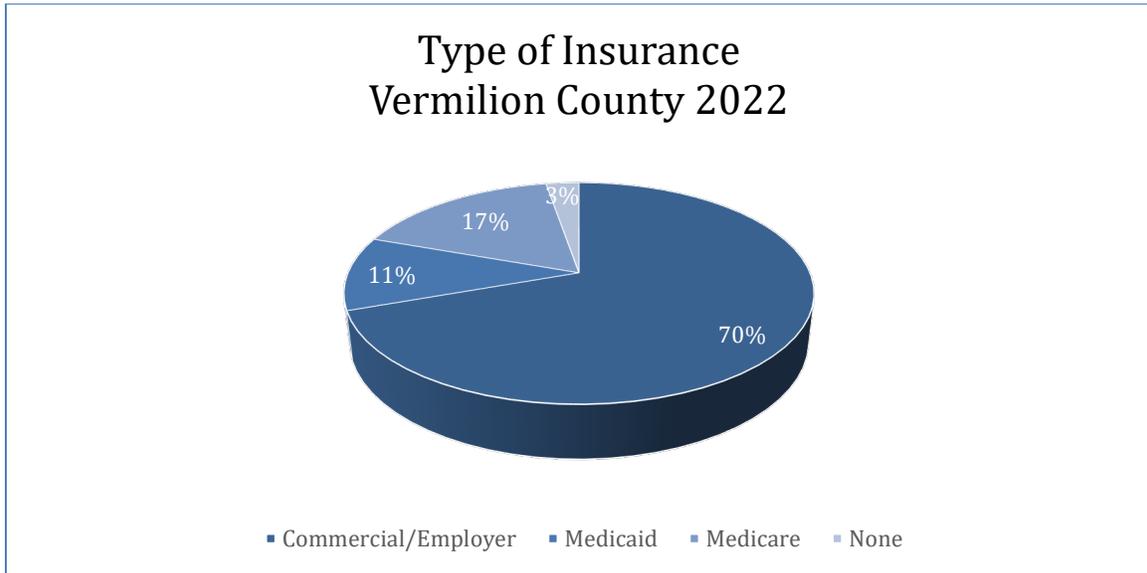
Several factors show significant relationships with an individual's choice of medical care. The following relationships were found using correlational analyses:

- **Clinic/Doctor's Office** tends to be used more often by women, older people, Black people and those with lower and income. Clinic/Doctor's office is used less often by White people.
- **Urgent Care** tends to be used more by younger people, White people and those with higher income. Urgent care tends to be used less by Black people and people with an unstable (e.g., homeless) housing environment.
- **Emergency Department** tends to be used more often by LatinX people, those with lower income 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 men and younger people.
- **Health Department** did not have any significant correlates.

Insurance Coverage

According to survey data, 70% of the residents are covered by commercial/employer insurance, followed by Medicare (17%), and Medicaid (11%). Only 3% of respondents indicated they did not have any health insurance (Figure 17).

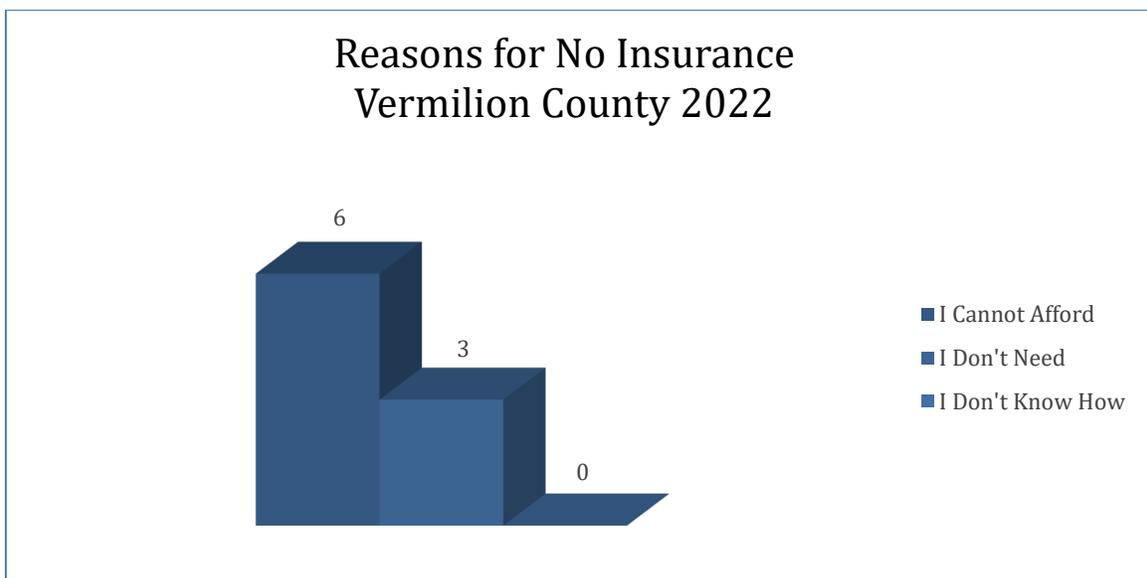
Figure 17



Source: CHNA Survey

Data from the survey show that for those individuals who do not have insurance, the most prevalent reason was cost (Figure 18). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 18



Source: CHNA Survey



Social Determinants Related to Type of Insurance

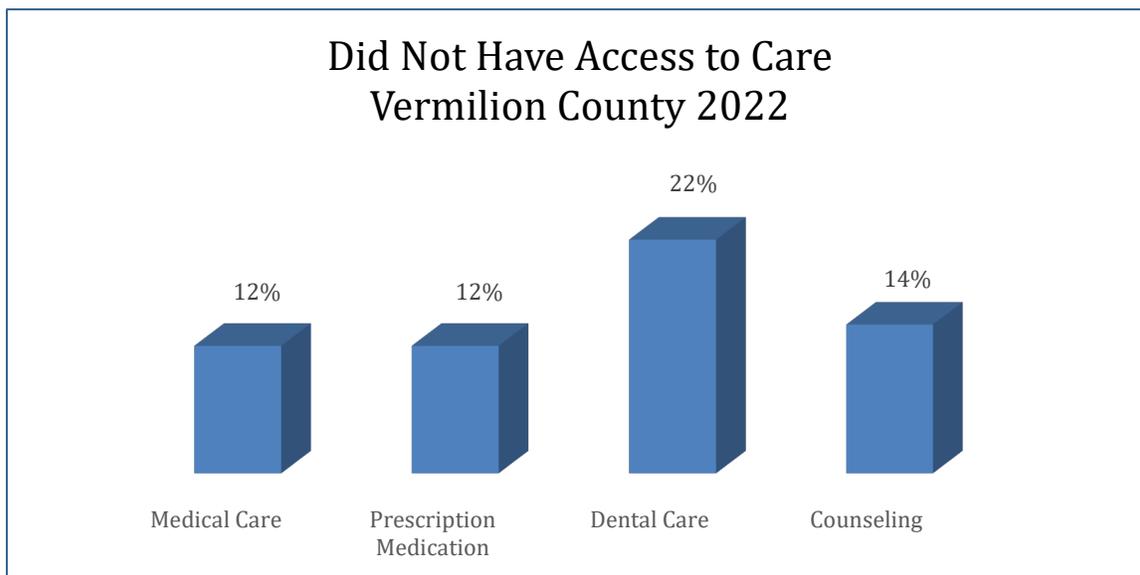
Several characteristics show significant relationships with an individual’s type of insurance. The following relationships were found using correlational analyses:

- **Medicare** tends to be used more frequently by older people, and those with lower education and income and people with an unstable (e.g., homeless) housing environment.
- **Medicaid** tends to be used more frequently by younger people, Black people, those with lower education and lower income and people with an unstable (e.g., homeless) housing environment.
- **Commercial/Employer Insurance** is used more often by younger people, White people and those with higher education and income. Commercial/Employer insurance is used less by Black people, LatinX people, and people with an unstable (e.g., homeless) housing environment.
- **No Insurance** tends to be reported more often by men, younger people, and Black people. **No insurance** tends to be reported less often by White people.

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 medication, dental care and counseling. Survey results show that 12% of the population did not have access to medical care when needed; 12% of the population did not have access to prescription medication when needed; 22% of the population did not have access to dental care when needed; and 14% of the population did not have access to counseling when needed (Figure 19).

Figure 19



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:

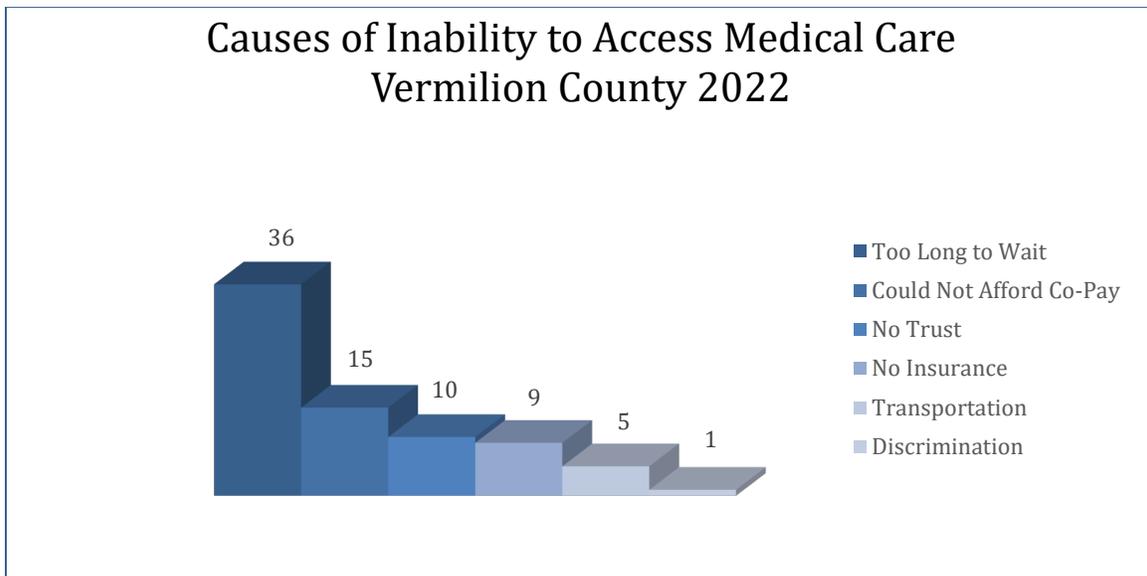
- **Access to medical care** tends to be higher for White people.
- **Access to prescription medications** tends to be higher for those with higher education and those with higher income.

- **Access to dental care** tends to be higher for men, older people, LatinX people, and those with higher education and those with higher income. Access to dental care tends to be lower for Black people.
- **Access to counseling** tends to be higher for men, older people, and those with higher income.

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 cause of the inability to gain access to medical care was too long to wait for an appointment (36), the inability to afford the copay (15), lack of trust (10) and no insurance (9) (Figure 20). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 20

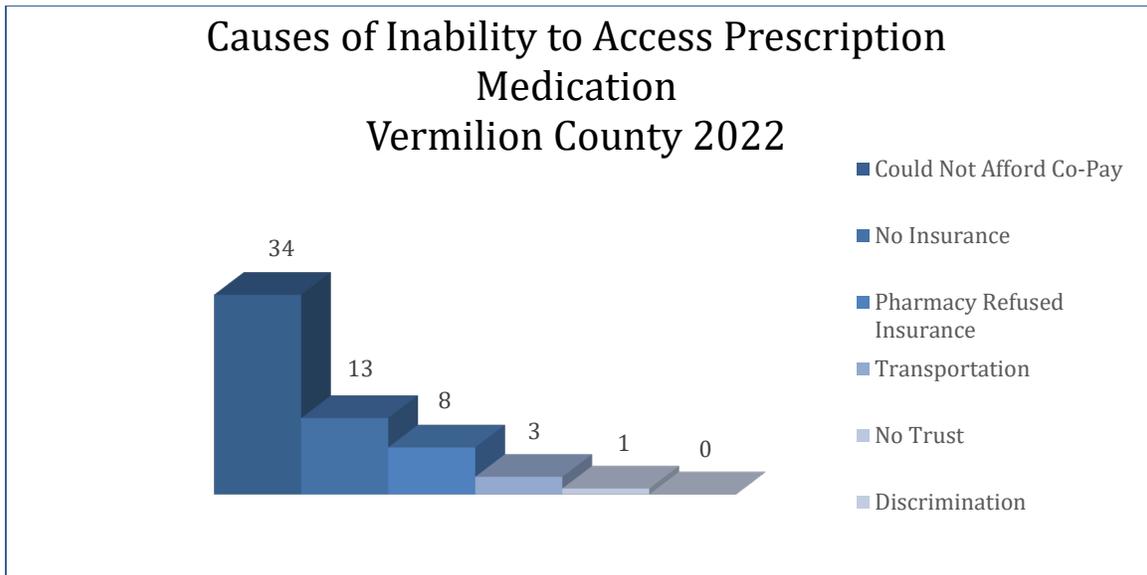


Source: CHNA Survey

Reasons for No Access – Prescription Medication

Survey respondents who reported they were not able to get prescription medication 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 (34) and no insurance (13). Note that these data are displayed in frequencies rather than percentages given the low number of responses (Figure 21).

Figure 21

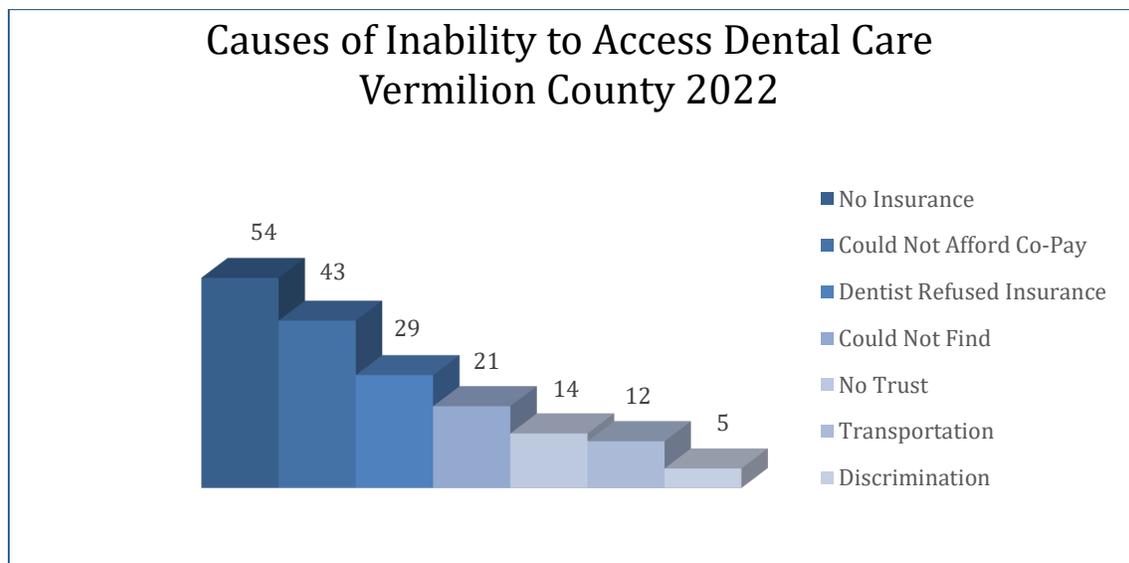


Source: CHNA Survey

Reasons for No Access – Dental Care

Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading causes of inability to gain access to dental care were no insurance (54) the inability to afford copayments (43) and refusal of insurance (29) (Figure 22). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 22

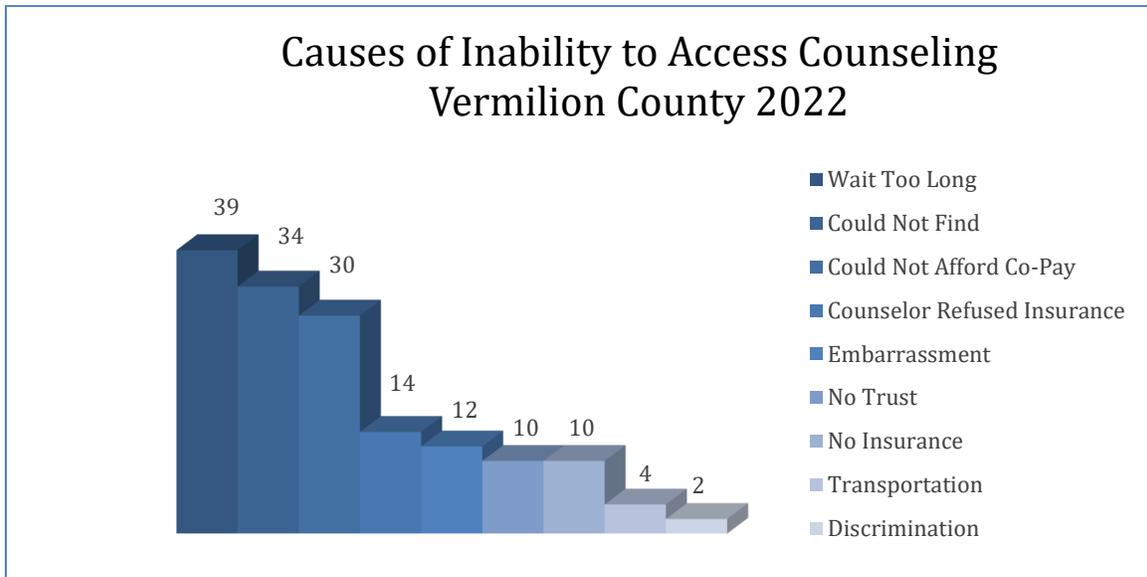


Source: CHNA Survey

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 wait was too long (39), could not find (34) and inability to afford co-pay (30) (Figure 23). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 23



Source: CHNA Survey

Transportation Network

Transportation network is a measure of the adequacy of the transportation network to facilitate access to care. Key risk influencers include access and proximity to resources. While survey data indicate transportation was not a leading cause of inaccessibility, for Vermilion County, 24% of the population is at elevated risk for transportation network. This is higher than the State of Illinois average of 6% (SocialScape® powered by SociallyDetermined®, 2022).

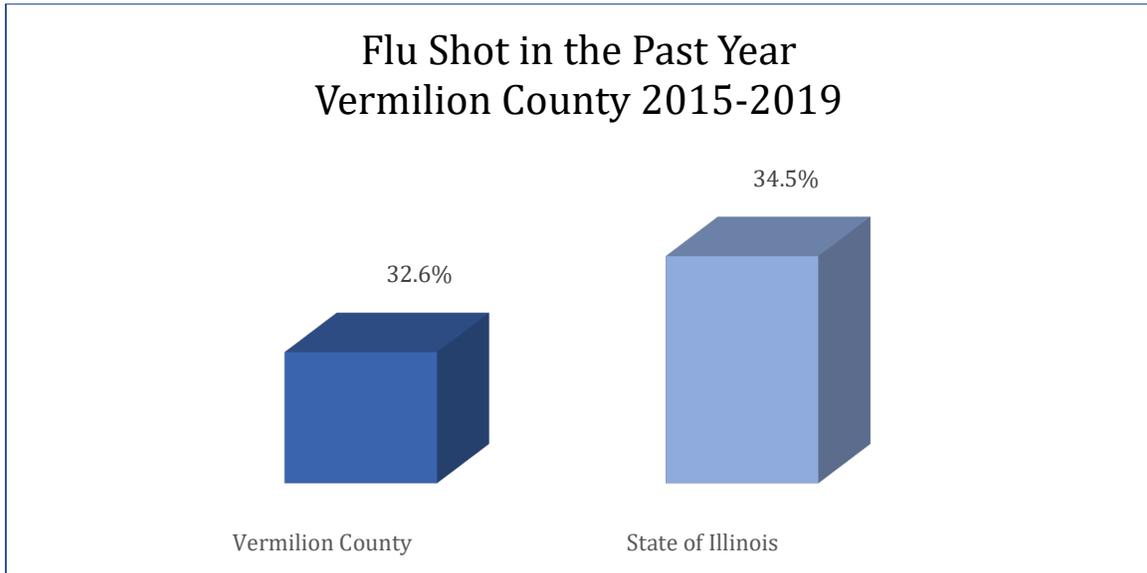
2.2 Wellness

Importance of the measure: Preventative health-care 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 health-care costs. The overall health of a community is impacted by preventative measures including immunizations and vaccinations.

Frequency of Flu Shots

Figure 24 shows that the percentage of people who have had a flu shot in the past year is 32.6% for Vermilion County in 2015-2019, compared to the State of Illinois average (34.5%). Note that data have not been updated by the Illinois Department of Public Health.

Figure 24

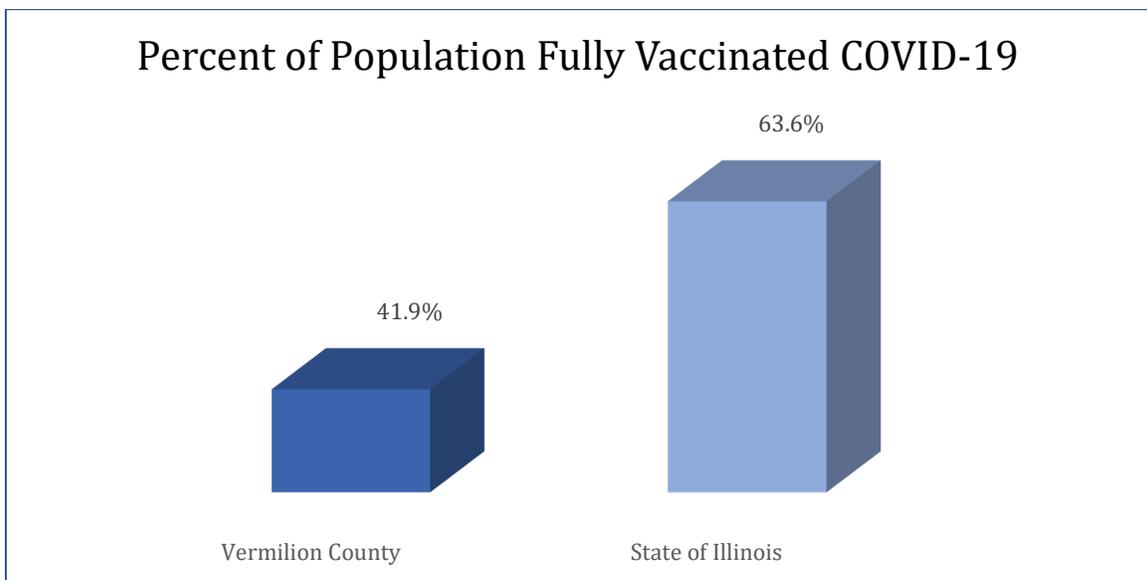


Source: CHNA Survey

COVID-19 Vaccinations

Figure 25 shows that the percentage of people who have been fully vaccinated from the COVID-19 virus. Although Vermilion County remains below half at 41.9%, they remain under the rate for the State of Illinois at 63.63%. Additionally, given the recency of the COVID-19 virus, no historical comparisons are made at this time.

Figure 25

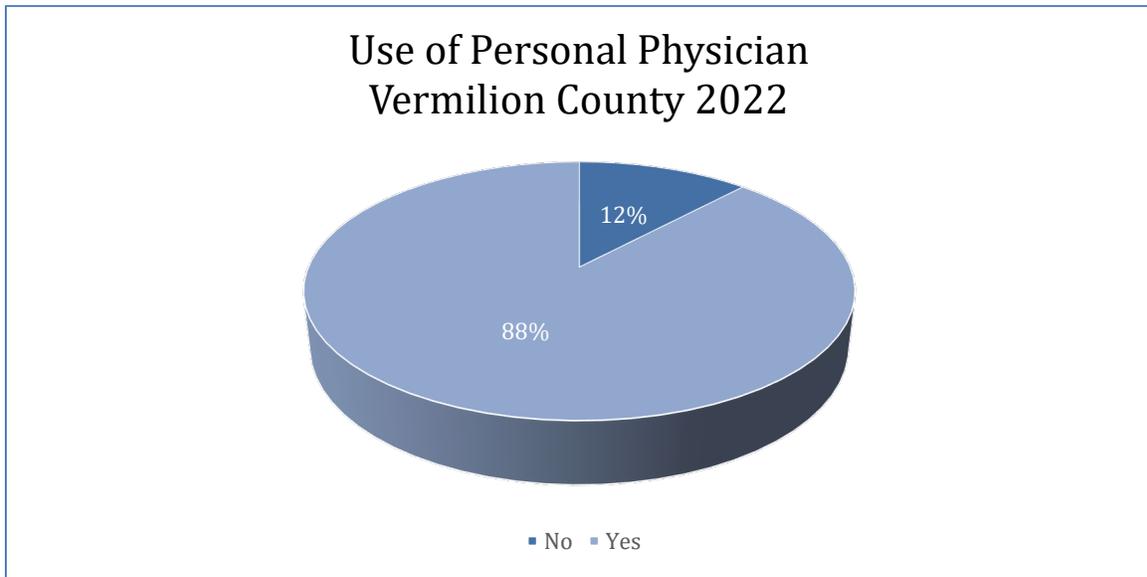


Source: Illinois Department of Public Health (02-27-22)

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 (Figure 26).

