

2022

COMMUNITY HEALTH
NEEDS ASSESSMENT

OSF St. Francis
Hospital & Medical Group

Delta County

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Community Health Needs Assessment

2022

Collaboration for sustaining health equity

EXECUTIVE SUMMARY

The Delta County Community Health Needs Assessment is a collaborative undertaking by OSF Saint Francis Hospital and Medical Group to highlight the health needs and well-being of residents in Delta County. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Delta County region. Several themes are prevalent in this health needs assessment – the demographic composition of the Delta 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 medication 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 Delta 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, two significant health needs were identified and determined to have equal priority:

- **Healthy Behaviors – defined as exercise, obesity, and food insecurity**
- **Behavioral Health – including mental health, substance abuse and access to counseling**

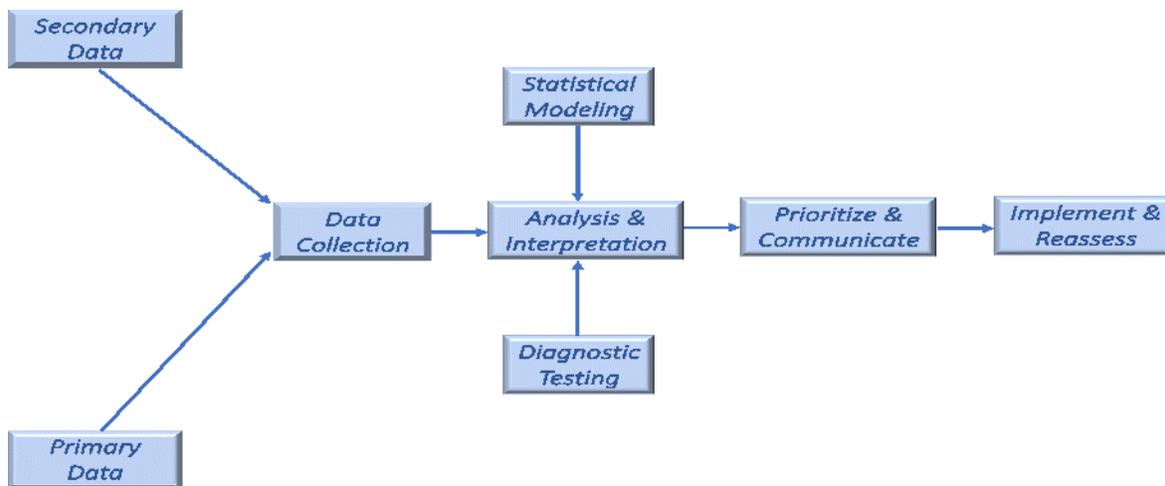
I. INTRODUCTION

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 OSF Saint Francis Hospital and Medical Group 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.

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 below (Figure 1).

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 representatives from OSF Saint Francis Hospital and Medical Group, members of the Delta County Health Department, and administrators from key community partner organizations. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire

collaborative team met in the first and second 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.

Definition of the Community

In order to determine the geographic boundaries for OSF Saint Francis Hospital and Medical Group, analyses were completed to identify what percentage of inpatient and outpatient activity was represented by Delta County. Data show that Delta County alone represents 86% of all patients for the hospital.

In addition to defining the community by geographic boundaries, this study targets the at-risk population as an area of potential opportunity to improve the health of the community. Note that the at-risk population was defined as those individuals who were eligible to receive Medicaid based on the State of Michigan 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 Delta County. When feasible, data are assessed longitudinally to identify trends and patterns by comparing with results from the 2019 CHNA and benchmarked with State of Michigan averages.

Community Feedback from Previous Assessments

The 2019 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 2019 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.

2019 CHNA Health Needs and Implementation Plans

The 2019 CHNA for Delta County identified three significant health needs. These included: Healthy Behaviors, defined as healthy eating and active living, and their impact on obesity; Behavioral Health,

including mental health and substance abuse; and Aging Issues, defined as population over 65. 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 2019 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



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 Delta 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 Delta County was 11.3 percent. The population used for the calculation was 35,666 yielding a total of 4,030 residents living in poverty in the Delta 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 Delta County area, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 381. The data collection effort for this CHNA yielded a total 550 usable responses. This exceeded the threshold of the desired 95% confidence interval.

To provide a representative profile when assessing the aggregated population for the Delta 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 501 respondents for analyzing the aggregate population. Sample characteristics can be seen in APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS.

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,

χ^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

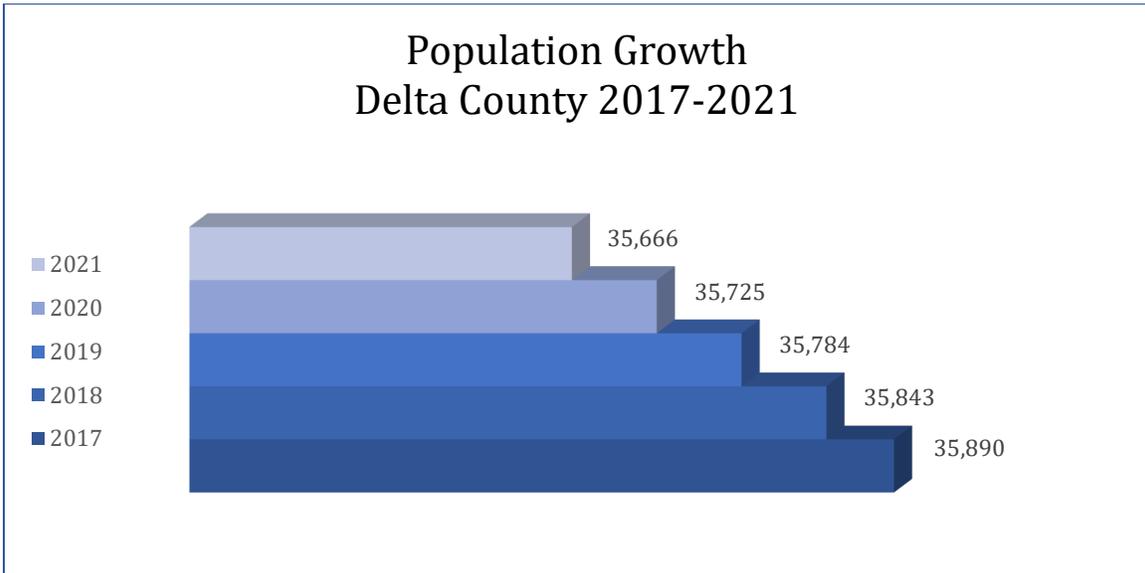
1.1 Population

Importance of the measure: Population data characterize individuals residing in Delta 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 Delta County has slightly decreased (<1.0%) between 2017 and 2021 (Figure 3).

Figure 3



Source: US Census

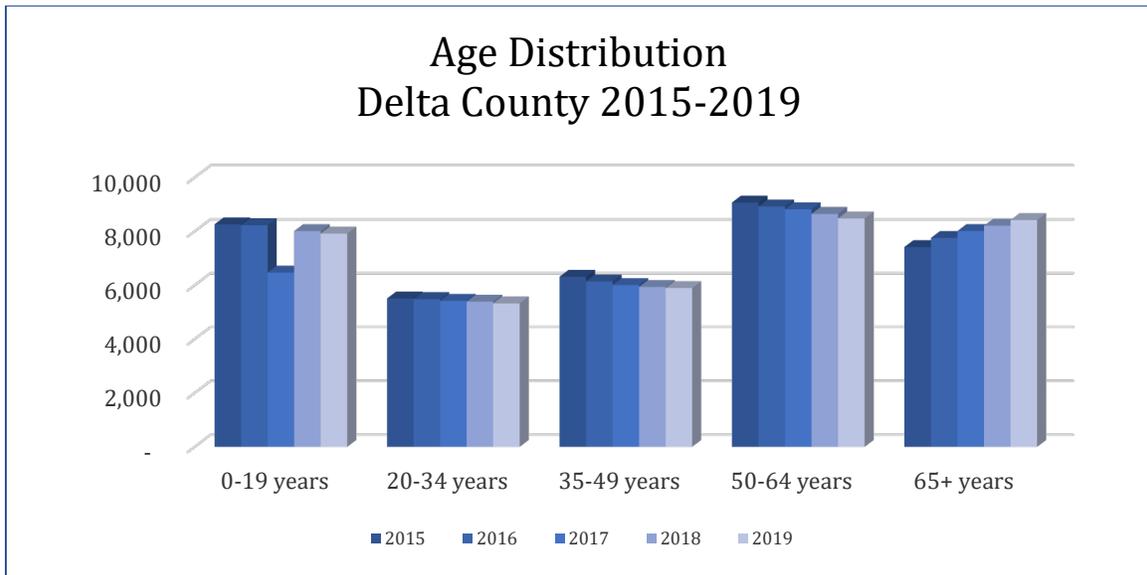
1.2 Age, Gender and Race Distribution

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

As illustrated in Figure 4, the percentage of individuals in Delta County in four age groups has declined over the five-year period 2015 and 2019. Most notably, those in the 35-49 and 50-64 age groups declined at least 6.5%. The only age group that increased was residents aged 65+ years, increasing 13.5% over the same five-year period.

Figure 4

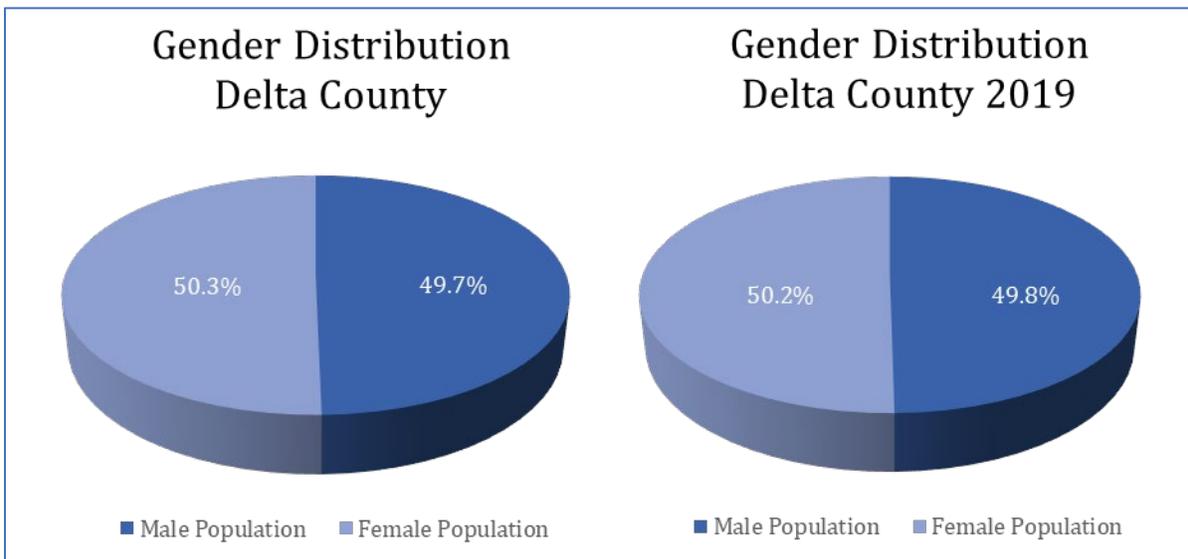


Source: US Census

Gender

The gender distribution of Delta County residents has remained relatively consistent between 2017 and 2019 (Figure 5).

Figure 5



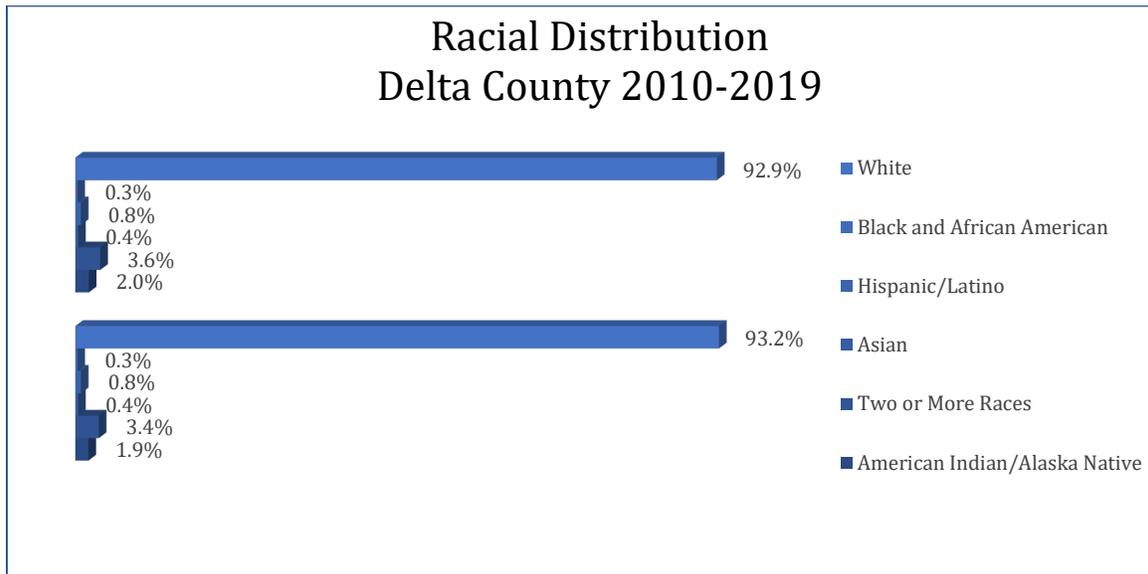
Source: US Census

Race

With regard to race and ethnic background, Delta County is largely homogenous, yet in recent years, the county is becoming more diverse. Data from 2019 suggest that White ethnicity comprises 92.9% of the

population in Delta County. However, the non-White population of Delta County has been increasing (from 6.8% to 7.1% in 2019), with Black ethnicity comprising 0.3% of the population, multi-racial ethnicity comprising 3.6% of the population and Hispanic/Latino (LatinX) ethnicity comprising 0.8% of the population (Figure 6).

Figure 6



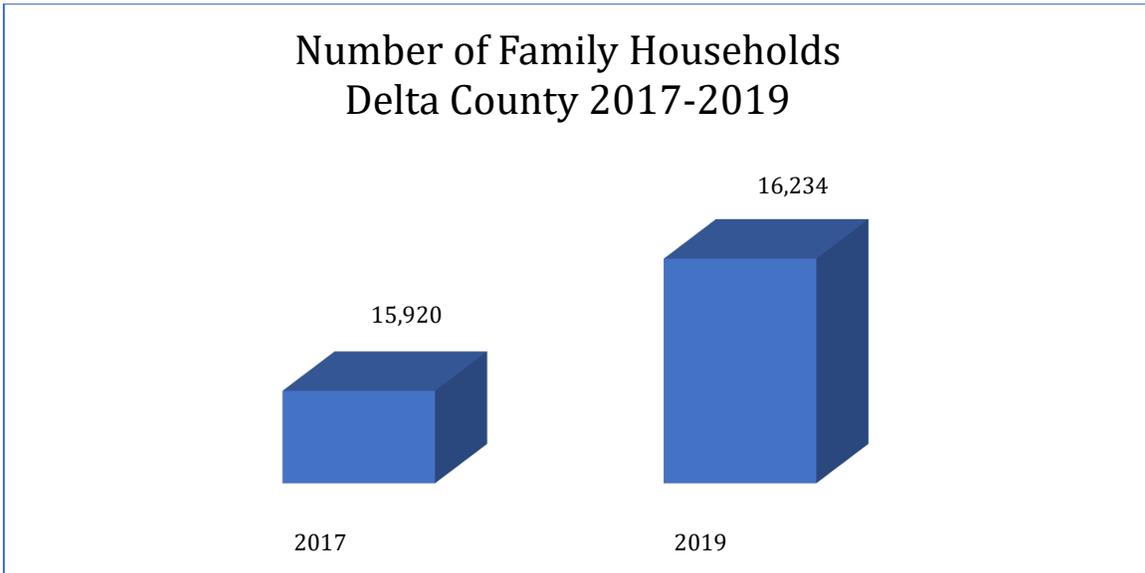
Source: US Census

1.3 Household/Family

Importance of the measure: Families are an important component of a robust society in Delta 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 Delta County increased slightly from 2017 to 2019.

Figure 7

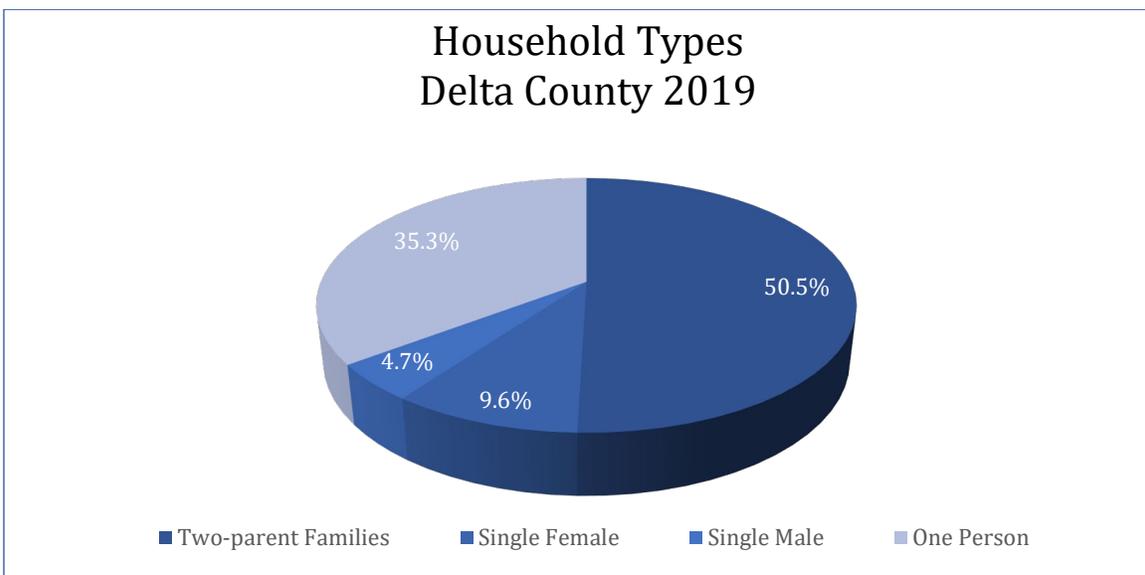


Source: US Census

Family Composition

In Delta County, data from 2019 suggest the percentage of two-parent families in Delta County is 50.5%. One-person households represent 35.3% of the county population, single-female households represent 9.6%, and single-male households represent 4.7% (Figure 8).

Figure 8

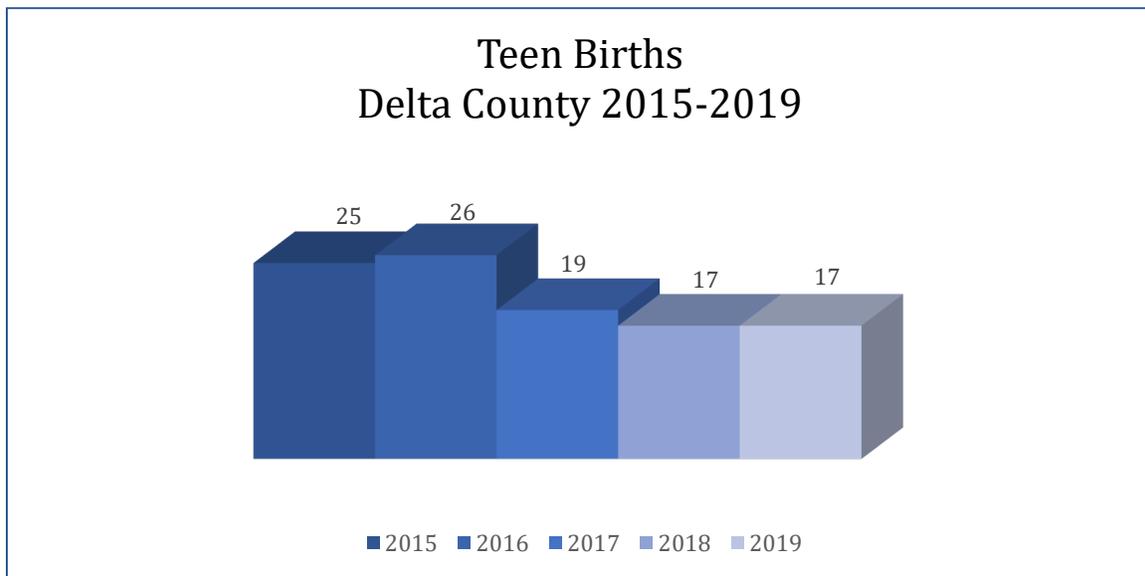


Source: US Census

Early Sexual Activity Leading to Births from Teenage Mothers

Delta County has experienced a slight fluctuation in teenage birth count. The teen birth count steadily decreased from 2015-2019 (Figure 9).

Figure 9



Source: Michigan 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.

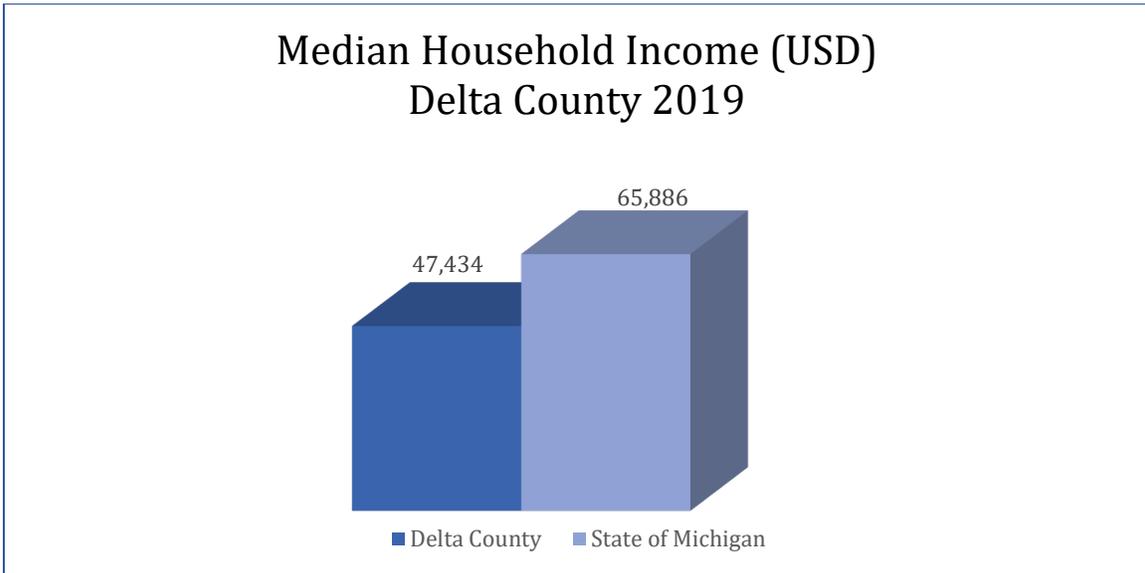
Economic Climate

Economic climate is a measure of a community's financial resources and resiliency. Key risk influencers include income, cost of living and opportunity. For Delta County, 17% of the population is at elevated risk for economic climate. This is lower than the State of Michigan average of 26% (SocialScape® powered by SociallyDetermined®, 2022).

Median Income Level

For 2019, the median household income in Delta County (\$47,434) was lower than the State of Michigan (\$65,886) (Figure 10).

Figure 10

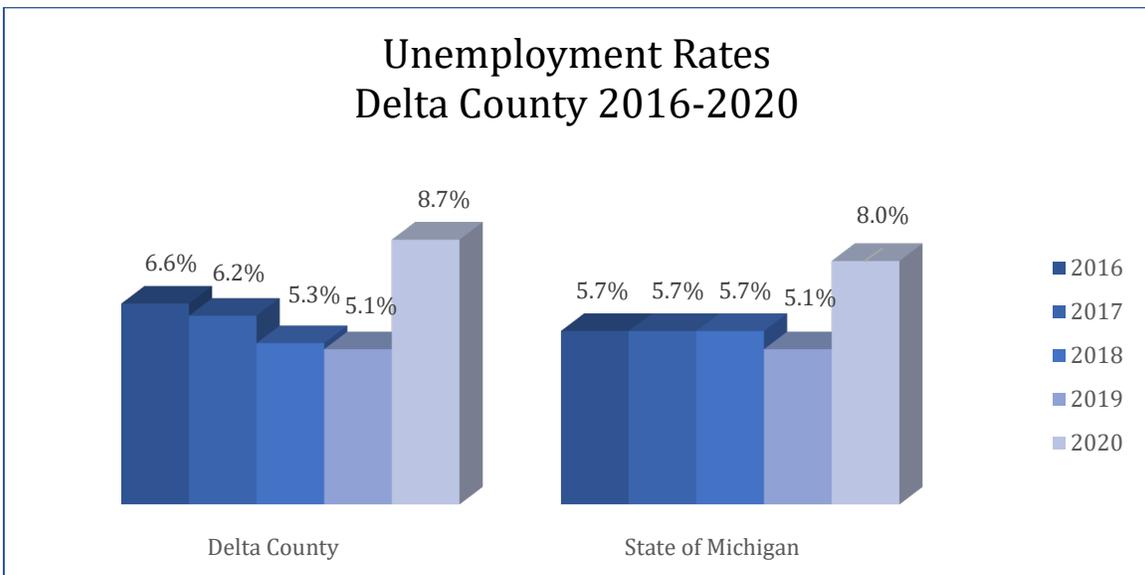


Source: US Census

Unemployment

For the years 2016 to 2020, the Delta County unemployment rate was at or higher than the State of Michigan unemployment rate, except in 2018. Overall, between 2016 and 2019, unemployment in Delta County decreased by approximately 1.5%, with a sharp increase in 2020 likely due to the COVID-19 pandemic (Figure 11).

Figure 11

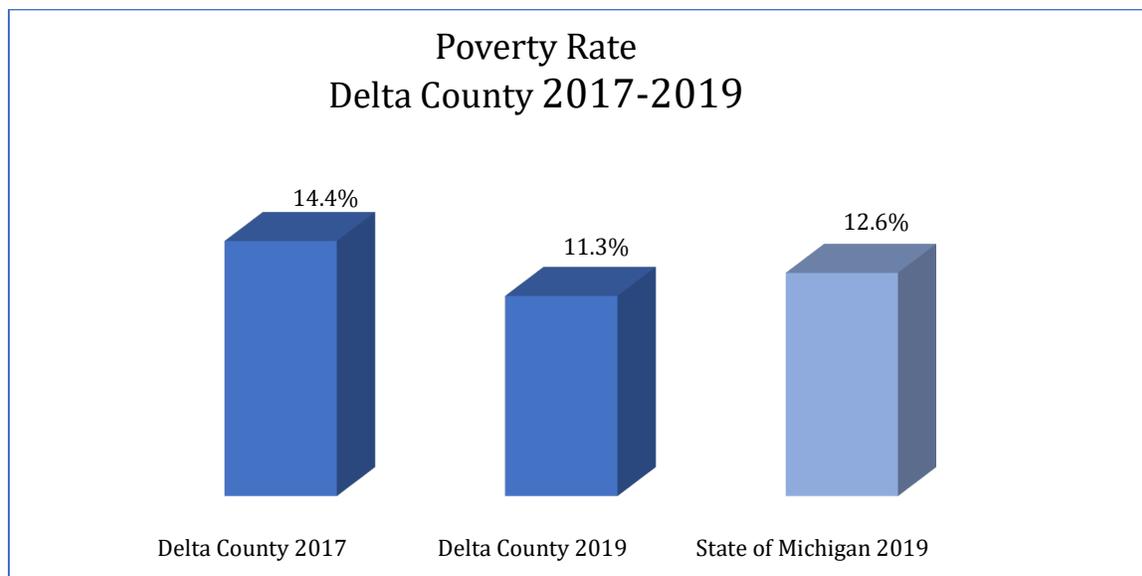


Source: Bureau of Labor Statistics

Individuals in Poverty

In Delta County, the percentage of individuals living in poverty between 2017 and 2019 decreased by 3.1%. The poverty rate for individuals is 11.3%, which is slightly lower than the State of Michigan individual poverty rate of 12.6%. Poverty has a significant impact on the development of children and youth (Figure 12).