Figure 26



Source: CHNA Survey



Social Determinants Related to Having a Personal Physician

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

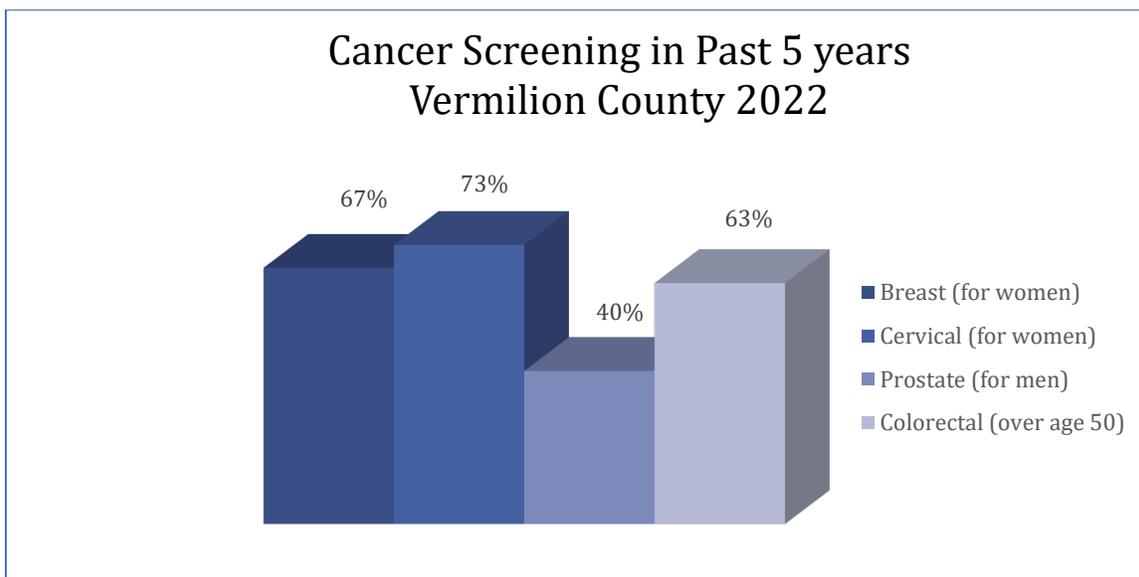
- **Having a personal physician** tends to be more likely for women and older people.

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. Specifically, four types of cancer screening were measured: breast, cervical, prostate and colorectal.

Results from the CHNA survey show that 67% of women had a breast screening in the past five years and 73% of women had a cervical screening. For men, 40% had a prostate screening in the past five years. For women and men over the age of 50, 63% had a colorectal screening in the last five years (Figure 27).

Figure 27



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:

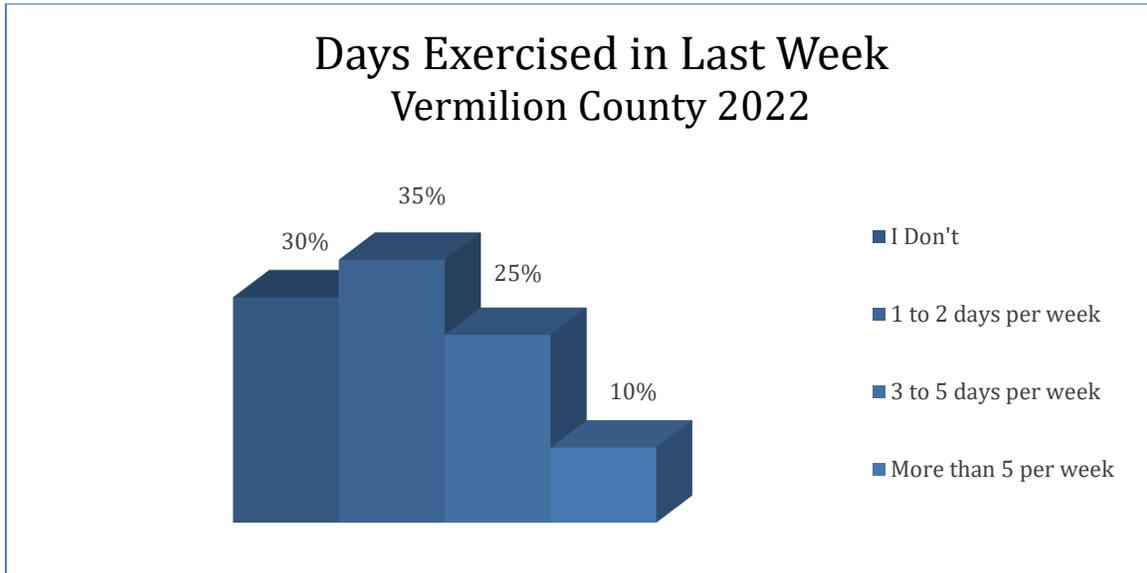
- **Breast screening** tends to be more likely for older women, White women, and those with higher income. Breast screening tends to be less likely for Black women, LatinX women and people in an unstable (e.g., homeless) housing environment.
- **Cervical screening** tends to be more likely for women with a higher level of education.
- **Prostate screening** tends to be more likely for older men.
- **Colorectal screening** tends to be more likely for men, and older people.

Physical Exercise

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

Specifically, 30% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week (Figure 28).

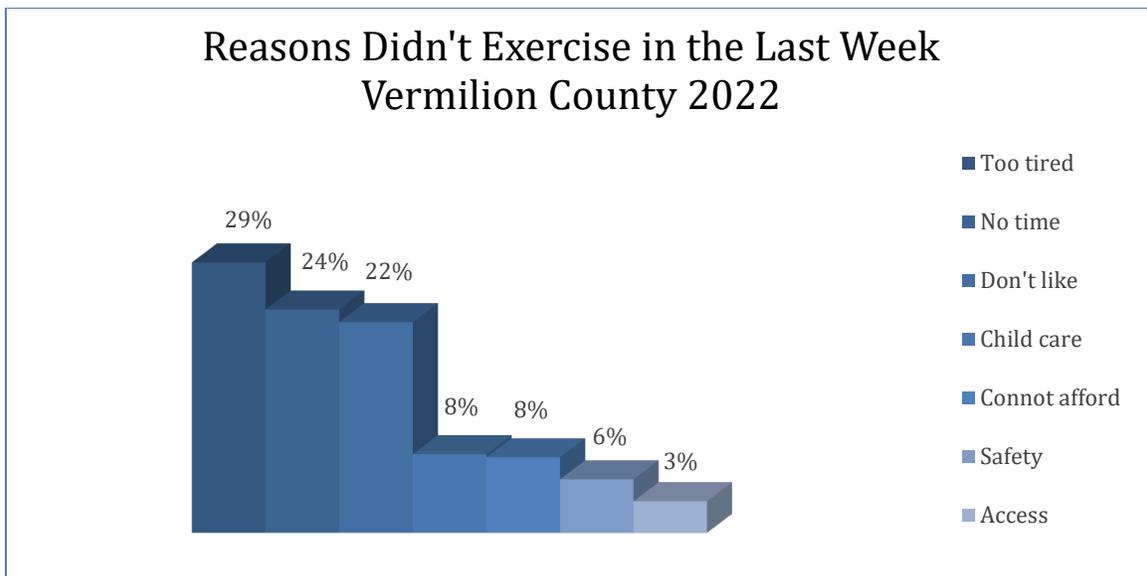
Figure 28



Source: CHNA Survey

To find out why some residents do not exercise at all, a follow up question was asked. The most common reasons for not exercising are not having enough energy (29%), not enough time (24%) and a dislike of exercise (22%) (Figure 29).

Figure 29



Source: CHNA Survey



Social Determinants Related to Exercise

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

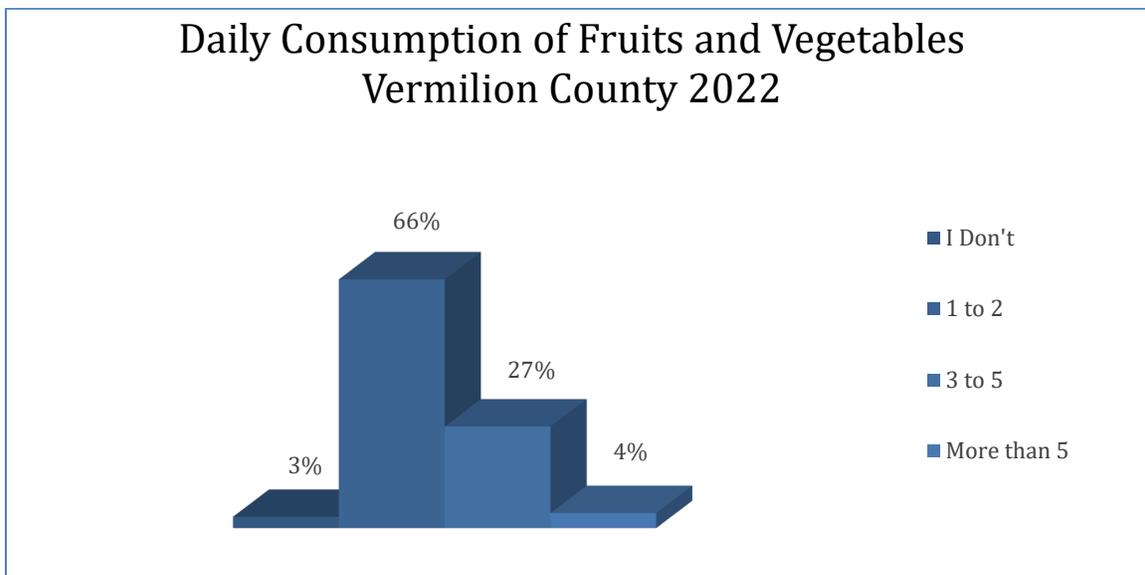
- **Frequency of exercise** tends to be more likely for White people, those with a higher level of education and higher income. Frequency of exercise tends to be less likely for people in an unstable (e.g., homeless) housing environment.

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.

Two-thirds (69%) 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 4% (Figure 30).

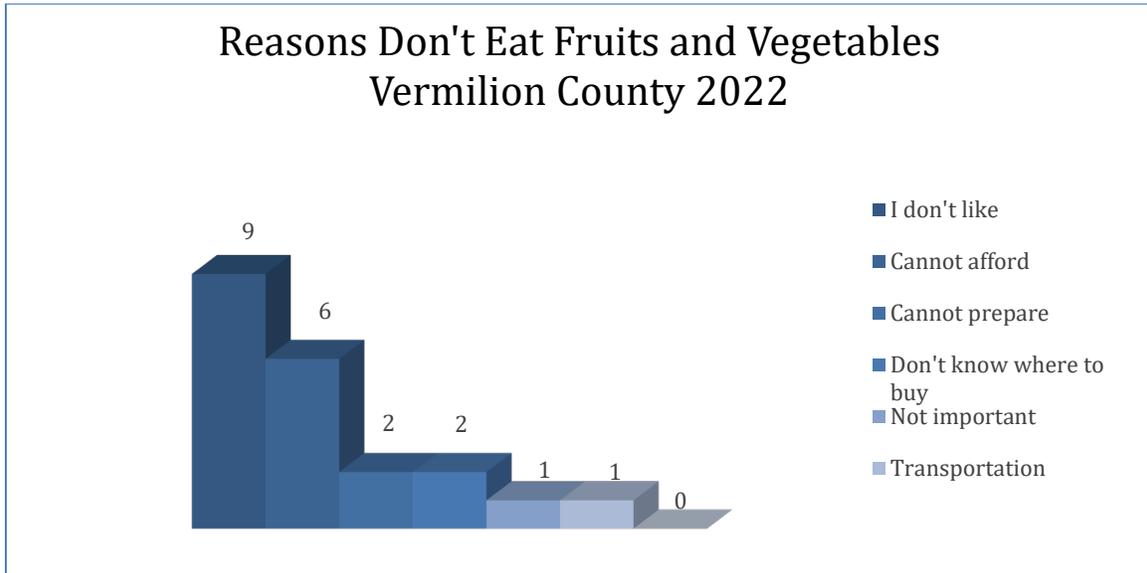
Figure 30



Source: CHNA Survey

Those individuals who indicated they do not eat any fruits or vegetables were asked a follow up question. The most common reason for failing to eat more fruits and vegetables was not liking fruits and vegetables (9) and cannot afford (6) (Figure 31). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 31



Source: CHNA Survey



Social Determinants Related to Healthy Eating

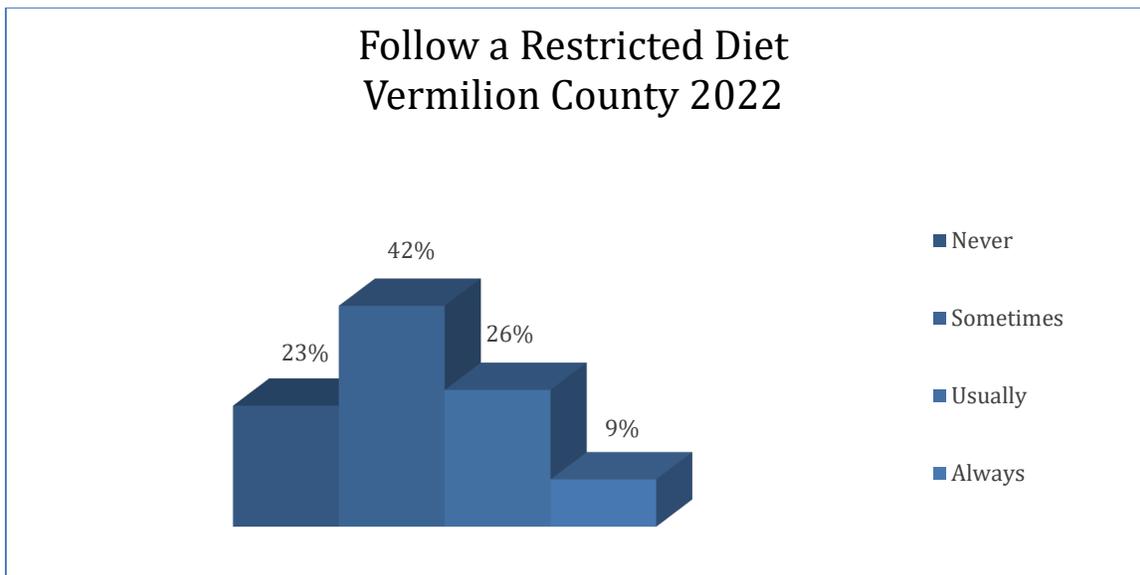
Multiple characteristics show significant relationships with healthy eating. The following relationships were found using correlational analyses:

- **Consumption of fruits and vegetables** tends to be more likely for women, Black people, and those with a higher level of education and those with higher income.

Restricted Diet

Respondents were also asked if they followed a restricted diet if recently diagnosed with a morbidity. Of respondents, 35% usually or always follow a restricted diet (Figure 32).

Figure 32



Source: CHNA Survey

Health Literacy

Health literacy is a measure of factors in the community that impact healthcare access, navigation and adherence. Key risk influencers include culture, demographics and education. For Vermilion County, 35% of the population is at elevated risk for health literacy. This is similar to the State of Illinois average of 34% (SocialScape® powered by SociallyDetermined®, 2022).

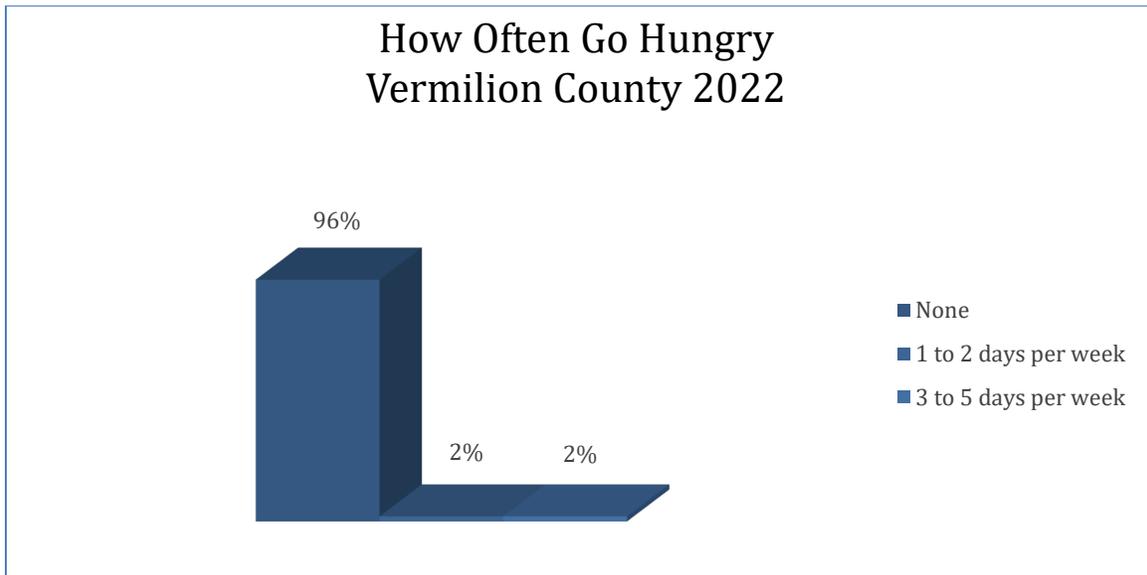
2.3 Understanding Food Insecurity

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.

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 – 5 days per week (Figure 33).

Figure 33



Source: CHNA Survey



Social Determinants Related to Prevalence of Hunger

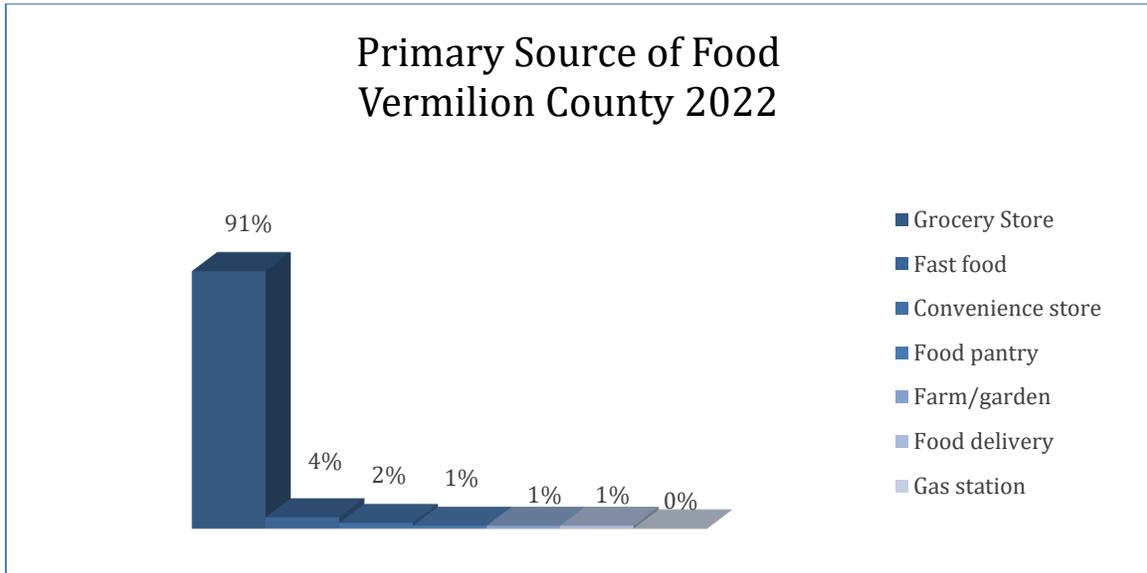
Multiple characteristics show significant relationships with hunger. The following relationships were found using correlational analyses:

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

Primary Source of Food

Respondents were asked to identify their primary source of food. It can be seen that the majority (91%) identified a grocery store (Figure 34).

Figure 34



Source: CHNA Survey

Food Landscape

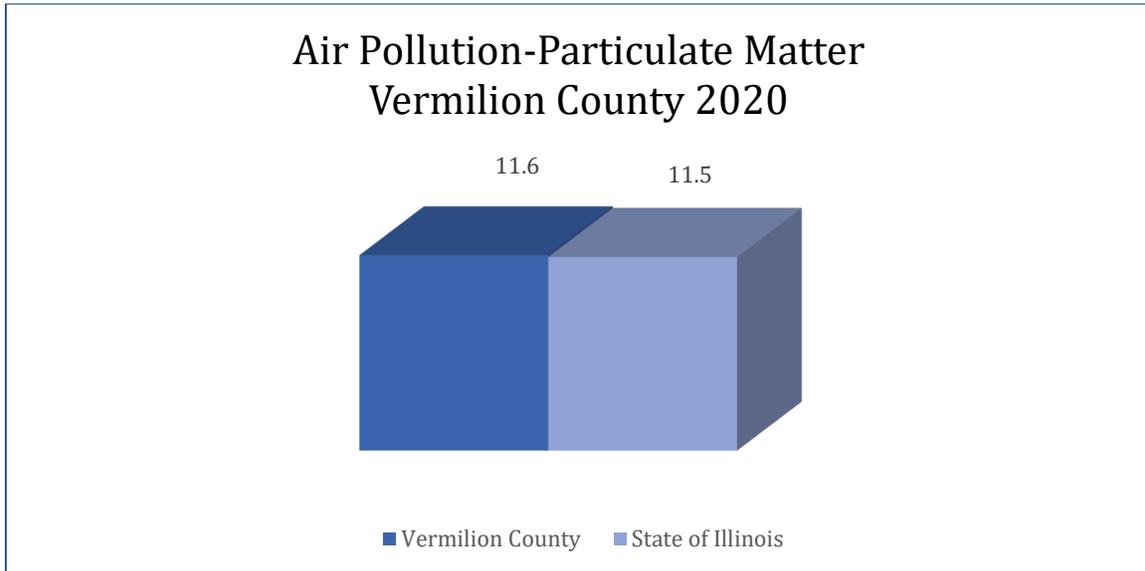
Food landscape is a measure of the conditions that affect the ability of residents to access health, affordable nutrition. Key risk influencers include accessibility, affordability and literacy. For Vermilion County, 34% of the population is at elevated risk for food landscape. This is higher than the State of Illinois average of 25%. (SocialScape® powered by SociallyDetermined®, 2022).

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 Vermilion County (11.6) is slightly higher than the State average of 11.5 (Figure 35).

Figure 35



Source: County Health Rankings 2021

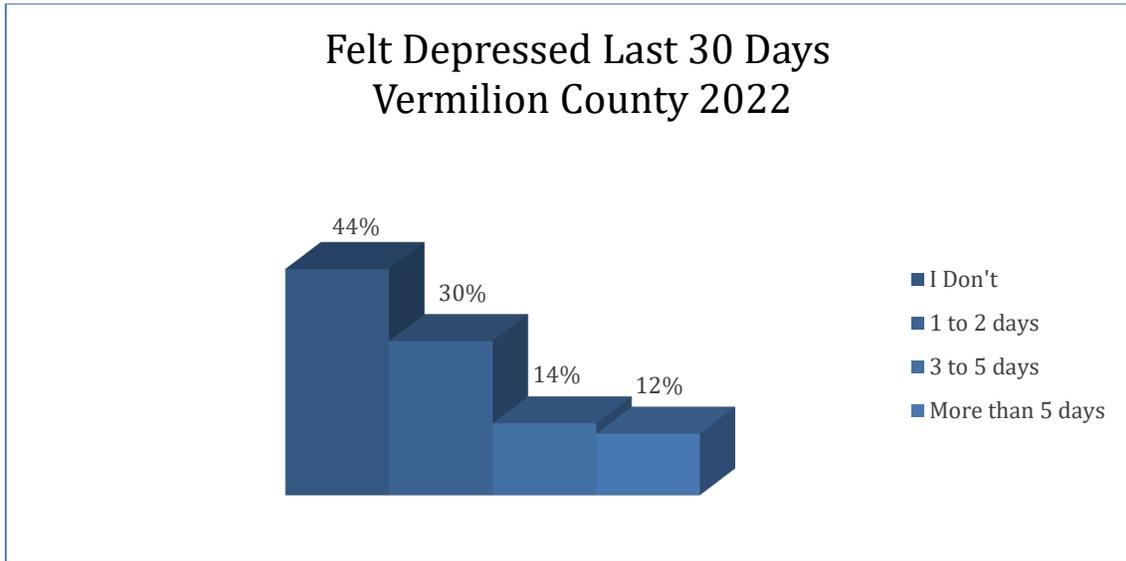
2.5 Health Status

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

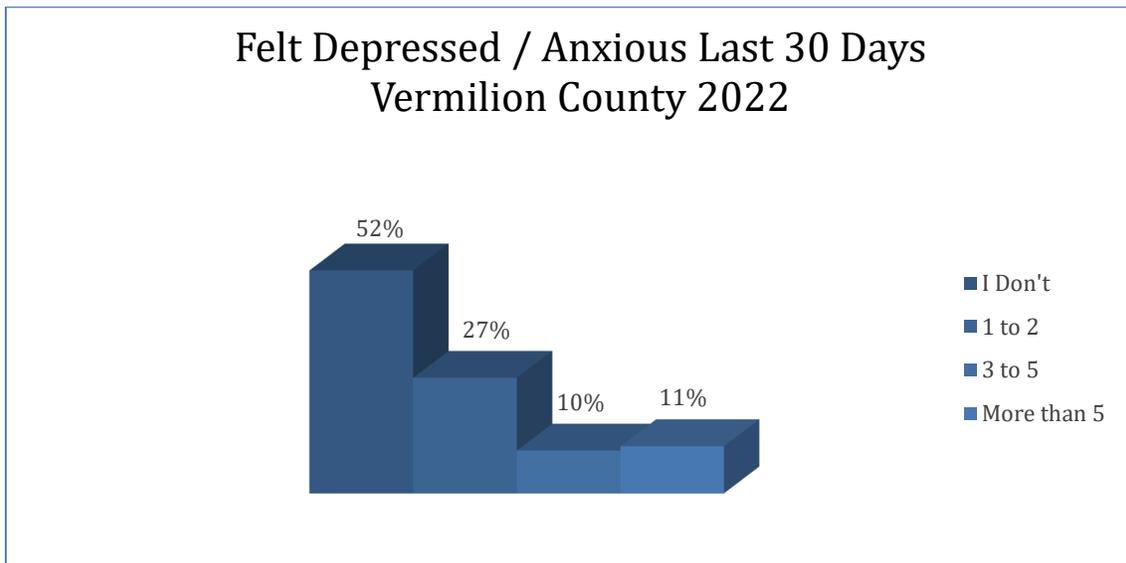
The survey asked respondents to indicate specific issues, such as depression and stress/anxiety. Of respondents, 44% indicated they did not feel depressed in the last 30 days (Figure 36) and 52% indicated they did not feel anxious or stressed (Figure 37).

Figure 36



Source: CHNA Survey

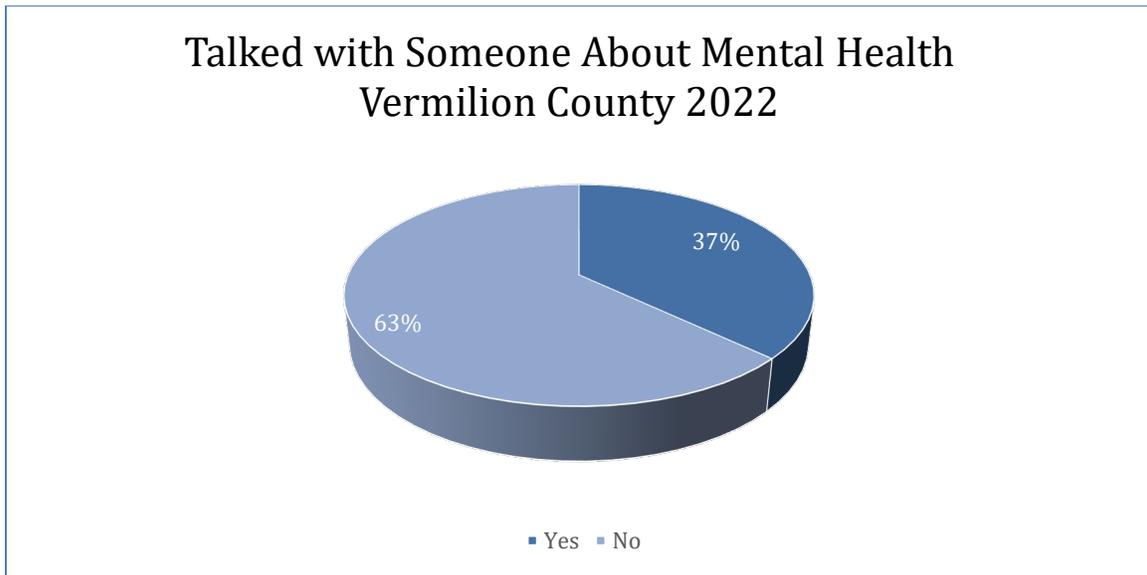
Figure 37



Source: CHNA Survey

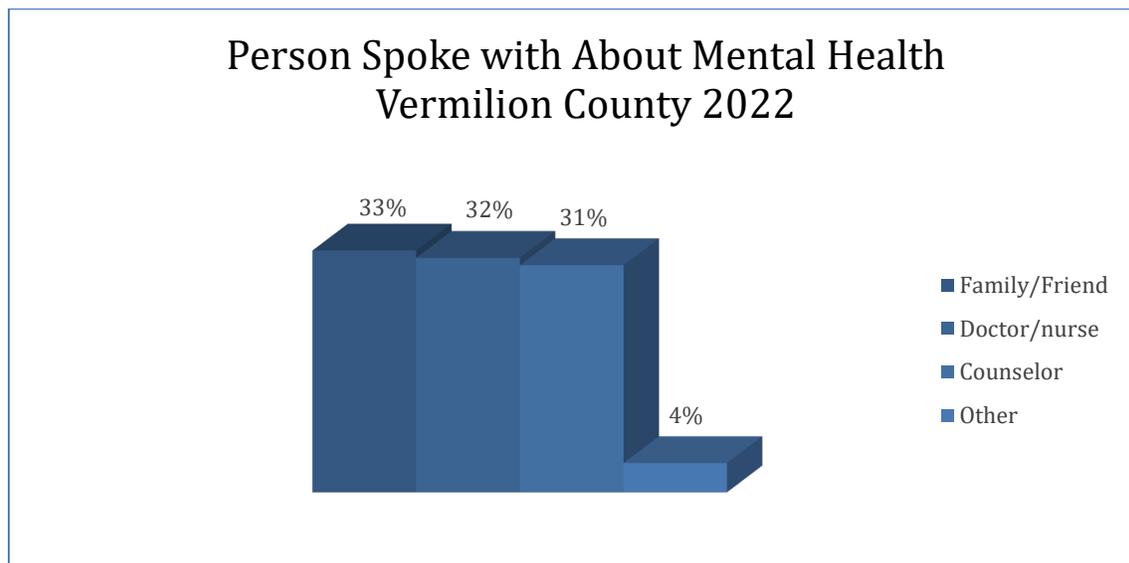
Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents, 37% indicated that they spoke to someone (Figure 38), the most common response was a Family/Friend (33%) (Figure 39).

Figure 38



Source: CHNA Survey

Figure 39



Source: CHNA Survey



Social Determinants Related to Behavioral Health

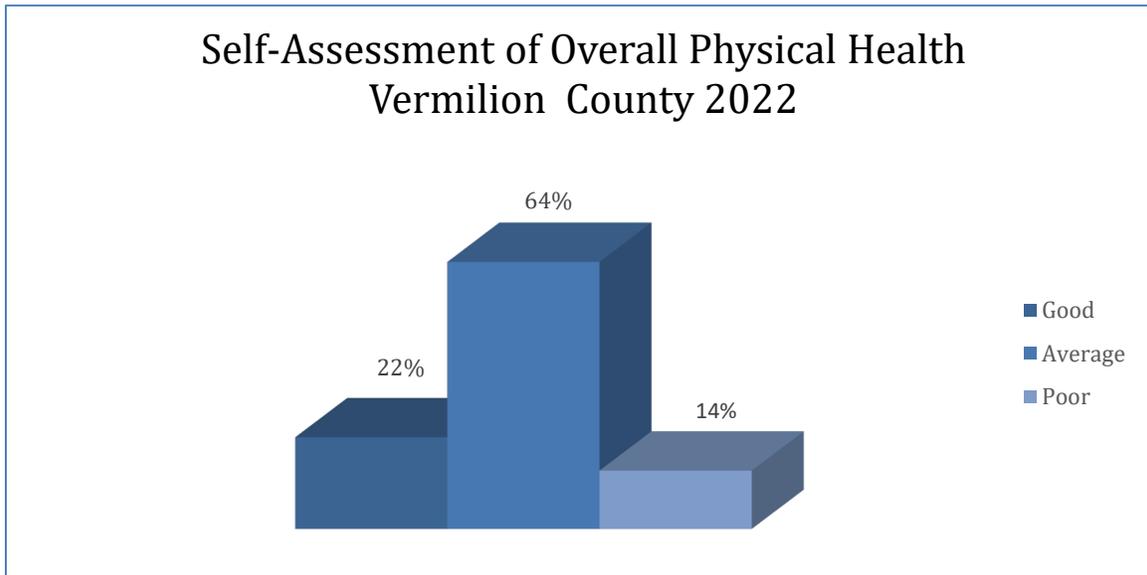
Multiple characteristics show significant relationships with behavioral health. The following relationships were found using correlational analyses:

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

Self-Perceptions of Overall Health

In regard to self-assessment of overall physical health, 14% of respondents reported having poor overall physical health (Figure 40).

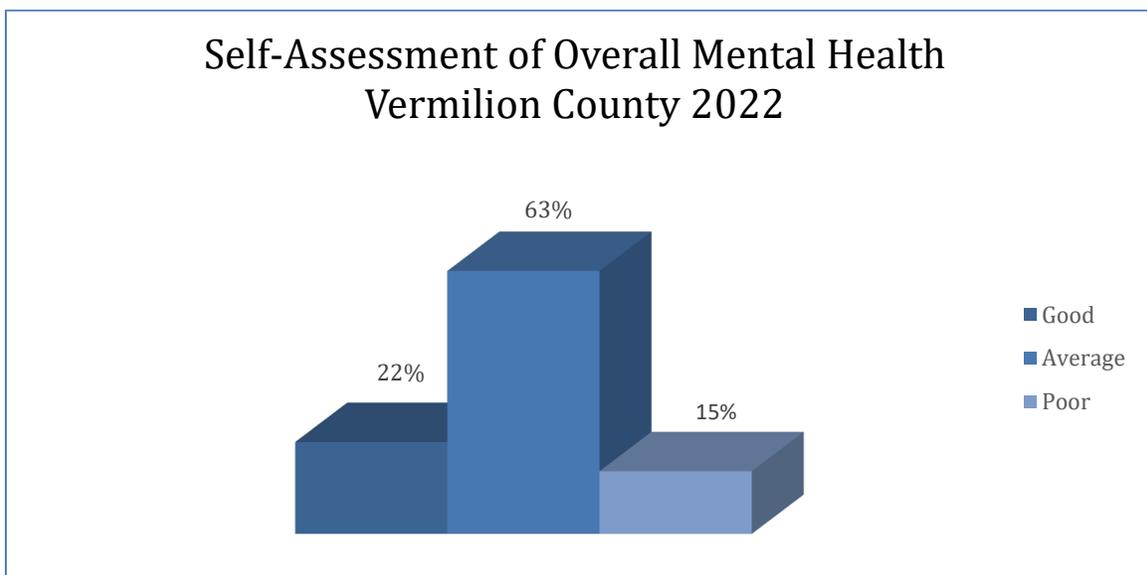
Figure 40



Source: CHNA Survey

In regard to self-assessment of overall mental health, 15% of respondents stated they have poor overall mental health (Figure 41).

Figure 41



Source: CHNA Survey



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 White people, those with higher education and income. Perceptions of physical health tend to be lower for LatinX people.
- **Perceptions of mental health** tend to be higher for men, older people and those with higher education and income. Women were less likely to report good mental health.

2.6 Key Takeaways from Chapter 2

- ✓ SIGNIFICANT UTILIZATION OF URGENT CARE AS A PRIMARY SOURCE OF HEALTHCARE.
- ✓ RELATIVELY HIGH RATE OF PEOPLE WHO DO NOT HAVE ACCESS TO DENTAL CARE.
- ✓ PROSTATE SCREENING IS RELATIVELY LOW COMPARED TO BREAST AND COLORECTAL SCREENING.
- ✓ WHILE SIMILAR TO STATE AVERAGES, THERE IS AN ELEVATED RISK OF HEALTH LITERACY ISSUES.
- ✓ THE MAJORITY OF PEOPLE EXERCISE LESS THAN 2 TIMES PER WEEK AND CONSUME 2 OR FEWER SERVINGS OF FRUITS/VEGETABLES PER DAY.
- ✓ FOOD INSECURITY IS HIGHER THAN STATE AVERAGES.
- ✓ HIGH PERCENTAGE OF RESPONDENTS EXPERIENCED DEPRESSION AND/OR STRESS IN THE LAST 30 DAYS.
- ✓ COVID-19 VACCINATION RATES ARE SIGNIFICANTLY LOWER THAN STATE AVERAGES.

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

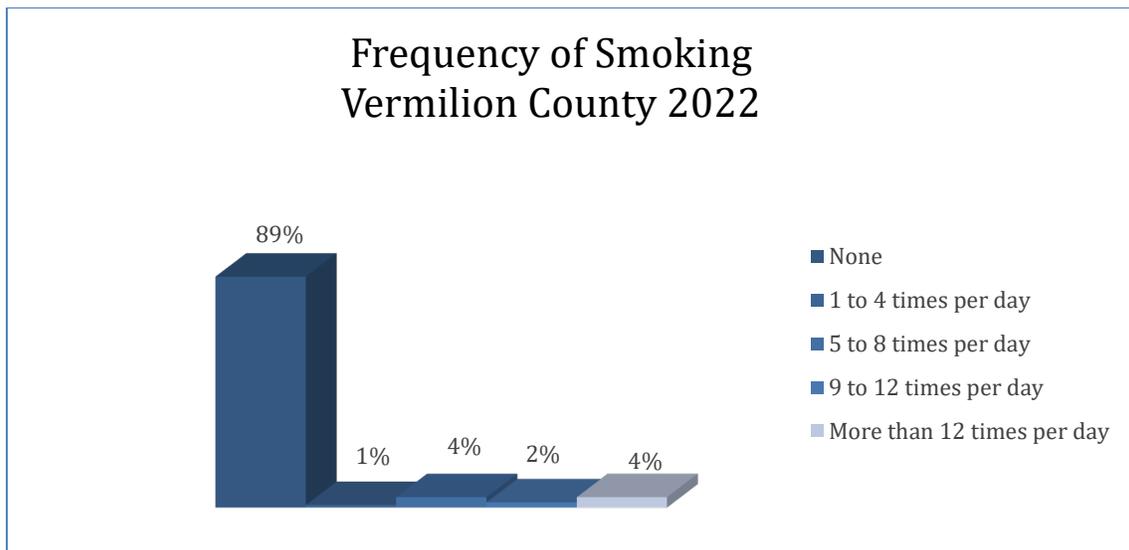
CHAPTER 3: SYMPTOMS AND PREDICTORS

3.1 Tobacco Use

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

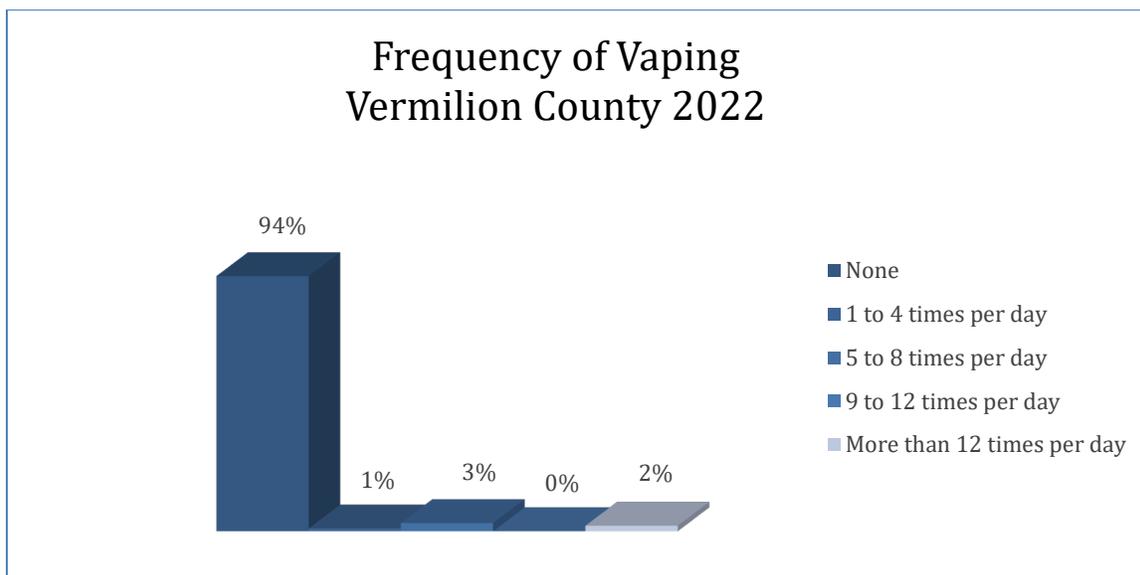
CHNA survey data show 89% of respondents do not smoke (Figure 42) and 94% of respondents do not vape (Figure 43).

Figure 42



Source: CHNA Survey

Figure 43



Source: CHNA Survey



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** tends to be rated higher those with less education and those in an unstable (e.g., homeless) housing environment.
- **Vaping** tends to be rated higher by younger people, those with less education and those in an unstable (e.g., homeless) housing environment. Vaping tends to be rated lower by White people.

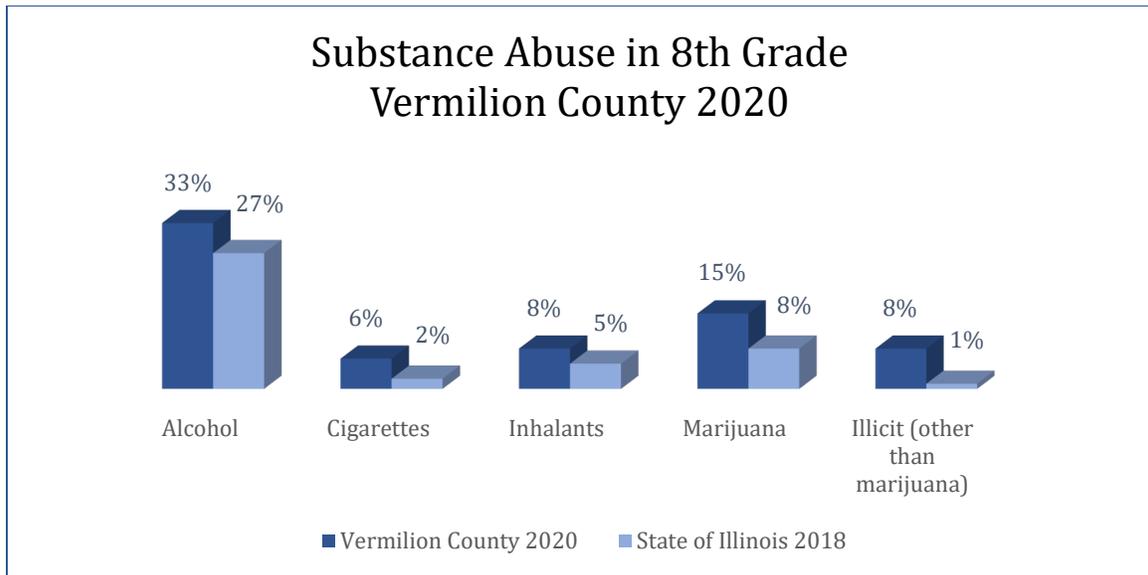
3.2 Drug and Alcohol Abuse

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 2020 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Vermilion County data reported for 2020, State of Illinois reporting 2018 data. Among 8th graders in Vermilion County, all categories of substance abuse are higher than the State of Illinois averages (Figure 44).

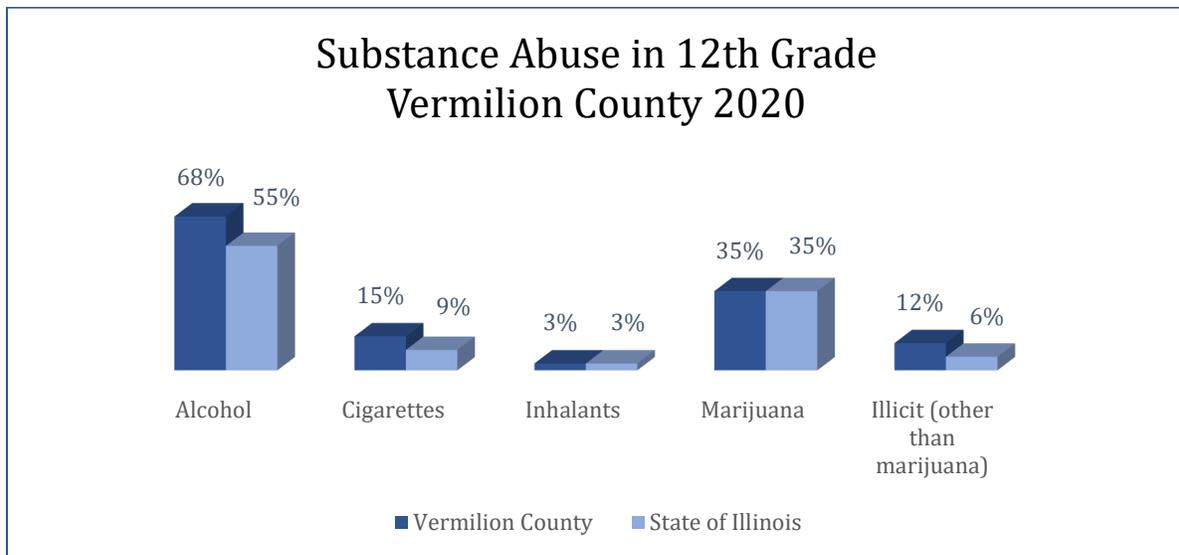
Figure 44



Source: University of Illinois Center for Prevention Research and Development

Among 12th graders, Vermilion County is at or above State of Illinois averages in all categories (Figure 45).

Figure 45

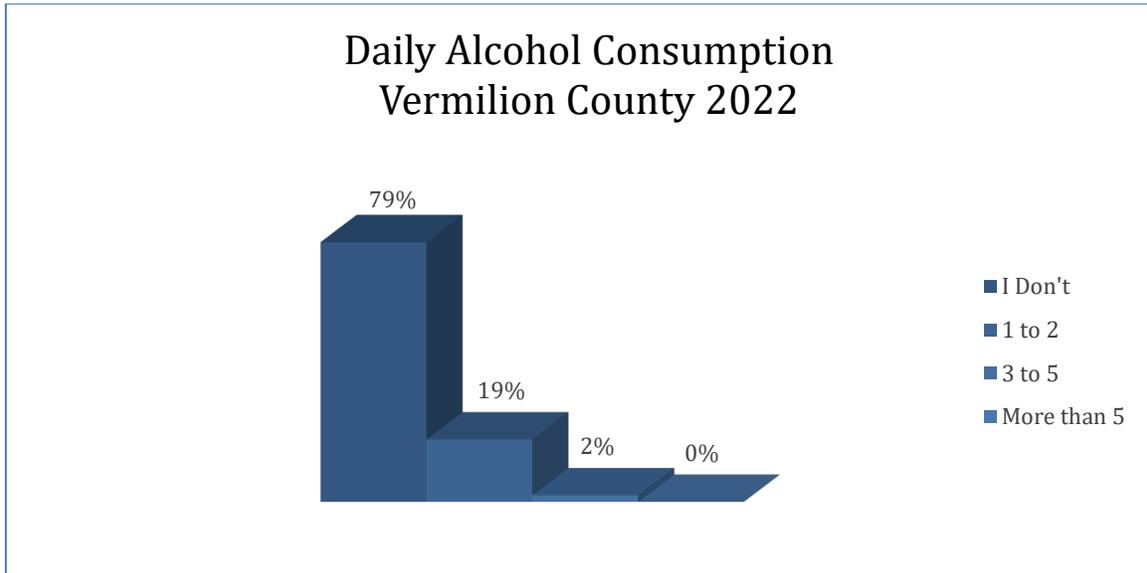


Source: University of Illinois Center for Prevention Research and Development

Adult Substance Use

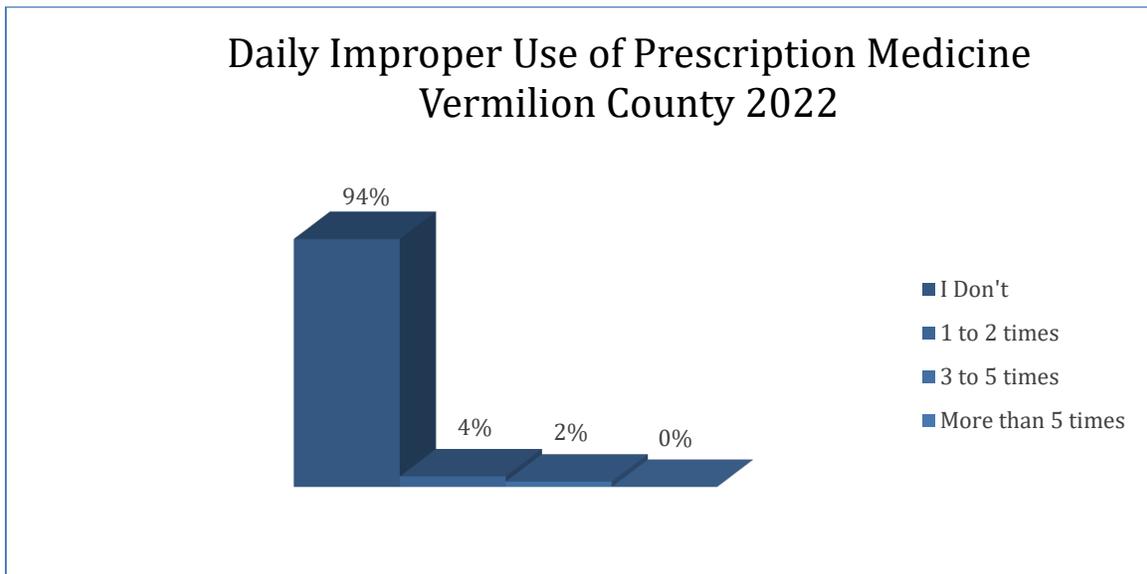
The CHNA survey asked respondents to indicate usage of several substances. Of respondents, 79% indicated they did not consume alcohol on a typical day (Figure 46), 94% indicated they do not take prescription medication improperly including opioids on a typical day (Figure 47), 90% indicated they do not use marijuana on a typical day (Figure 48) and 98% indicated they do not use illegal substances on a typical day (Figure 49). Table 1 shows related overdose deaths in Vermilion County 2018 – 2021.