Figure 12



Source: US Census

1.5 Education

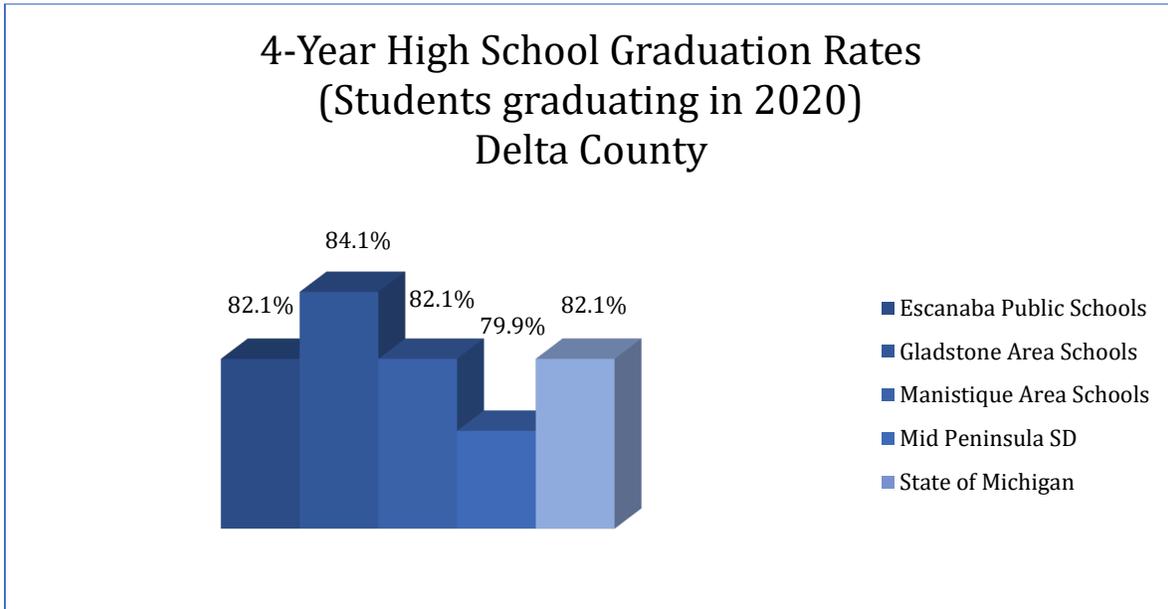
Importance of the measure: According to the National Center for Educational Statistics¹, “The better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income.” Research suggests that the higher the level of educational attainment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

In 2020, the graduation rate remained close to State of Michigan averages of 82.1%. (Figure 13).

¹ NCES 2005

Figure 13

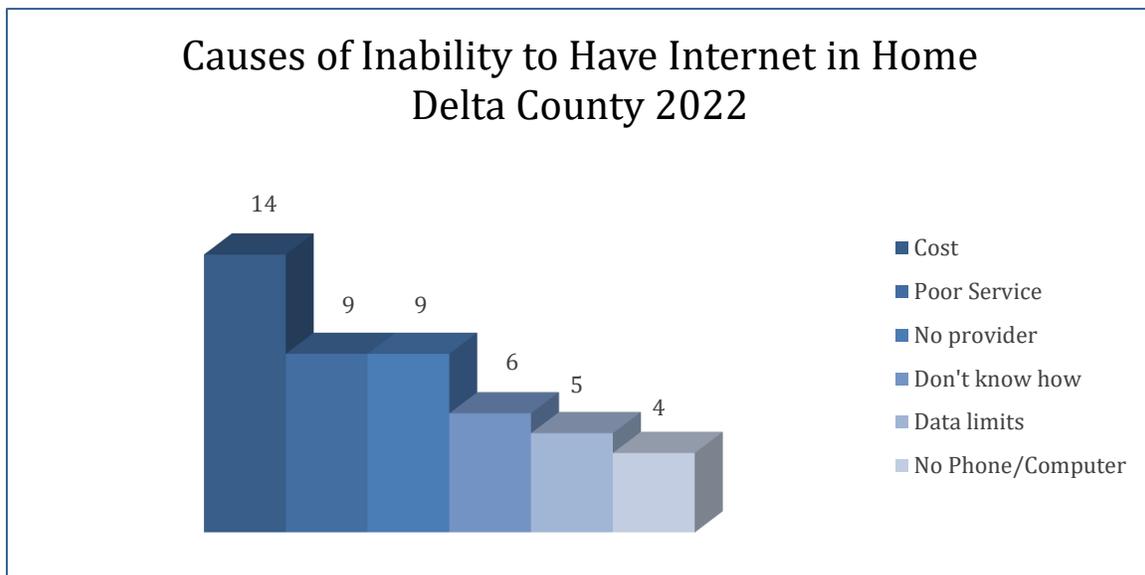


Source: Michigan Department of Education

1.6 Internet Accessibility

Survey respondents were asked if they had Internet access. Of respondents, 92% indicated they had Internet in their homes. For those who did not have Internet in their home, cost was the most frequently cited reason (Figure 14). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 14



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 Delta County, 43% of the population is at elevated risk for digital landscape. State of Michigan average for digital landscape was not available (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 higher for women, younger people, those with higher education and those with higher income. Access to Internet tends to be rated lower by people living in an unstable (e.g., homeless) housing environment.

1.7 Key Takeaways from Chapter 1

- ✓ OVERALL POPULATION IS DECREASING
- ✓ POPULATION OVER AGE 65 IS INCREASING
- ✓ SINGLE FEMALE HEAD-OF-HOUSEHOLD REPRESENTS 9.6% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.

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

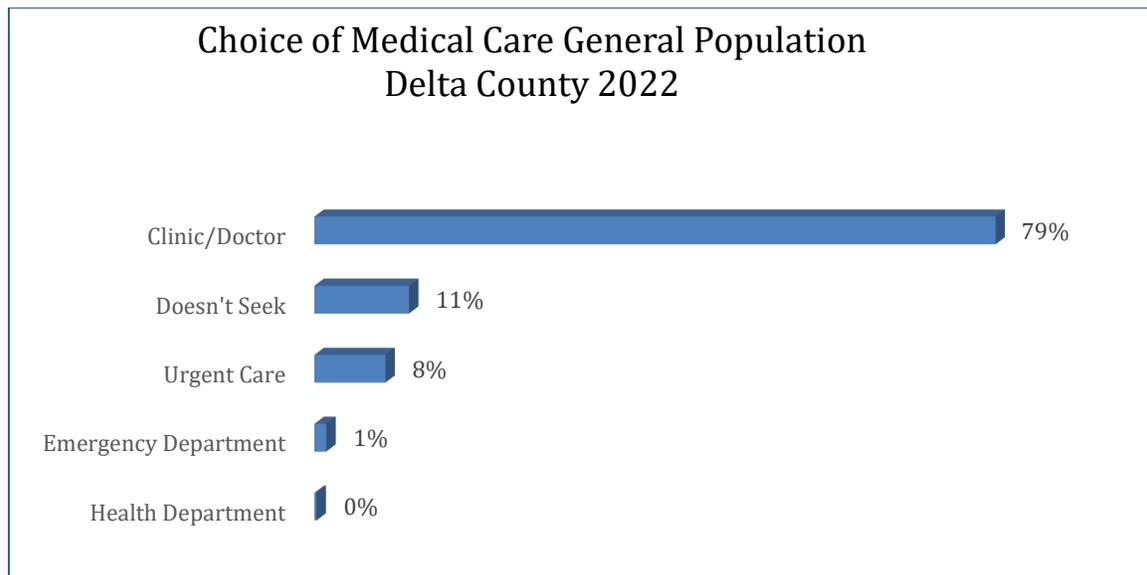
2.1 Accessibility

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 79% of survey respondents. This was followed by not seeking medical attention (11%), urgent care (8%), the emergency department at a hospital (1%) and the health department (0%). (Figure 15).

Figure 15



Source: CHNA Survey

Comparison to 2019 CHNA

While most of the choices for medical care remained steady, Clinic/doctor's office increased from 75% in 2019 to 79% in 2022. Note that the percentage of the population that does not seek medical care (11%) is relatively higher than other OSF communities.



Social Determinants Related to Choice of Medical Care

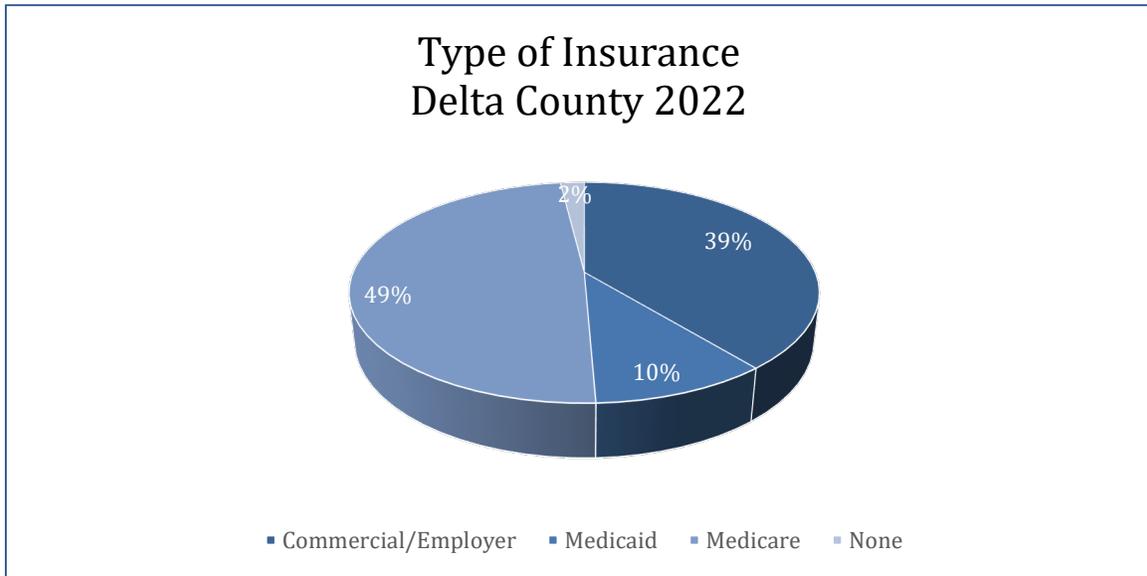
Several factors show significant relationships with an individual's choice of medical care. The following relationships were found using correlational analyses:

- **Clinic/Doctor's Office** tends to be used more often by women, older people, and those with higher education. Clinic/Doctor's office tends to be used less by people living in an unstable (e.g., homeless) housing environment.
- **Urgent Care** did not have any significant correlates.
- **Emergency Department** tends to be used more by men, Native Americans, those with lower education and lower income.
- **Do Not Seek Medical Care** tends to be chosen more by men, younger people and by people living in an unstable (e.g., homeless) housing environment.
- **Health Department** did not have any significant correlates.

Insurance Coverage

According to survey data, 49% of the residents are covered by commercial/employer insurance, followed by Medicare (39%) and Medicaid (10%). Only 2% of respondents indicated they did not have any health insurance (Figure 16).

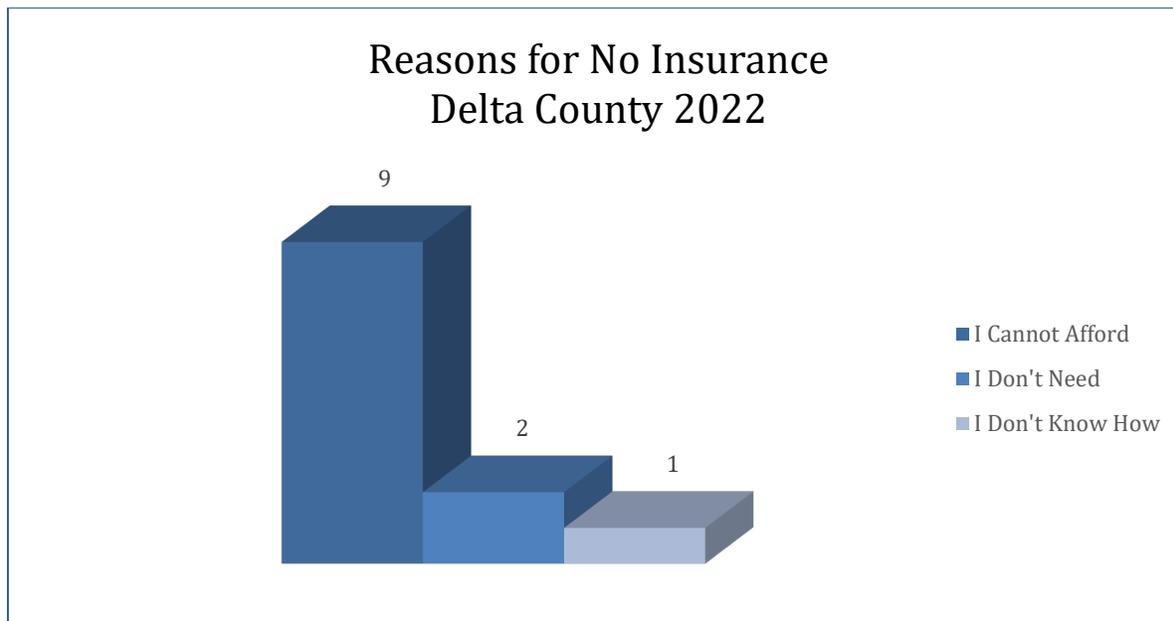
Figure 16



Source: CHNA Survey

Data from the survey show that for the 2% of individuals who do not have insurance, the most prevalent reason was cost (Figure 17). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 17



Source: CHNA Survey



Social Determinants Related to Type of Insurance

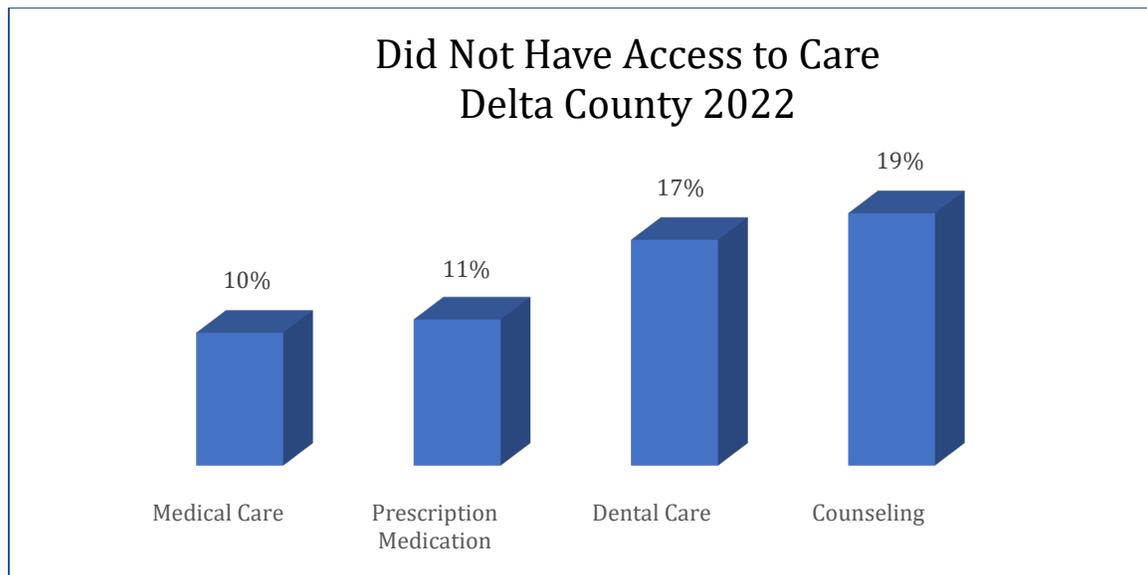
Several characteristics show significant relationships with an individual's type of insurance. The following relationships were found using correlational analyses:

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

Access to Care

In the CHNA survey, respondents were asked, "Was there a time when you needed care but were not able to get it?" Access to four types of care were assessed: medical care, prescription medication, dental care and counseling. Survey results show that 10% of the population did not have access to medical care when needed; 11% of the population did not have access to prescription medication when needed; 17% of the population did not have access to dental care when needed; and 19% of the population did not have access to counseling when needed (Figure 18).

Figure 18



Source: CHNA Survey



Social Determinants Related to Access to Care

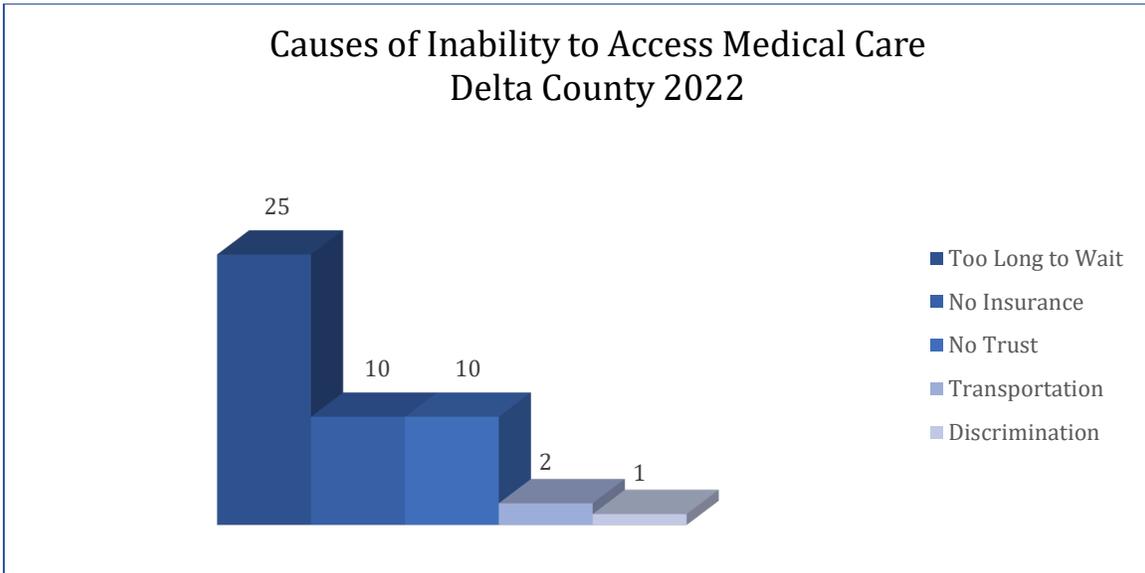
Several characteristics show a significant relationship with an individual's ability to access care when needed. The following relationships were found using correlational analyses:

- **Access to medical care** tends to be higher for older people and those with higher income.
- **Access to prescription medication** tends to be higher for those with higher income. Access to prescription medication tends to be lower for people living in an unstable (e.g., homeless) housing environment.
- **Access to dental care** tends to be higher for older people, those with higher education and those with higher income.
- **Access to counseling** tends to be rated higher by older people.

Reasons for No Access – Medical Care

Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. Based on frequencies, the leading cause of the inability to gain access to medical care were too long to wait for an appointment (25) (Figure 19).

Figure 19

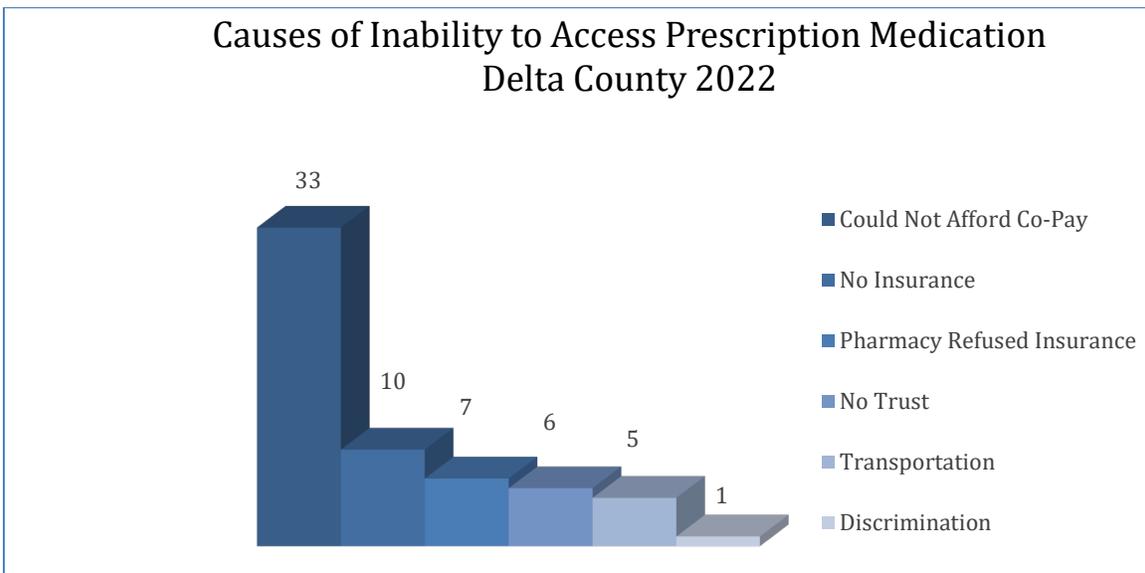


Source: CHNA Survey

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. Based on frequencies, the leading cause of the inability to gain access to prescription medicine was the inability to afford copayments or deductibles (33) (Figure 20).

Figure 20

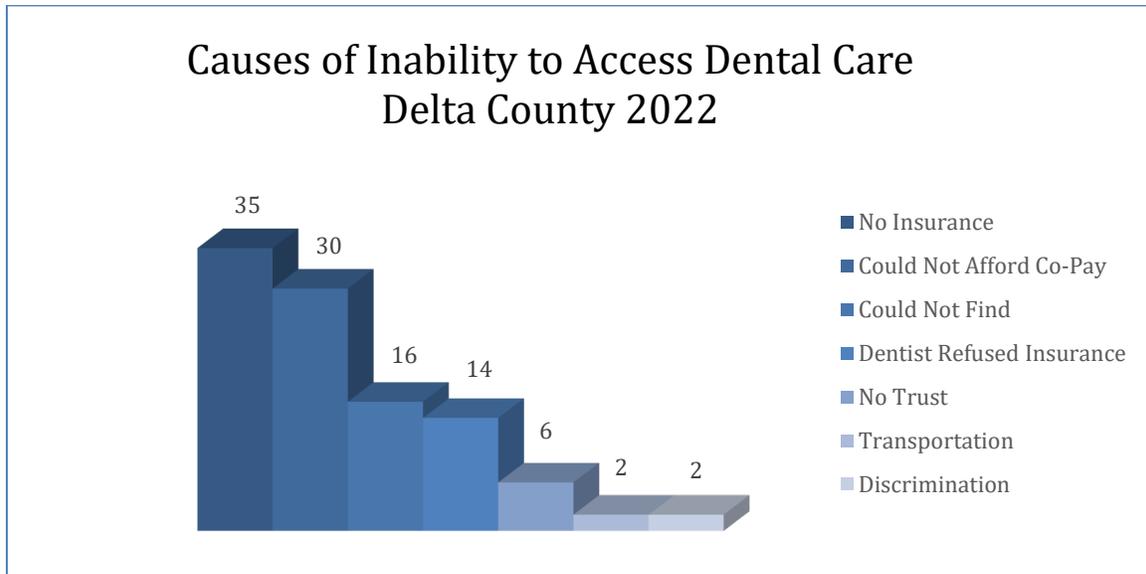


Source: CHNA Survey

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 (35), and the inability to afford copayments or deductibles (30). Note that these data are displayed in frequencies rather than percentages given the low number of responses (Figure 21).

Figure 21

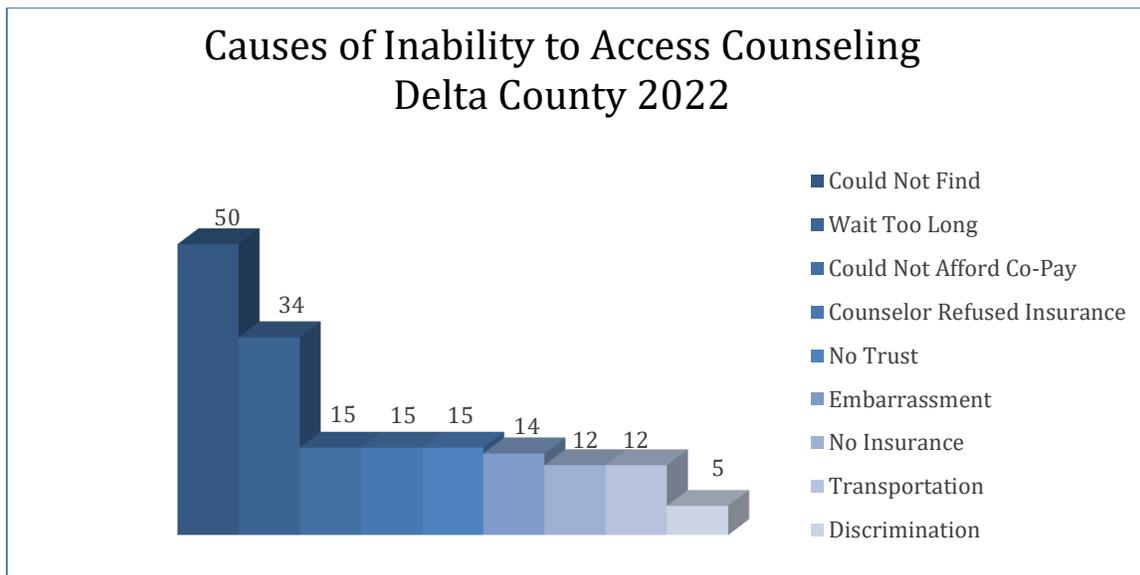


Source: CHNA Survey

Reasons for No Access – 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 could not find a counselor (50) and wait was too long (34) (Figure 22). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 22



Source: CHNA Survey

Comparison to 2019 CHNA

Access to Medical Care – survey results show a 4% decrease in those who were not able to find medical care.

Access to Prescription Medication – survey results show a 4% decrease in those who were not able to get prescription medication.

Access to Dental Care – results show a 2% decrease in those who were not able to get dental care when needed.

Access to Counseling – results show an 2% increase in those who were not able to get counseling when needed.

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 Delta County, 43% of the population is at elevated risk for transportation network. This is higher than the State of Michigan average of 14% (SocialScape® powered by SociallyDetermined®, 2022).