Figure 46



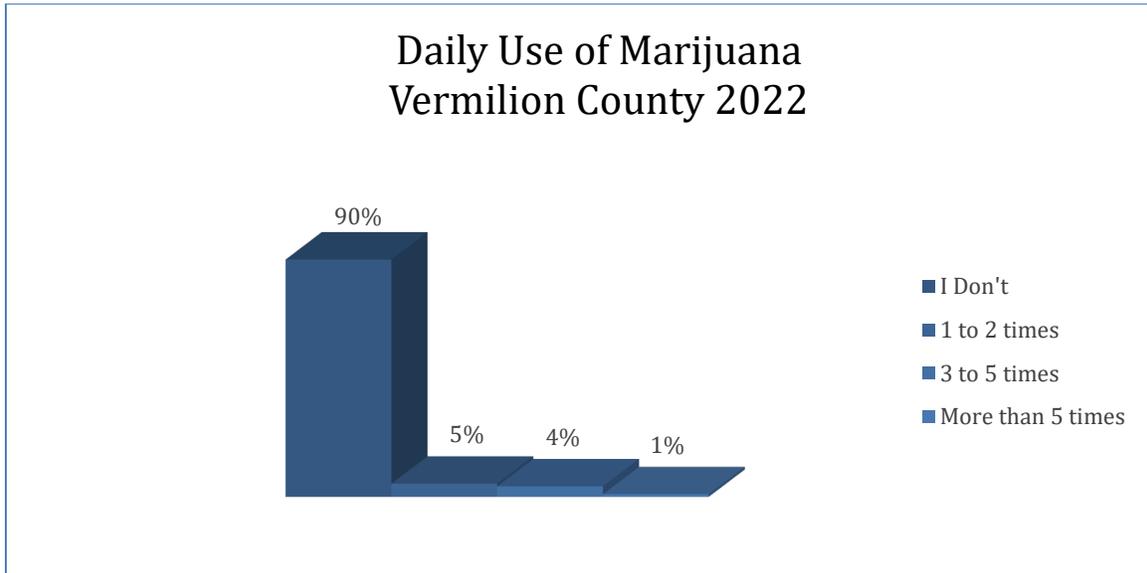
Source: CHNA Survey

Figure 47



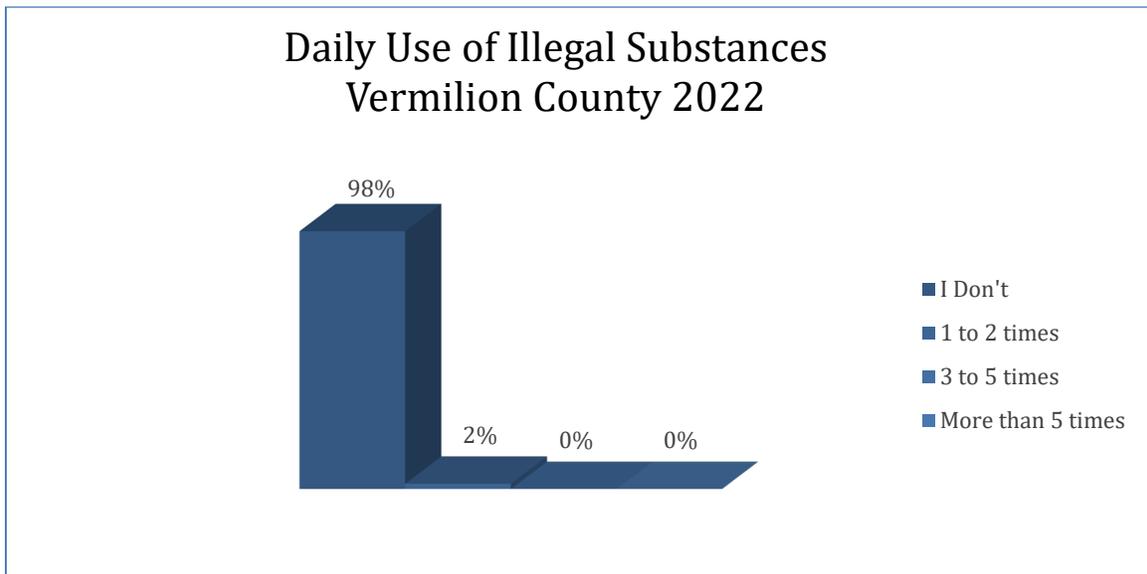
Source: CHNA Survey

Figure 48



Source: CHNA Survey

Figure 49



Source: CHNA Survey

Table 1

Overdose Deaths in Vermilion County					
Year	Any Drug	Any Opioid	Heroin	Synthetic Opioids	Natural and Semi-Synthetic Opioids
2021	28				
2020	21	16	4	13	3
2019	24	15	4	10	5
2018	21	13	5	6	7

Source: 2018-2020 Illinois Department of Public Health; 2021 Vermilion County Coroner



Social Determinants Related to Substance Use

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

- **Alcohol consumption** tends to be rated higher for men, Black people, LatinX people, those with less income and education. Alcohol consumption tends to be rated lower for White people.
- **Misuse of prescription medication including opioids** tends to be rated higher by older people, LatinX people, those with less income and education and people with an unstable (e.g., homeless) housing environment. Misuse of prescription medication tends to be rated lower for White people.
- **Marijuana use** tends to be rated higher by younger people, Black people, those with less income and education, and people with an unstable (e.g., homeless) housing environment. Marijuana tends to be rated lower for White people.
- **Use of illegal substances** tends to be rated higher by LatinX people, those with less education, and people with an unstable (e.g., homeless) housing environment. Illegal substance use tends to be rated lower for White people.

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 Vermilion 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

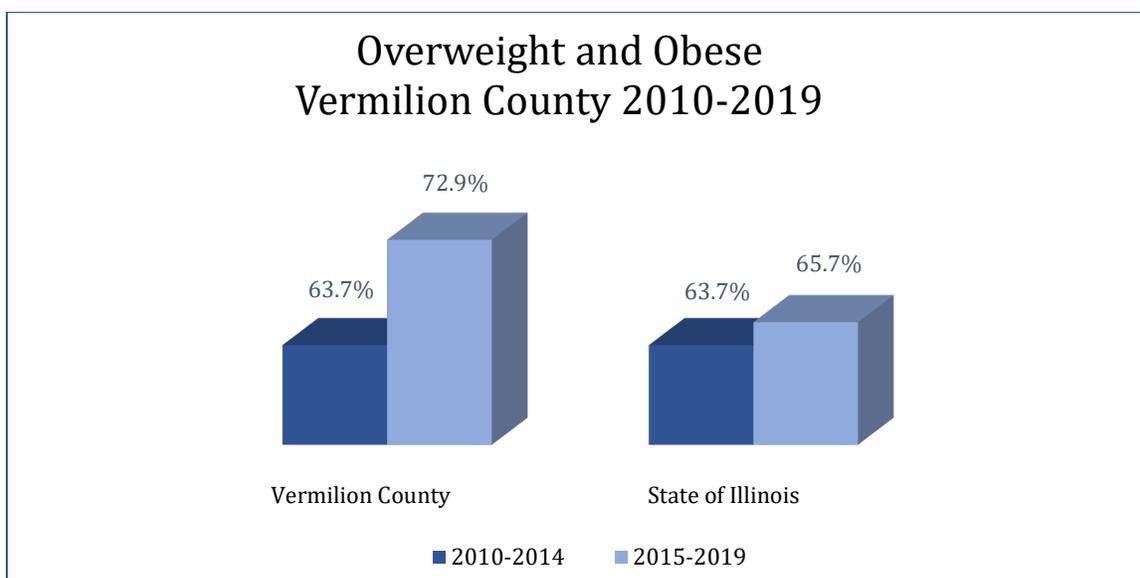
impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children.

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 Vermilion County, the number of people diagnosed with obesity and being overweight has increased from 2010-2014 to 2015-2019. Note specifically that the percentage of obese and overweight people has increased from 63.7% to 72.9%. Overweight and obesity rates in Illinois have increased from 2014 (63.7%) to 2019 (65.7%). Note that data have not been updated by the Illinois Department of Public Health.

Additionally, note in the 2022 CHNA survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.

Figure 50

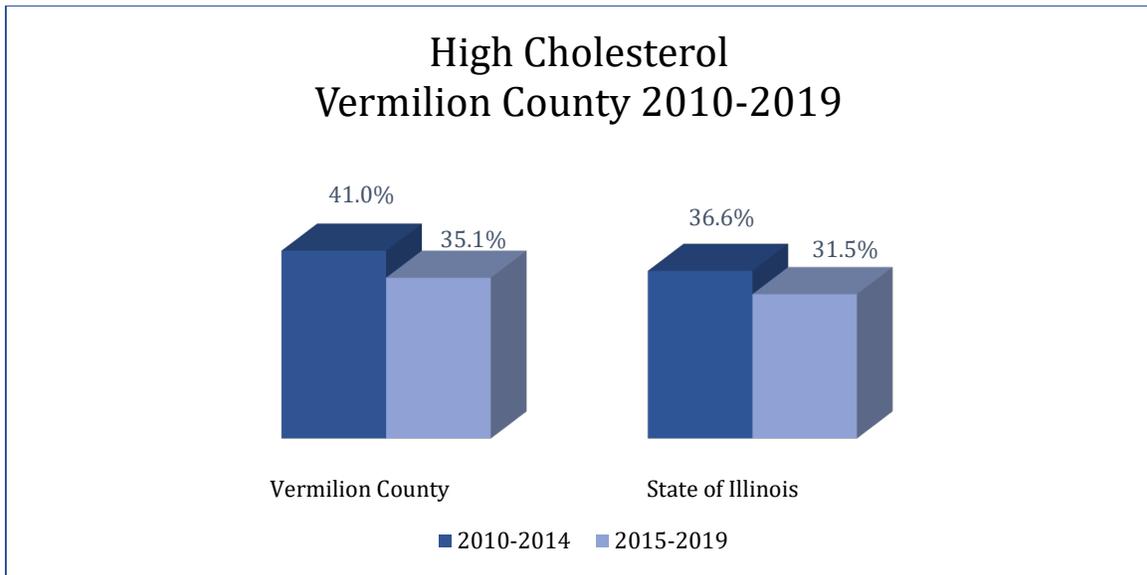


Source: Illinois Behavioral Risk Factor Surveillance System

3.4 Predictors of Heart Disease

Residents in Vermilion County report a higher than State average prevalence of high cholesterol. The percentage of residents who report they have high cholesterol is higher in Vermilion County (35.1%) than the State of Illinois average of 31.5%. Note that data have not been updated past 2019 by the Illinois Department of Public Health (Figure 51).

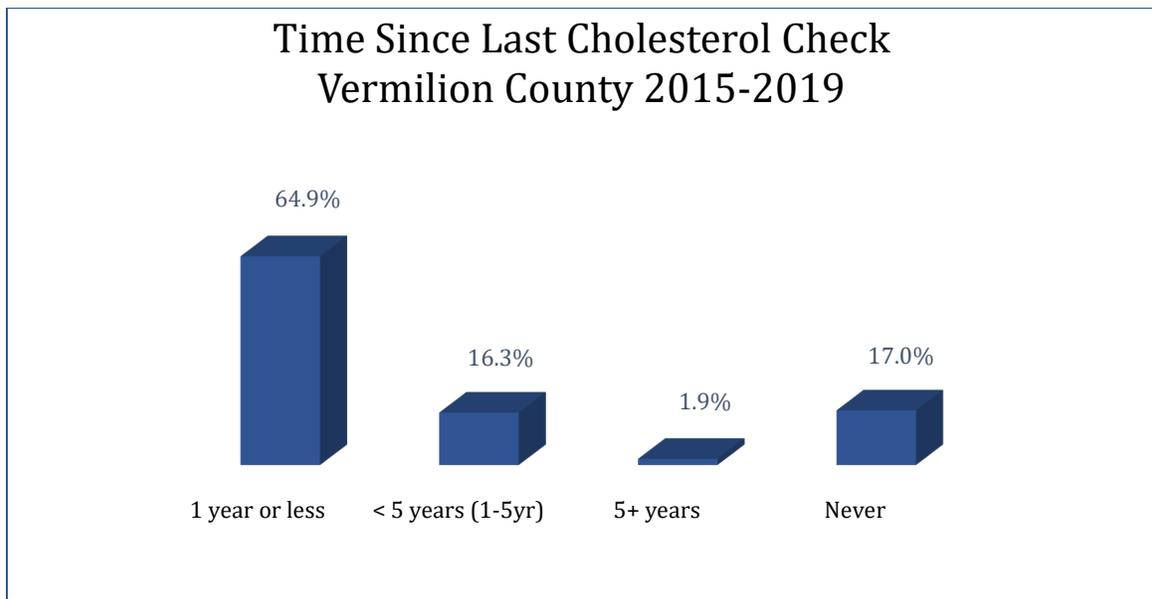
Figure 51



Source: Illinois Behavioral Risk Factor Surveillance System

Most (64.9%) residents of Vermilion County report having their cholesterol checked recently, whereas 17% report never having their cholesterol checked (Figure 52). Note that data have not been updated by the Illinois Department of Public Health.

Figure 52

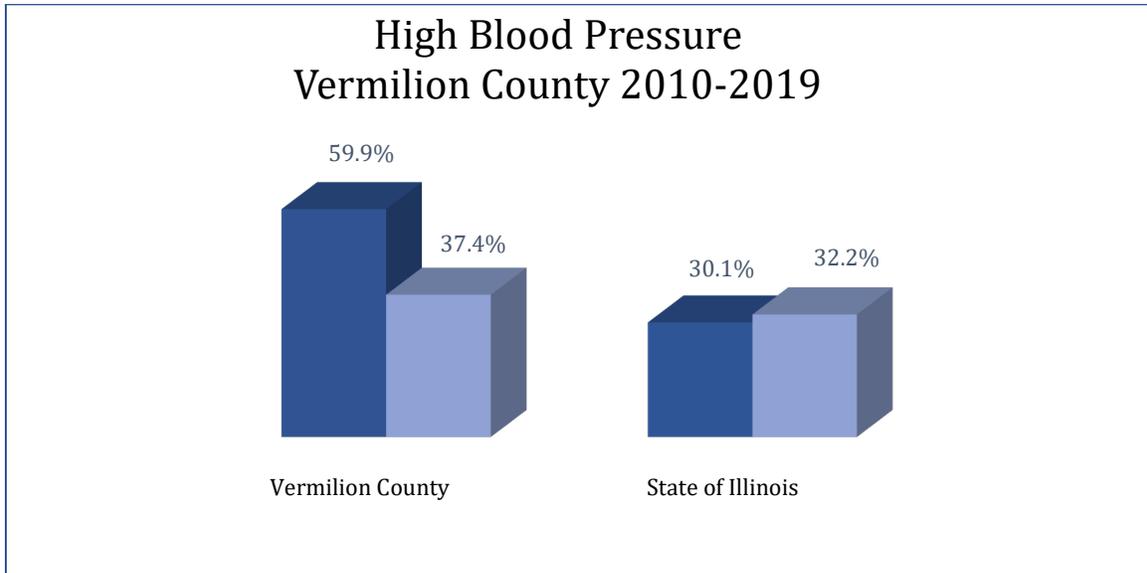


Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Vermilion County has a higher percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Vermilion County residents reporting they have high blood pressure from 2015-2019 decreased to 37.4% which is higher

than the State average of 32.2% (Figure 53). Note that data have not been updated by the Illinois Department of Public Health.

Figure 53



Source: Source: Illinois Behavioral Risk Factor Surveillance System

3.5 Key Takeaways from Chapter 3

- ✓ SUBSTANCE USE AMONG 8TH GRADERS AND 12TH GRADERS IS SIGNIFICANTLY HIGHER THAN STATE AVERAGES IN ALL CATEGORIES.
- ✓ THE PERCENTAGE OF PEOPLE WHO ARE OVERWEIGHT AND OBESE HAS INCREASED SIGNIFICANTLY IN VERMILION COUNTY AND IS NOW HIGHER THAN STATE AVERAGES.

CHAPTER 4 OUTLINE

- 4.1 Self-Identified Health Conditions
- 4.2 Healthy Babies
- 4.3 Cardiovascular Disease
- 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

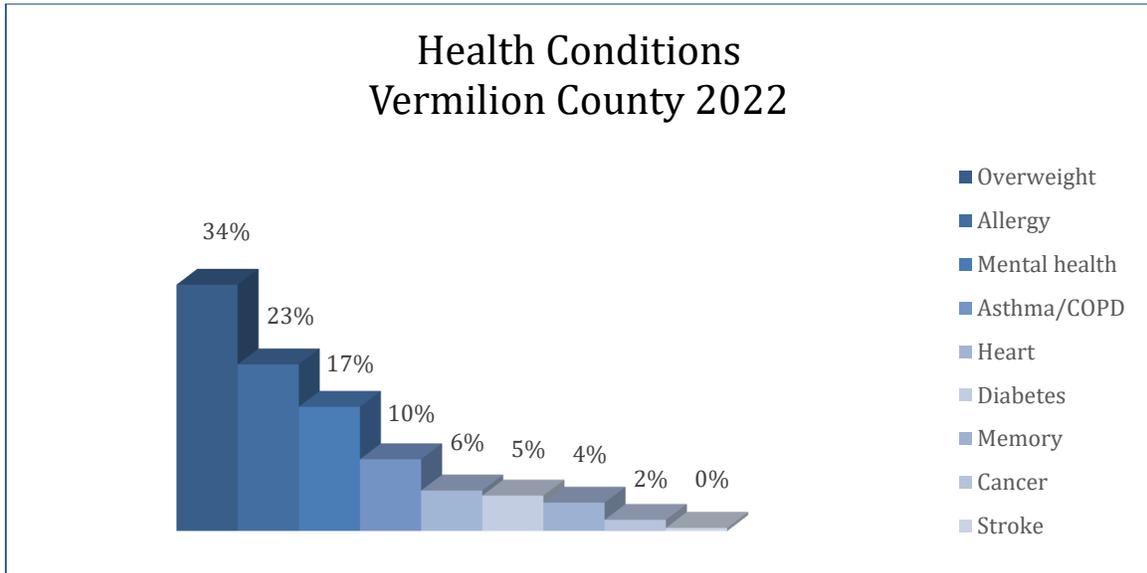
CHAPTER 4: MORBIDITY AND MORTALITY

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 Vermilion County hospitals using COMPdata Informatics. 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 (34%) was significantly higher than any other health conditions. This percentage is significantly lower than secondary sources. Specifically, BRFSS data indicate that roughly three-quarters of the population is overweight or obese (Figure 54).

Figure 54



Source: CHNA Survey

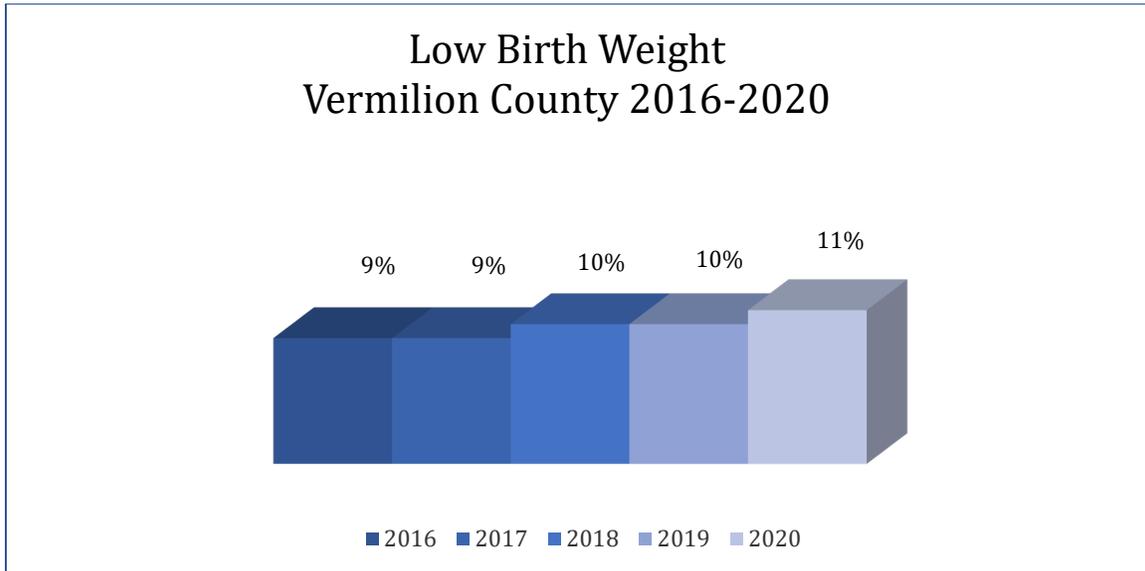
4.2 Healthy Babies

Importance of the measure: Regular prenatal care is a vital aspect in producing healthy babies and children. Screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of healthy babies. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies.

Low Birth Weight Rates

Low birth weight rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth weight rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low birth weight in Vermilion County slightly increased from 2016 (9%) to 2020 (11%) (Figure 55).

Figure 55



Source: County Health Rankings 2020

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.

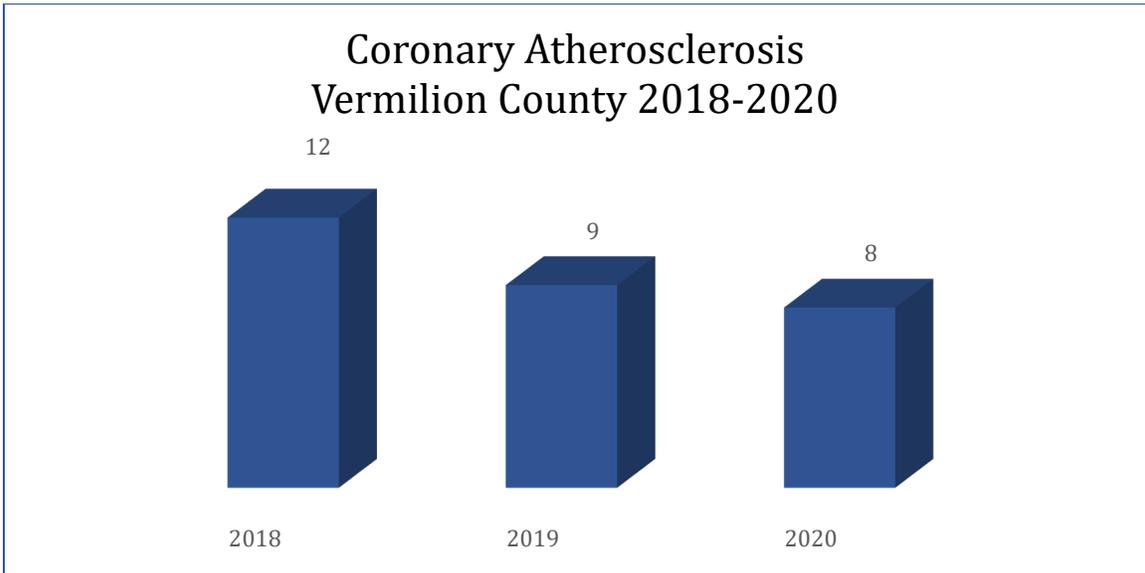
Coronary Atherosclerosis

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 Vermilion County area hospitals has been low, with 12 cases in 2018, decreasing to 8 cases in 2020 (Figure 56). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Figure 56

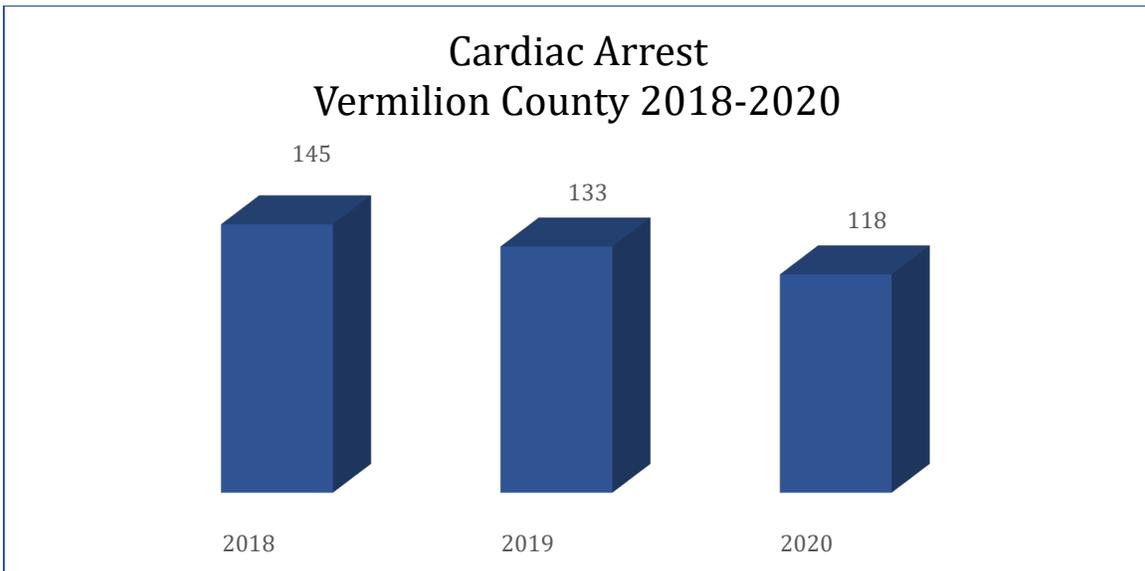


Source: COMPdata Informatics 2021

Cardiac Arrest

Cases of dysrhythmia and cardiac arrest at Vermilion County area hospitals decreased from 145 in 2018 to 118 in 2020 (Figure 57). Note that hospital-level data only show hospital admissions.

Figure 57

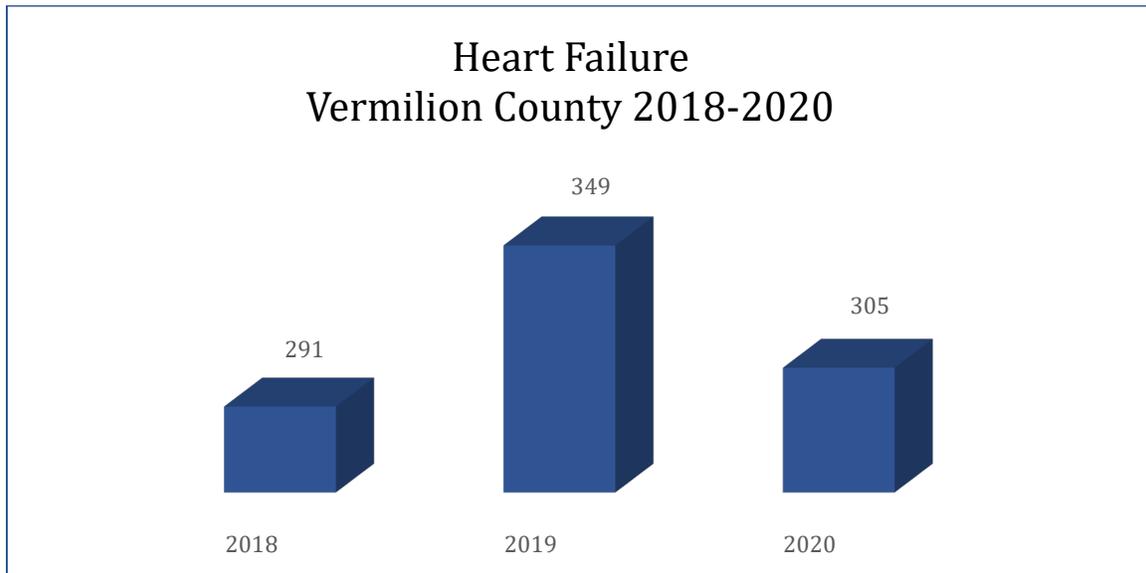


Source: COMPdata Informatics 2021

Heart Failure

The number of treated cases of heart failure in Vermilion County increased from 291 cases in 2018, to 349 in 2019 and then decreasing in 2020 to 305 cases (Figure 58). Note that hospital-level data only show hospital admissions.

Figure 58

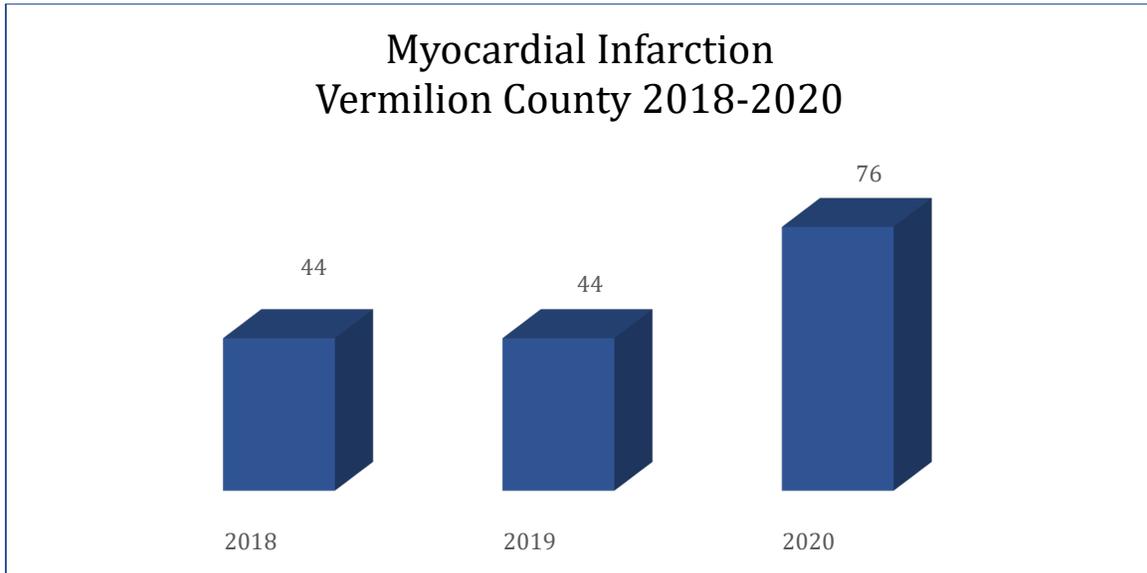


Source: COMPdata Informatics 2021

Myocardial Infarction

The number of treated cases of myocardial infarction at area hospitals in Vermilion County stayed the same in 2018 and 2019 showing 44 cases. The number of cases of myocardial infarction then increased to 76 in 2020 (Figure 59). Note that hospital-level data only show hospital admissions.

Figure 59



Source: COMPdata Informatics 2021

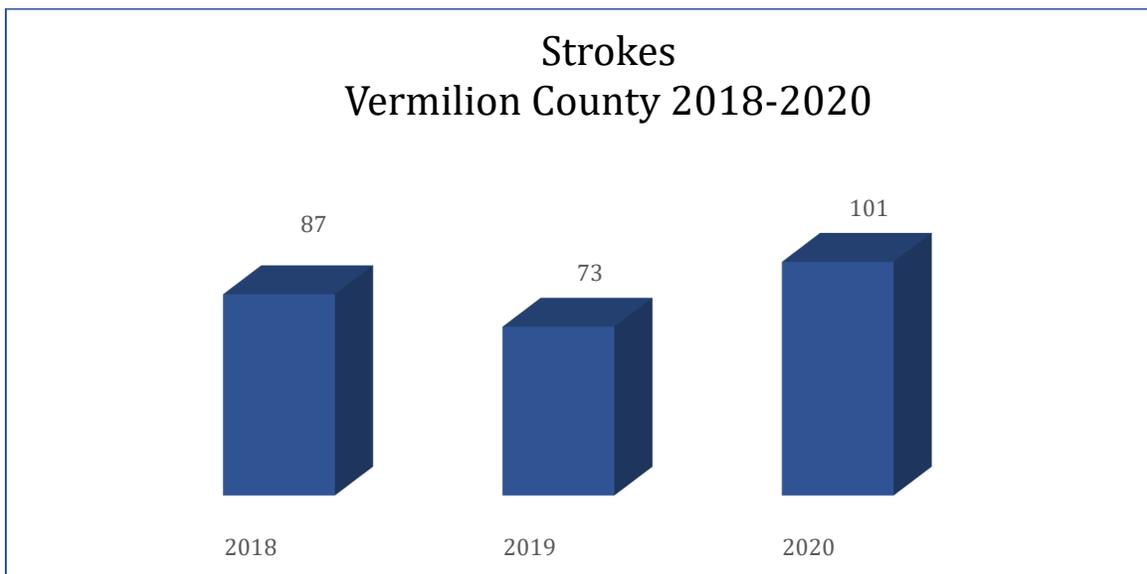
Arterial Embolism

There were no treated cases of arterial embolism at Vermilion County area hospitals from 2018-2020. Note that hospital-level data only show hospital admissions.

Strokes

The number of treated cases of stroke at Vermilion County area hospitals increased from 87 in 2018 to 101 in 2020 (Figure 60). There was a slight decrease in 2019 to 73 cases. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

Figure 60



Source: COMPdata Informatics 2021

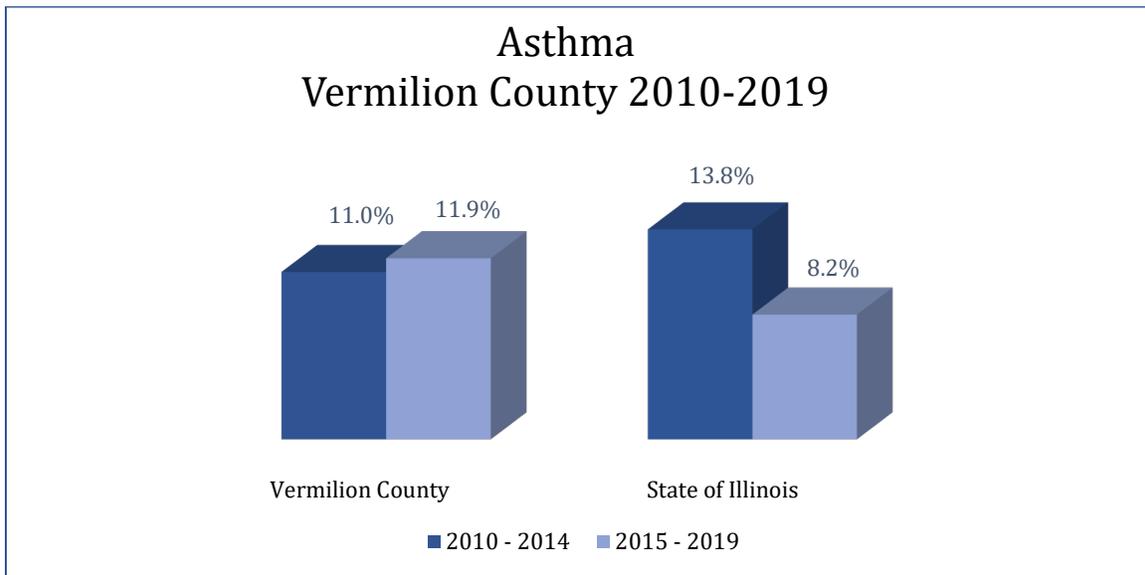
4.4 Respiratory

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 Vermilion County has slightly increased between 2010 and 2019. According to the Illinois BRFSS, asthma rates in Vermilion County (11.9%) are greater than the State of Illinois (8.2%) (Figure 61). Note that data have not been updated by the Illinois Department of Public Health.

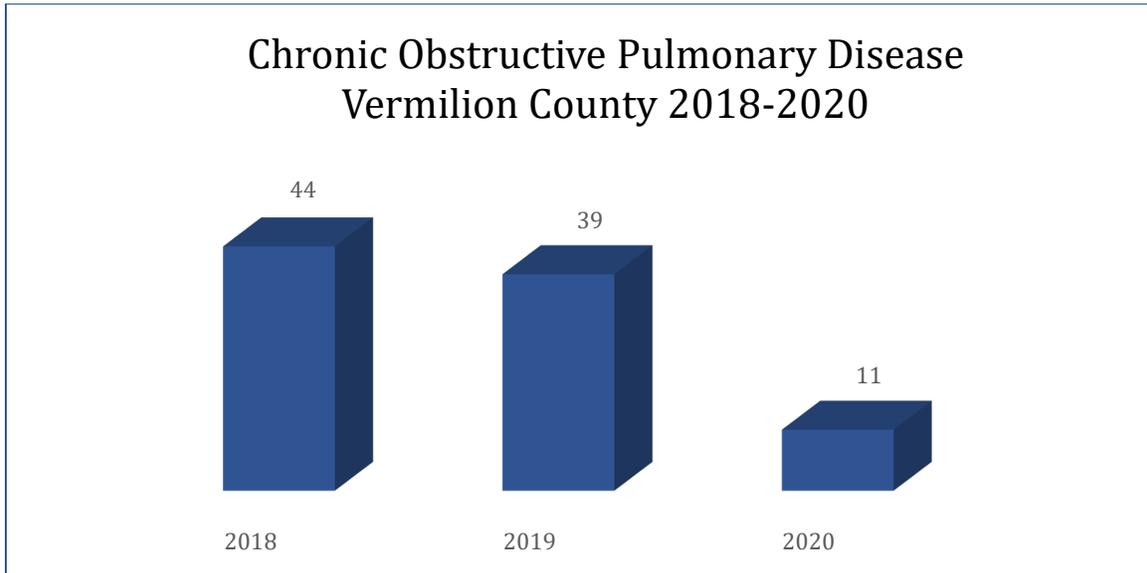
Figure 61



Source: Illinois Behavioral Risk Factor Surveillance System

Treated cases of COPD at Vermilion County area hospitals fluctuated between 2018 and 2020, with a significant decline in 2020 (Figure 62). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Figure 62



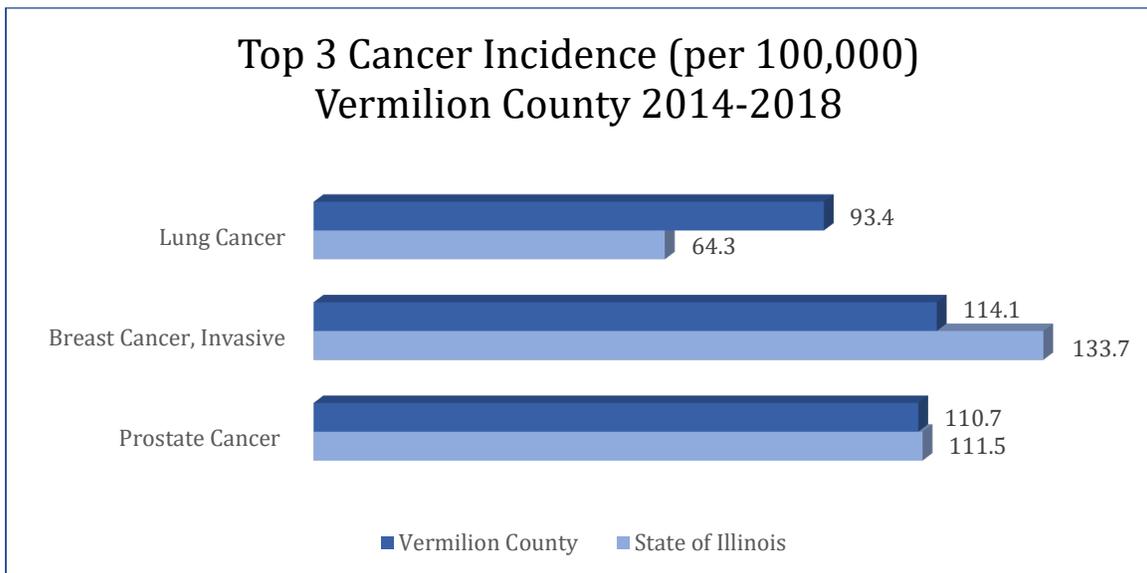
Source: COMPdata Informatics 2021

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 Vermilion County.

The top three prevalent cancers in Vermilion County are illustrated in Figure 63. Specifically, prostate cancer and breast cancer are lower than the State of Illinois averages, while lung cancer rates are higher than the State of Illinois. Note that 2018 is the most recent year of data.

Figure 63



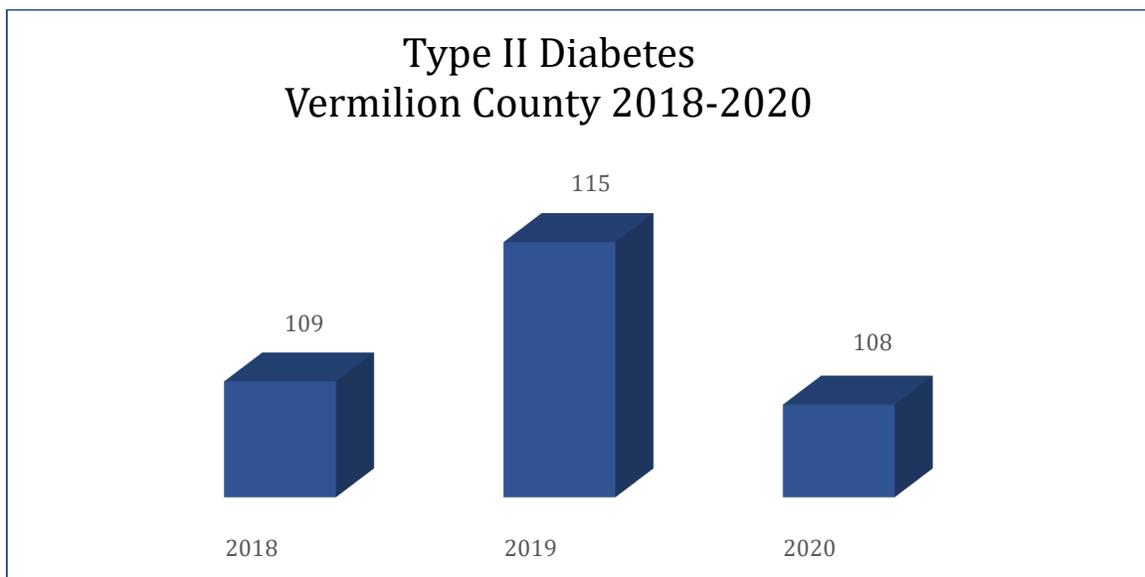
Source: Illinois Department of Public Health – Cancer in Illinois

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 Vermilion County decreased between 2018 (109) and 2020 (108). There was an increase in 2019 of 115 cases (Figure 64). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

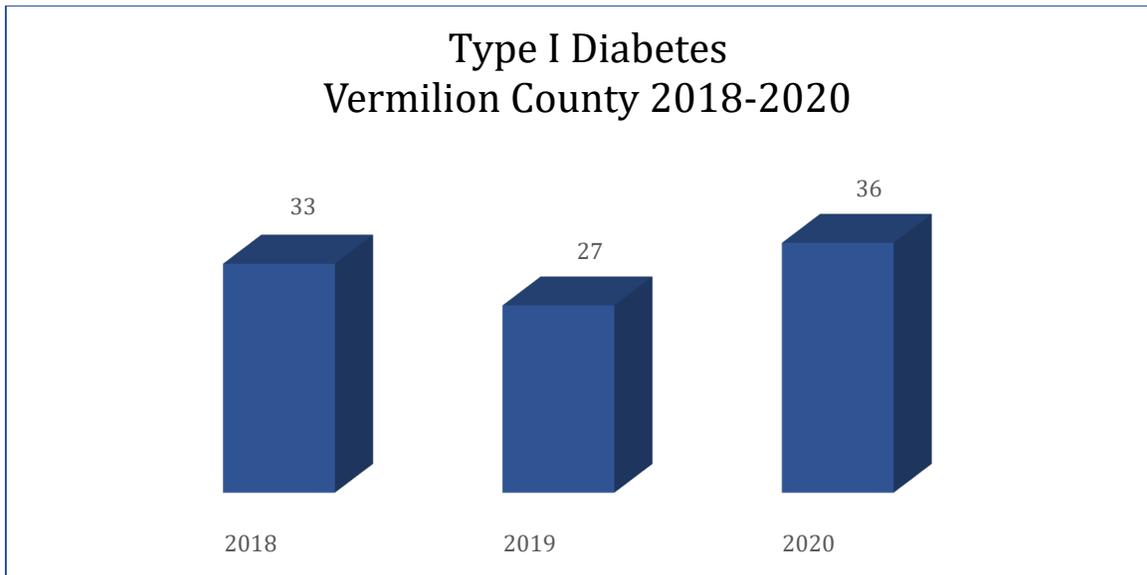
Figure 64



Source: COMPdata Informatics 2021

Inpatient cases of Type I diabetes in Vermilion County show a decrease from 2019 (33) to 2019 (27) followed by an increase in 2020 (36) (Figure 65). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

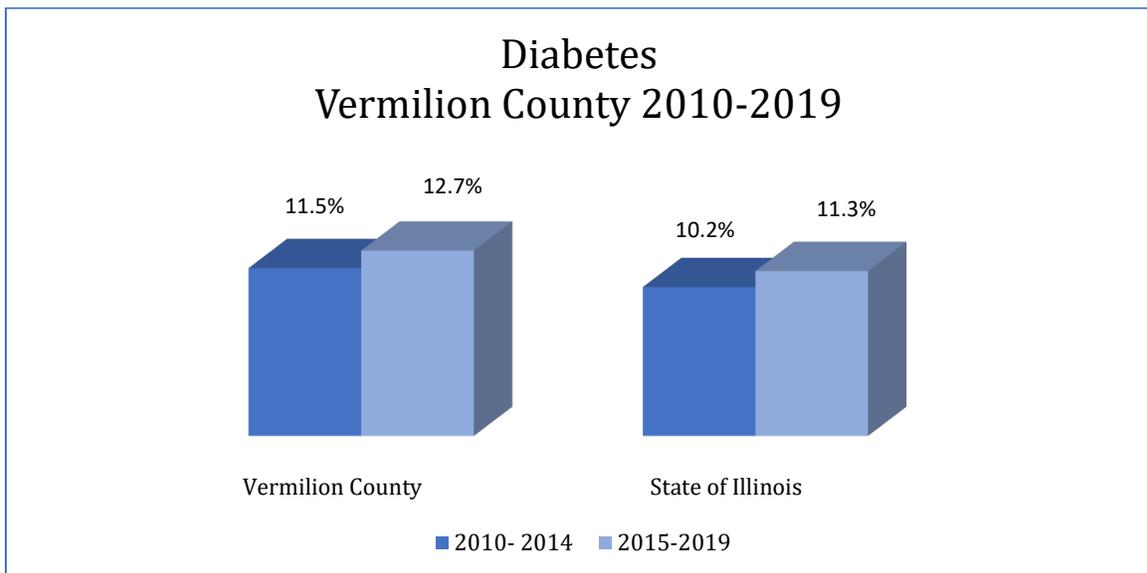
Figure 65



Source: COMPdata Informatics 2021

Data from the Illinois BRFSS indicate that 12.7% of Vermilion County residents have diabetes (Figure 66). Trends are concerning, as the prevalence of diabetes is increasing in Vermilion County and is higher than the State of Illinois averages. Note that data have not been updated past 2019 by the Illinois Department of Public Health.

Figure 66



Source: Illinois Behavioral Risk Factor Surveillance System

4.7 Infectious Diseases

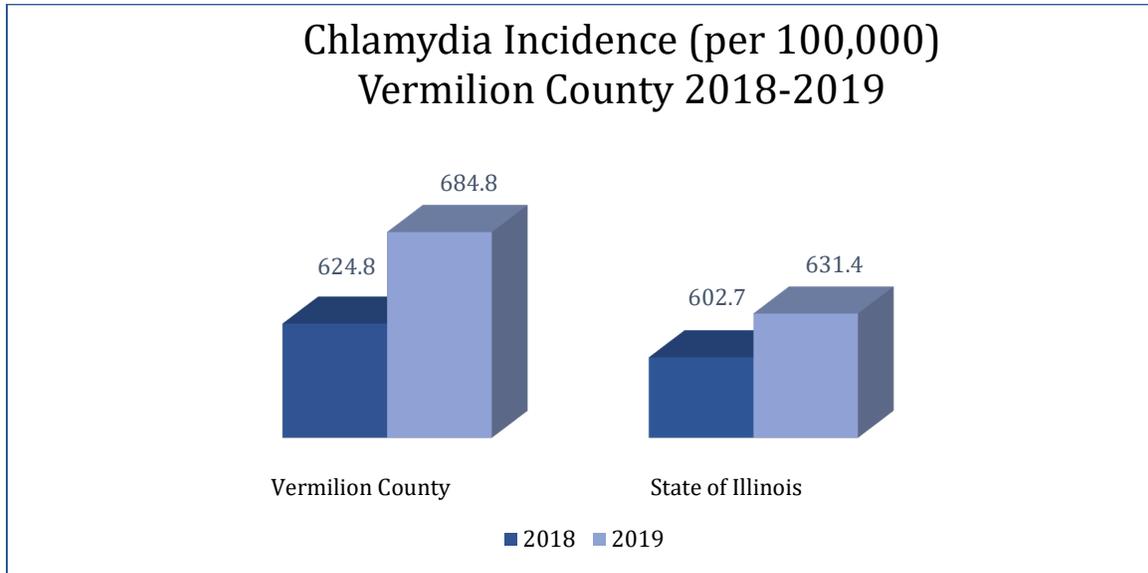
Importance of the measure: Infectious diseases, including sexually transmitted infections and hepatitis, are related to high-risk sexual behavior, drug and alcohol abuse, limited access to healthcare, and

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 Vermilion County from 2018-2019 indicate an increase. There is also an increase of incidence of chlamydia across the State of Illinois. (Figure 67). Rates of chlamydia in Vermilion County are higher than State averages.

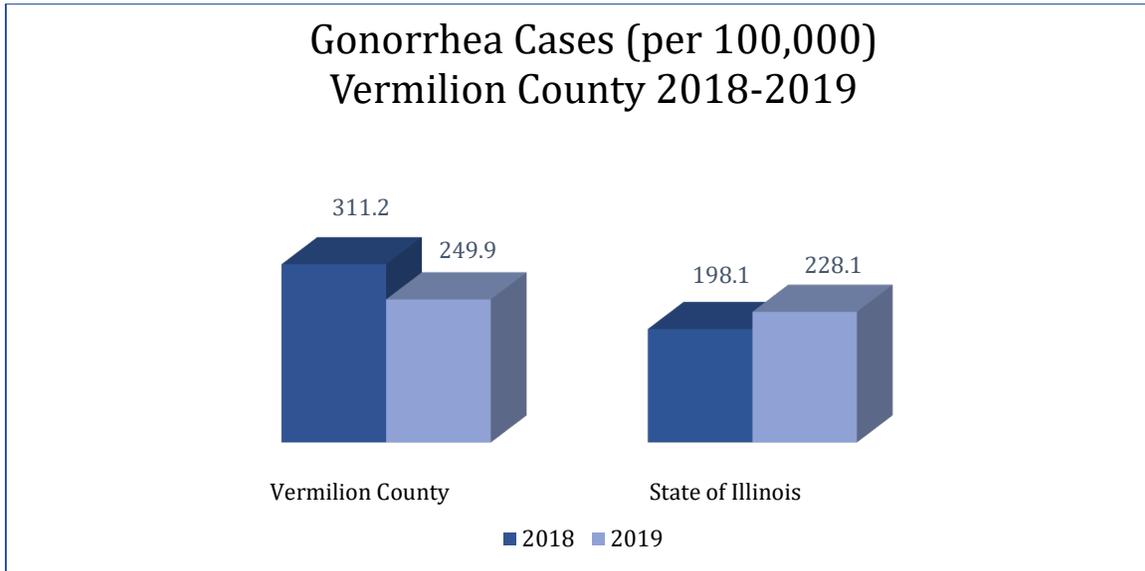
Figure 67



Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in Vermilion County indicate a decrease from 2018-2019 while the State of Illinois experienced an increase over the same period. (Figure 68). Vermilion County is significantly higher than the State of Illinois. Note 2019 is the most recent data.