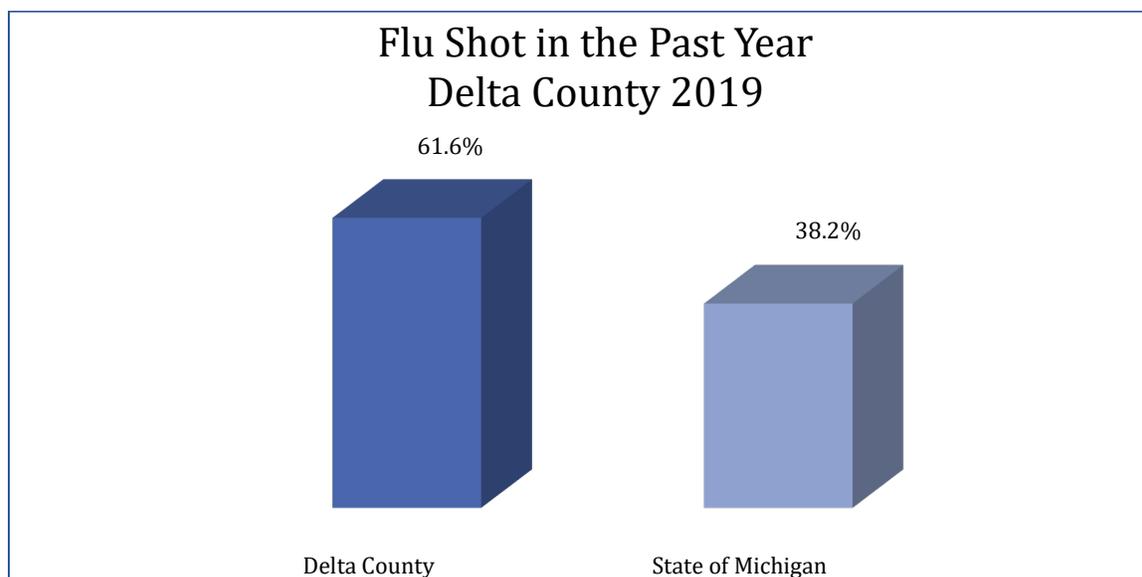
2.2 Wellness

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.

Frequency of Flu Shots

The overall health of a community is impacted by preventative measures including immunizations and vaccinations. Figure 23 shows that the percentage of people who have had a flu shot is 61.6% for Delta County in 2019. The State of Michigan had a lower vaccination percentage of 38.2% (Figure 23). Note that data have not been updated by the Michigan Department of Public Health.

Figure 23

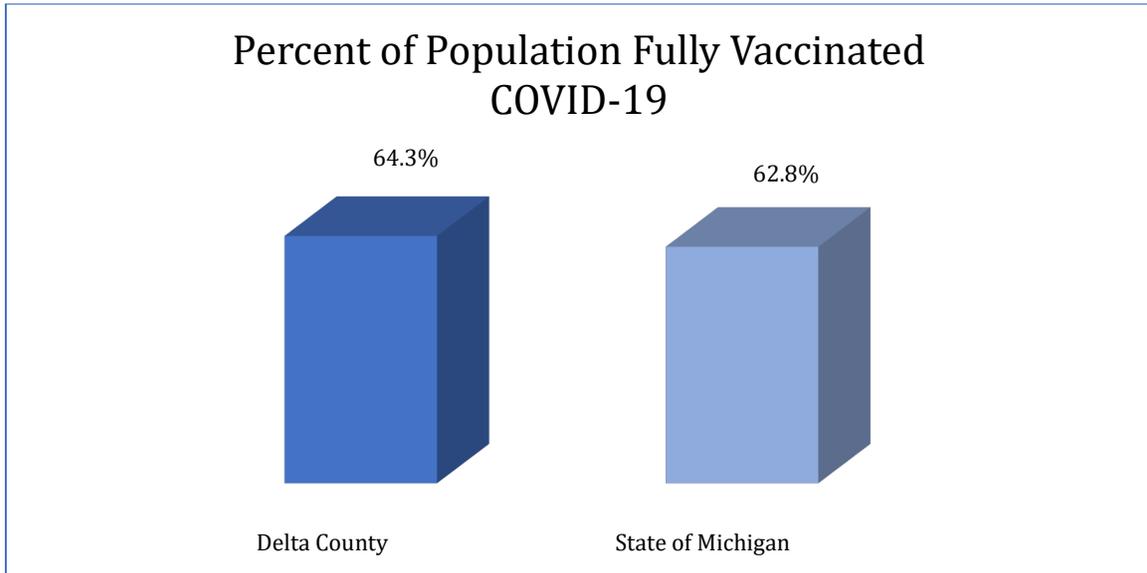


Source: CHNA Survey

COVID-19 Vaccinations

Figure 24 shows the percentage of people who have been fully vaccinated from the COVID-19 virus. Delta County is above half at 64.3% and above the State of Michigan at 62.8%. Additionally, given the recency of the COVID-19 virus, no historical comparisons are made at this time.

Figure 24

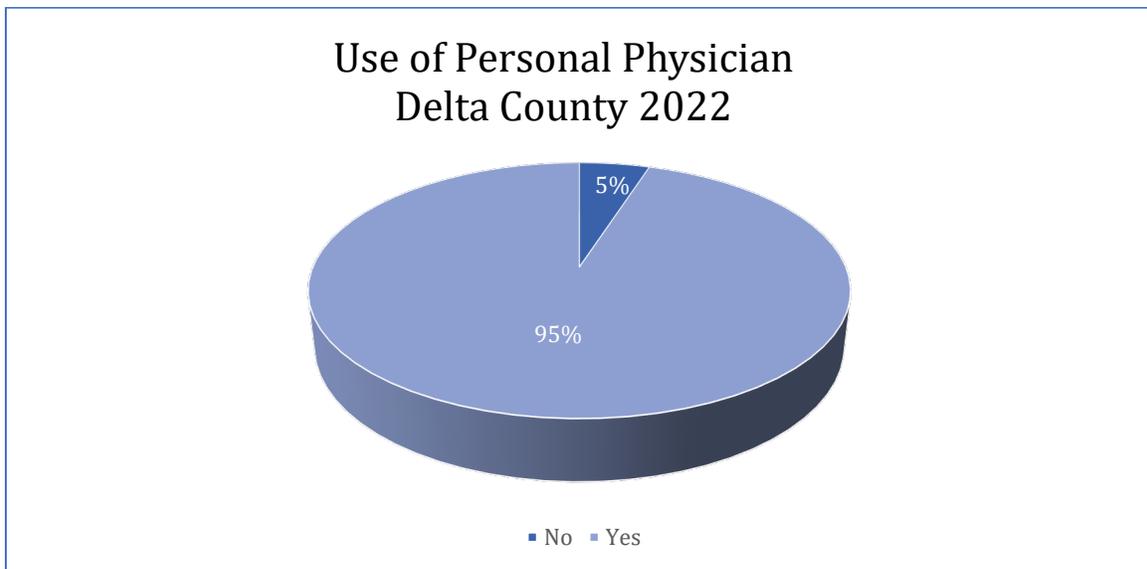


Source: Centers for Disease Control and Prevention (03-01-22)

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, 95% of residents have a personal physician (Figure 25).

Figure 25



Source: CHNA Survey

Comparison to 2019 CHNA

Having a personal physician has increased. Specifically, 91% of residents reported having a personal physician in 2019 and 95% report the same in 2022.



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:

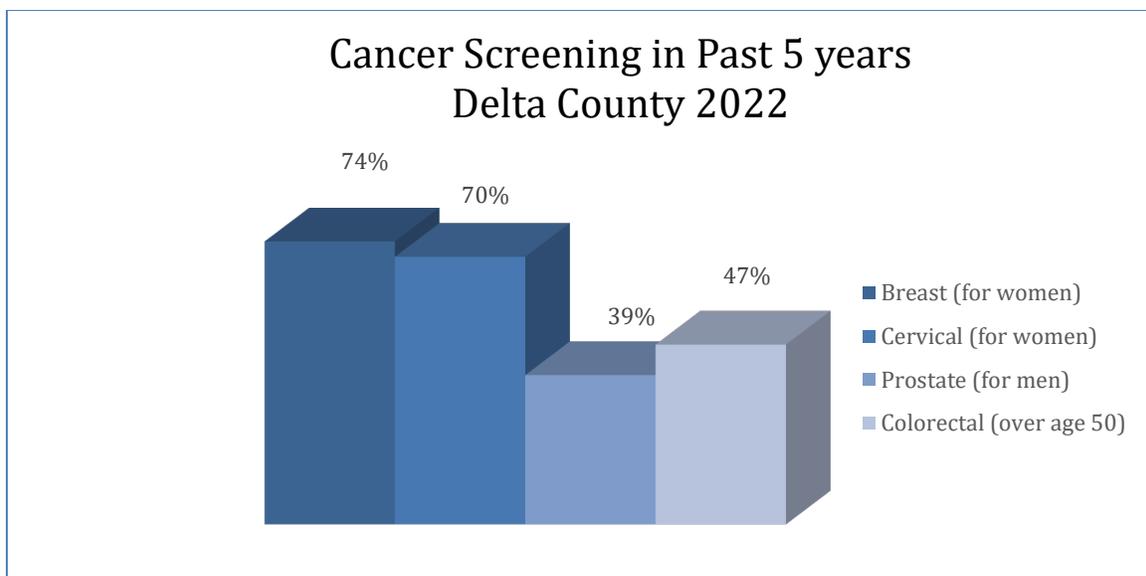
- **Having a personal physician** tends to be more likely for older people. Native Americans tend to be less likely to have a personal physician.

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 74% of women had a breast screening in the past five years and 70% of women had a cervical screening. For men, 39% had a prostate screening in the past five years. For women and men over the age of 50, 47% had a colorectal screening in the last five years (Figure 26).

Figure 26



Source: CHNA Survey

Comparison to 2019 CHNA

Results for breast screening showed a slight increase, while colorectal screening and prostate screening both showed a marked decrease. Note that this is the first year the CHNA survey assessed cervical screening, so there is no comparison to 2019.



Social Determinants Related to Cancer Screenings

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

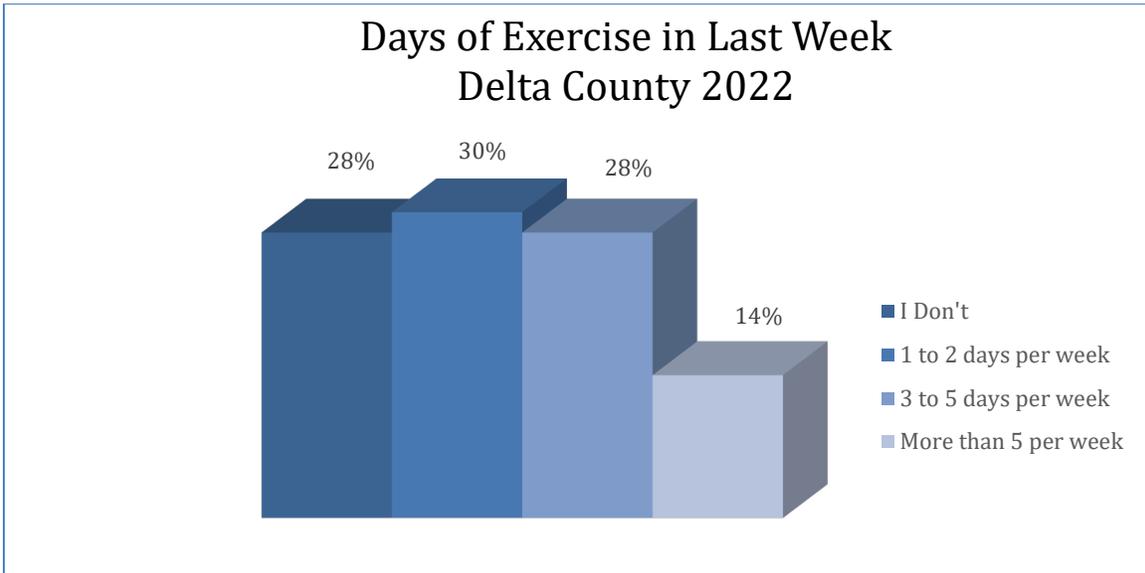
- **Breast screening** tends to be more likely for older women and those with higher income. Breast screening tends to be less likely for women who live in an unstable (e.g., homeless) housing environment.
- **Cervical screening** tends to be more likely for women, those with a higher education and those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

Physical Exercise

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

Specifically, 28% of respondents indicated that they do not exercise at all, while the majority (58%) of residents exercise 1-5 times per week (Figure 27).

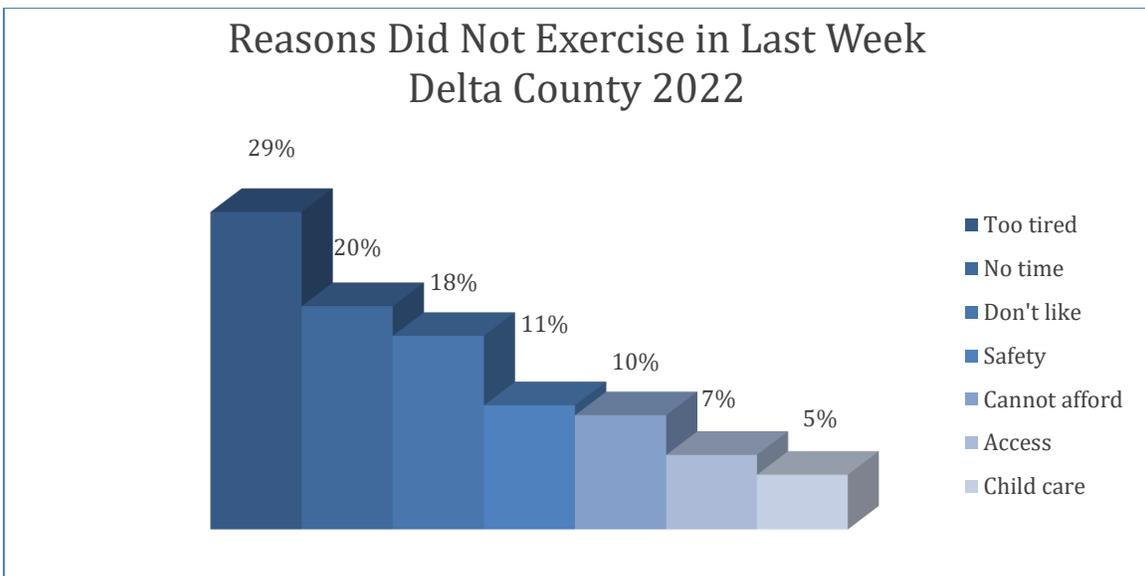
Figure 27



Source: CHNA Survey

To find out why some residents do not exercise at all, a follow up question was asked. Similar to the 2019 CHNA, the most common reasons for not exercising are not having enough energy (29%), not enough time (20%) and a dislike of exercise (18%) (Figure 28).

Figure 28



Source: CHNA Survey

Comparison to 2019 CHNA

There has been decline in exercise. Specifically, there is an increase in those who do not exercise. In 2019, 23% of residents indicated they did not exercise at all and 29% indicated they did not exercise in 2022.



Social Determinants Related to Exercise

One characteristic shows a significant relationship with frequency of exercise. The following relationship was found using correlational analyses:

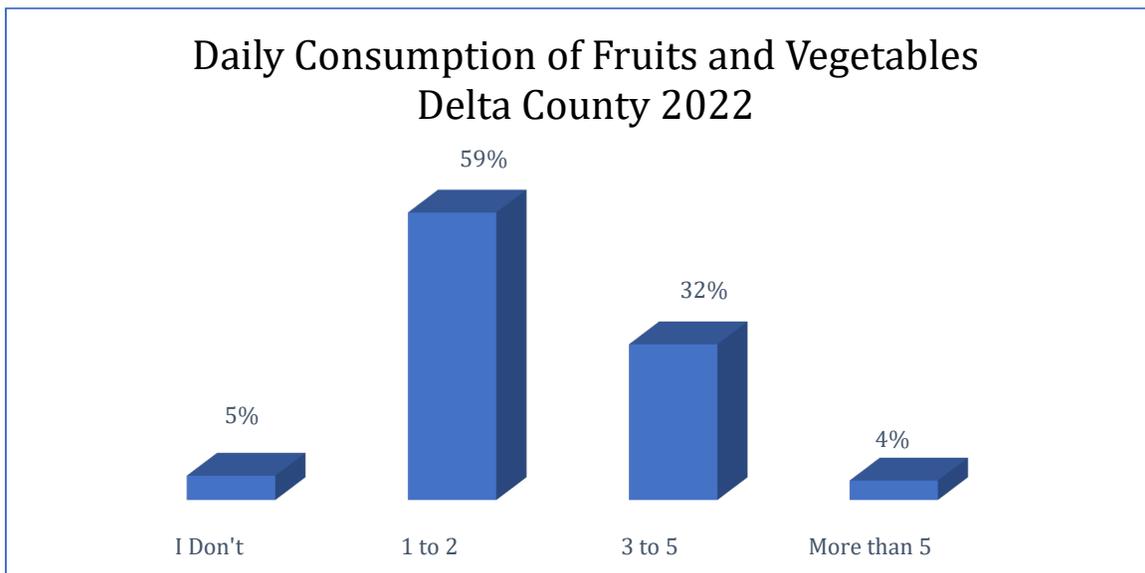
- **Frequency of exercise** tends to be more likely for men.

Healthy Eating

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

Almost two-thirds (64%) 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 29).

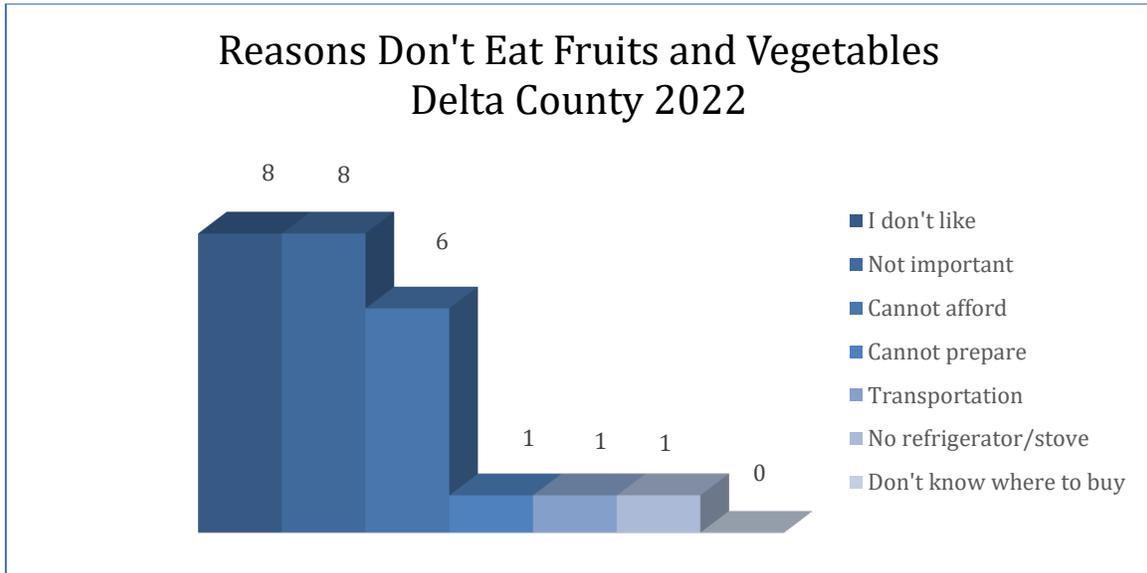
Figure 29



Source: CHNA Survey

Those individuals who indicated they do not eat any fruits or vegetables were asked a follow up question. Reasons most frequently given for failing to eat more fruits and vegetables are not liking fruits and vegetables (8) and a lack of importance (8) (Figure 30). Note that these data are displayed in frequencies rather than percentages given the low number of responses.

Figure 30



Source: CHNA Survey

Comparison to 2019 CHNA

There has been an increase for those that had two or fewer servings of fruits and vegetables per day from 60% in 2019 to 65% in 2022.



Social Determinants Related to Healthy Eating

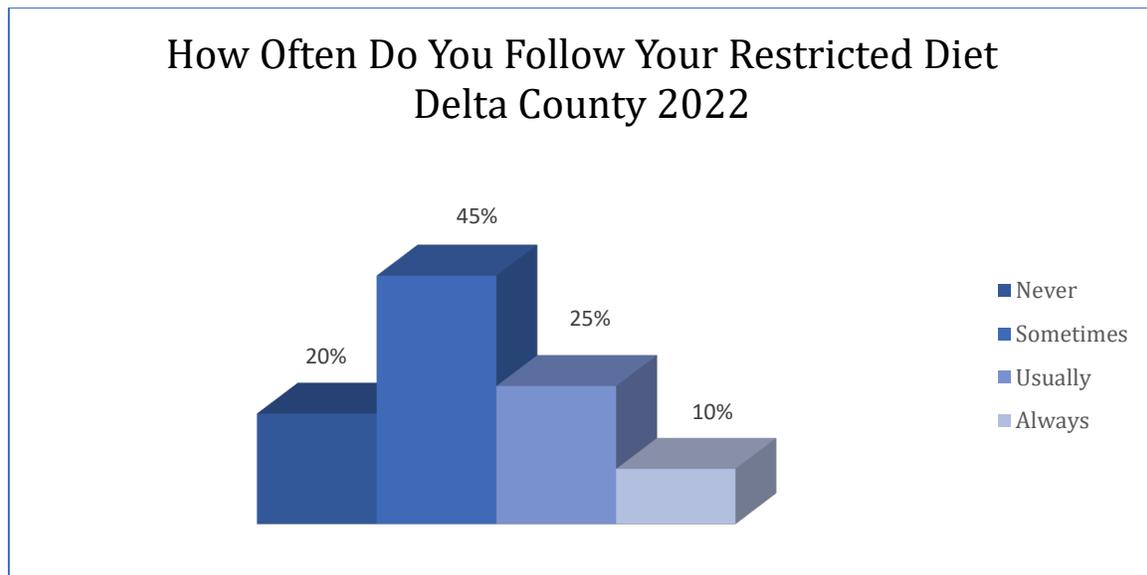
Multiple characteristics show significant relationships with healthy eating. The following relationships were found using correlational analyses:

- **Consumption of fruits and vegetables** tends to be more likely for older 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 31).

Figure 31



Source: CHNA Survey

Comparison to 2019 CHNA

There has been an increase in those who follow a restricted diet if recently diagnosed with a morbidity. In 2019, 40% of respondents indicated they usually or always followed a restricted diet compared to 46% in 2022.



Social Determinants Related to Following a Restricted Diet

Multiple characteristics show significant relationships with following a restricted diet. The following relationships were found using correlational analyses:

- **Following a restricted diet** tends to be more likely for older people, those with a higher education and those with higher income.

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 Delta County, 8% of the population is at elevated risk for health literacy. This is lower than the State of Michigan average of 23% (SocialScape® powered by SociallyDetermined®, 2022).

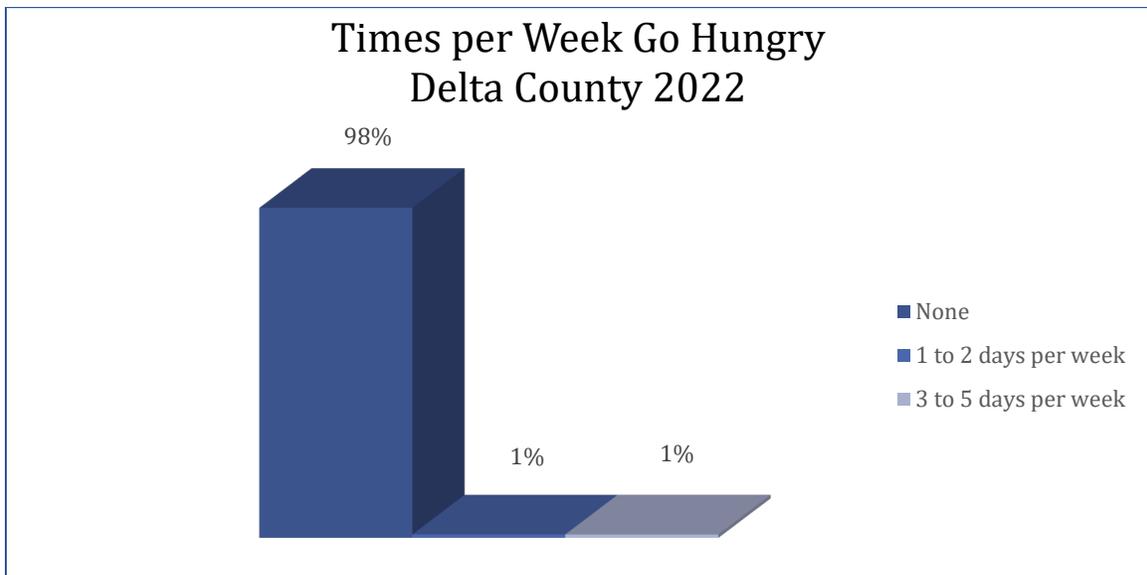
2.3 Understanding Food Insecurity

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, 2% indicated they go hungry 1 or more days per week (Figure 32).

Figure 32



Source: CHNA Survey



Social Determinants Related to Prevalence of Hunger

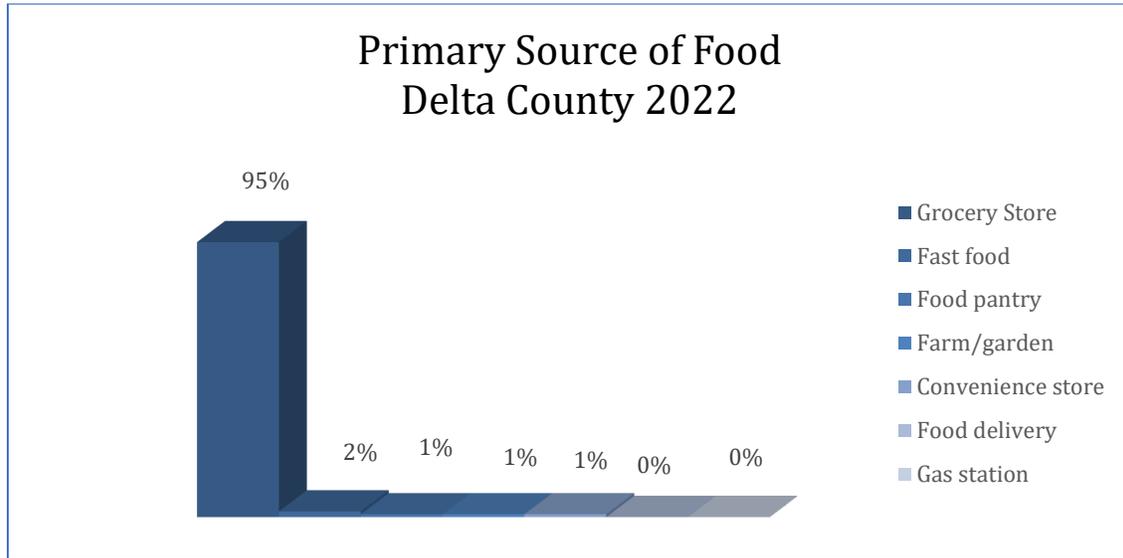
Multiple characteristics show significant relationships with hunger. The following relationships were found using correlational analyses:

- **Prevalence of Hunger** tends to be more likely for those with less education and less income.

Primary Source of Food

Respondents were asked to identify their primary source of food. It can be seen that the majority (95%) identified a grocery store (Figure 33).