Figure 68



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 Michigan 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. Vermilion County has shown no significant outbreaks compared to state statistics, but there are limited data available (Table 2 and Table 3). Note data has not been updated by the State beyond years displayed in table. Also note that COVID-19 vaccine rates are presented in Chapter 2.

*Table 2
Vaccine Preventable Diseases 2014, 2015 and 2016 Vermilion County Region*

Mumps	2014	2016
Vermilion County	1	3
State of Illinois	142	333

Pertussis	2015	2016
Vermilion County	N/A	5
State of Illinois	718	1034

Varicella	2015	2016
Vermilion County	2	1
State of Illinois	443	469

Source: Illinois Department of Public Health

*Table 3
Tuberculosis 2018-2019 Vermilion County Region*

Tuberculosis	2017	2018
Vermilion County	1	4
State of Illinois	319	326

Source: Illinois Department of Public Health

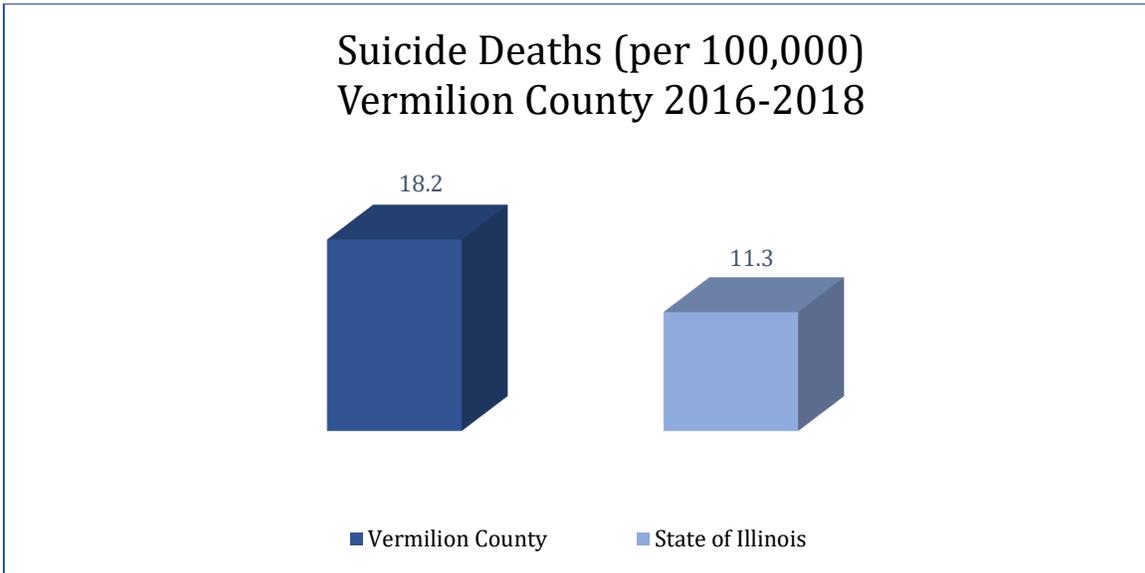
4.8 Injuries

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

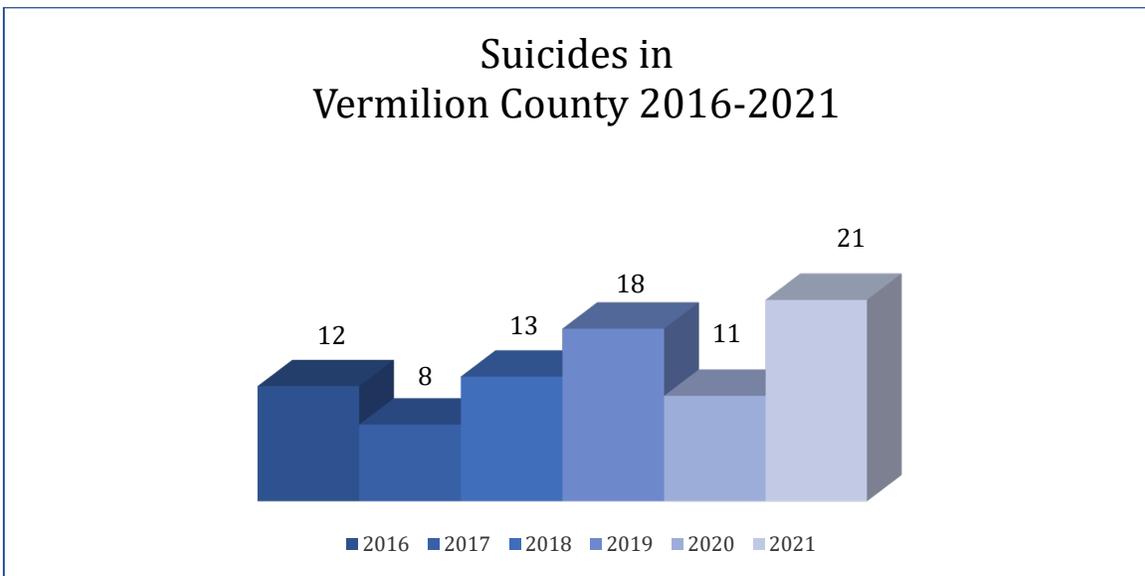
The number of suicides in Vermilion County indicate higher incidence than State of Illinois averages, as there were approximately 18.2 per 100,000 people in Vermilion County from 2016-2018 (Figure 69).

Figure 69



Source: Illinois Department of Public Health

Figure 70



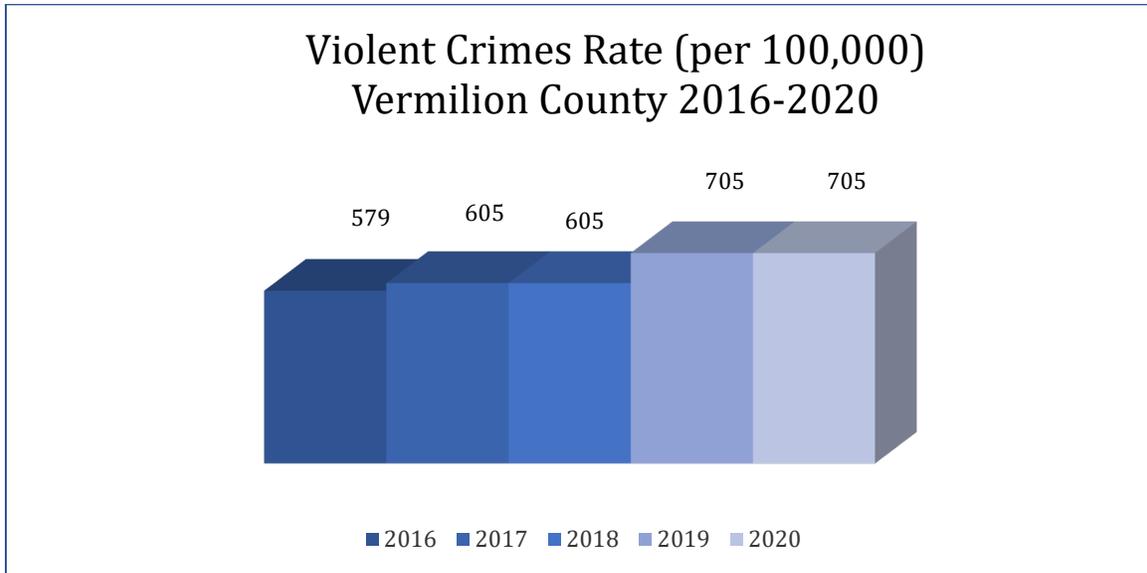
Source: Vermilion County Coroner

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. Violent crime rates in Vermilion County (705 per 100,000 people) are significantly higher than the State of Illinois average (426 per 100,000 people) and

the national average (388 per 100,00 people). The number of violent crimes has steadily increased since 2016 in Vermilion County (Figure 71).

Figure 71



Source: Illinois County Health Rankings 2021

As illustrated in Table 4 there has been increased incidence of rape, theft and motor-vehicle theft.

Table 4 Index Crime Offenses Vermilion County, 2018-2021

Index Crime Offenses	2018	2019	2020	2021	Percentage Change 2018-2021
Criminal Homicide	12	8	8	9	-25.0%
Rape	53	50	17	69	30.2%
Robbery	103	65	59	30	-70.9%
Aggravated Assault/Aggravated Battery	391	414	265	213	-45.5%
Burglary	379	341	383	272	-28.2%
Theft	1133	957	997	1194	5.4%
Motor Vehicle Theft	77	72	46	90	16.9%
Arson	15	9	14	8	-46.7%
Human Trafficking - Commercial Sex Acts	0	0	0	0	-
Human Trafficking - Involuntary Servitude	0	0	0	0	-
Total	2163	1916	1789	1885	

Source: Uniform Crime Reporting. 2021 totals are based on Law Enforcement Record Management System

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 three leading causes of death in the State of Illinois and Vermilion County are similar as a percentage of total deaths in 2020. Diseases of the Heart are the cause of 19.2% of deaths, cancer is the cause of 18.7% of deaths and COVID-19 is the cause of 7.6% of deaths in Vermilion County (Table 5).

Table 5

Top 5 Leading Causes of Death for all Races by County & State 2020		
Rank	Vermilion County	State of Illinois
1	Diseases of Heart (19.2%)	Diseases of Heart (20.7%)
2	Malignant Neoplasm (18.7%)	Malignant Neoplasm (18.1%)
3	COVID-19 (7.6%)	COVID-19 (11.8%)
4	Cerebrovascular Disease (5%)	Accidents (5.4%)
5	Accidents (4.6%)	Cerebrovascular Disease (5.1%)

Source: Illinois Department of Public Health

4.10 Key Takeaways from Chapter 4

- ✓ LUNG CANCER RATES IN VERMILION COUNTY ARE HIGHER THAN STATE AVERAGES.
- ✓ ASTHMA HAS SEEN AN INCREASE VERMILION COUNTY AND IS NOW HIGHER THAN STATE AVERAGES.
- ✓ DIABETES HAS SEEN AN INCREASE IN VERMILION COUNTY AND IS NOW HIGHER THAN STATE AVERAGES.
- ✓ CHLAMYDIA HAS SEEN AN INCREASE AND IS NOW HIGHER THAN STATE AVERAGES.
- ✓ VIOLENT CRIME RATES SIGNIFICANTLY HIGHER THAN STATE AVERAGES
- ✓ CANCER, HEART DISEASE AND COVID-19 ARE THE LEADING CAUSES OF MORTALITY IN VERMILION COUNTY.

CHAPTER 5 OUTLINE

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

CHAPTER 5: PRIORITIZATION OF HEALTH-RELATED ISSUES

In this chapter, the most critical health-related needs in the community are identified. To accomplish this, community perceptions of health issues, unhealthy behaviors and issues related to well-being were first considered. Key takeaways from each chapter were then used to identify important health-related issues in the community. Next, a comprehensive inventory of community resources was completed; and finally, the most significant health needs in the community are prioritized.

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.

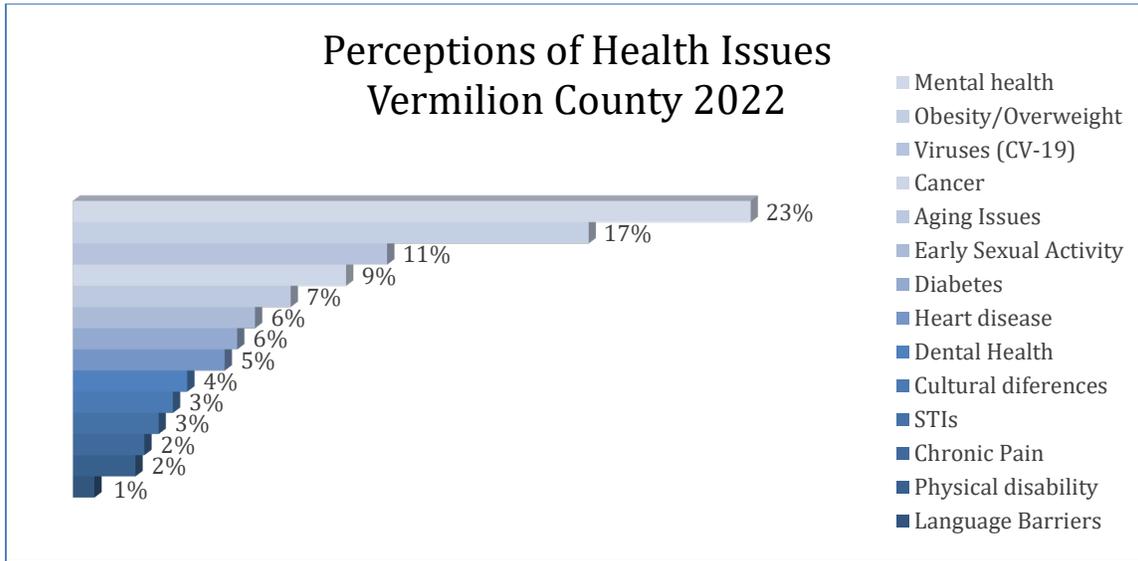
5.1 Perceptions of Health Issues

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 14 different options.

The health issue that rated highest was mental health (23%), followed by obesity/overweight (17%) (Figure 72).

Note that perceptions of the community were accurate in some cases. For example, mental health issues are significantly increasing. Also, there is a steady rise in obesity. 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.

Figure 72

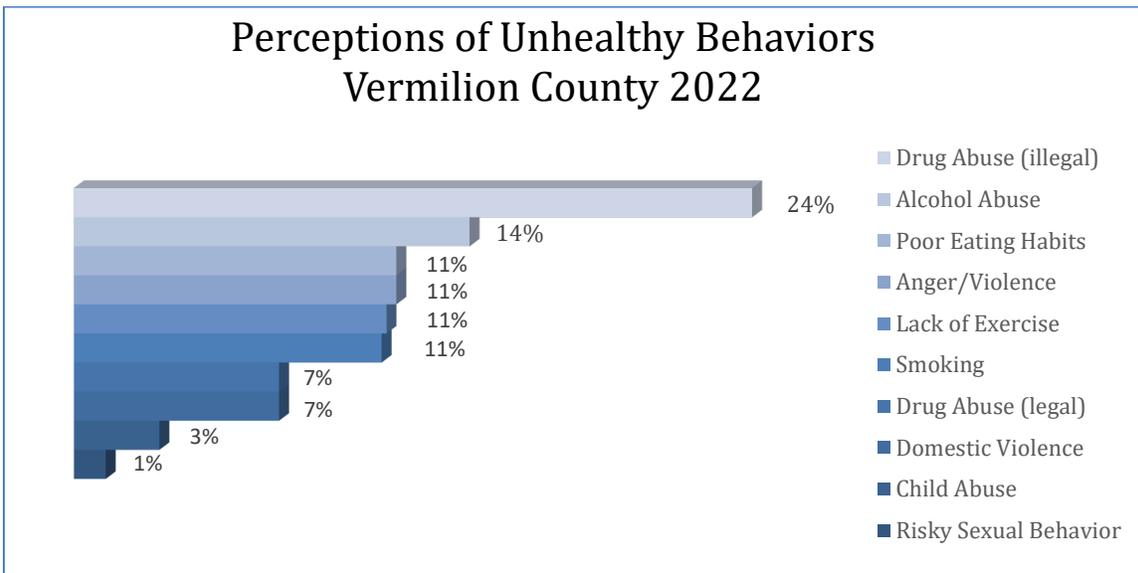


Source: CHNA Survey

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 23% and alcohol abuse at 17% (Figure 73).

Figure 73



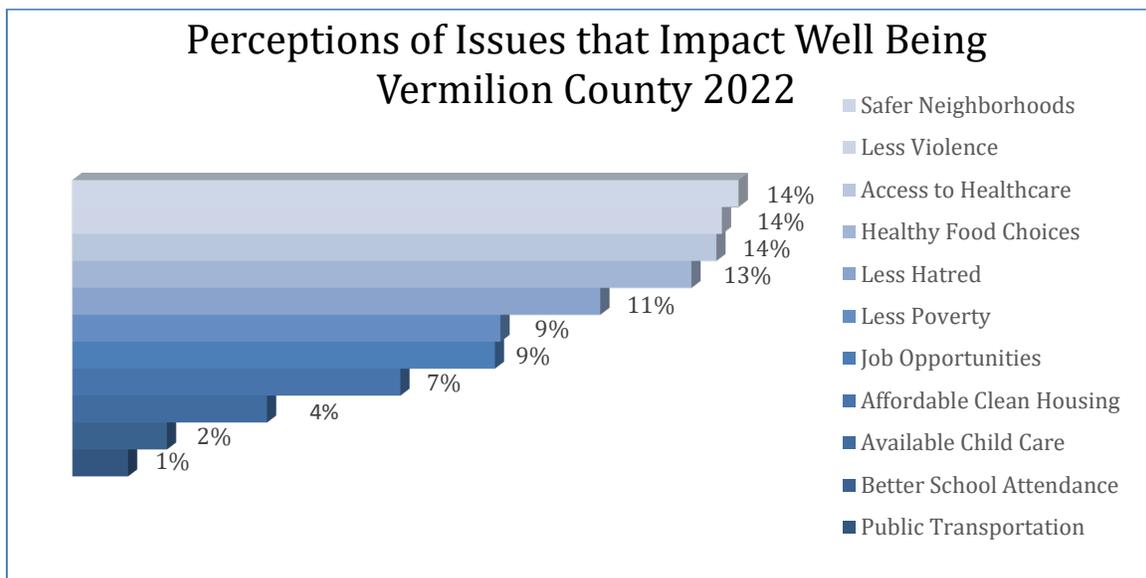
Source: CHNA Survey

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 issues impacting well-being that rated highest were safer neighborhoods, less violence and access to healthcare, all at 14%, followed by healthy food choices at 13% (Figure 74). These factors were significantly higher than other categories based on *t-tests* between sample means.

Figure 74



Source: CHNA Survey

5.4 Summary of Community Health Issues

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

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

- Population decreased
- Population over age 65 increased
- Single female head-of-house-household represents 14% of the population
- High poverty rates

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

- High utilization of urgent care facilities
- Access to dental care
- Prostate screening is relatively low
- Health literacy
- Exercise and healthy eating behaviors
- Food insecurity
- Depression and stress/anxiety
- COVID-19 vaccination rate

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

- Substance use among youth
- Overweight and obesity

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

- Lung cancer
- Asthma is trending upward
- Diabetes is trending upward
- Chlamydia rates
- Cancer, heart disease and COVID-19 are the leading causes of mortality

Potential Health-Related Needs Considered for Prioritization

Before the prioritization of significant community health-related needs was performed, results were aggregated into 14 potential categories. Based on similarities and duplication, the 14 potential areas considered are:

- **Aging Issues**
- **Income/Poverty**
- **Healthy Behaviors – Nutrition & Exercise**
- **Behavioral Health**
- **Overweight/Obesity**
- **Substance Abuse Among Youth**
- **Access - Dental**
- **Cancer – Lung**
- **Diabetes**
- **Asthma**
- **Cancer Screening**
- **Health Literacy**

- Violence
- Food insecurity

5.5 Community Resources

After summarizing potential categories for prioritization in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 14 health-related areas were being addressed. A resource matrix can be seen in APPENDIX 5: RESOURCE MATRIX relating to the 14 health-related issues.

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

5.6 Significant Needs Identified and Prioritized

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

- Violence
- Income/Poverty
- Healthy Behaviors
- Behavioral Health – including mental health and substance abuse

VIOLENCE

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. The violent crime rate in Vermilion County (705 per 100,000 people) is higher than the State of Illinois average (426 per 100,000 people) and the national average (388 per 100,000 people). Of note, there have been significant increases in rape (+30.2%), theft (+5.4%) and motor vehicle theft (+16.9%) from 2018-2021.

Respondents in the 2022 CHNA survey ranked anger/violence as the fourth most important unhealthy behavior (11%) and less violence (16%). Moreover, safer neighborhoods (14%) and less violence (14%) were ranked as the two most important issues impacting well-being in Vermilion County.

INCOME/POVERTY

Vermilion County, the percentage of individuals living in poverty between 2019 and 2020 increased by 2.1%. Poverty has a significant impact on the development of children and youth. In 2020 the poverty rate for families living in Vermilion County (18.6%) was significantly higher than the State of Illinois family poverty rate (11.4%).

Note that income level was correlated to several key variables in the CHNA survey. Specifically, low income correlates with the following:

- More likely to use the emergency department as a primary source of healthcare
- More likely to go hungry
- More likely to experience depression
- More likely to experience stress/anxiety
- More likely to have a negative self-assessment of both physical and mental well-being
- More likely to consume alcohol, misuse prescription medication, use marijuana
- Less likely to have commercial/employer insurance
- Less likely to have access to prescription medications, dental care and counseling
- Less likely to get breast screening
- Less likely to exercise
- Less likely to consume fruits and vegetables

HEALTHY BEHAVIORS

HEALTHY EATING. Over two-thirds (69%) 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 4%. The most prevalent reasons for failing to eat more fruits and vegetables were dislike and affordability.

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 30% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week. The most common reasons for not exercising are not having enough energy (29%), no time (24%) or a dislike of exercise (22%).

OBESITY. In Vermilion County, almost three-quarters (72.9%) of residents were diagnosed with obesity and being overweight. In the 2022 CHNA survey, respondents indicated that being overweight was the second most important health issue and was rated as the most prevalently diagnosed health condition. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Vermilion County. The U.S. 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. With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children. With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated

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

BEHAVIORAL HEALTH – MENTAL HEALTH AND SUBSTANCE ABUSE

MENTAL HEALTH. The CHNA survey asked respondents to indicate prevalence of specific issues, namely depression and stress/anxiety. Of respondents, 56% indicated they felt depressed in the last 30 days and 48% indicated they felt anxious or stressed. Depression tends to be rated higher by younger people, those with less income and those in an unstable (e.g., homeless) housing environment. Stress and anxiety tend to be rated higher for younger people, those with less income, those with less education 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 37% indicated that they spoke to someone, the most common response was to family and friends (33%). In regard to self-assessment of overall mental health, 15% of respondents stated they have poor overall mental health. In the 2022 CHNA survey, respondents indicated that mental health was the most important health issue (23%).

SUBSTANCE ABUSE. Of survey respondents, 21% indicated they consume at least one alcoholic drink each day. Alcohol consumption tends to be rated higher by men, Black people, LatinX people, those with less income and those with lower education. Of survey respondents, 6% indicated they improperly use prescription medication each day to feel better and 10% indicated the use marijuana each day. Note that misuse of prescription medication (oftentimes opioid use) tends to be rated higher by older people, LatinX people, those with lower education, those with less income and those living in an unstable (e.g., homeless) housing environment. Marijuana use tends to be rated higher by younger people, Black people, those with lower education, those with less income and those living in an unstable (e.g., homeless) housing environment. Finally, of survey respondents, 2% indicated they use illegal drugs on a daily basis

In the 2022 CHNA survey, respondents rated drug abuse (illegal) as the most prevalent unhealthy behavior (24%) in Vermilion County, followed by alcohol abuse (14%).

III. APPENDICES

APPENDIX 1: MEMBERS OF COLLABORATIVE TEAM

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

Douglas Toole is the Public Health Administrator of the Vermilion County Health Department. Growing up in Danville, he attended Southern Illinois University in Carbondale to pursue a degree in journalism. During summer breaks, he worked at the Vermilion County Health Department, collecting water samples and investigating illegal sewage discharges. After graduation, he spent 24 years working in the Environmental Health division of the VCHD during the day (five years as the Director of the division), and covering local city council and school board meetings two evenings each week for The Champaign News-Gazette. In 2016, he was hired as the Administrator of the health department where he had served as summer help.

Jacob Ozier serves as the Manager of the Community Resource Center at OSF Sacred Heart Medical Center. He has over 7 years of experience overseeing the Community Resource Center, Community Outreach & Education, Faith in Action and Volunteers Services. In this role, he has helped develop multiple programs to address Social Determinant of Health for our patients. Jacob received his Masters of Arts in Gerontology at Eastern Illinois University.

Jim Russell serves as the Executive Director of the Vermilion County Mental Health 708 Board in Danville, a position he has held since August of 2014. Jim has a Master of Science degree in Counseling, and is a Licensed Clinical Professional Counselor (LCPC) and was a Licensed Sex Offender Treatment Provider. He is also a Certified Instructor for Mental Health First Aid, in both the Youth and Adult curriculum. Jim's previous work experience includes time with the Center for Children's Services and Catholic Charities in Danville, in both therapy and supervisory roles, substitute teaching, and approximately 10 years as a volunteer EMT. He also has over forty years in the ministry, having served churches in Illinois, Indiana, Georgia, Tennessee and Vermont. He is currently serving as minister at the Northside Church of Christ in Bismarck. Jim has also been a contributor to Prime Life Times, an area monthly periodical for seniors, since June of 2015.