Figure 33



Source: CHNA Survey

Food Landscape

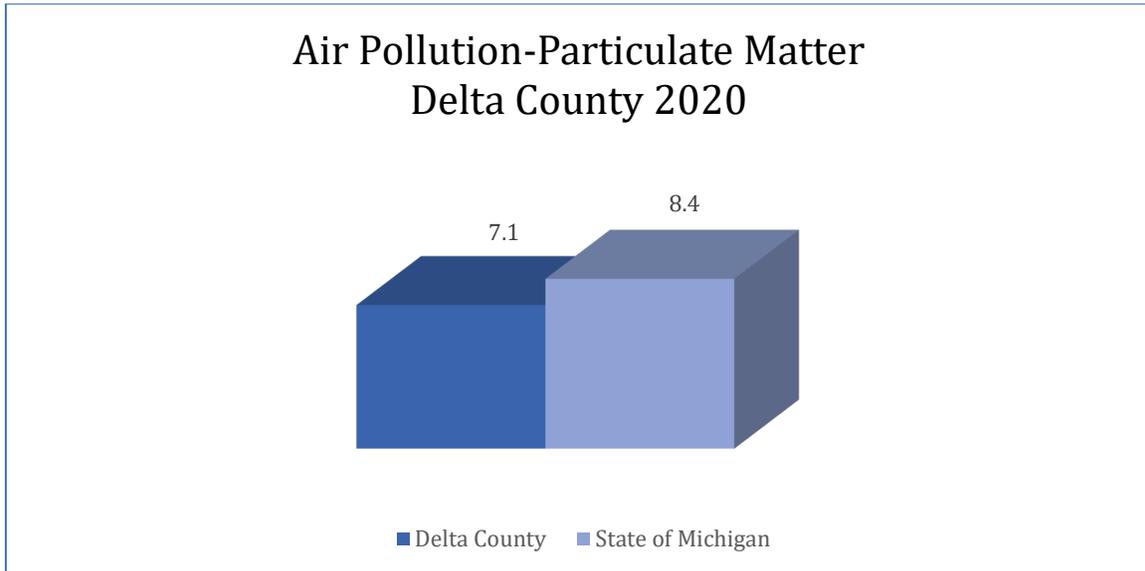
Food landscape is a measure of the conditions that affect the ability of residents to access healthy, affordable nutrition. Key risk influencers include accessibility, affordability and literacy. For Delta County, 37% of the population is at elevated risk for food landscape. This is higher than the State of Michigan average of 27% (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 Delta County (7.1) is lower than the State average of 8.4 (Figure 34).

Figure 34



Source: County Health Rankings 2021

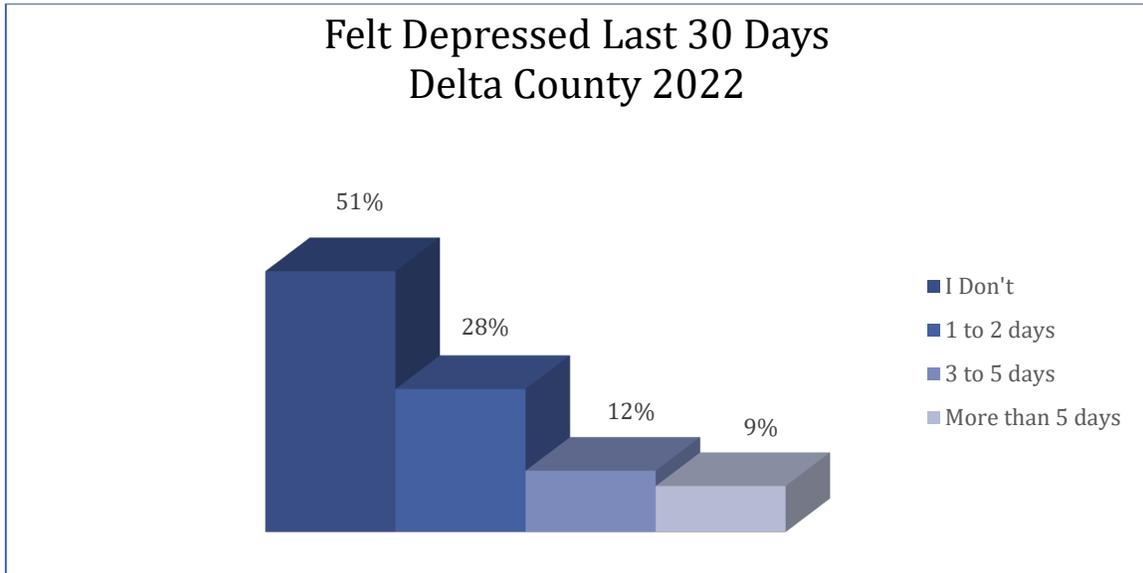
2.5 Health Status

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

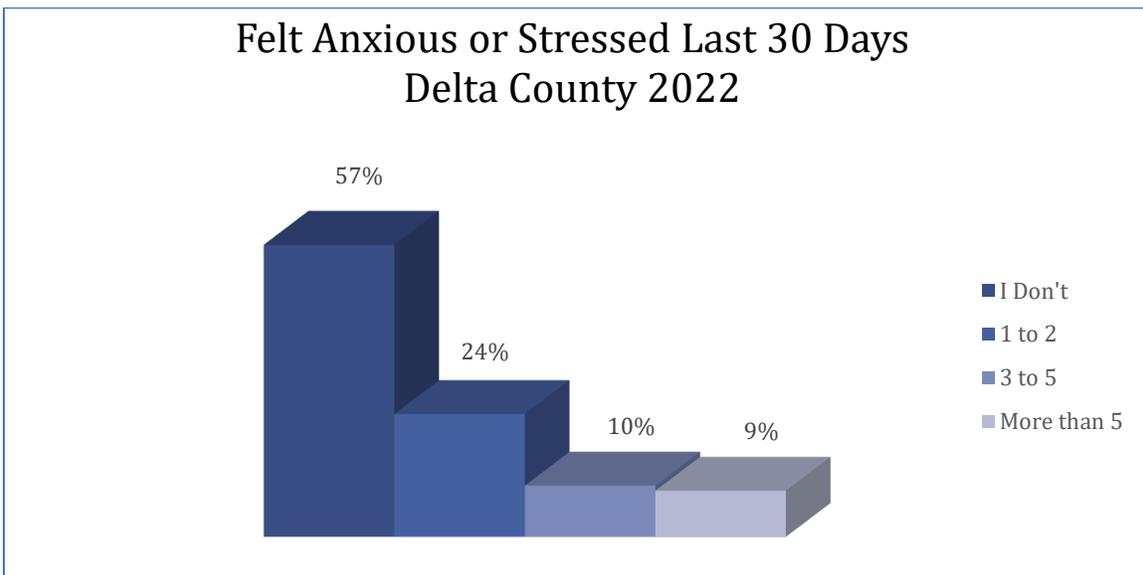
The survey asked respondents to indicate specific issues, such as depression and stress/anxiety. Of respondents, 51% indicated they did not feel depressed in the last 30 days (Figure 35) and 57% indicated they did not feel anxious or stressed (Figure 36).

Figure 35



Source: CHNA Survey

Figure 36



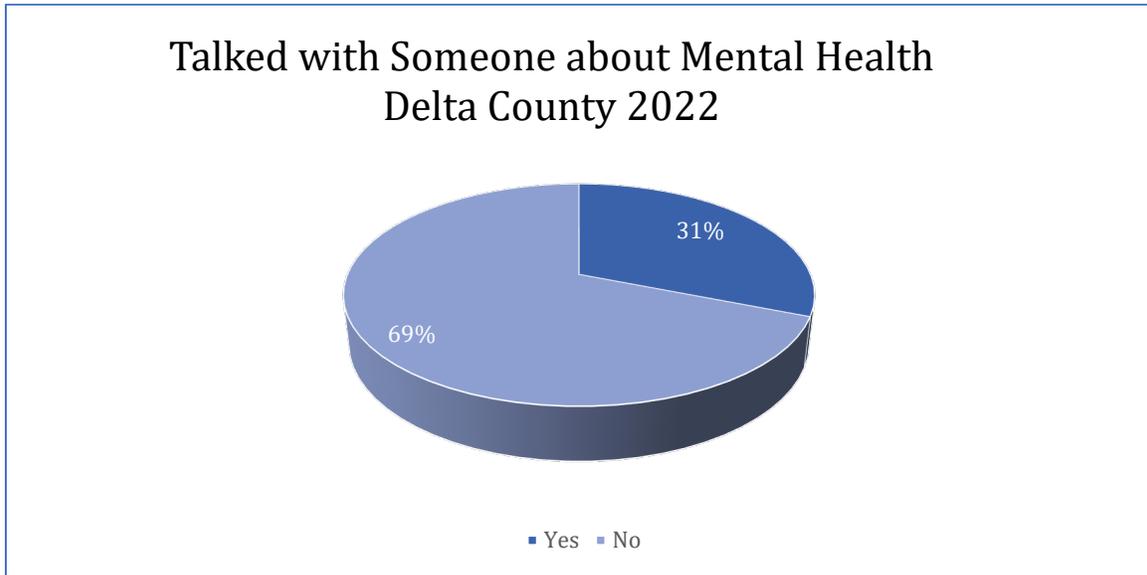
Source: CHNA Survey

Comparison to 2019 CHNA

Results for both depression and stress/anxiety were similar to the 2019 CHNA.

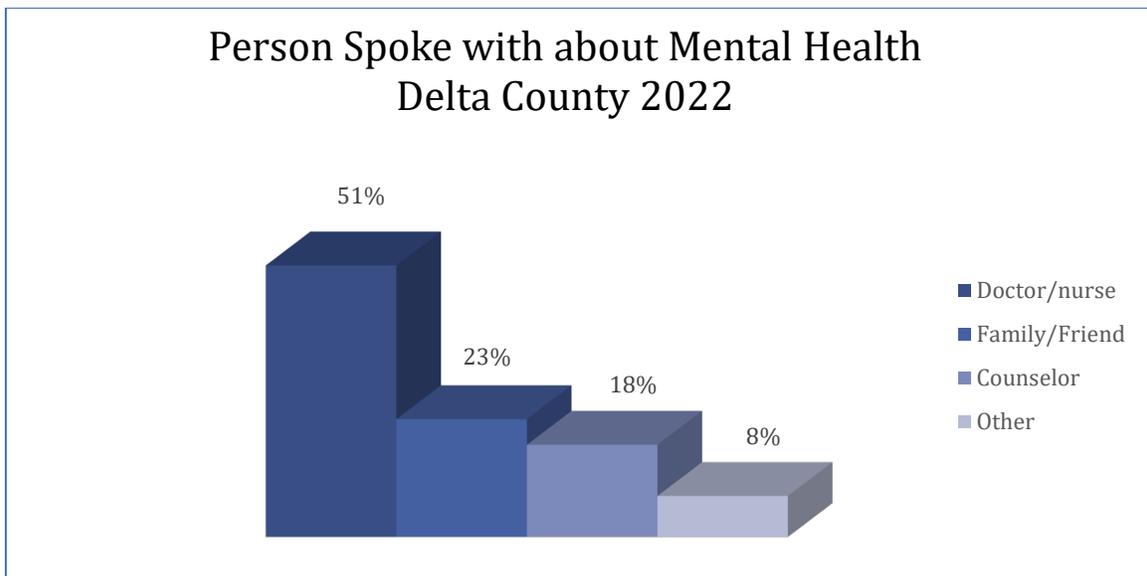
Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents, 31% indicated that they spoke to someone (Figure 37), the most common response was a doctor/nurse (51%) (Figure 38).

Figure 37



Source: CHNA Survey

Figure 38



Source: CHNA Survey



Social Determinants Related to Behavioral Health

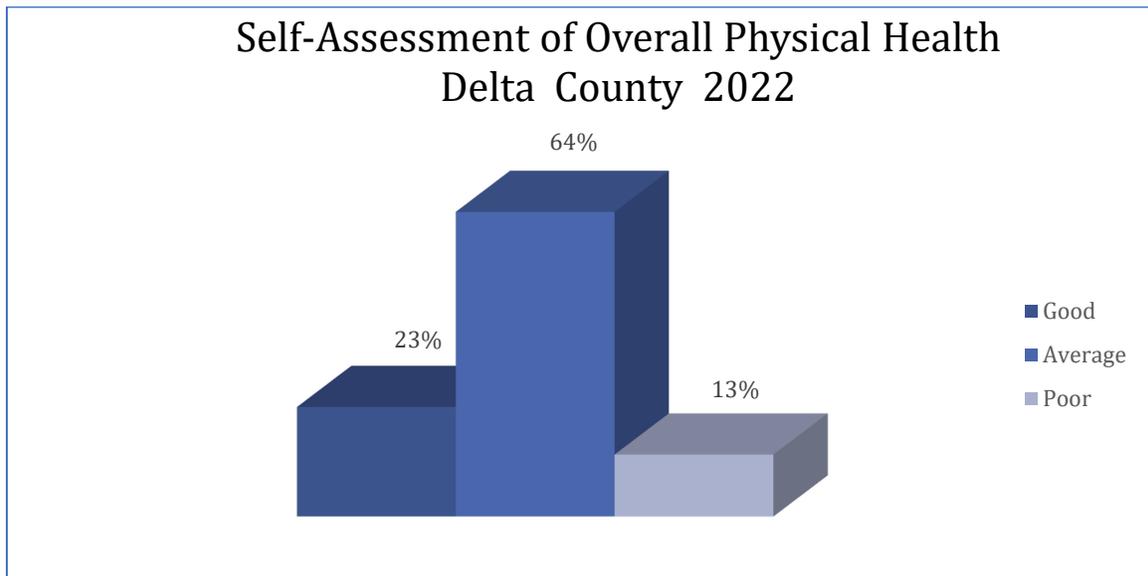
Multiple characteristics show significant relationships with behavioral health. The following relationships were found using correlational analyses:

- **Depression** tends to be rated higher for younger people, and those with less income.
- **Stress and anxiety** tends to be rated higher for younger people, and those with less income.

Self-Perceptions of Overall Health

In regard to self-assessment of overall physical health, 13% of respondents reported having poor overall physical health (Figure 39).

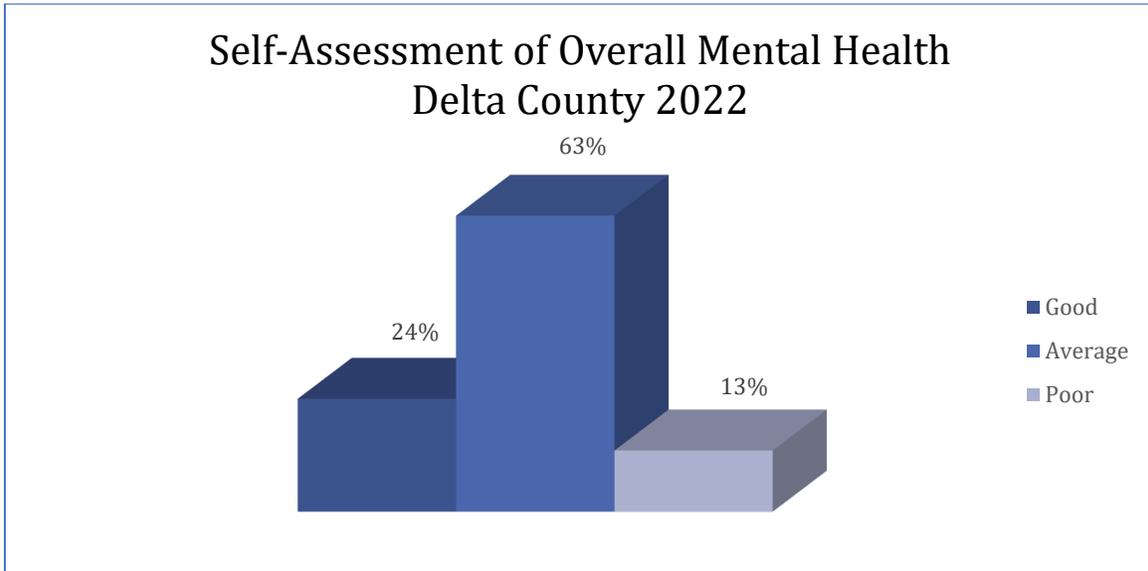
Figure 39



Source: CHNA Survey

In regard to self-assessment of overall mental health, 13% of respondents stated they have poor overall mental health (Figure 40).

Figure 40



Source: CHNA Survey

Comparison to 2019 CHNA

Results are similar for self-perceptions of physical health and mental health compared to 2019.



Social Determinants Related to Self-Perceptions of Health

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

- **Perceptions of physical health** tend to be higher for older people, those with higher education and those with higher income.
- **Perceptions of mental health** tend to be higher for men, older people and those with higher education and higher income.

2.6 Key Takeaways from Chapter 2

- ✓ A RELATIVELY HIGH PERCENTAGE OF RESIDENTS (11%) DO NOT SEEK MEDICAL CARE.
- ✓ ACCESS TO COUNSELING HAS DECREASED.
- ✓ COVID-19 VACCINATION RATE.
- ✓ PROSTATE SCREENING AND COLORECTAL SCREENING ARE RELATIVELY LOW COMPARED TO BREAST AND CERVICAL SCREENING.
- ✓ THE MAJORITY OF PEOPLE EXERCISE LESS THAN 2 TIMES PER WEEK AND CONSUME 2 OR FEWER SERVINGS OF FRUITS/VEGETABLES PER DAY.
- ✓ APPROXIMATELY 1/2 OF RESPONDENTS EXPERIENCED DEPRESSION OR STRESS IN THE LAST 30 DAYS.
- ✓ ELEVATED RISK OF FOOD INSECURITY

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

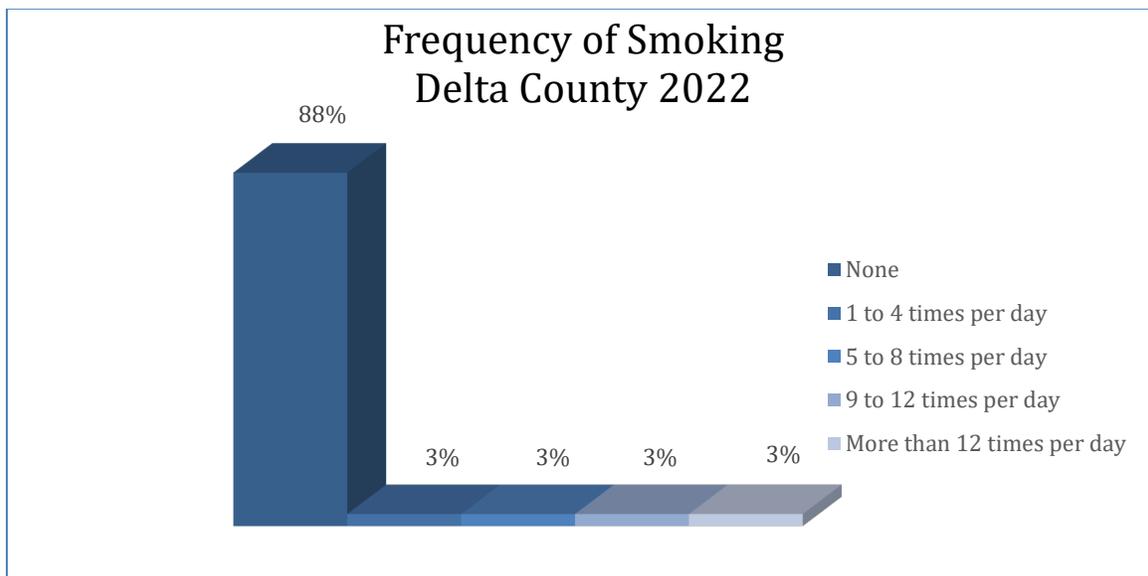
CHAPTER 3: SYMPTOMS AND PREDICTORS

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.

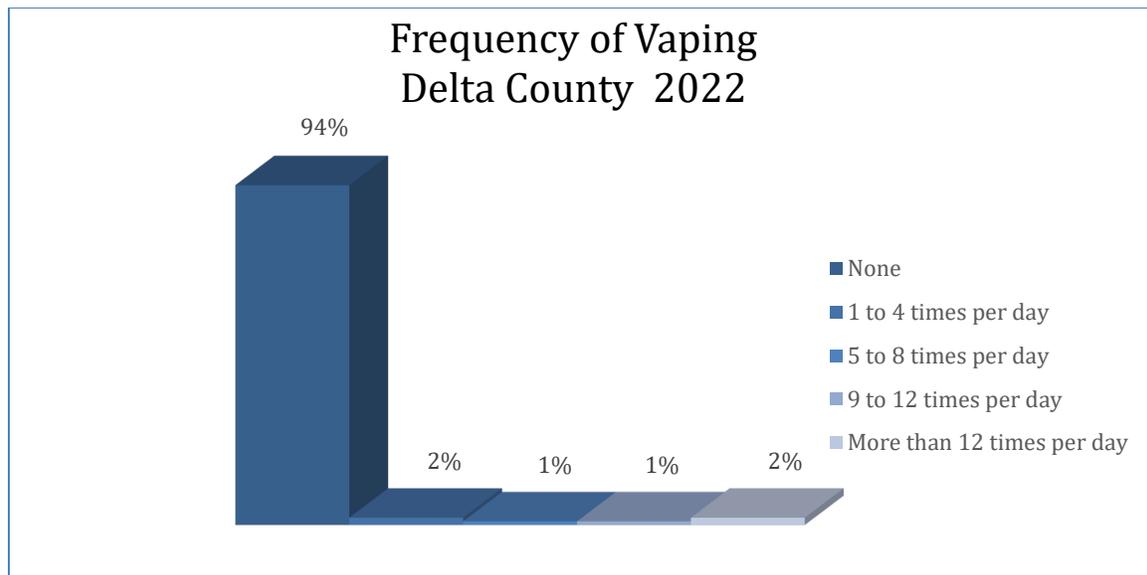
CHNA survey data show 88% of respondents do not smoke and only 3% state they smoke more than 12 times per day (Figure 41). Only 6% of respondents vape on a daily basis (Figure 42).

Figure 41



Source: CHNA Survey

Figure 42



Source: CHNA Survey

Comparison to 2019 CHNA

Results are the same as the 2019 CHNA.



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

3.2 Drug and Alcohol Abuse

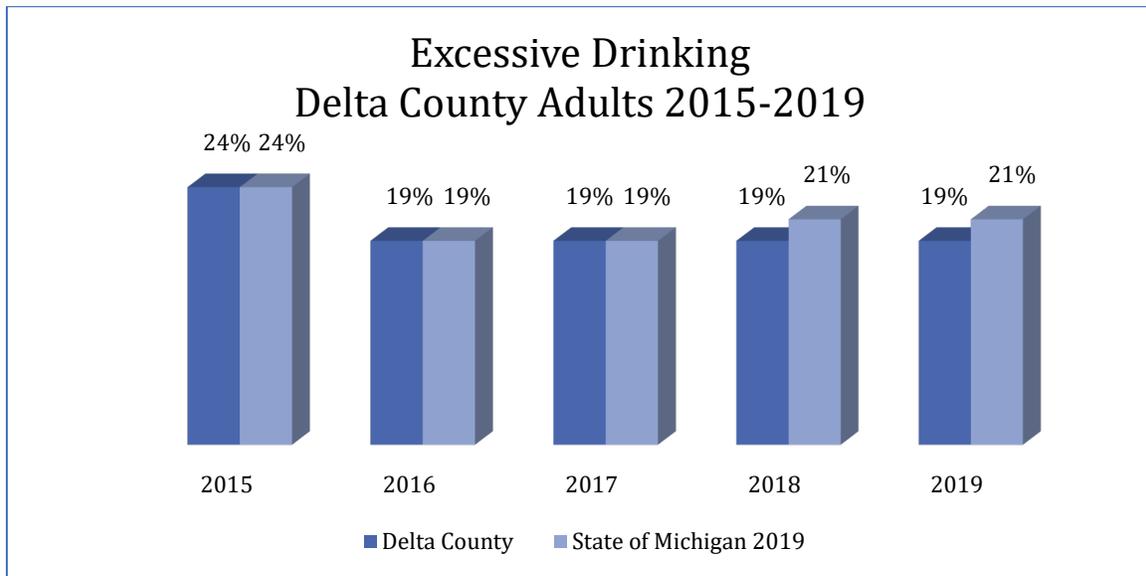
Importance of the measure: Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors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

Excessive Drinking

Data from the 2019 County Health Rankings measures excessive drinking in Delta County as the percentage of the county's adult population that reports binge or heavy drinking in the past 30 days.

Binge drinking is defined as a woman consuming more than four alcoholic drinks during a single occasion or a man consuming more than five alcoholic drinks during a single occasion. Heavy drinking is defined as a woman drinking more than one drink on average per day or a man drinking more than two drinks on average per day. Excessive drinking is calculated as the sum of both behaviors. However, for years 2015-2019, Delta County reported equal rates of excessive drinking (19%) while the State of Michigan increased to 21% (Figure 43).

Figure 43

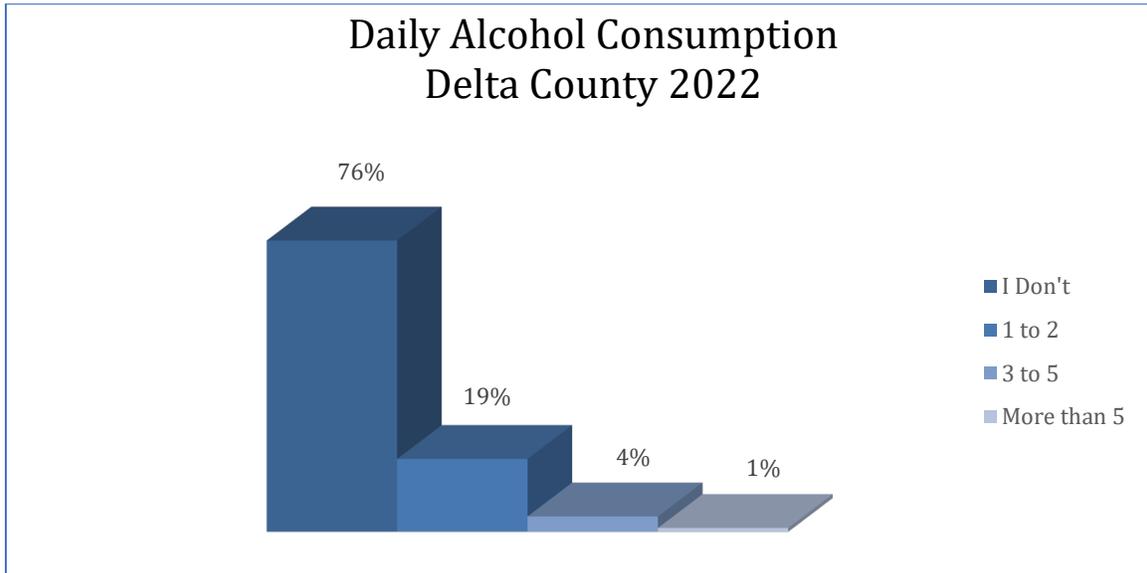


Source: County Health Rankings

Adult Substance Use

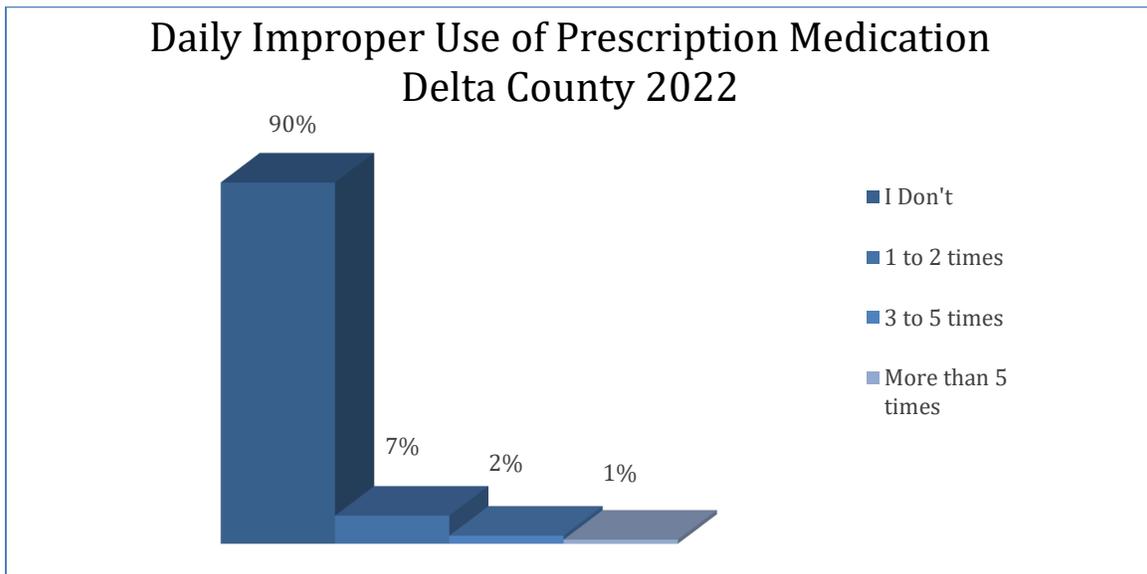
The CHNA survey asked respondents to indicate usage of several substances. Of respondents, 76% indicated they did not consume alcohol on a typical day (Figure 44), 90% indicated they do not take prescription medication improperly including opioids on a typical day (Figure 45), 93% indicated they do not use marijuana on a typical day (Figure 46) and 100% indicated they do not use illegal substances on a typical day (Figure 47). Note this is the first year that the CHNA has measured separated categories of substance use, so there is no comparison to the 2019 CHNA.

Figure 44



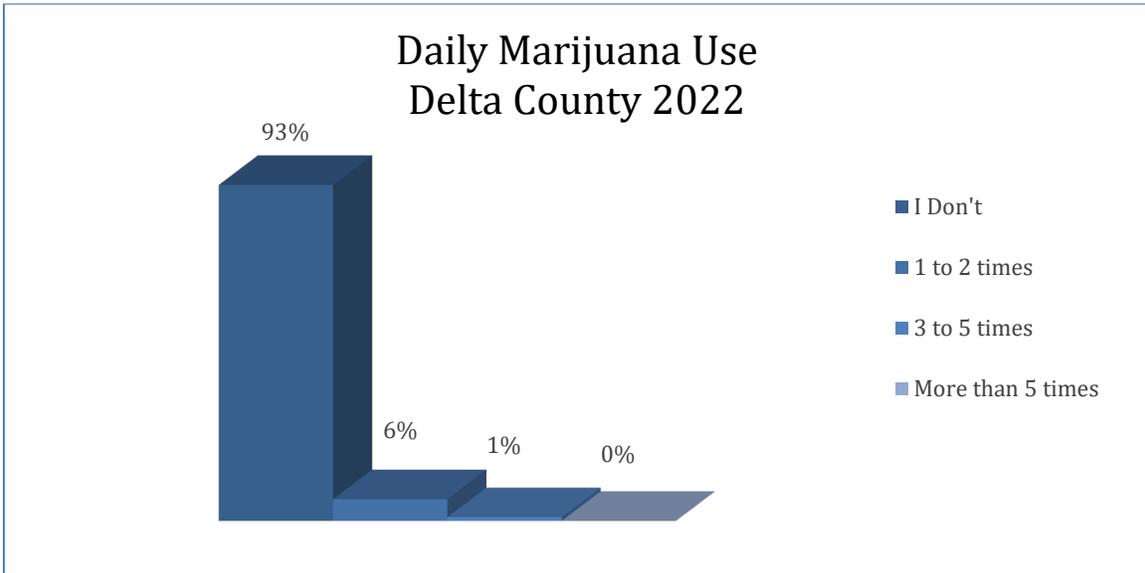
Source: CHNA Survey

Figure 45



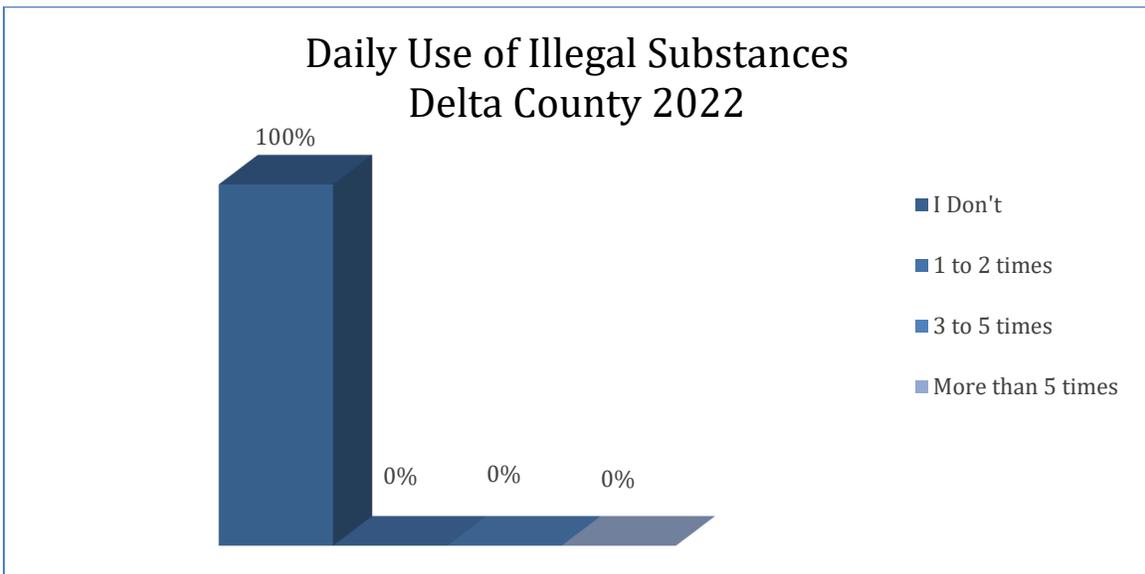
Source: CHNA Survey

Figure 46



Source: CHNA Survey

Figure 47



Source: CHNA Survey



Social Determinants Related to Substance Use

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

- **Alcohol consumption** showed no significant correlations.
- **Misuse of prescription medication including opioids** tends to be rated higher by men, older people, those with a lower education and those with less income.

- **Marijuana use** tends to be rated higher by younger people
- **Illegal substance** use showed no significant correlations.

3.3 Overweight and Obesity

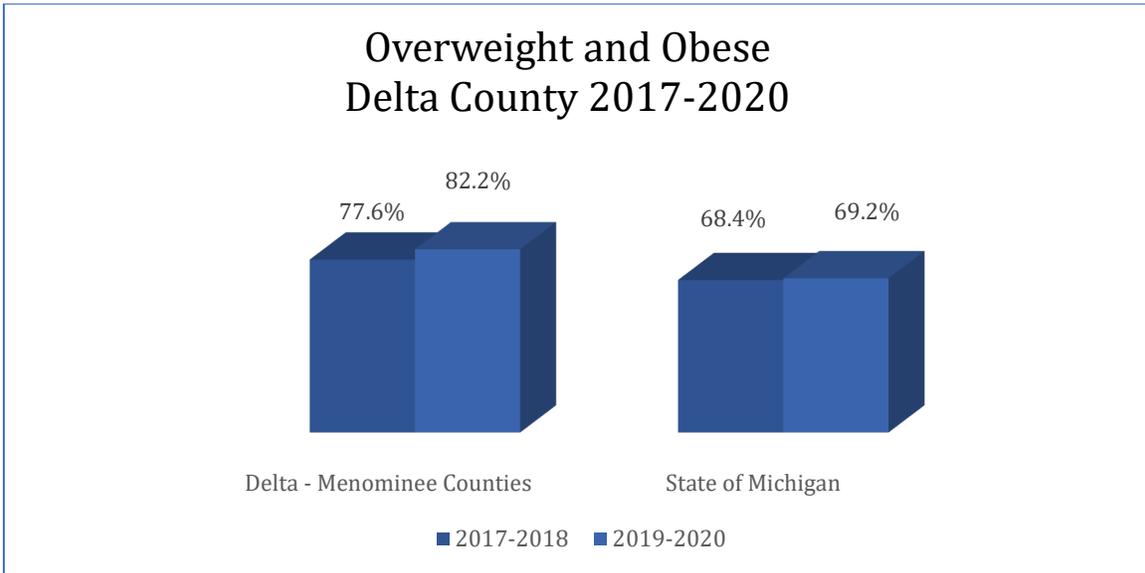
Importance of the measure: Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Michigan, and within Delta 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 Michigan General Assembly, 20% of Michigan children are obese. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Michigan for 1998-2000 exceeded \$3.4 billion, ranking Michigan 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 Michigan 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 Delta County, the number of people diagnosed with obesity and being overweight has increased from 2017-2018 to 2019-2020. Note specifically that the percentage of obese and overweight people has increased from 77.6% in 2017 to 82.2% in 2020. Overweight and obesity rates in Michigan have increased slightly from 2017 (68.4) to 2020 (69.2%) (Figure 48). Additionally, in the 2022 CHNA survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.

Figure 48

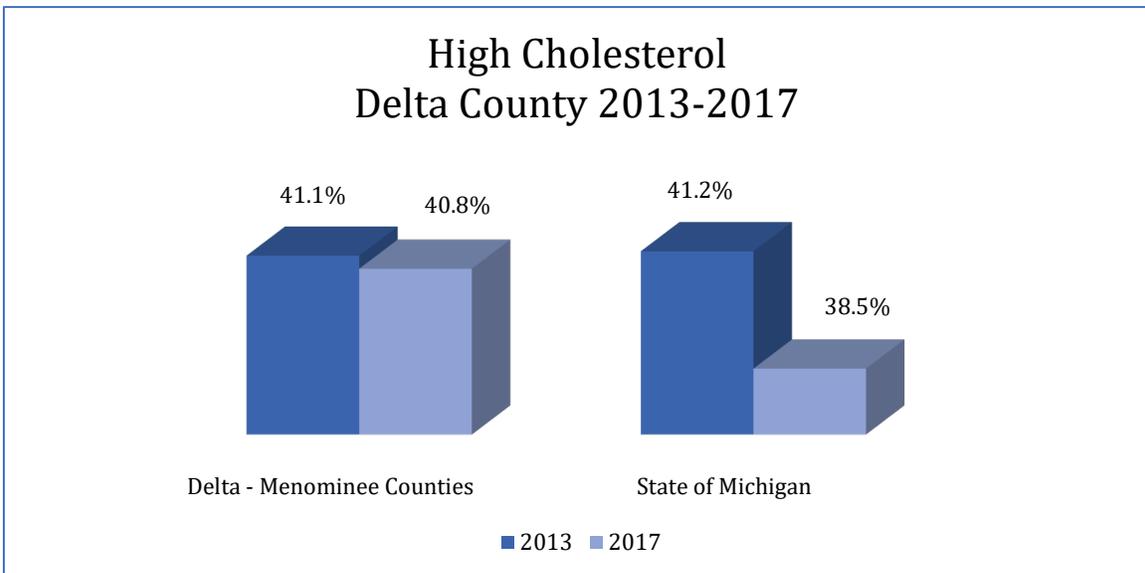


Source: Michigan Behavioral Risk Factor Surveillance System

3.4 Predictors of Heart Disease

Residents in Delta County report a prevalence of high cholesterol equal to the State average. The percentage of residents who report they have high cholesterol is higher in Delta County (40.8%) compared to the State of Michigan average of 38.5%. Note that data have not been updated by the Michigan Department of Public Health (Figure 49).

Figure 49

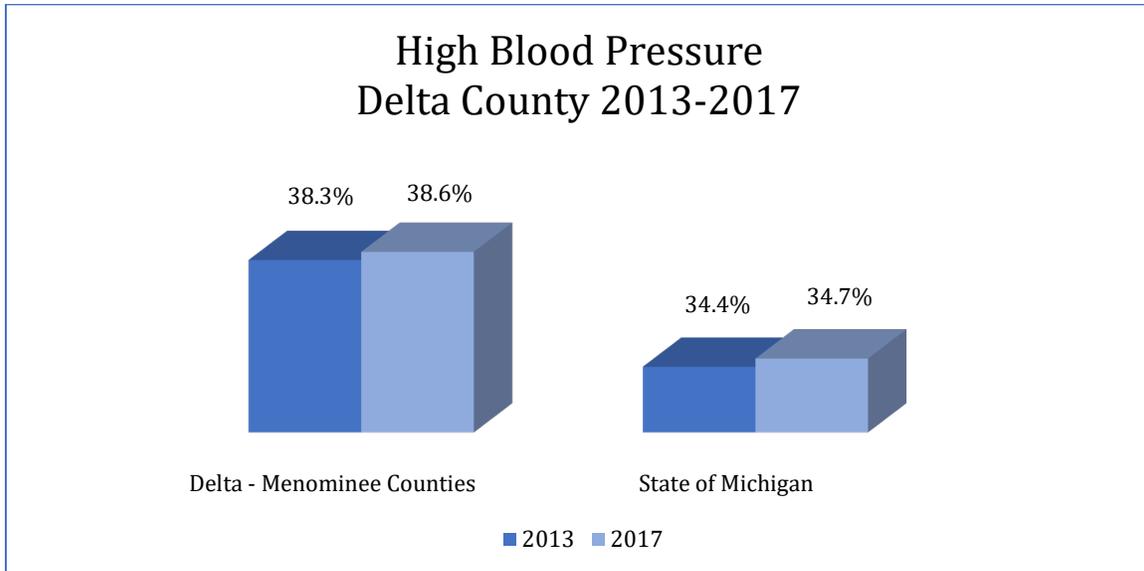


Source: Michigan Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Delta County has a higher percentage of residents with high blood pressure than residents do in the State of Michigan as a whole. The percentage of Delta County residents

reporting they have high blood pressure in 2013 was 38.3% and this has increased in 2017 to 38.6% (Figure 50). Note that data have not been updated by the Michigan Department of Public Health.

Figure 50



Source: Source: Michigan Behavioral Risk Factor Surveillance System

3.5 Key Takeaways from Chapter 3

- ✓ EXCESSIVE DRINKING HAS DECREASED.
- ✓ 10% OF RESPONDENTS INDICATE THEY MISUSE PRESCRIPTION MEDICATION.
- ✓ OBESITY RATES HAVE INCREASED AND ARE SIGNIFICANTLY HIGHER THAN THE STATE AVERAGE.

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

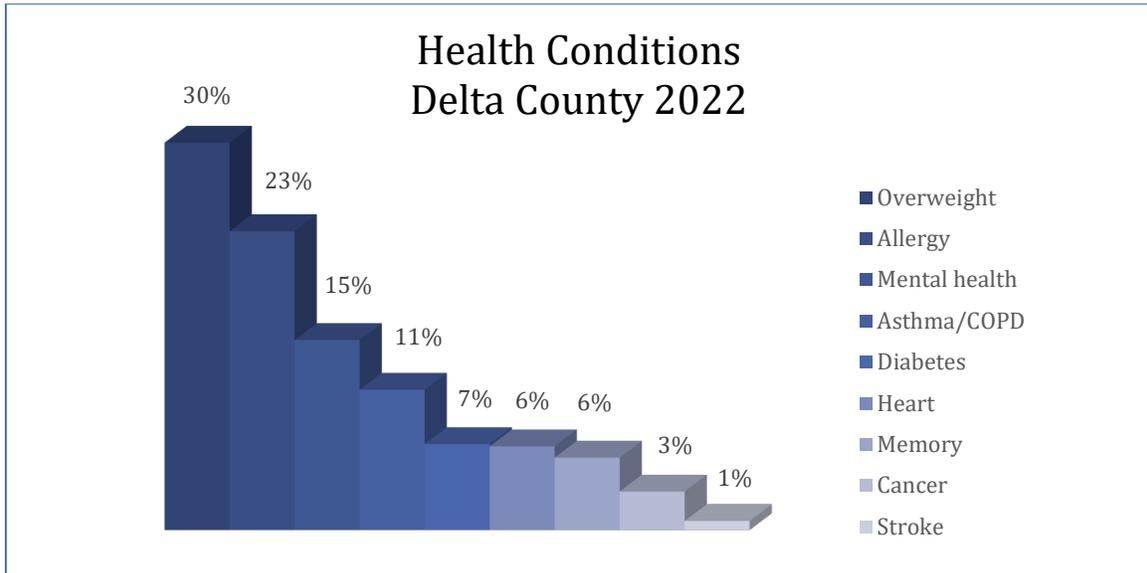
CHAPTER 4: MORBIDITY AND MORTALITY

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 Delta 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 (30%) was significantly higher than any other health conditions. This percentage is significantly lower than secondary sources. Specifically, Behavioral Risk Factor Surveillance System (BRFSS) data indicate that over 80% of the population is overweight or obese. (Figure 51).

Figure 51



Source: CHNA Survey

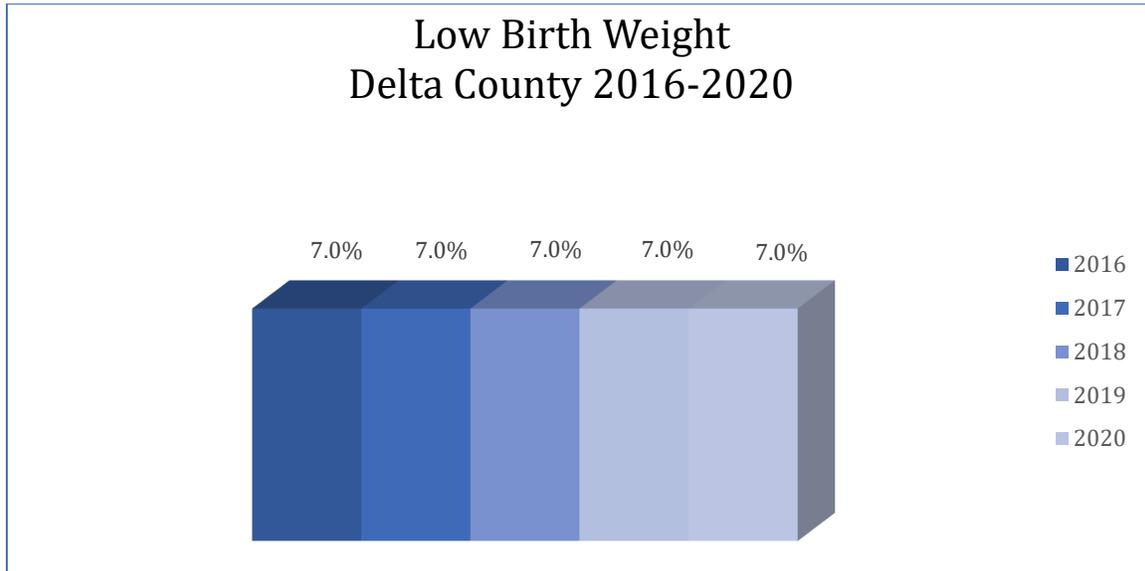
4.2 Healthy Babies

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 Delta County has remained constant at 7% (Figure 52).

Figure 52



Source: County Health Rankings

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.

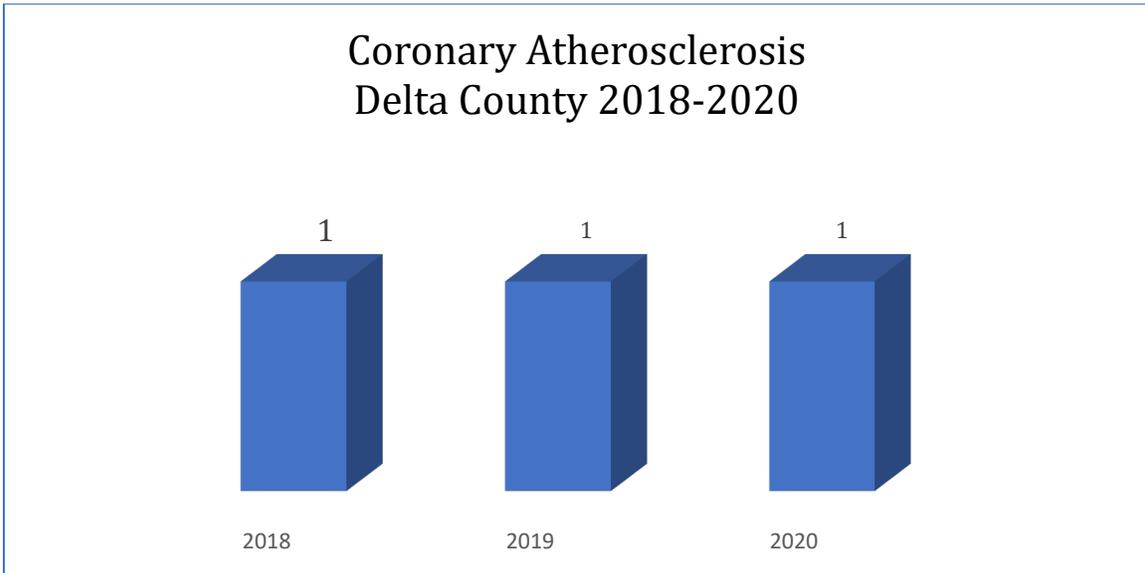
Coronary Atherosclerosis

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 Delta County area hospitals has been low, with 1 case reported each year from 2018-2020 (Figure 53). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Figure 53

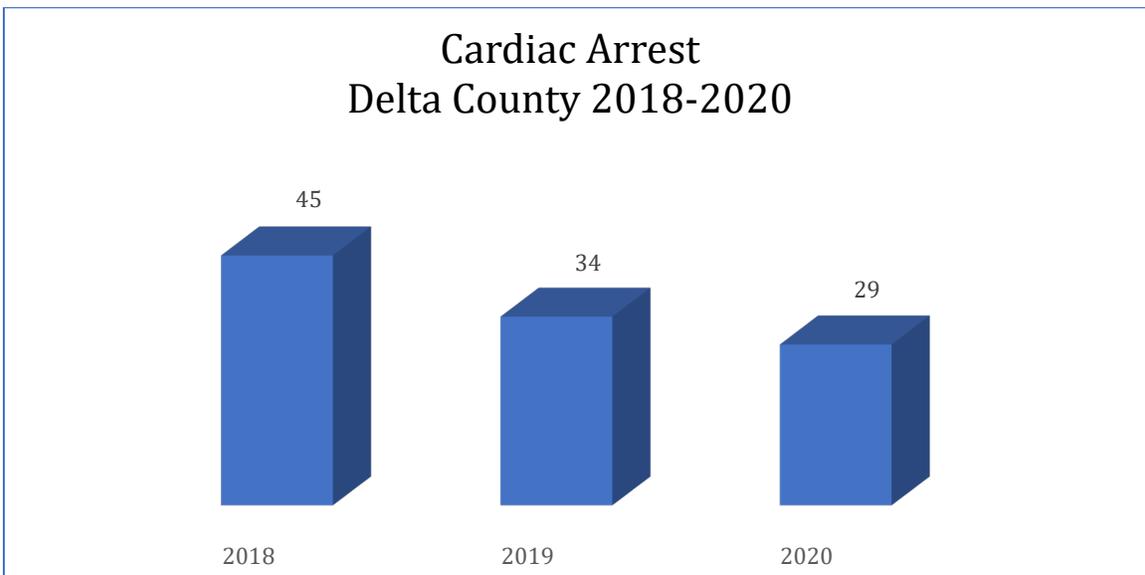


Source: CHNA Survey

Cardiac Arrest

Cases of dysrhythmia and cardiac arrest at Delta County area hospitals decreased by 5 cases between 2019 and 2020. Cases of dysrhythmia and cardiac arrest decreased by 16 cases between 2018 and 2020 (Figure 54). Note that hospital-level data only show hospital admissions.

Figure 54

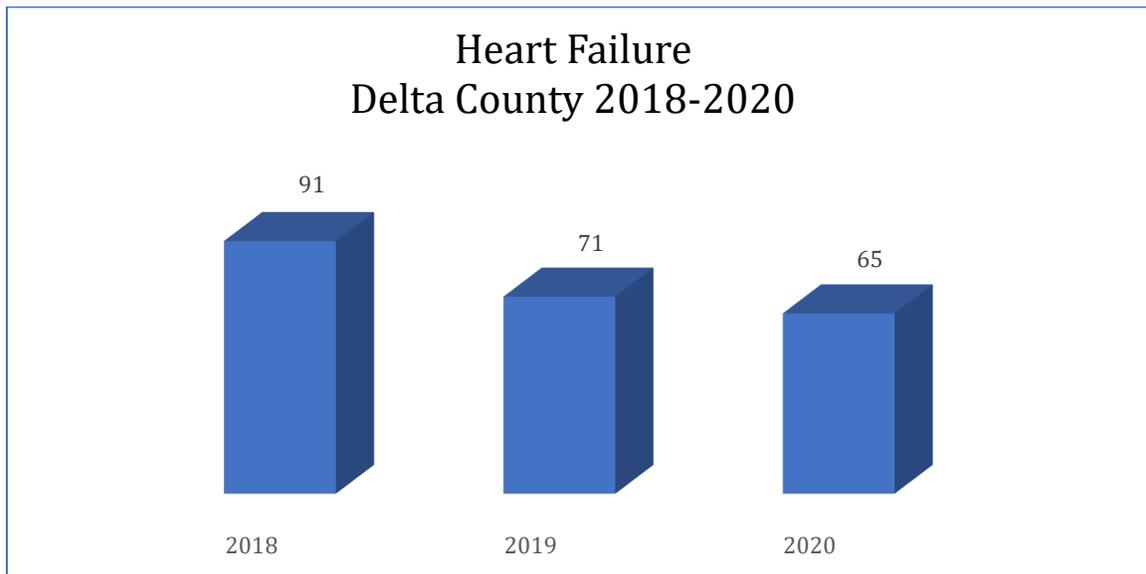


Source: COMPdata Informatics 2021

Heart Failure

The number of treated cases of heart failure at Delta County area hospitals decreased from 91 cases in 2018 to 65 cases in 2020 (Figure 55). Note that hospital-level data only show hospital admissions.