John Walsh serves as External Affairs Program Executive for Carle Health, a vertically integrated health system based in Central Illinois. John's background is in the federal legislature, working for United States Congressman Adam Kinzinger, then directing governmental relations work for an association based in Central Illinois. At Carle, John is responsible for maintaining relationships with and, in collaboration with system government relations and leadership, communicating system positions and priorities with key constituents, including elected and appointed public officials, legislative and regulatory agencies, and associated staffs. Additionally, John works to ensure that the system's Community Benefit reporting, Community Health Needs Assessments, Implementation Plans, and associated requirements and responsibilities are met. At the time of this assessment's research and publication, John serves as Chairman of the Board of Directors for the Champaign County Economic Development Corporation.

Mary Surprenant is the CEO of United Way of Danville Area, Inc. Mary has been with United Way for over 3 years and accepted her role as CEO in the Fall of 2020. In addition to United Way, Mary is the current CoChair for Danville Local Area Network of Nonprofits, Central Illinois Community Health Network board member, a member of the Vermilion Advantage Board, and a Vermilion County Board

member. In addition, Mary, is a current member of the Danville Sunrise Rotary, VA Illiana Health Care Angel Wing Volunteer, Balloons Over Vermilion Volunteer Chair, Festival of Tree Volunteer, and the past President for Danville Noon Kiwanis Club. She recently accepted an Early Career Achievement Award from Illinois State University, her alma mater. She was also selected as a Central Illinois Business Magazine Forty under 40 recipient in 2020. Mary has coined the phrase, “Happy to Help” and hopes to inspire others to use their gifts for the greater good of all in our community.

Melissa Rome is the Emergency Planning and Response Coordinator / Community Liaison at the Vermilion County Health Department. Melissa has been with the department for the past 21 years. Melissa has a Bachelor of Science degree in Community Health with a specialization in Health Education from the University of Illinois in Champaign-Urbana and has an MBA in Healthcare Management from the University of Phoenix. Melissa is a certified health education specialist and a certified emergency response coordinator. In addition to the Regional Executive Advisory Board, Melissa serves as vice chairman on the Vermilion County Emergency Telephone System Board and is a board trustee for the Danville Public Library.

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

Michelle A. Carrothers (Coordinator) is currently the Vice President of Strategic Reimbursement for OSF Healthcare System, a position she has served in since 2014. She serves as a Business Leader for the Ministry Community Health Needs Assessment process. Michelle has over 35 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her Fellow of the Healthcare Financial Management Association Certification in 2011. Currently she serves on the National Board of Examiners for HFMA. Michelle serves on various Peoria Community Board of Directors and Illinois Hospital Association committees.

Dawn Tuley (Coordinator) is a Strategic Reimbursement Senior Analyst at OSF Healthcare System. She has worked for OSF Healthcare System since 2004 and acts as the coordinator for 15 Hospital Community Health Need Assessments. In addition, she coordinates the submission of the Community Benefit Attorney General report and the filing of the IRS Form 990 Schedule H since 2008. Dawn holds a Master’s in Healthcare Administration from Purdue University and is certified in Community Benefit. Dawn has been a member of the McMahan-Illini Chapter of Healthcare Financial Management Association for over twelve years. She has served as the Vice President, President-Elect and two terms as the Chapter President on the board of Directors. She has earned a silver, bronze, gold and Metal of Honor from her work with the McMahan-Illini HFMA Chapter. She is currently serving as a Director on the board.

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

Council and numerous hospitals. His approach to Community Health Needs Assessments was identified by the Healthcare Financial Management Association (HFMA) as a Best-in-Practice methodology. Dr. Weinzimmer was contracted for assistance in conducting the CHNA.

APPENDIX 2: ACTIVITIES RELATED TO 2020 CHNA PRIORITIZED NEEDS

Vermilion County

Three major health needs were identified and prioritized in Vermilion County 2020 CHNA. Below are examples of the activities, measures and impact during the last two years to address these needs.

1. Behavioral Health

***Goal:** Increase capacity and access to care, support Mental Health First Aid trainings, promote education and training on mental and behavioral health to reduce stigma, provide targeted prevention programs.*

Strategic Goals:

- 1) Expand Behavioral Health capacity for Vermilion County residents and promote education and training on mental and behavioral health to reduced stigma.
- 2) Collaborate with community partners to support Mental Health First Aid training and promote education of targeted prevention programs for Vermilion County residents.

Behavioral Health Measurement and Impact

- 1) Increased participation in our Digital Behavioral Health preventative solution (SilverCloud) by 31 new signups. SilverCloud is a secure, anonymous and interactive platform to help individuals manage the feelings and causes of depression, anxiety or stress.
- 2) Provided free Behavioral Health Navigation Services to 39 new participants.
- 3) Promoted 19 Mental Health First Aid trainings in the community through traditional and social media.
- 4) Increased the number of outpatient behavioral health visits to 5,721.
- 5) Attended the Walk for Hope event to provide education and information for those seeking support for Mental Health.
- 6) Partnered with our CHOI program to provide education to kids at the local Boys and Girls club, which included mental health training.
- 7) Care-A-Van purchased and will be used to serve the needs of the community in a variety of ways, including Behavioral Health.

2. Income/Poverty

***Goal:** Promote post graduate paths to high school students, increase awareness of assistance programs, decrease food insecurity.*

Strategic Goals:

- 1) Address the poverty rate in Vermilion County by promoting post graduate paths to high school students and increasing awareness of community resources and assistance programs.

- 2) Address food insecurity in Vermilion County.

Income/Poverty Measurement and Impact

- 1) Purchased OSF Care-A-Van to address a variety of community needs and will focus on serving underserved populations.
- 2) The business development department extended their outreach by 4 additional employees which increased the attendees to 39.
- 3) Provided 1,153 contacts to seniors in Vermilion County. These contacts served as opportunities to provide, education, information, and referrals to seniors in need.
- 4) Attended an event in November to speak to high school students about career opportunities in health care.
- 5) Distributed 200 SmartMeals to seniors.
- 6) Developed a St. Nick's Closet in the emergency department to provide basic hygiene products to patients as they are discharged.

3. Violence

Goal: *Promote community-police relations, reduce community violence through partnership, and establish violence interruption program.*

Strategic Goal:

- 1) Address violence in Vermilion County by promoting police-community relations, reducing community violence by partnering in local initiatives, and establishing a violence interruption program.

Violence Measurement and Impact

- 1) Provided free Behavioral Health Navigation Services to 39 new participants.
- 2) Attended monthly coalition meeting to address violence. Participation rose to 43 different agencies and community member.
- 3) Provided 1,153 contacts and referrals to seniors in Vermilion County.
- 4) Increased participation in our Digital Behavioral Health preventative solution (SilverCloud) by 31 new signups to help alleviate violence. SilverCloud is a secure, anonymous and interactive platform to help individuals manage the feelings and causes of depression, anxiety or stress.

Carle Hoopston Regional Health Center

Evaluation of Prior Impact

Based upon the Community Health Needs Assessment using both quantitative and qualitative research, Carle Hoopston Regional Health Center prioritized the significant community health needs of Vermilion County considering several criteria including: alignment with the hospital's mission, existing programs, the ability to make an impact within a reasonable time frame, the financial and human resources

required, and whether there would be a measurable outcome to gauge improvement. The following three health areas were selected as the top priorities.

1. **Behavioral Health**
2. **Violence**
3. **Income/Poverty**

As a result, Carle Hoopston Regional Health Center committed time and resources for each of these identified health priorities, as described below.

Behavioral Health, Evaluation of Prior Impact:

In the 2020 Community Health Needs Assessment, as well as the previous, the following were identified as keys to addressing Mental Health: increasing training and education regarding mental health resources and information, reducing the suicide rate in Vermilion County, increasing the proportion of children and adults who receive needed mental health care and consultation, and increasing the number of providers, urgent care, and emergency departments that conduct stress or mental health screenings for patients, among others.

In response, Carle Hoopston Regional Health Center took the following actions:

- 1) Increased the number of behavioral health providers in the region by partnering with the Carle Health system by 17 net providers from 2018 to 2021.
- 2) Established, in partnership with the Carle Health system, the Carle Regional Substance Use Disorder Leadership Center (Carle RLC), whose focus will be on building provider capacity, expanding treatment services for people living with opioid and stimulant use disorders, and expanding the use of recovery support services within each region, including the Vermilion County region, including interventions for co-occurring medical/mental illness.
- 3) Provided training to 12 behavioral health residents from 2018-2021, includes the areas of inpatient and outpatient psychiatry, addictions, geriatrics, child, forensics, emergency and administrative psychiatry.
- 4) Improved access to substance use disorder services by providing assessment and consultation services on the mobile unit operated by Carle Community Health Initiatives.
- 5) Carle Community Health Initiatives implemented ACES screening and trauma-informed care delivery approaches.
- 6) Provided, in partnership with the Carle Health system, a train the trainer program for Carle and regional partner employees to teach Mental Health First Aid training- hosting over 20 classes regionally in 2020 and 2021. Carle Hoopston had the opportunity to train healthcare professionals, farmers, employers, clergy members, first responders and many other community members.

Behavioral Health needs continue to be an issue across the county. Lack of resources, funding, and stigma contribute to the issue in Vermilion County. According to County Health Rankings the ratio of mental health providers has improved drastically over the past six years, moving from 4,234:1 in 2011 to 320:1 in 2021.

According to the most recent suicide data available from County Health Rankings, the Vermilion County suicide rate in 2021 was 18 per 100,000 which is higher than the state of Illinois rate of 11 and the national rate of 11.

Carle Hoopston Regional Health Center and Carle Health have contributed to the increase of mental health providers per 100,000 since the last Community Health Needs Assessment. There is still work to be done by Carle Hoopston Regional Health Center in decreasing the number of suicides in Vermilion County. Carle Hoopston Regional Health Center's actions and financial commitments have supported improved access to care for behavioral health in Vermilion County.

Violence, Evaluation of Prior Impact:

In the 2021 Community Health Needs Assessment, as with the previous assessment, the following were identified as keys to addressing violence in Champaign County: promote police---community relations, increase community engagement, and reduce community violence through partnering with local initiatives.

The majority of the goals in the CHNA involved law enforcement and correctional system entities; therefore, Carle did not provide direct interventions in these areas. However, there are a number of projects and initiatives Carle supports that are intended to reduce the rate of violence and support victims of violence.

In response, Carle Hoopston Regional Health Center took the following actions:

- 1) Screened at points of entry into Carle systems in Vermilion County for signals of abuse, neglect, gun safety, and more violence related indicators to identify and act proactively on signals of violent households and make linkages to supportive community services.
- 2) Committed to, in partnership with the Carle Health system, a Sexual Assault Nurse Examiners (SANE)/Interpersonal Violence Program, training 19 nurses to assist 24/7 with sexual assault patients, who assisted with almost 400 total cases, including almost 100 pediatric sexual assault patients in 2020 and 2021 alone.
- 3) Committed to, in partnership with the Carle Health system, a 24/7 Child Abuse Safety Team (CAST), which served 235 children to identify suspected abuse, ensure proper investigation and testing, and communicate with state and local agencies in 2020 and 2021.
- 4) Committed to violence prevention 'Risk Watch' curriculum program in community schools, reaching over 17,000 students in topic area of violence prevention such as choking, strangulation suffocation, and poisoning from 2017-2019, spending 120 hours in community classrooms. Carle staff recorded videos to be used virtually in 2020 and 2021 to ensure the education was provided despite the COVID-19 pandemic.
- 5) Committed to Rape Advocacy, Counseling, and Education Services (RACES) RadKIDS Program, providing over 100 hours of support from 2017-2019 to the national, five-day course empowering children with real life training to protect themselves from danger, including inappropriate touching, when to tell an adult if harmed, and how to dial 911 in emergency or violent situations, as well as how to physically defend themselves. Carle Foundation Hospital continued to support the work of RACES in 2020 and 2021, though the RadKids program was put on hold in 2020 and 2021 due to COVID-19 concerns. Carle will continue to support once again safe to do so.
- 6) Contributed in-kind leadership staff time to the Vermilion County Violence Coalition.

- 7) Provided \$2,500 directly to Survivor Resource Center to support their rape crisis services in Vermilion County

Vermilion County crime rate has increased over recent years, and remains higher compared to the State of Illinois and surrounding counties. As stated by the 2021 County Health Rankings the violent crime rate (the number of reported violent crime offenses per 100,000 populations) is 705 which is significantly higher than the state of Illinois rate of 403.

According to Community Health Rankings there were 17 gun related deaths in Vermilion County, 18 suicides and 10 homicides in 2021.

While Vermilion County's crime rate remains higher compared to the State of Illinois, Carle Hoopeston Regional Health Center's commitment to programming and funding support for organizations and community events that target reducing violence has contributed to the overall decrease in crime rate. Lastly, Carle Hoopeston Regional Health Center's commitment to educating the county's youth on violence prevention is a lagging indicator, and will take some time to show up in reportable data, but is a contribution to the community, and will hopefully bring down violence in Vermilion County in years to come.

Income/Poverty, Evaluation of Prior Impact:

In the 2021 Community Health Needs Assessment, the following were identified as keys to addressing Income and Poverty: reducing the number of families living in poverty by 2% by 2023, increasing the high school graduation rate, decreasing the number of families who have food insecurity in Vermilion County by 10%, and increasing awareness of community resources that offer assistance.

In response, Carle Hoopeston Regional Health Center took the following actions:

- 1) Engaged in active planning to offer healthcare sector career/job fairs for high school students in Vermilion County. Due to the COVID-19 pandemic, we were unable to facilitate these fairs but intend to continue to plan for and operationalize when able.
- 2) Engaged in active planning to offer mentoring programs between Carle staff and students at Carle Hoopeston Regional Health Center, Carle at the Riverfront, and other Carle entities in Vermilion County. Due to the COVID-19 pandemic, we were unable to facilitate these fairs but intend to operationalize when able.
- 3) Committed in-kind contributions of Carle Hoopeston Regional Health Center's leadership's involvement on community boards and commissions which focus on addressing issues of income/poverty, and racial and social determinants of health.
- 4) Continued Carle Hoopeston Regional Health Center's financial commitment to school districts in Vermilion County- Parent Teacher Organizations (PTO), Response-To Intervention programs (RTI)- direct intervention programs working with children, and programs that focus on income and poverty disparities in families.
- 5) Ensured care was available for all that need through its System Financial Assistance program by working diligently in Medicaid enrollment assistance, Social Work focused on Vermilion County and entire Hoopeston region.

This was the first time that Income/Poverty was identified and prioritized as a key community health need. Research has shown people living in poverty can face greater barriers accessing medical care, less likely to have health insurance, have less access to healthy foods, which contribute to higher rates of obesity and chronic disease. Poor health can limit one's ability to work, reduce economic opportunities, inhibit educational attainment, and lead to medical debt and bankruptcy.

According to 2020 Census data, the estimated average household income in Vermilion County (2016-2020) is \$46,843, significantly less than the Illinois average of \$68,428. Additionally, over the same time period, the per capita income in the past 12 months was \$25,484; again, this is significantly lower than the Illinois average of \$37,306. The percentage of people living in poverty is 18.6%, which is higher than the Illinois average (11%), and the US average (11.4%).

According to the 2020 Census data, the number of individuals under 65 without health insurance in Vermilion County is 6.6%, which is lower than the State of Illinois (8.6%), and the US (10.2%), though there is still work to be done.

In 2019-2020, 60.9% of students in Vermilion County are eligible for free lunch programs, which is higher than Illinois (46.7%) and the US (43.1%). In the most recent data available, Vermilion County has an 83.2% high school graduation rate, which is lower than the Illinois rate (85.4%) and the US (85.3%).

Carle Hoopston Regional Health Center, in partnership with the Carle Health system and all community partners, is undertaking the efforts listed above and more to address income/poverty in Vermilion County and the impacts these factors have on our patients.

APPENDIX 3: SURVEY

Vermilion County 2021 COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

INSTRUCTIONS

We want to know how you view our community, and other factors that may impact your health. We are inviting you to participate in a research study about community health needs. Your opinions are important! This survey will take about 12 minutes to complete. All of your individual responses are anonymous and confidential. We will use the survey results to better understand and address health needs in our community.

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

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

Prescription Medicine

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

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

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

- Didn't have health insurance. Pharmacy refused to take my insurance or Medicaid.
 Couldn't afford to pay my co-pay or deductible. Didn't have a way to get to the pharmacy.
 Fear of discrimination. Lack of trust.

Dental Care

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

- Yes (please answer #7) No (please go to #8: Behavioral-Health Services)

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

- Didn't have dental insurance. The dentist refused my insurance/Medicaid.
 Couldn't afford to pay my co-pay or deductible. Didn't have a way to get to the dentist.
 Fear of discrimination. Lack of trust.
 Not sure where to find available dentist

Behavioral-Health Services

8. In the last YEAR, was there a time when you needed behavioral-health services 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 behavioral-health services, why not? (Please choose all that apply).

- Didn't have insurance. The counselor refused to take insurance/Medicaid.
 Couldn't afford to pay my co-pay or deductible Embarrassment.
 Didn't have a way to get to a counselor. Cannot find counselor.
 Fear of discrimination. Lack of trust.
 Long wait time.

HEALTHY BEHAVIORS

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

Exercise

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

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

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

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

Healthy Eating

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

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

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

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

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

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

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

If you don’t have any health conditions, please check the first box and go to question #8: Smoking.

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

7. If you identified any conditions in Question #6, how often do you follow an eating plan to manage your condition(s)?

- Never
- Sometimes
- Usually
- Always

Smoking

8. On a typical DAY, how many cigarettes do you smoke?

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

Vaping

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

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

GENERAL HEALTH

10. Where do you get most of your health information and how would you like to get health information in the future? (For example, do you get health information from your doctor, from the Internet, etc.). _____

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

12. How many days a week do you or your family members go hungry?
 None 1-2 days 3-5 days More than 5 days

13. In the last 30 DAYS, how many days have you felt depressed, down, hopeless?
 None 1-2 days 3-5 days More than 5 days

14. In the last 30 DAYS, how often has your stress and/or anxiety stopped you from your normal daily activities?
 None 1-2 days 3-5 days More than 5 days

15. In the last YEAR have you talked with anyone about your behavioral health?
 Yes (please answer #16) No (please go to #17)

16. If you talked to anyone about your behavioral health, who was it?
 Doctor/nurse Counselor Family/friend

17. How often do you use prescription medications (not prescribed to you or used differently than how the doctor instructed) on a typical DAY?
 None 1-2 times 3-5 times More than 5 times

18. How many alcoholic drinks do you have on a typical DAY?
 None 1-2 drinks 3-5 drinks More than 5 drinks

19. How often do you use marijuana on a typical DAY?
 None 1-2 times 3-5 times More than 5 times

20. How often do you use substances such as inhalants, ecstasy, cocaine, meth or heroin on a typical DAY?
 None 1-2 times 3-5 times More than 5 times

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

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

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

Overall Health Ratings

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

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INTERNET

1. Do you have Internet at home? For example, can you watch Youtube at home?

Yes (please go to next section – BACKGROUND INFORMATION) No (please answer #2)

2. If don't have Internet, why not? Cost No available Internet provider I don't know how
 Data limits Poor Internet service No phone or computer

BACKGROUND INFORMATION

1. What county do you live in?

Vermilion Other

2. What is your Zip Code? _____

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

Medicare Medicaid/State insurance Commercial/Employer

Don't have (Please answer #4)

4. If you answered "don't have" 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

5. What is your gender? Male Female Non-binary Transgender Prefer not to answer

6. What is your sexual orientation? Heterosexual Lesbian Gay Bisexual
 Queer Prefer not to answer

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

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

White/Caucasian Black/African American Hispanic/LatinX
 Pacific Islander Native American Asian/South Asian
 Multiracial

9. 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 Certificate/technical degree
 Bachelor's degree Graduate degree

10. 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

11. What is your housing status?

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

12. If you answered that you have housing, does your house have:

- leaking roof
- mold
- heat
- air conditioning
- running water
- rodents
- lead
- electricity
- Internet

13. How many people live with you? _____

14. How often do you communicate with people you care about and feel close to? (For example, talking, texting, meeting with friends/family?)

- Less than once per week
- 1-2 times per week
- 3 - 5 times per week
- More than 5 times per week

15. How often do you bike, walk, or use public transportation to get to work?

- Less than once per week
- 1-2 times per week
- 3 - 5 times per week
- More than 5 times per week

16. How often do you participate in any type of gambling (such as sports bets, lottery, slots, poker, video machines, etc.)?

- Less than once per week
- 1-2 times per week
- 3 - 5 times per week
- More than 5 times per week

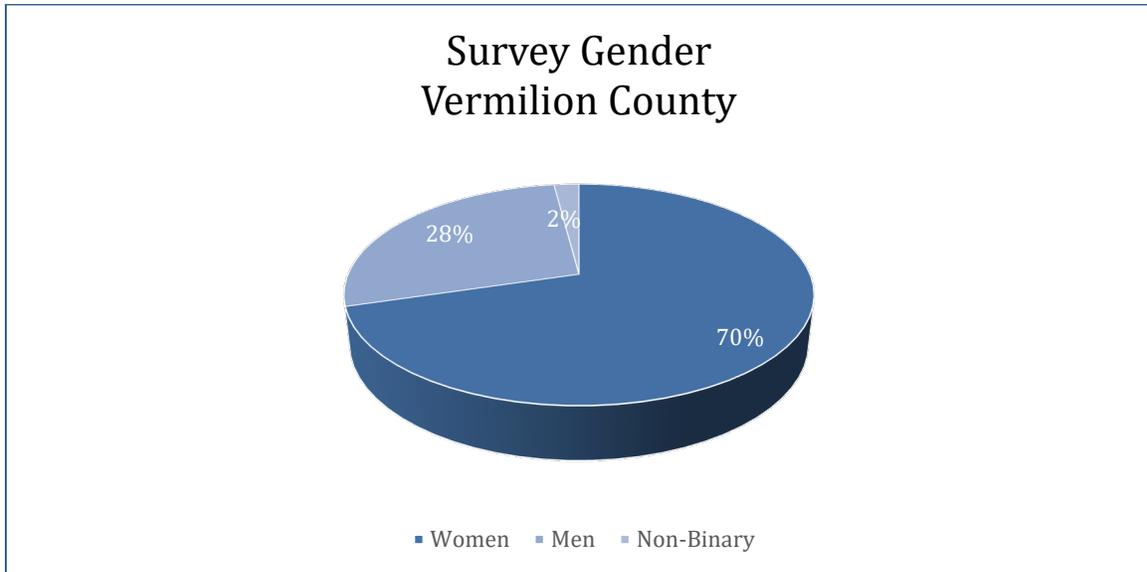
17. When you want to go somewhere, how do you usually get there? (Please choose only one answer).

- I usually get there myself (car, walk, bike)
- Public transportation
- Rides from staff in provider van or vehicle
- Taxi/Uber/Lyft
- Rides from family/friends
- I am not able to get to places

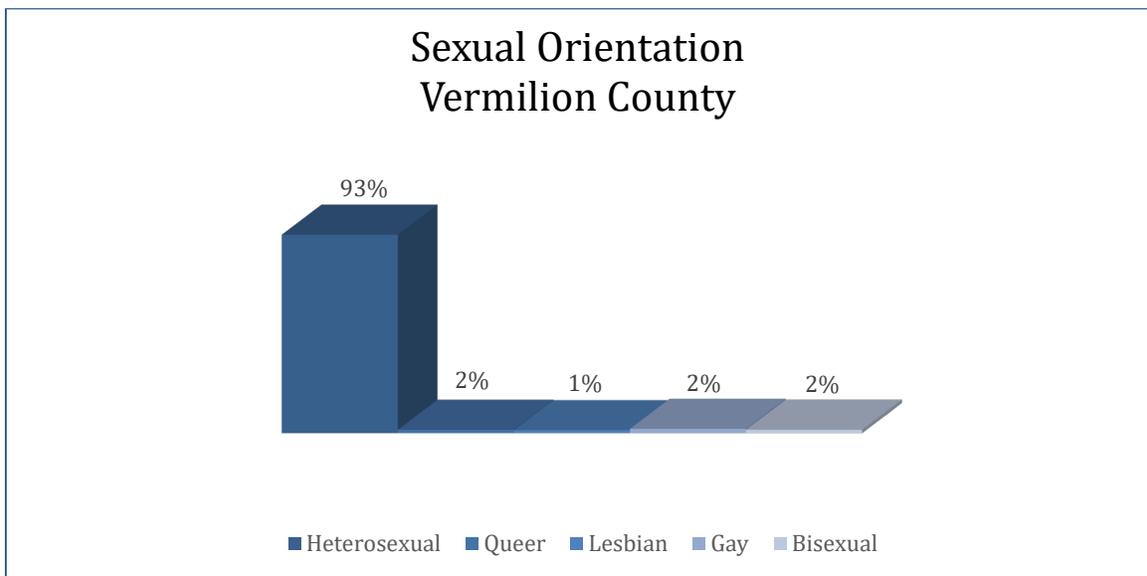
Is there anything else you'd like to share about your own health goals or health issues in our community? _____

Thank you very much for sharing your views with us!