Figure 55

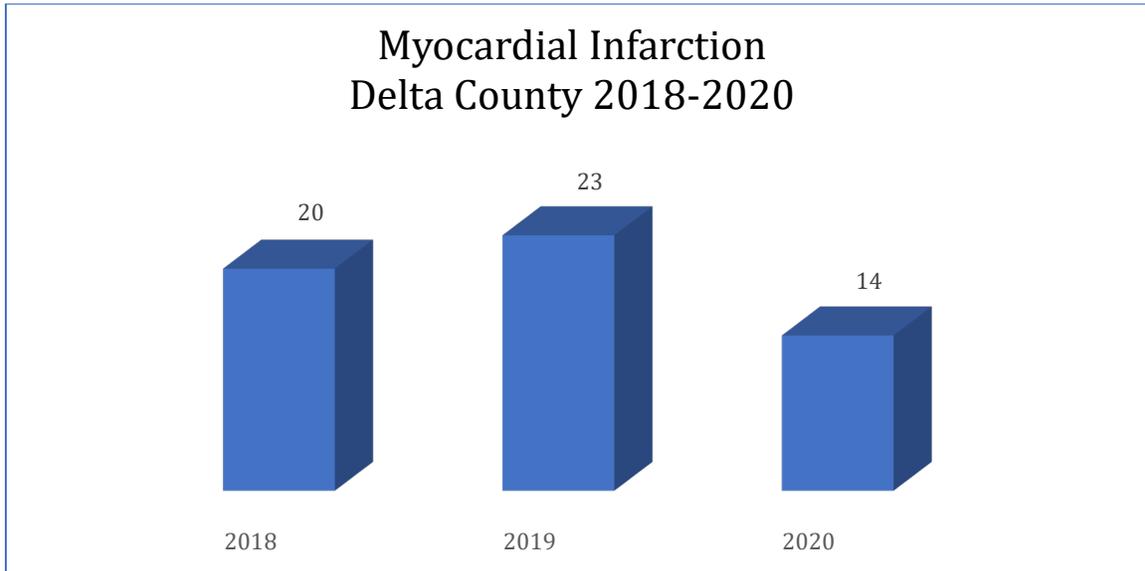


Source: COMPdata Informatics 2021

Myocardial Infarction

The number of treated cases of myocardial infarction at area hospitals in Delta County decreased from 20 in 2018 to 14 in 2020, with a slight increase in 2019 (23) (Figure 56). Note that hospital-level data only show hospital admissions.

Figure 56



Source: COMPdata Informatics 2021

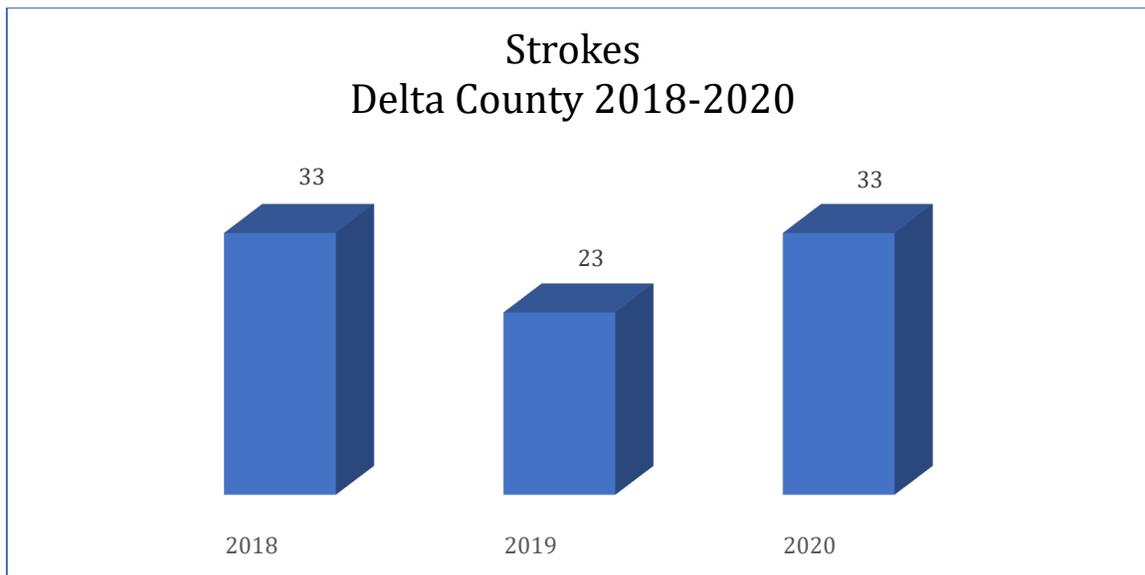
Arterial Embolism

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

Strokes

The number of treated cases of stroke at Delta County area hospitals stayed the same in 2018 and 2020 (33 cases), with a slight increase in 2019 (23 cases) (Figure 57). Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

Figure 57



Source: COMPdata Informatics 2021

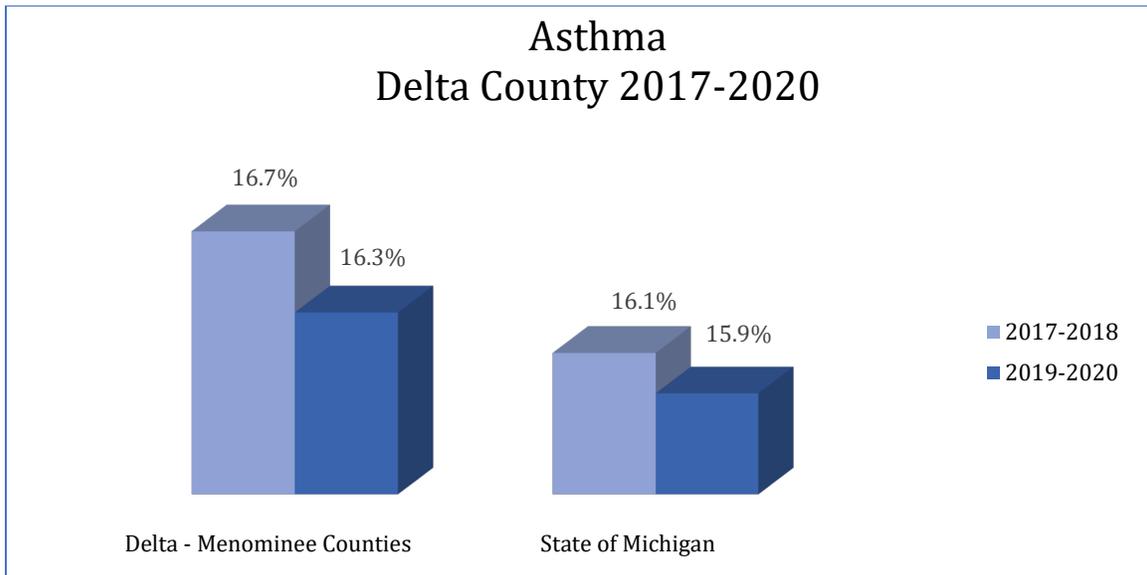
4.4 Respiratory

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 who have asthma in Delta County has decreased between 2017-2020. State of Michigan rates have decreased as well. According to the Michigan BRFSS, asthma rates in Delta County (16.3%) are higher than the State of Michigan (15.9%) (Figure 58). Note that data has not been updated past 2019 by the Michigan Department of Public Health.

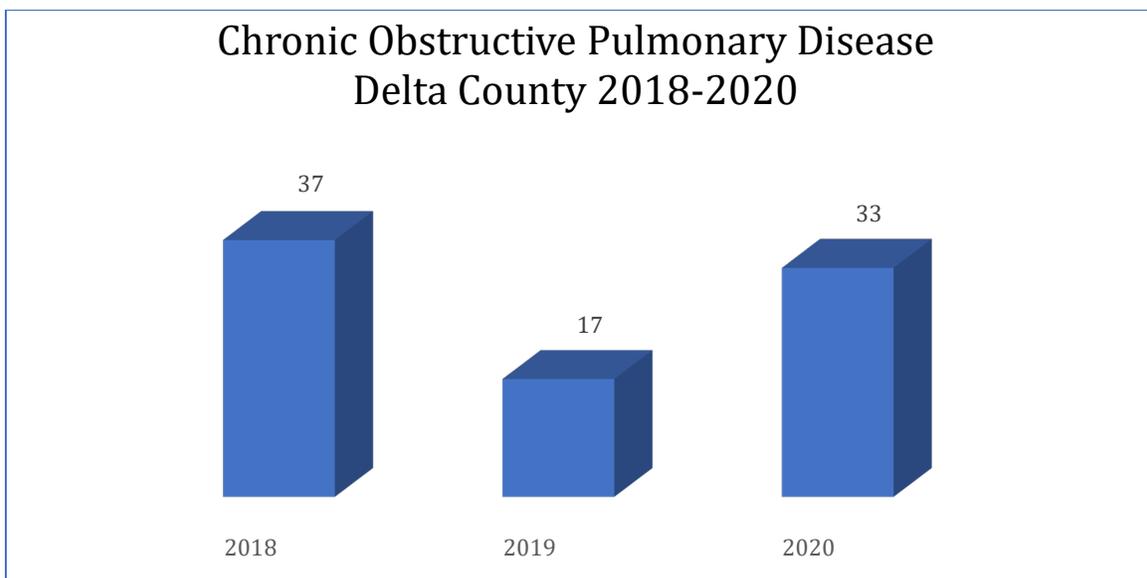
Figure 58



Source: Michigan Behavioral Risk Factor Surveillance System

Treated cases of COPD at Delta County area hospitals fluctuated between 2018 and 2020, with a significant decrease in 2019. (Figure 59). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

Figure 59



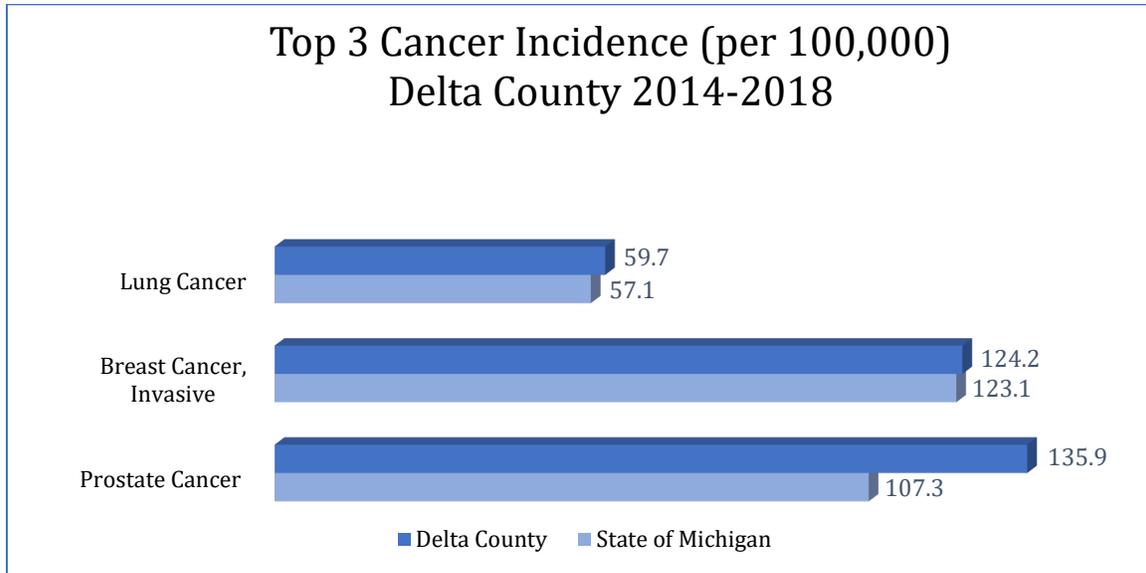
Source: COMPdata Informatics 2021

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 Delta County.

For the top three prevalent cancers in Delta County, comparisons are illustrated in Figure 60. Specifically, prostate cancer, breast cancer, and lung cancer are all higher than the State of Michigan.

Figure 60



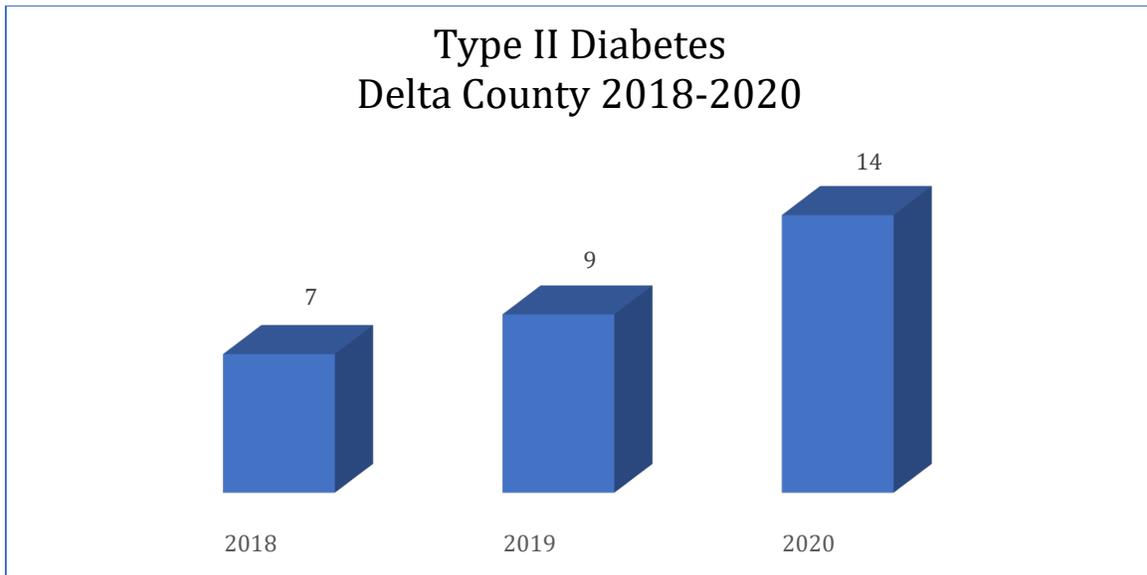
Source: National Cancer Institute

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 Delta County increased between 2018 (7 cases) and 2019 (9 cases), followed by another increase in 2020 (14 cases) (Figure 61). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

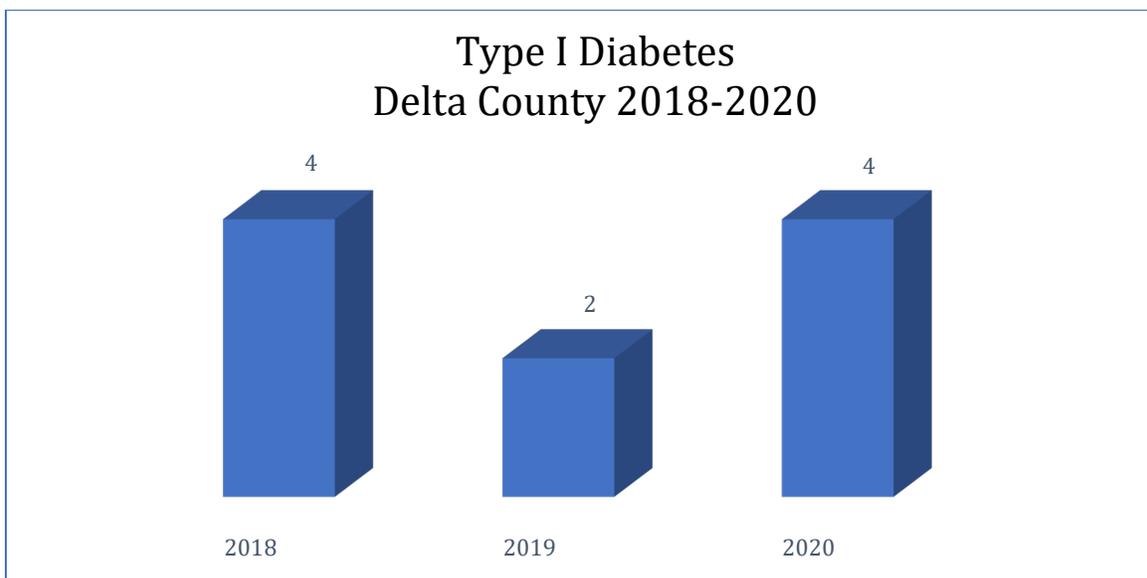
Figure 61



Source: COMPdata Informatics 2021

Inpatient cases of Type I diabetes show a decrease from 2018 (4) to 2019 (2) followed by an increase in 2020 (4) for Delta County. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

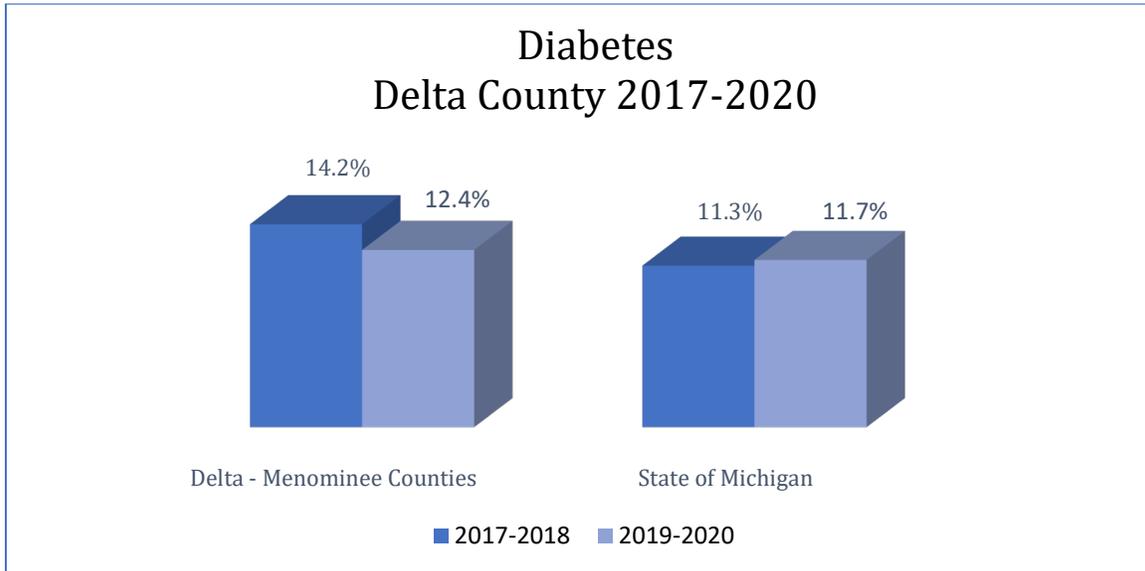
Figure 62



Source: COMPdata Informatics 2021

Data from the Michigan BRFSS indicate that 12.4% of Delta County residents have diabetes. Delta County has higher rates of diabetes than the State of Michigan (11.7%). Note that data have not been updated by the Michigan Department of Public Health.

Figure 63



Source: Michigan Behavioral Risk Factor Surveillance System

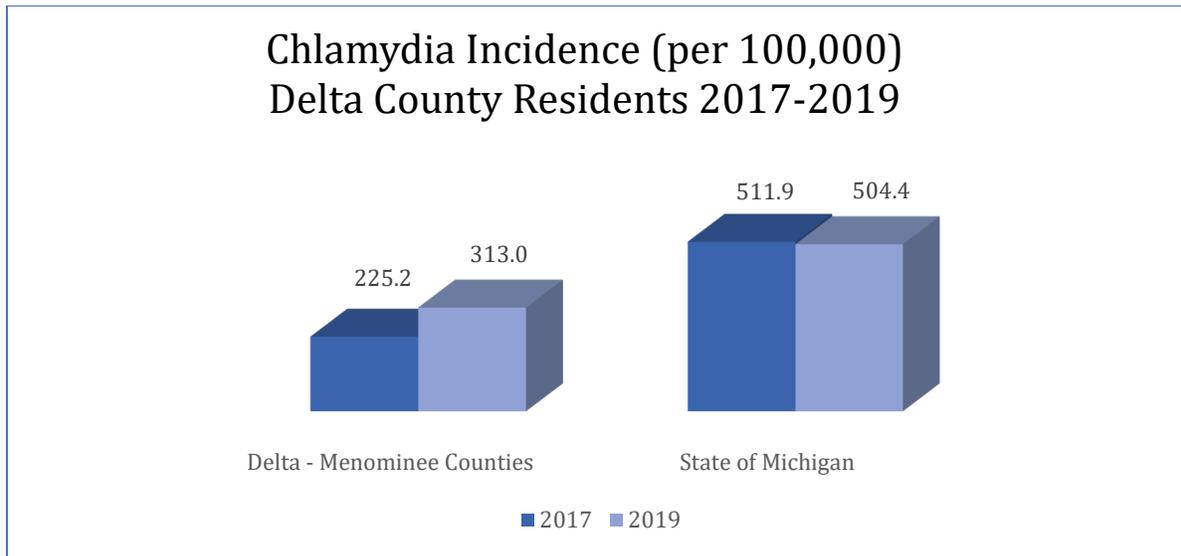
4.7 Infectious Diseases

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 Delta County from 2017 indicate an increase; however, there is a slight decrease of incidence of chlamydia across the State of Michigan. Rates of chlamydia in Delta County are lower than State averages (Figure 64).

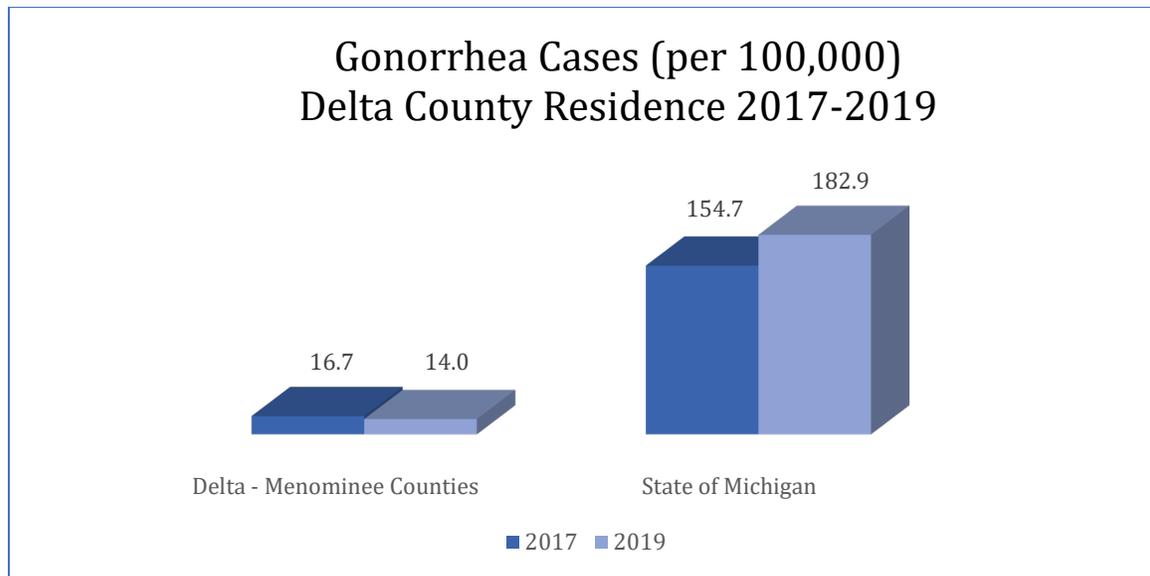
Figure 64



Source: Michigan Department of Public Health and Human Services

The data for the number of infections of gonorrhea in Delta County indicate a decrease from 2017, while the State of Michigan experienced a significant increase from 2017 (Figure 65). State of Michigan rates are significantly higher overall than Delta County.

Figure 65



Source: Michigan Department of Public Health and Human Services

Vaccine Preventable Diseases

A vaccine-preventable disease is an infectious disease for which an effective preventative 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. Delta County has shown no significant outbreaks compared to State statistics, but there are limited data available (Table 1 and Table 2). Note data has not been updated beyond years displayed in table. Also note that COVID-19 vaccine rates are presented in Chapter 2 of this CHNA.

*Table 1
Vaccine Preventable Diseases 2013-2016 Delta County Region*

Mumps	2013	2014	2015	2016
Delta County	0	0	N/A	N/A
State of Michigan	15	42	18	38

Pertussis	2013	2014	2015	2016
Delta County	1	0	N/A	N/A
State of Michigan	995	1424	496	389

Varicella	2013	2014	2015	2016
Delta County	N/A	N/A	N/A	N/A
State of Michigan	719	726	548	567

Source: Michigan Public Health Department

*Table 2
Tuberculosis 2019-2020 Delta County Region*

Tuberculosis	2019	2020
Delta County	N/A	N/A
State of Michigan	131	101

Source: Michigan Public Health Department

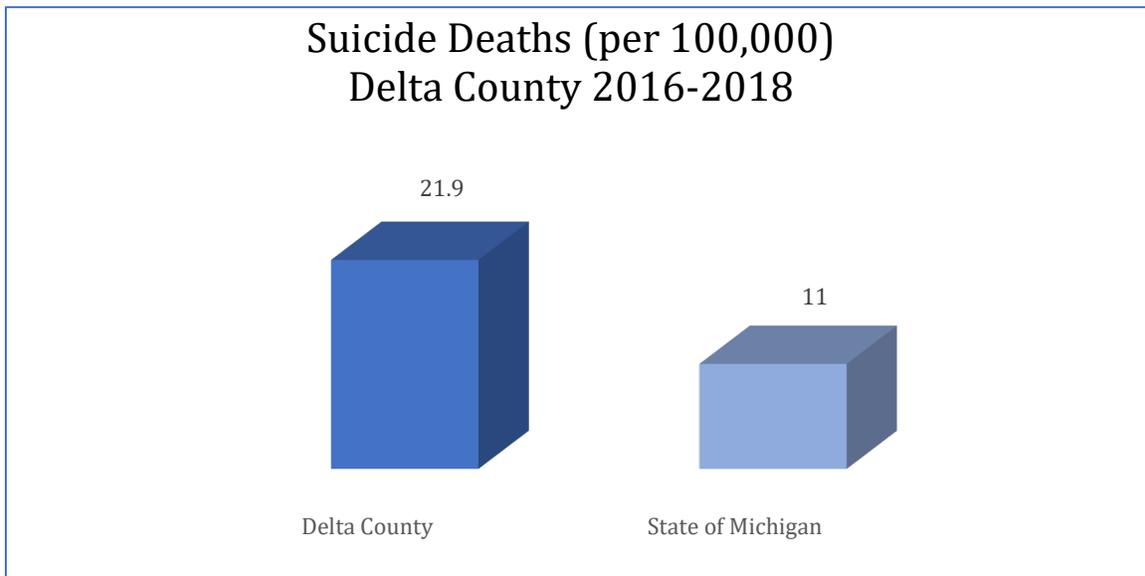
4.8 Injuries

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 Delta County indicate higher incidence than State of Michigan averages, as there were approximately 21.9 per 100,000 people in Delta County in 2018, note this is significantly higher than state averages of 11 (Figure 66).

Figure 66

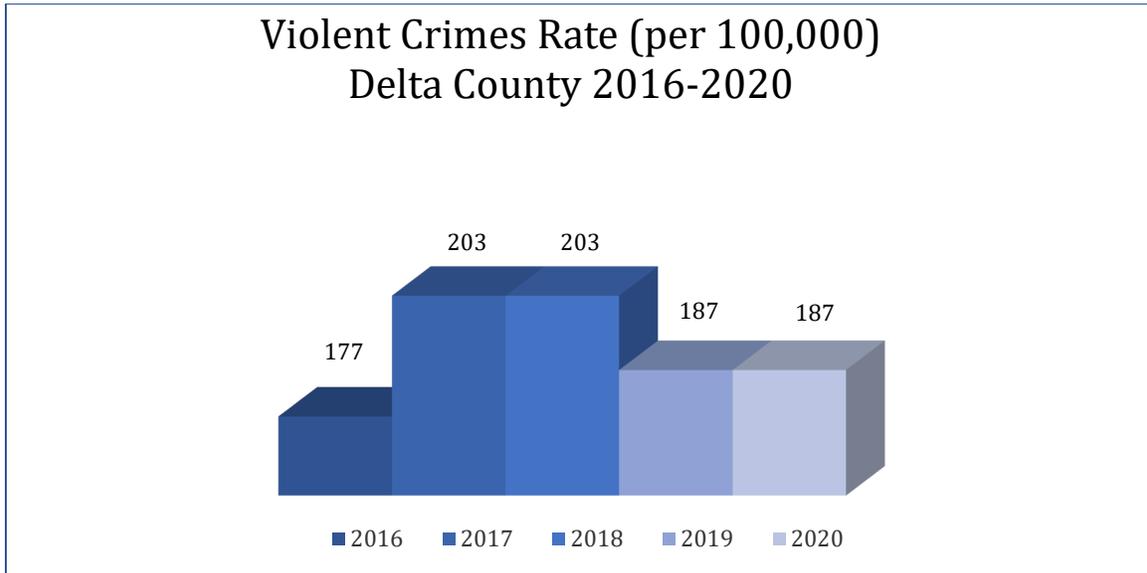


Source: Michigan Department of Public Health and Human Services

Violent Crimes

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery and aggravated assault. Violent crime is represented as an annual rate per 100,000 people. The number of violent crimes has decreased significantly for 2019-2020 in Delta County (Figure 67).

Figure 67



Source: Michigan County Health Rankings and Roadmaps

4.9 Mortality

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

The top three leading causes of death in the State of Michigan and Delta County are similar as a percentage of total deaths in 2020. Diseases of the heart are the cause of 28.5% of deaths, cancer is the cause of 19.9% of deaths, and COVID-19 is the cause of 8% of deaths in Delta County (Table 3).

Table 3

Top 5 Leading Causes of Death for all Races by County and State 2020		
Rank	Delta County	State of Michigan
1	Diseases of Heart (28.5%)	Diseases of Heart (27.7%)
2	Malignant Neoplasm (19.9%)	Malignant Neoplasm (17.0%)
3	COVID-19 (8%)	COVID-19 (8.7%)
4	Chronic Lower Respiratory Diseases (5.2%)	Stroke (7.2%)
5	Accidents (2.7%)	Accidents (4.0%)

Source: Michigan County Department of Health and Human Services

4.10 Key Takeaways from Chapter 4

- ✓ HEART DISEASE, CANCER, AND COVID-19 ARE THE LEADING CAUSES OF MORTALITY.
- ✓ PROSTATE CANCER IS SIGNIFICANTLY HIGHER THAN STATE AVERAGES.
- ✓ SUICIDE RATES ARE HIGHER THAN STATE AVERAGES.

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.

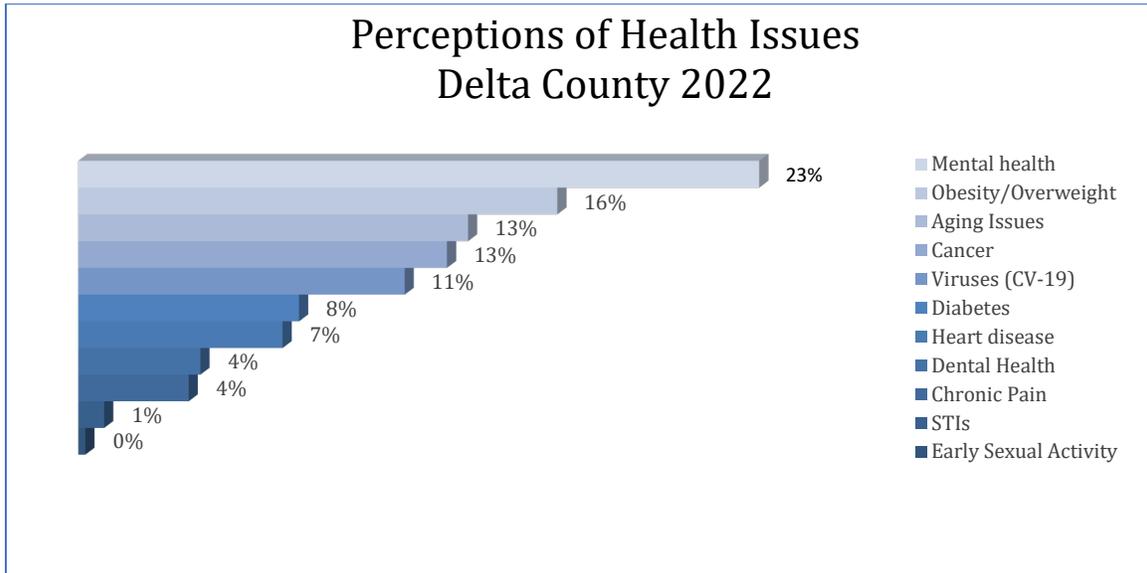
5.1 Perceptions of Health Issues

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 11 different options.

The health issue that rated highest was mental health (23%), followed by obesity/overweight (16%), aging issues (13%) and cancer (13%).

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

Figure 68

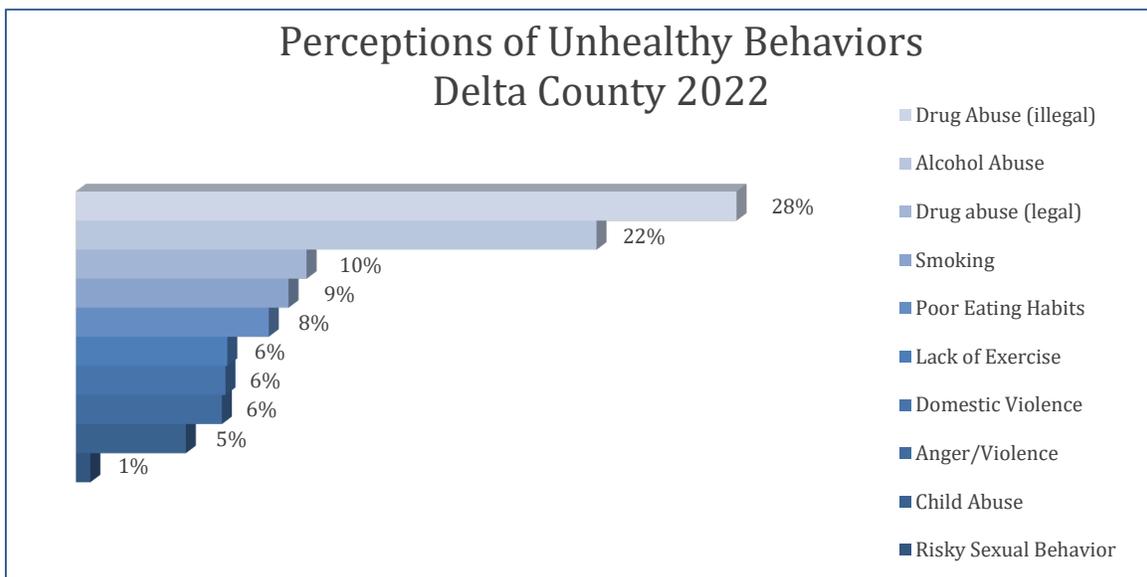


Source: CHNA Survey

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 28% and alcohol abuse at 22% (Figure 69). These two factors were significantly higher than other categories based on *t-tests* between sample means.

Figure 69



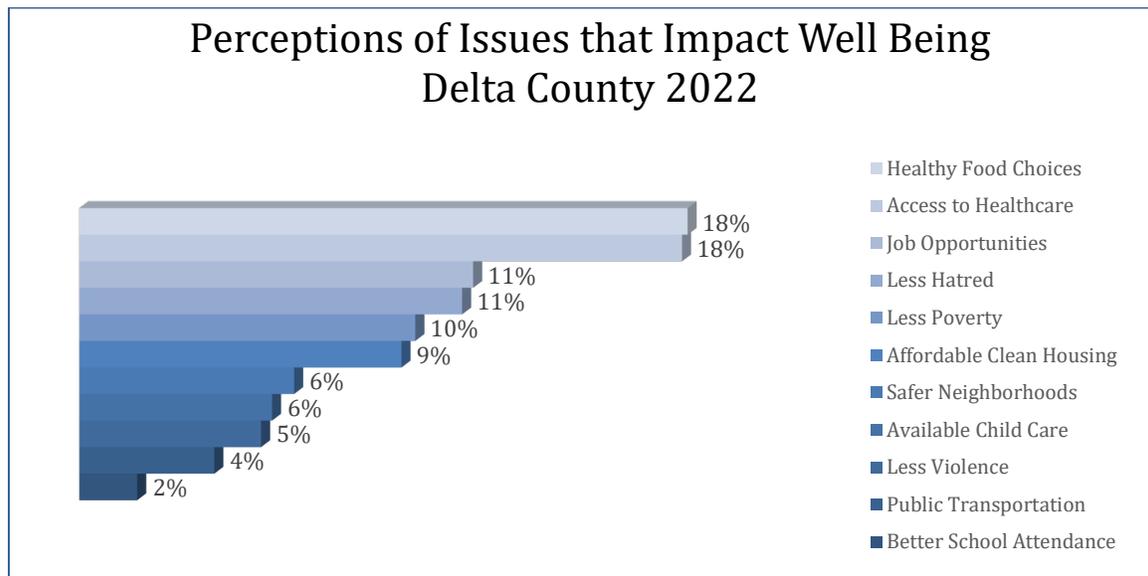
Source: CHNA Survey

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 issue impacting well-being that rated highest were healthy food choices (18%) and access to health (18%) (Figure 70). These two factors were significantly higher than other categories based on *t-tests* between sample means.

Figure 70



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) – Three 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 10% of the population

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

- Not seeking medical care when needed
- Access to counseling services
- COVID-19 vaccination rate
- Prostate screening and colorectal screening are relatively low
- Exercise and healthy eating behaviors
- Depression and stress/anxiety
- Food insecurity

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

- Overweight and obesity
- Misuse of prescription medication

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

- Cancer, heart disease and COVID-19 are leading causes of mortality
- Prostate cancer
- Suicide rates

Potential Health-Related Needs Considered for Prioritization

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

- **Not seeking healthcare when needed**
- **Aging issues**
- **Healthy behaviors – nutrition & exercise**
- **Behavioral health**
- **Overweight/Obesity**
- **Access – mental-health counseling**
- **Cancer screening**
- **Food insecurity**
- **Suicide**

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 9 health-related areas were being addressed. A resource matrix can be seen in APPENDIX 5: RESOURCE MATRIX relating to the 9 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 two significant health needs and considered them equal priorities:

- **Healthy Behaviors – defined as exercise, obesity, and food insecurity**
- **Behavior Health – including mental health, substance abuse and access to counseling**

HEALTHY BEHAVIORS – EXERCISE, OBESITY AND FOOD INSECURITY

EXERCISE. A healthy lifestyle, comprised of regular physical activity has been shown to increase physical, mental and emotional well-being. Note that 28% of respondents indicated that they do not exercise at all, while the majority (58%) of residents exercise 1-5 times per week. The most common reasons for not exercising are not having enough energy (29%) or time (20%) and a dislike of exercise (18%).

Frequency of exercise tends to be more likely for men. There has been a decrease in those who exercise compared to data from the 2019 CHNA. In 2019, 64% of residents indicated they exercise 1-5 times per week and 58% indicated they exercise in 2022.

OBESITY. In Delta County, 82.2% of residents were diagnosed with obesity and being overweight. This is an increase of nearly 5% from the previous 2-year assessment. Moreover, Delta County is significantly higher than the State of Michigan average of 69.2%. 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 Michigan and within Delta County. The U.S. Surgeon General has characterized obesity as “the fastest-growing, most threatening disease in America today.” 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 Michigan 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.

FOOD INSECURITY. It is essential that everyone has access to food and drink necessary for living healthy lives. Food insecurity exists when people don't have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs for a healthy life. Respondents from the CHNA survey indicated that 2% of the population goes hungry at least one a week. Prevalence of hunger tends to be more likely for those with less education and less income.

Another indicator of food insecurity is food landscape. Food landscape is a measure of the conditions that affect the ability of residents to access healthy, affordable nutrition. Key risk influencers include accessibility, affordability and literacy. For Delta County, 37% of the population is at elevated risk for food landscape. This is higher than the State of Michigan average of 27% (SocialScape® powered by SociallyDetermined®, 2022).

BEHAVIORAL HEALTH – MENTAL HEALTH, SUBSTANCE ABUSE AND ACCESS TO COUNSELING

MENTAL HEALTH. The CHNA survey asked respondents to indicate prevalence of specific issues, namely depression and stress/anxiety. Of respondents, 49% indicated they felt depressed in the last 30 days and 43% indicated they felt anxious or stressed. Depression tends to be rated higher by younger people and for those with less income. Stress and anxiety tend to be rated higher for younger people and those with less income. Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents 31% indicated that they spoke to someone, the most common response was to a doctor/nurse (51%). In regard to self-assessment of overall mental health, 13% 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.

SUBSTANCE ABUSE. Of survey respondents, 24% indicated they consume at least one alcoholic drink each day. Alcohol consumption has no statistically significant correlations with social determinants of health. According to the 2019 County Health Rankings measures, 19% of Delta County residents engaged in excessive drinking in the past 30 days. Of survey respondents, 10% indicated they improperly use prescription medications each day to feel better and 7% indicated the use marijuana each day. Note that misuse of prescription medication (oftentimes opioid use) tends to be rated higher by men, older people, those with a lower education and those with less income. Marijuana use tends to be rated higher by younger people.

In the 2022 CHNA survey, respondents rated drug abuse (illegal) as the most prevalent unhealthy behavior (28%) in Delta County, followed by alcohol abuse (22%).

ACCESS TO COUNSELING. In the CHNA survey, respondents were asked, "Was there a time when you needed counseling but were not able to get it?" Of survey respondents, 19% indicated they were not able

to get mental-health counseling when needed. The two most prevalent reasons for not having access to counseling were the inability to find a counselor and the wait for an appointment was too long.

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:

Joanna Wilbee Amis, Community Relations Coordinator, OSF HealthCare St. Francis Hospital & Medical Group. Joanna grew up in Escanaba, just blocks from the former St. Francis Hospital. In 2020, she joined OSF HealthCare as community relations coordinator; she oversees public relations, internal communications, community outreach and marketing for OSF St. Francis. Prior to OSF, Joanna was the director of business initiatives for the regional economic development organization, InvestUP. She also owned a marketing and communication agency, HobNob Communications, for 16 years. Prior to moving back to the area, she was the Midwest-based regional public relations director for Feld Entertainment in Chicago. Joanna earned a Bachelor of Business Administration from Western Michigan University and a Master of Business Administration with a concentration in social media marketing from Southern New Hampshire University. She also serves on the Gladstone Area Schools Board of Education and teaches indoor cycling at the local YMCA.

Kelly Jefferson, President, OSF St. Francis Hospital & Medical Group. Kelly has worked for OSF Healthcare since 1998, progressing from a registered nurse at the bedside to president. She began her career at OSF Saint Francis Medical Center in Peoria, IL as a registered nurse on general pediatrics and in neonatal intensive care, transitioning to performance improvement and becoming a six sigma black belt. In 2007, Kelly accepted a master black belt position at St. Francis Hospital & Medical Group and moved her family to Escanaba, MI. A native of Canton, Ill., she received her nursing diploma from Graham Hospital School of Nursing in Canton, IL. After working several years in healthcare, Kelly recognized the importance of obtaining an advanced degree to continue her professional development. In 2011, she received her Master of Science in Nursing from Walden University. Her experience in working in clinical care and performance improvement has enabled her to develop an in-depth understanding of many aspects of the healthcare delivery system. This knowledge contributed not only to her ability to plan and effectively execute on key systems and processes but ultimately prepare her to lead in her current role.

Lacey Crabb, vice president of patient care services and Chief Nursing Officer, OSF St. Francis Hospital. Lacey was born and raised in the Upper Peninsula and graduated from Marquette High School. She earned her Bachelor of Science in nursing from Northern Michigan University in Marquette, Michigan, where she went on to complete her Master of Science in Nursing. Lacey began her career as a registered nurse and became a nurse practitioner in 2008. She spent nine years serving as a nurse practitioner hospitalist and later served as the chief hospitalist of Sound Physicians, overseeing all hospitalist services at OSF St. Francis Hospital. With strong leadership skills and a positive rapport with nursing staff at OSF, it was only natural for Lacey to continue serving OSF patients in a new capacity.

Kayla Weise, director of entity finance, OSF St. Francis Hospital & Medical Group. Kayla is responsible for the day-to-day leadership, influence and support to the people and processes that drive business performance for the Escanaba region. She provides leadership for the deployment of Ministry strategies for affordability and sustainability as well as leverages Ministry financial planning and analysis, health analytics and other resources to lead and perform analysis and activities that are necessary to support OSF St. Francis Hospital & Medical Group leaders in achieving performance targets. Kayla joined

OSF from Munson HealthCare in Traverse City where she worked most recently in Clinical and Business Intelligence (CBI) as a financial analytics program manager. She has also held multilevel roles as a business intelligence analyst. Prior to beginning her career at Munson Healthcare, Kayla was a Mission Partner at OSF Home Care Services for four years, in which she held roles as a senior accountant and later as a financial analyst. Leading up to her time at OSF HealthCare, Kayla worked in various accounting roles after graduating from Saginaw Valley State University Center with a bachelor degree in business administration.

Michelle Miron, director of Physician Practices, OSF HealthCare St. Francis Hospital & Medical Group. Michelle returned to OSF in June 2021 with a 24 year history with the organization. She began as an LPN in 1998, became an RN in 1995 and a clinical supervisor in the Ambulatory Care Unit in 2001 before assuming the position of patient care manager for the unit. She went on to serve as the director of nursing at Grandview Hospital (now Aspirus) in Ironwood from 2012 to 2014. Most recently she served as the infection prevention specialist for the past two years and prior to that was the manager of the Emergency Department and Convenience Care Clinic for five years at Dickinson County Healthcare System. Michelle's longevity in health care as well as diverse work and leadership experience make her well suited for her current position. She is responsible for the operational and administrative oversight of the OSF St. Francis Medical Group practices. Michelle earned a Master of Science in Nursing Administration from Walden University. In addition, her educational background also includes a Bachelor of Science in Nursing from Northern Michigan University as well as an Associate of Applied Science degree in Nursing from Bay College.

Kari Nordin, social worker, LBSW, ACM OSF HealthCare St. Francis Hospital. Kari is an inpatient social work case manager at OSF St. Francis Hospital. She received her Bachelor's degree in Social Work from Northern Michigan University in 2009. She has work at OSF St. Francis Hospital for three years. Kari helps to manage discharge planning as well as setting up and connection patients with the necessary resources they need. She also helps to arrange follow up appointments with a diabetic educator, primary care provider or home health in helping a patient to manage diabetes. She works closely with physicians and other interdisciplinary team members in all units of the hospital, with community physician's groups, home health care agencies and other local service agencies to aid the patient's hospital experience and transition of care.

Shayne LaMarch, Lead Clinical Dietitian, OSF HealthCare St. Francis Hospital. Shayne received a Bachelor of Science in Clinical and Administrative Dietetics from Northern Michigan University as well as completed a dietetic internship at Viterbo University in La Crosse Wisconsin. She has been with OSF St. Francis for 11 years and is currently responsible for inpatient nutrition assessments and education as well as outpatient nutrition consults and some kitchen supervisory duties. In this role she provides inpatient and outpatient diabetes diet education, teaches patients how to administer insulin and how to use a glucometer, providing tools and information to help manage their diabetes.

Emily DeSalvo, Delta County Administrator, Delta County. Emily has been in the role of county administrator since 2019. In her position, she is responsible for coordinating departmental activities, studying administrative procedures and organization, and recommending changes to improve the operations of County government, reviewing budget requests and making recommendations to the Board of Commissioners, and performing other related duties assigned by the Board of Commissioners.

Previously, she served as district court administrator/ magistrate/ probation director for Delta County. She also worked as an adult probation officer in the county's district court from August 2012 to April 2013; before then, she worked as a supervisor of probation/special programs in Kendall County, Ill., from February 2009 to January 2012 and as an adult probation officer in DeKalb County, Ill., from May 2007 to February 2009. Emily received a Master of Arts degree in sociology — criminology from Northern Illinois University in August 2011 and a Bachelor of Science degree in criminal justice/psychology from Northern Michigan University in May 2006.

Alyssa Knoll, Community Engagement Partnership Coordinator (CEPC), Oscar G Johnson Veteran Affairs Medical Facility. Alyssa is a licensed clinical social worker with a Master degree in social work from the University of Wisconsin in Madison. In her position she works on collaborating and building coalitions with community partners focused on Veteran suicide prevention. She also works to support clients with new or chronic medical diagnosis, such as diabetes, that are a risk factor for increased suicide risk.

Kristina M. Hansen, Ed.D., Student Success Coordinator for Bark River-Harris Schools. Dr. Hansen oversees and delivers support services for students in Kindergarten through 12th grade in the areas of academics, behavior, and social-emotional learning. As the Student Success Coordinator, Dr. Hansen has championed the implementation of social-emotional learning for all students and additional, more intensive, interventions for students struggling with the management of their “big” emotions. Although new to BRH this school year, Dr. Hansen has worked in education as a teacher or administrator for nearly 21 years. She received her Ed.D. from Central Michigan University in May 2020 in the area of Educational Leadership.

Julie Mallard, Executive Director, United Way of Delta County. Julie holds a Bachelor's Degree in Public Relations from the University of Florida. She started her career with the Girl Scout council in her hometown of Tampa, Florida before moving to the U.P. in 1994. For the next 11 years she did marketing and volunteer coordination at North Woods, promoting their home nursing and hospice, outpatient therapy, private duty nursing and assisted living services in a four-county area. In 2005 she became the Executive Director of the United Way of Delta County. Her work includes fundraising, special events, marketing, volunteer coordination, administration, community collaboration and working with local nonprofit agencies. She is on the executive committees for Delta County Communities That Care and Delta-Schoolcraft Great Start and is a member of the Delta County Homeless Coalition and Bay College's Human Services Advisory Board. She also is secretary of the Escanaba Noon Kiwanis Club.

Becky McIntyre, Quality Assurance Supervisor and Medicare/Medicaid Assistance Program (MMAP) Regional Coordinator for UPCAP Services, Inc. In her role as Quality Assurance Supervisor, she works with UP in-home service partners and provider agencies to ensure compliance with state standards for Aging and Home and Community Based Waiver Services. She also serves as the Regional Coordinator with the MMAP program and oversees 50 volunteer counselors across the Upper Peninsula. This program provides free, unbiased information and assistance to Medicare beneficiaries who have questions on health care options, billing, and prescription drug information. Becky is a graduate of Lake Superior State University with a Bachelor's degree in Legal Assistant Studies and will be embarking on her 27th year with UPCAP Services.

Caron Salo, Senior Program / Fund Development Director, Northern Lights YMCA – Delta Center. She has worked for the YMCA since 1996. She is responsible for all aspects of program development and administration including budget management, marketing, community partnerships and strategic planning. On the Fund Development side, she is responsible for grant writing and all major fundraising efforts including the YMCA Annual Campaign and special events. Caron is a member of the Escanaba Rotary Club, a Jaycee and a past member of the OSF St. Francis Advisory Board member.

Mike Snyder RS, Health Officer, Public Health Delta & Menominee Counties. Michael Snyder is the Health Officer for Public Health Delta & Menominee Counties. He received his Bachelor degree in Conservation and Master's Degree in Public Administration from Northern Michigan University. He also received a Certificate in the Foundation of Public Health from the University of Michigan. Michael has been employed at Public Health since 1994 and has been the Health Officer since 2012.

Tara Weaver, Great Start Director, Delta-Schoolcraft Intermediate School District. Tara has served as the director of the Great Start program serving Delta County since 2008. In her role, she leads the Delta-Schoolcraft Great Start Collaborative (DSCGSC) partnership to connect and collaborate with community leaders, healthcare professionals, human services agencies, charitable and faith-based organizations, educators, and parents. The DSGSC is dedicated to establishing and maintaining a comprehensive early childhood system. The goal of the Collaborative is to provide a network of support and resources for children and their families to ensure children enter kindergarten ready and eager to learn.

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 2019 CHNA PRIORITIZED NEEDS

Three major health needs were identified and prioritized in the Delta County 2019 CHNA. Below are examples of the activities, measures and impact during the last three years to address these needs.

Using a modified version of the Hanlon Method, the collaborative team prioritized three significant health needs:

1. Healthy Behaviors – defined as active living and healthy eating, and their subsequent impact on obesity
2. Behavioral Health – including mental health and substance abuse
3. Aging Issues – defined as population over 65

Healthy Behaviors - Defined as Active Living, Healthy Eating and Their Impact on Obesity

Goal 1: *Increase awareness of the importance for proper nutrition in overall health and wellness with-in Delta County.*

1. Distribute and promote articles and education on healthy eating through traditional and social media.
 - a. Posted 1 article per week every week. Maintained consistent number, not able to grow as much given to the priority of COVID information to be shared.
2. Discuss importance of nutrition, share/refer appropriate patients to community programs.
 - a. COVID triage was done from April – September 2020. Much of this time was spent the same way in FY21.
3. Increase number of nutritional counseling sessions.
 - a. Provided nutritional consults to 137 patients in FY20 and 270 patients in FY21.
4. Increase referrals to OSF dietitians through clinic briefs/meet and greets with providers and care management department.
 - a. Although this was intended to occur, it did not happen due to COVID. The dietitian was furloughed and did not return. Reallocation of duties to support COVID happened in 2021.
5. Provide donation for healthy choices for backpack programs at local schools.
 - a. This item did not happen due to COVID. Meal program supplementation occurred instead.

Goal 2: *Increase awareness of the importance of exercise for overall health and well-being in Delta County.*

1. Partner with DSISD to promote youth recreational activities that promote movement/exercise.
2. This tactic did not occur because the task force has not met since March 2020 due to COVID. The DSISD did not continue this initiative.

3. Sponsor events that encourage active living, i.e., 5K, targeting youth.
4. \$2,500 in FY20 and \$7955 for FY21.

Behavioral Health - Defined as Mental Health and Substance Abuse

Goal 1: *Increase number of persons receiving behavioral health services at OSF St. Francis Hospital.*

1. Explore feasibility of Behavioral Health telemedicine within the local schools.
 - a. Through the introduction to Dr. English, a partnership between DSISD and MSU Health Care was created to provide consultant services for an adult and child psychiatrist. The original contract (signed June 16, 2020) stated the Doctor would travel to DSISD from Lansing quarterly to provide a day of consultant support for the most challenging students. Due to the pandemic, Dr. English has been providing these services virtually for the last two years.
2. Provide free access to digital Behavioral Health solution – Silvercloud
 - a. Sixty-seven (67) utilizing app.
3. Increase number of Behavioral Health visits at OSF St. Francis Hospital & Medical Group.
 - a. In FY20 2,669 patients and in FY 21 319 patient visits occurred.

Goal 2: *Reduce stigma surrounding Behavioral Health/Mental Health services in Delta County.*

1. Increase number of patients in MAT program embedded in OBGYN office.
 - a. 8 patients in FY20 and 13 patients in FY21.