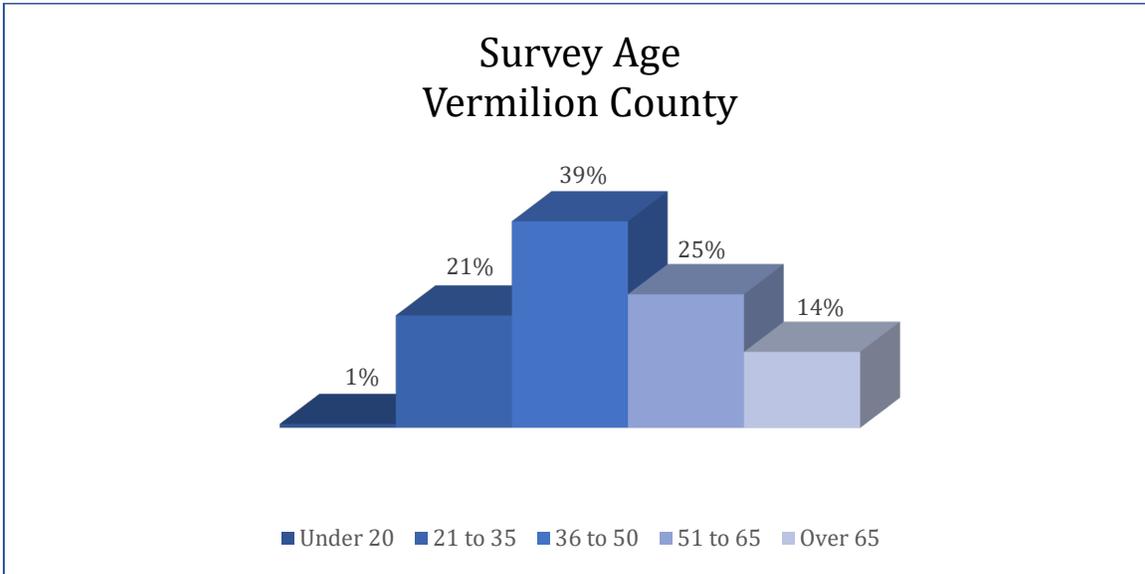
APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS



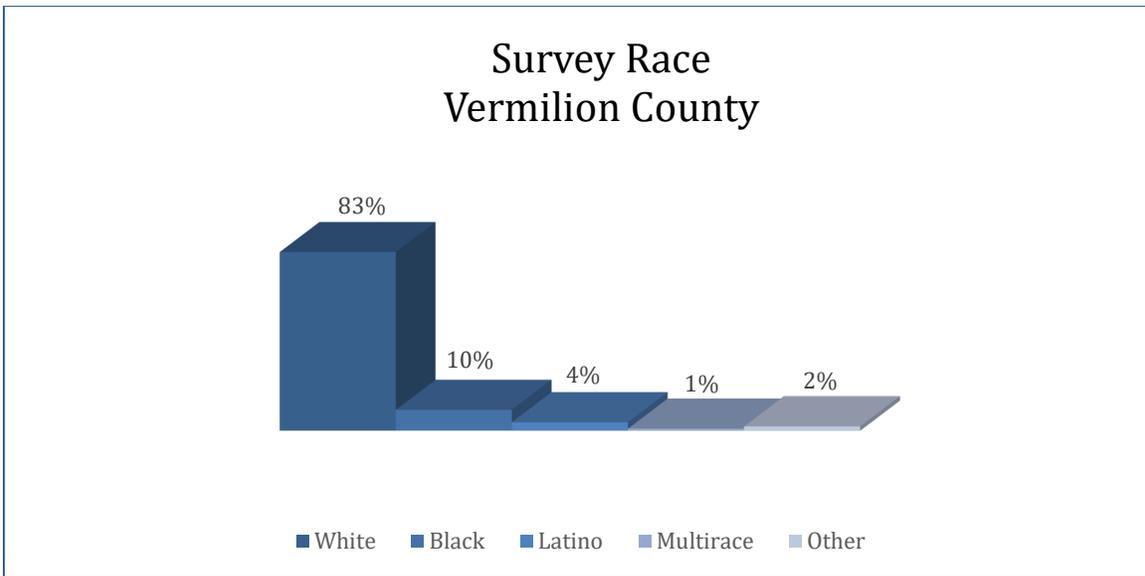
Source: CHNA Survey



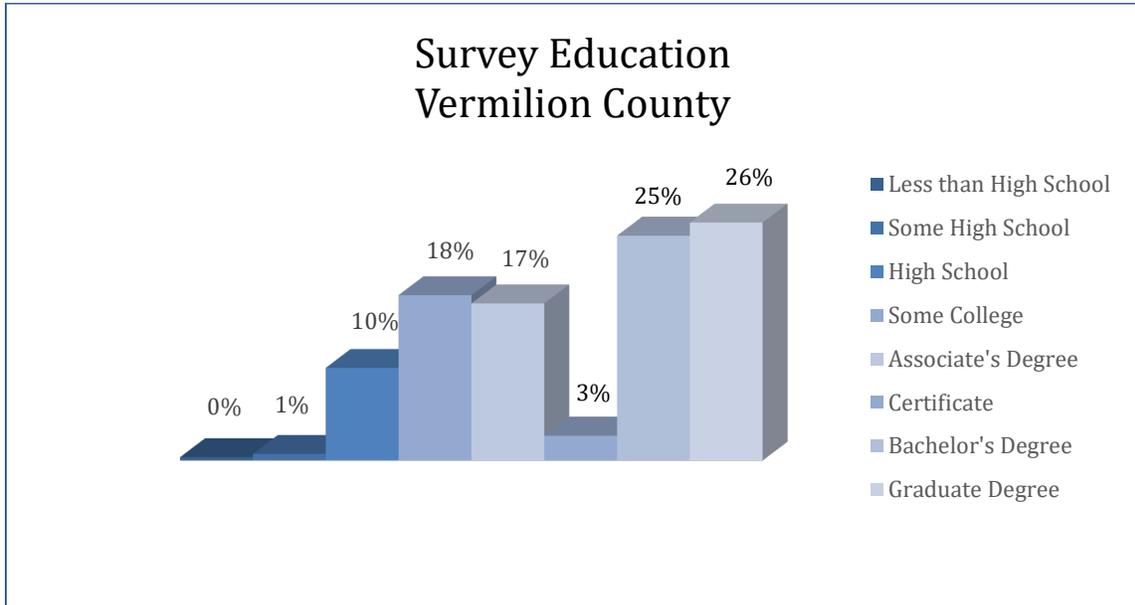
Source: CHNA Survey



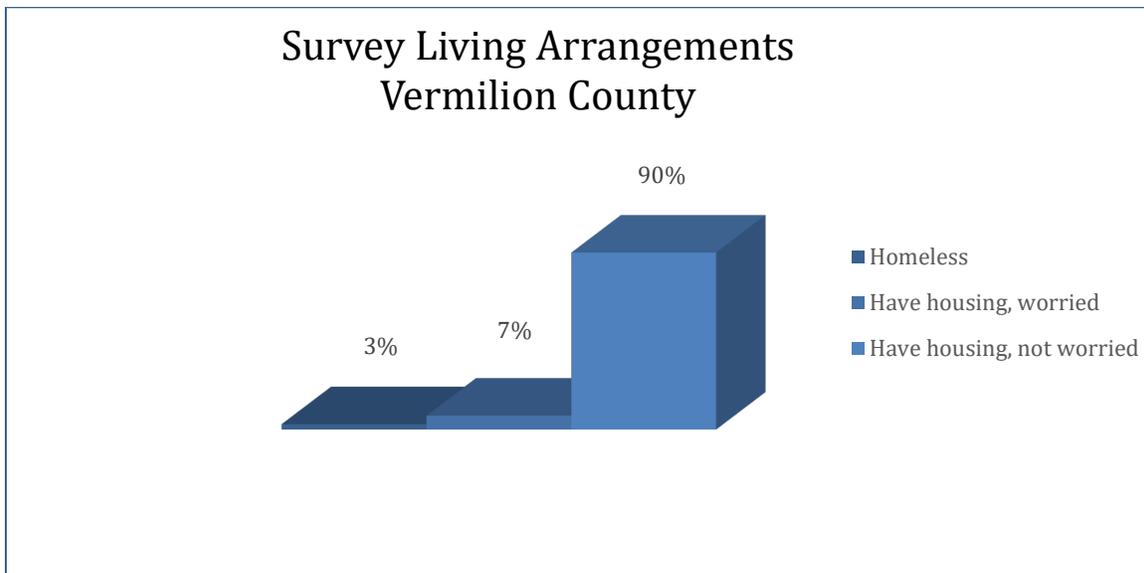
Source: CHNA Survey



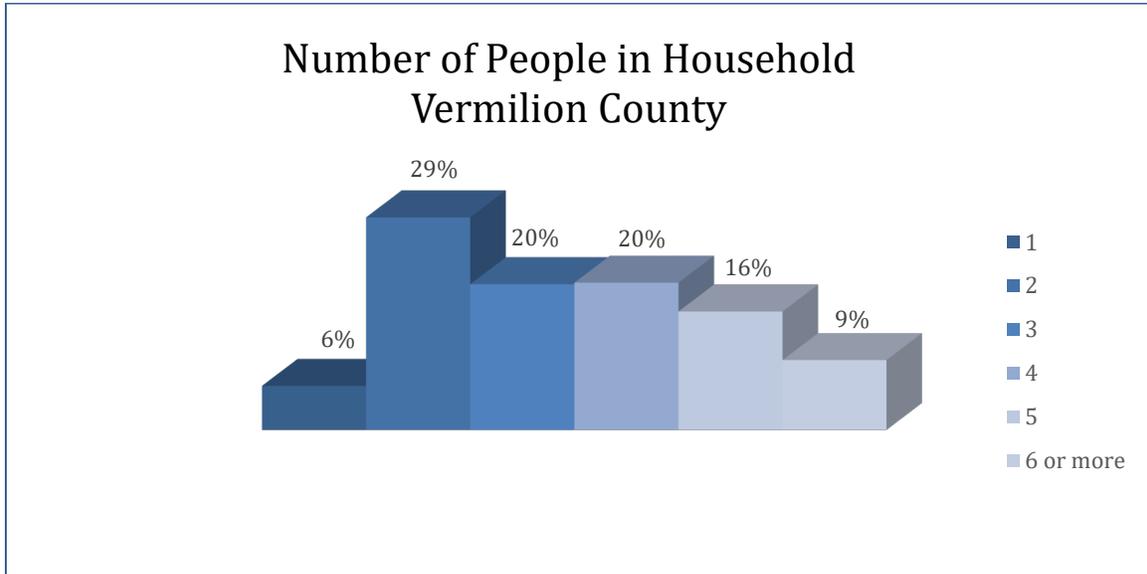
Source: CHNA Survey



Source: CHNA Survey



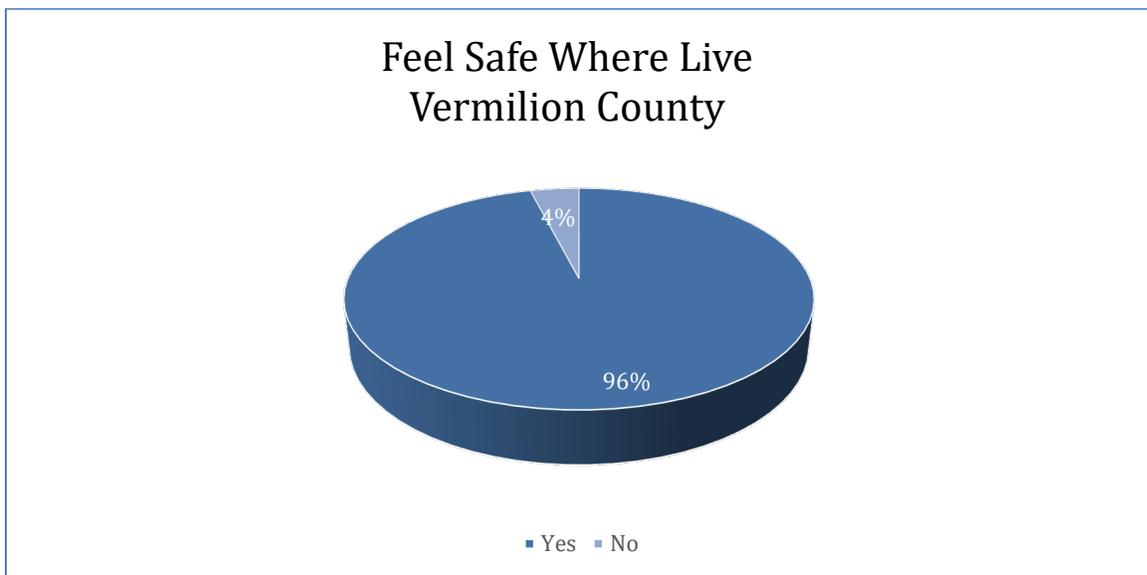
Source: CHNA Survey



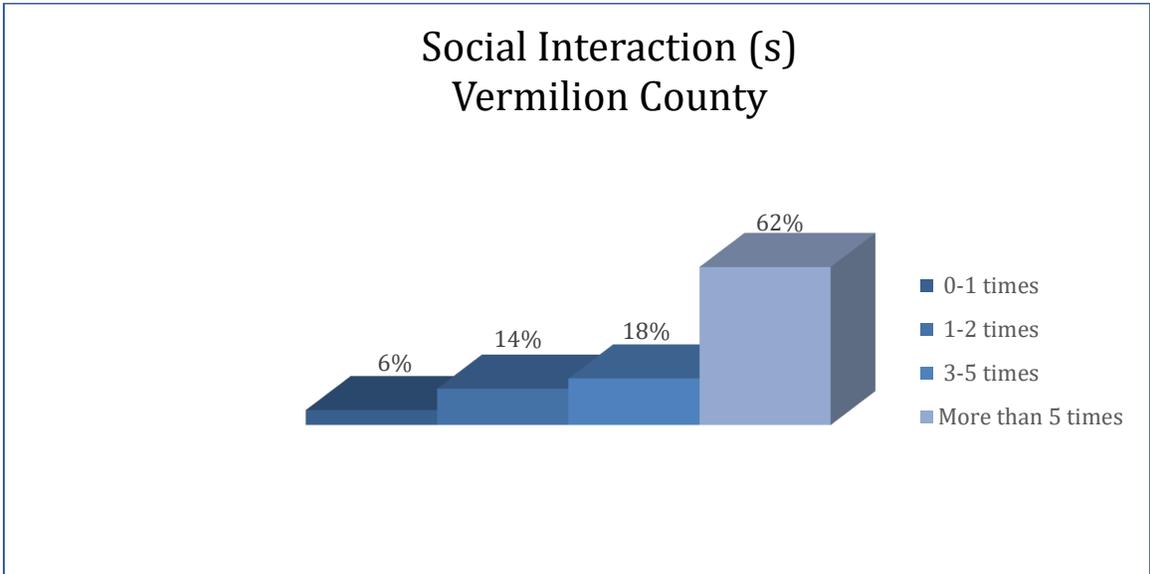
Source: CHNA Survey

Housing Environment

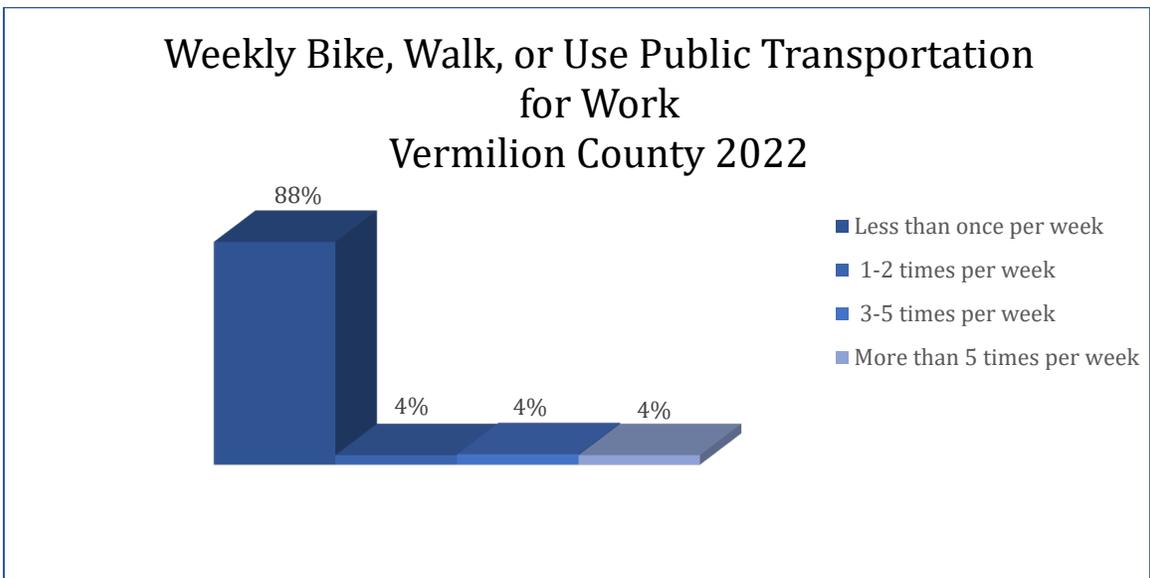
Housing environment is a measure of the housing-related standard of living in a community. Key risk influencers include affordability, crowding and quality. For Vermilion County, 59% of the population is at elevated risk for Housing environment. This is higher than the State of Illinois average of 33% (SocialScape® powered by SociallyDetermined®, 2022).



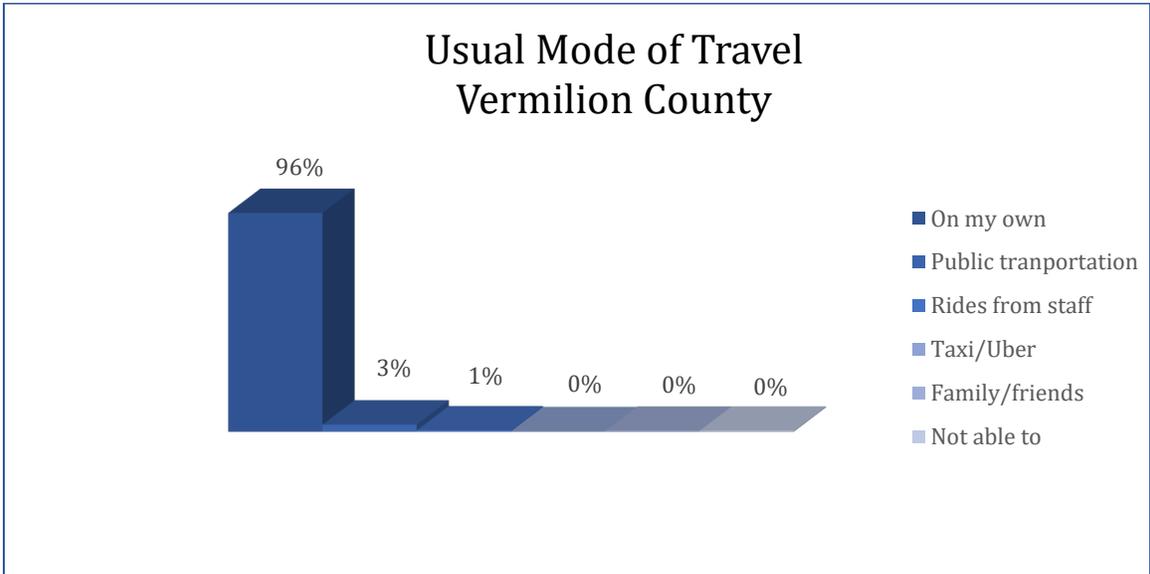
Source: CHNA Survey



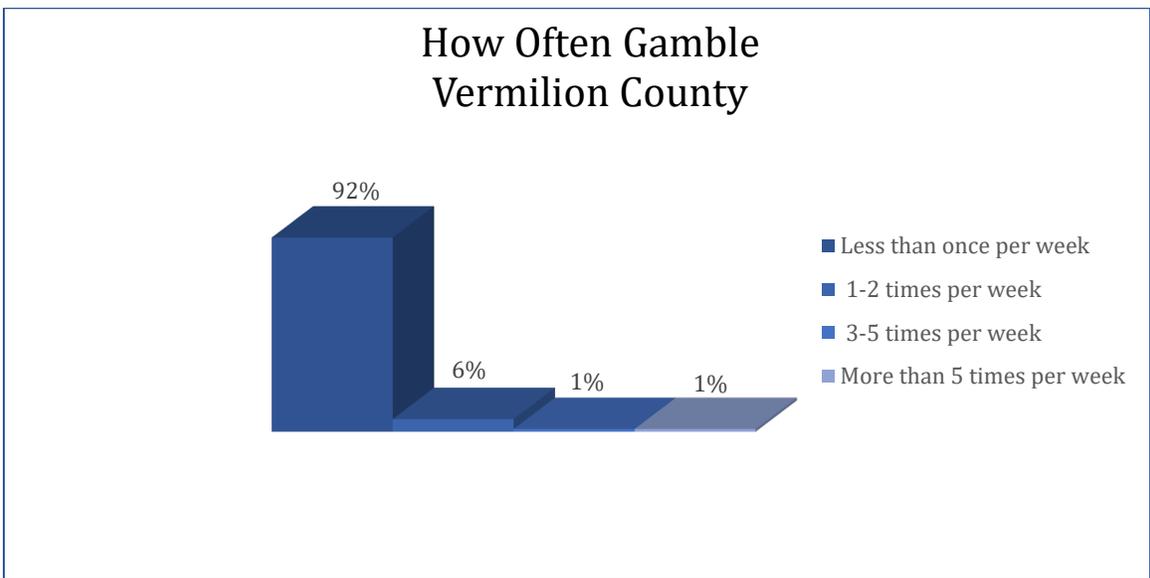
Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey

APPENDIX 5: RESOURCE MATRIX

	Aging Issues	Dental Access	Cancer Screening	Lung Cancer	Healthy Behaviors/ Nutrition & Exercise	Behavioral Health	Obesity	Substance Abuse Youth	Asthma	Diabetes	Food Insecurity	Health Literacy	Violence	Income / Poverty
Health Department														
Vermilion County Health Department	3		2	2	3	3	3	1	1	2	1	3	2	2
Hospitals														
Carle Foundation Hospital	2		3	3	3	3	2		3	3	1	2	2	2
OSF HealthCare Sacred Heart Medical Center	2		3	3	3	3	2		3	3	1	2	2	2
Community Agencies														
United Way of Danville	2				2	2					2	2	2	2
Vermilion County Mental Health Board					1	3						2	3	1

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

APPENDIX 6: DESCRIPTION OF COMMUNITY RESOURCES

Carle Health in Vermilion County

Carle Hoopeston Regional Health Center (CHRHC), a 24-bed Critical Access Hospital in Hoopeston, IL, serves Hoopeston, Vermilion, and Iroquois counties and the surrounding area. CHRHC employs more than 200 team members, with over 50 physicians and advanced practice providers. CHRHC has been committed to providing quality, dependable health services for more than 50 years. CHRHC offers specialty services with cardiology, orthopedics, gynecology, mental health, urology and diagnostic services including nuclear medicine, digital mammography, radiology and laboratory along with emergency medicine and surgical services.

Carle Hoopeston provides access to primary care with clinics in Cissna Park, Danville, Hoopeston, Mattoon, Milford, Rossville, Tuscola and Watseka.

Vermilion County Health Department

The Vermilion County Health Department strives for disease prevention, health protection and health promotion. The Vermilion County Health Department offers the following programs: WIC (Women, Infant, and Children) services, including breastfeeding and nutritional information / supplementation; Communicable Disease surveillance and Immunization services; Vital Records, including birth and death records filed after January 1, 1983; Emergency Preparedness Programs; Community Health Education; and Environmental Health Services, including Food Sanitation, Potable Water, and Private Sewage.

United Way of Danville

United Way of Danville Area seeks to reduce poverty by: helping people achieve financial stability, by helping families get on the road to economic independence, promoting healthy lives, and increasing the number of youth and adults who are healthy and avoid risky behaviors, and engaging families and connecting them with resources to prepare children for successful lives and school experiences in early years and throughout life.

Vermilion County Mental Health Board

The Mental Health 708 Board allocates local tax revenues to six service providers within Vermilion County. These agencies provide a wide variety of mental health services to county residents in the areas of mental health, developmental disabilities and substance abuse.

Carle Danville on Fairchild

Carle Danville on Fairchild is an outpatient department of the Carle Hoopeston Regional Health Center. Services at this location include adult medicine, behavioral health, breast imaging, family medicine, gynecology, plastic surgery, radiology, sleep medicine, medical supply, allergy services, pediatric primary care, lab services, and more.

Carle Danville on Vermilion

Carle Danville on Vermilion is an outpatient department of Carle Foundation Hospital. They offer many services at this location, such as gastroenterology, many types of cancers, hand surgery, infectious disease, nephrology, neurology, occupational medicine, oncology, urology, wound therapy, ENT, and more.

OSF HealthCare Sacred Heart Medical Center

OSF HealthCare Sacred Heart Medical Center is a 174-bed health care facility established in 1882. It serves patients throughout Danville and Vermilion County. Health care services include the Cancer Care Center, the Family Birthplace, cardiovascular and orthopedic care, testing and diagnostic services.

Additional Resources

For additional community resources please visit one of the following:

- 211
- VCHelp.org
- Vermilion County Resource List

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 Method²

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

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

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

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

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

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

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

Considerations include, but are not limited to:

- Availability and efficacy of solutions
- Feasibility of success

² “Guide to Prioritization Techniques.” National Connection for Local Public Health (NACCHO)