Aging Issues

Goal 1: *Decrease number of patients in MAT program embedded in OBGYN office.*

1. Promote and co-host/sponsor existing community resources/programs for the aging (Diabetes PATH, Matter of Balance, Chronic Pain PATH, Confident caregiver program, etc.)
 - a. Canceled due to COVID, events are returning in FY22.
2. Increase number of speaking engagements for aging population.
 - a. Conducted monthly radio interviews to update senior citizen community on COVID.

APPENDIX 3: SURVEY

Delta 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: Mental-Health Counseling)

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

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

Mental-Health Counseling

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

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

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

- Didn't have insurance. The counselor refused to take 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
- Mental-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 mental health?
 Yes (please answer #16) No (please go to #17)
16. If you talked to anyone about your mental health, who was it?
 Doctor/nurse Counselor Family/friend Other _____
17. 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 mental health is: Below average Average Above average

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)

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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?

- Delta 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 Other _____

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 Other: _____

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 Other: _____

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

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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? _____

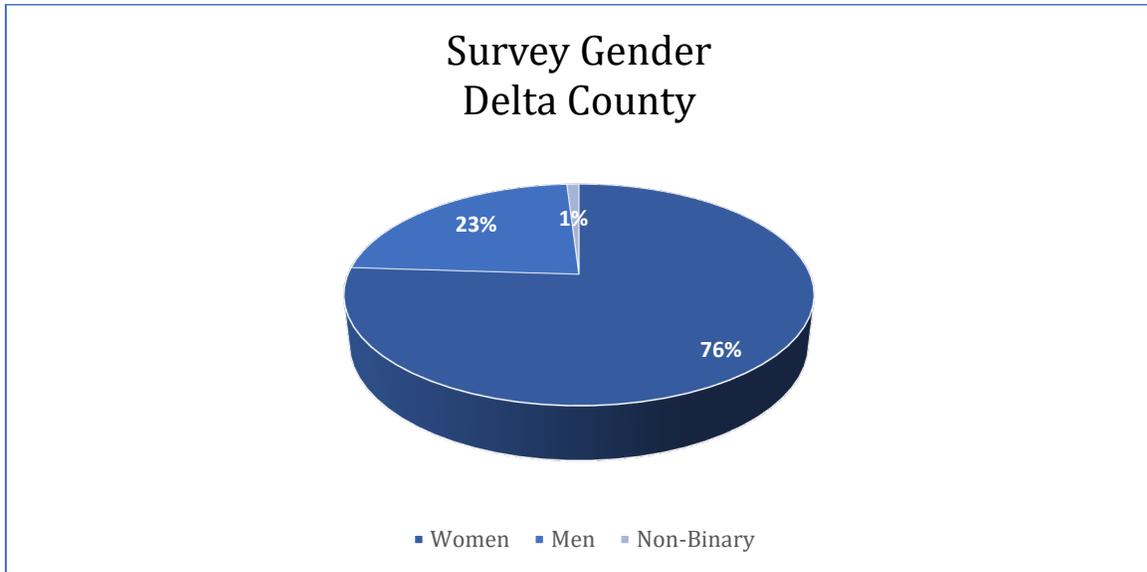
14. How often do you communicate with people you care about and feel close to? (For example, talking, texting, meeting with friends/family?)

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

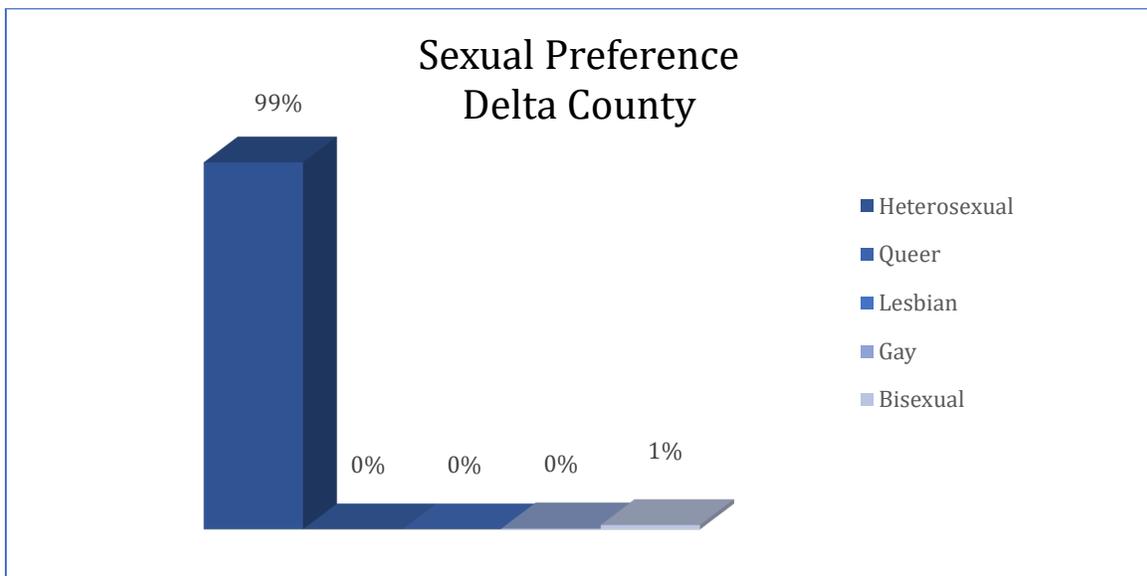
Is there anything else you'd like to share about your own health goals or health issues in our community?

Thank you very much for sharing your views with us!

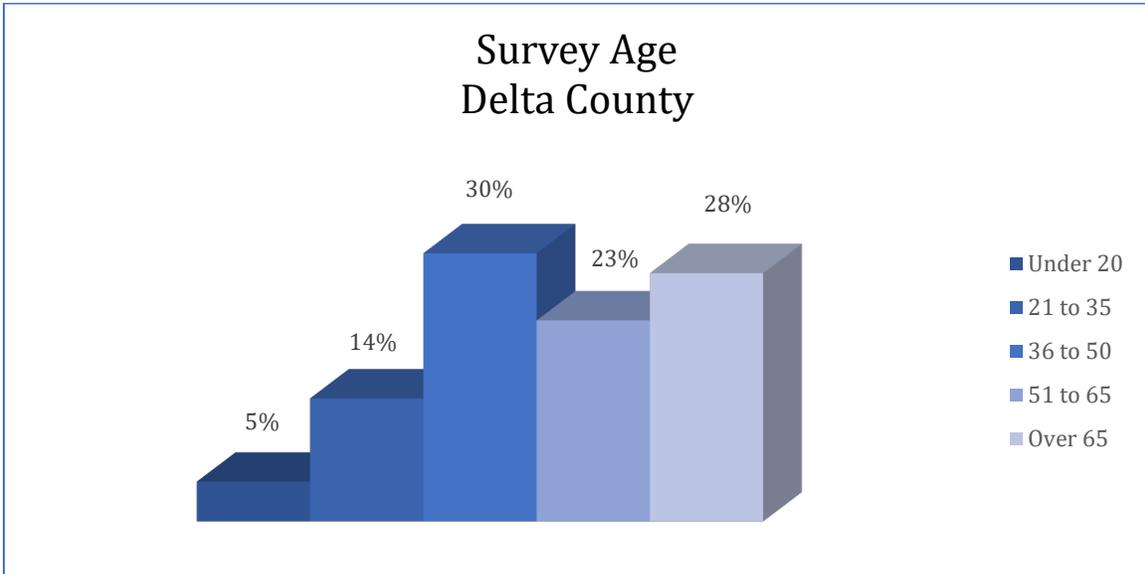
APPENDIX 4: CHARACTERISTICS OF SURVEY RESPONDENTS



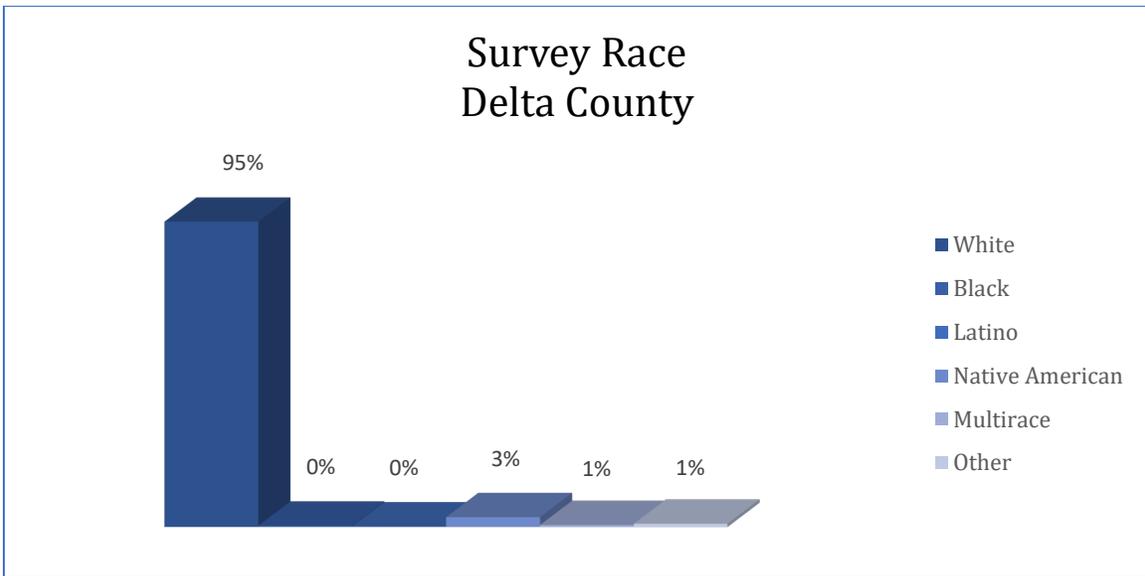
Source: CHNA Survey



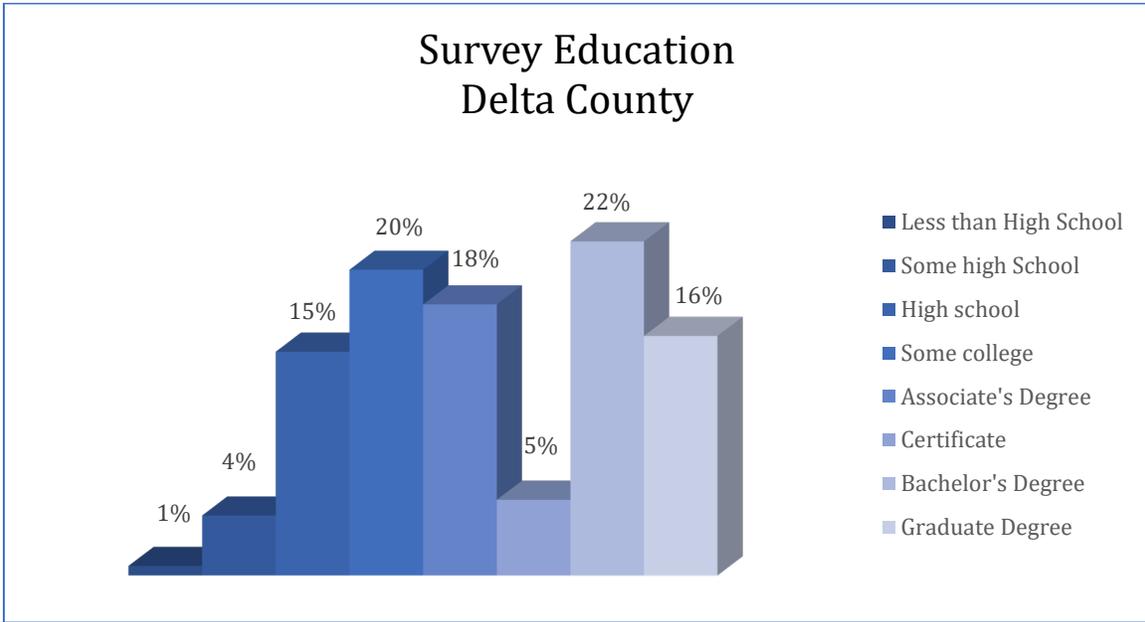
Source: CHNA Survey



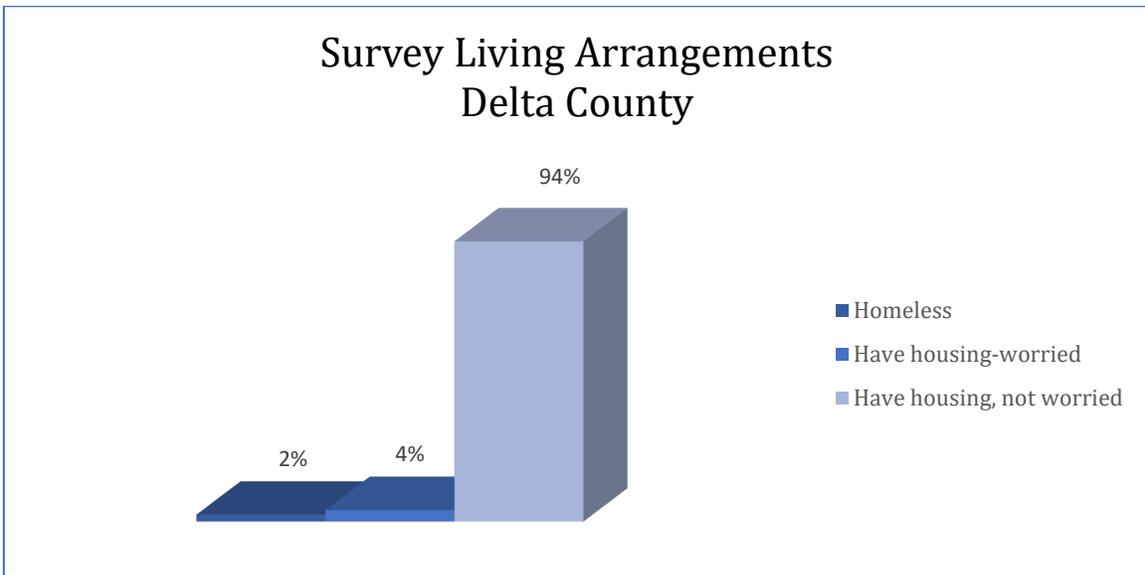
Source: CHNA Survey



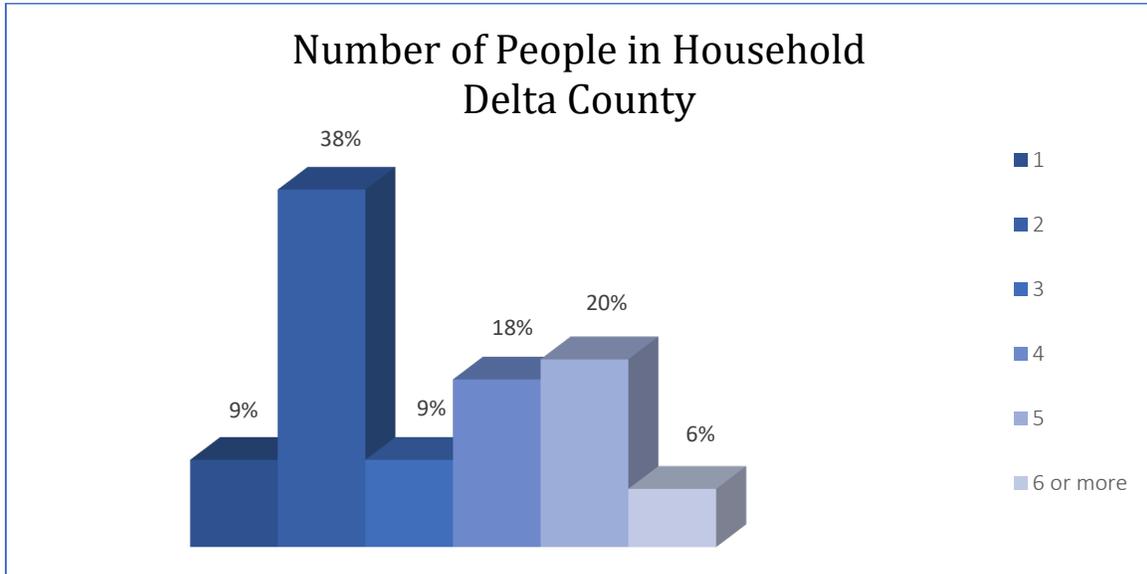
Source: CHNA Survey



Source: CHNA Survey



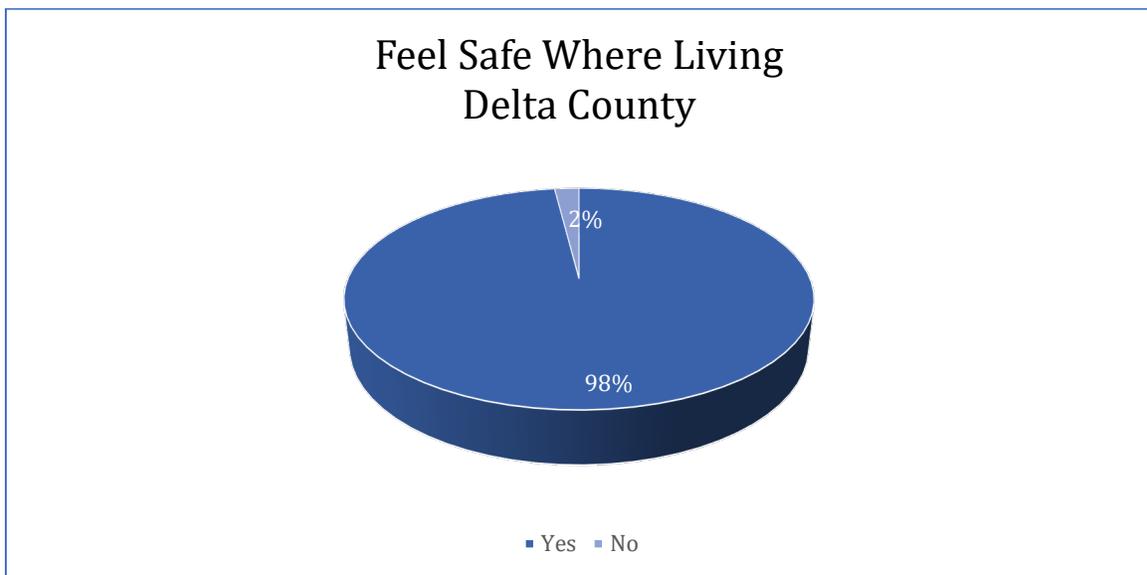
Source: CHNA Survey



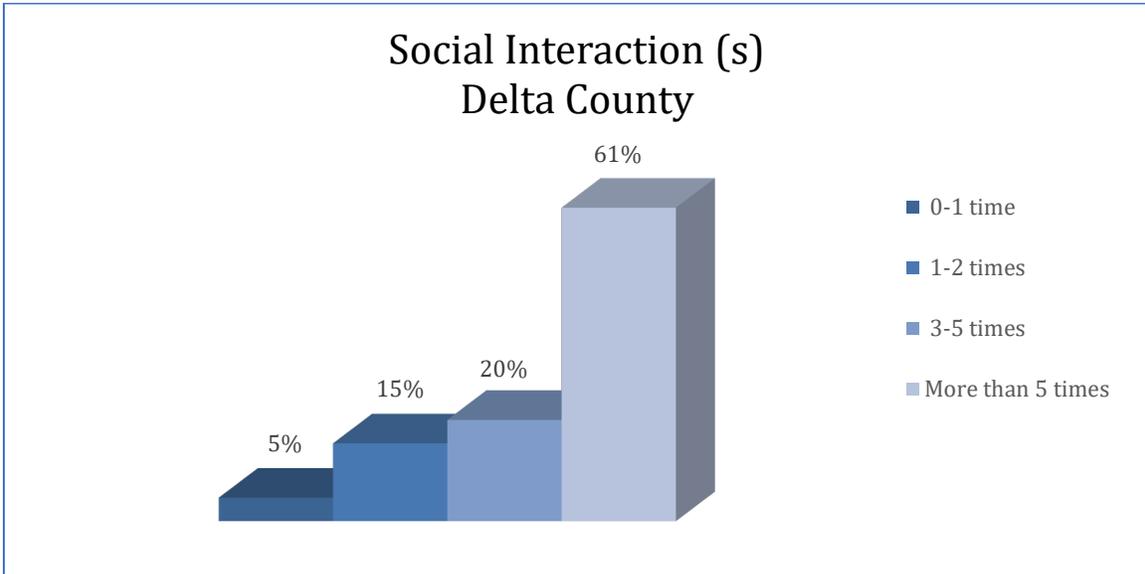
Source: CHNA Survey

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 Delta County, 27% of the population is at elevated risk for Housing environment. This is similar to the State of Michigan average of 26% (SocialScape® powered by SociallyDetermined®, 2022).



Source: CHNA Survey



Source: CHNA Survey

APPENDIX 5: RESOURCE MATRIX

	Aging Issues	Healthy Behaviors/ Eating & Exercise	Behavioral Health	Access to Counseling	Obesity	Not Seeking Medical Care	Cancer Screening	Food Insecurity	Suicide
Recreational Facilities									
Northern Lights YMCA	2	3			2	1			
City of Escanaba Parks and Facilities		1			1				
City of Gladstone Parks and Facilities		1			1				
Health Departments									
MI Dept of Health & Human Services - Delta Co.	1		1	1	1	1	1	3	1
Public Health Delta & Menominee Counties	2	1			2	1	2	1	
Community Agencies									
Alcoholics Anonymous		1							
Bishop Noa Home for Senior Citizens	3								
Catholic Social Services	1		2	2		1			
Central Upper Peninsula Planning & Development		2	1		2				
Child & Family Services of the Upper Peninsula			3			1			
Communities that Care/ISD Task Force	2	1	1	2	1	1			
Community Action Agency	3	1			1	1		2	
Delta County Cancer Alliance							3		
Great Lakes Recovery Centers-Outpatient Services				1					
Lutheran Social Services of WI and Upper MI			2	1					
MSU Extension Family Nutrition and Food Safety		3			2			1	
Narcotics Anonymous		1							

	Aging Issues	Healthy Behaviors/ Eating & Exercise	Behavioral Health	Access to Counseling	Obesity	Not Seeking Medical Care	Cancer Screening	Food Insecurity	Suicide
Oscar G. Johnson VA Medical Center (incl. Gladstone clinic)	3	1	3	3	1	3	2	1	3
Pathways Community Mental Health	1	2	3	3					
Salvation Army-Escanaba		2	3	1				3	
Society of St. Vincent de Paul		2	3					3	
Teaching Family Homes of Upper Michigan			1						
Tri-County Safe Harbor			2	2					
United Way of Delta County	1		2	2					
Upper Peninsula Commission for Area Progress	3	3			1	3		3	
Hospitals / Clinics									
St. Francis Hospital & Medical Group	1	3	3	1	3	2	3	2	1
UP Health Systems	1	3	3	1	2	1	2		
Carefree Dental Clinic						1			
Bellin Health	1		2	1	2	1	2		
Schools									
Delta Schoolcraft Intermediate School District		2	2		2				2
MDS Early Childhood Program		2							
Oscar G. Johnson VA Medical Center (incl. Gladstone clinic)	3	1	3	3	1	3	2	1	3
Pathways Community Mental Health	1	2	3	3					
Salvation Army-Escanaba		2	3	1				3	
Society of St. Vincent de Paul		2	3					3	
Teaching Family Homes of Upper Michigan			1						

	Aging Issues	Healthy Behaviors/ Eating & Exercise	Behavioral Health	Access to Counseling	Obesity	Not Seeking Medical Care	Cancer Screening	Food Insecurity	Suicide
Tri-County Safe Harbor			2	2					
United Way of Delta County	1		2	2					
Upper Peninsula Commission for Area Progress	3	3			1	3		3	
Hospitals / Clinics									
St. Francis Hospital & Medical Group	1	3	3	1	3	2	3	2	1
UP Health Systems	1	3	3	1	2	1	2		
Carefree Dental Clinic						1			
Bellin Health	1		2	1	2	1	2		
Schools									
Delta Schoolcraft Intermediate School District		2	2		2				2
MDS Early Childhood Program		2							

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

APPENDIX 6: DESCRIPTION OF COMMUNITY RESOURCES

RECREATIONAL FACILITIES (3)

City of Escanaba Parks and Facilities

Obesity, Healthy Behaviors, Cardiovascular Disease

The City of Escanaba offers a variety of programs for infants, toddlers, early childhood, youth, adults, and seniors at the Catherine Bonifas Civic Center.

City of Gladstone Parks and Facilities

Obesity, Healthy Behaviors, Cardiovascular Disease

Provide the best possible quality of life in our community by involving our citizens and maximizing our natural resources. Never settling for past accomplishments, always striving to improve. Resources available to the community include recreational activities and special events, year-long to include: sports-park, ski-park, beach/harbor, bike paths, and a farmer's market.

Northern Lights YMCA

Healthy Behaviors, Obesity, Cardiovascular Disease, Diabetes

The Northern Lights YMCA is a community-based service organization dedicated to building the mind, body and spirit for members of the Delta County community. By offering value-based programs emphasizing education, health and recreation for individuals regardless of sex, race or socio-economic status the YMCA is increasing the quality of life in Delta County.

HEALTH DEPARTMENTS (2)

Public Health, Delta and Menominee Counties

Obesity, Addiction, Healthy Behaviors, Access to Health Services, Cardiovascular Disease, Cancer, Diabetes, Mental Health, Substance Abuse

The goal of the Delta-Menominee County Health Department is to protect and promote health and prevent disease, illness and injury. Public health interventions range from preventing diseases to promoting healthy lifestyles and from providing sanitary conditions to ensuring safe food and water. Specific programs of interest include the Wisewoman Program (*Diabetes, Addiction, and Healthy Behaviors*).

Michigan Department of Health and Human Services – Delta County

Access to Health Services, Emergency Department Misuse

DCDHHS provides health care coverage to individuals who meet certain eligibility requirements. All programs have an income test and some look at assets, these tests vary with each program. Some may have a medical spend down amount, where the individual will be required to pay a set amount per month towards medical expenses before the coverage will be available.

COMMUNITY AGENCIES/PRIVATE PRACTICES (19)

Delta County Communities That Care

Delta County Communities That Care shall utilize the CTC model with fidelity as a prevention framework

to promote healthy youth development and reduce adolescent problem behaviors, such as; substance abuse, depression/anxiety/suicide, violence, delinquency, school drop-out and teen pregnancy.

Tri-County Safe Harbor (formerly Alliance Against Violence and Abuse)

Mental Health

The Alliance Against Violence and Abuse offers services for all people who are abused. Services include a 24 hour crisis line, an emergency shelter, support groups, individual counseling, therapy, court advocacy, and referrals for legal, medical, financial, and housing.

Alcoholics Anonymous/Narcotics Anonymous

Substance Abuse-Alcohol, Healthy Behaviors

Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others recover from alcoholism.

Bishop Noa Home for Senior Citizens

Cardiovascular Disease, Cancer, Diabetes

The Bishop Noa Home for Senior Citizens provides a safe, healthy environment that promotes physical, emotional and spiritual well-being to residents, families and employees.

Care Free Dental Clinic

Dental Issues – Not seeking medical care

The Care Free Dental Clinic provides free dental care for Delta Country residents on a first come/first serve basis. The clinic specifically serves individuals who do not have any dental or medical insurance coverage.

Catholic Social Services of the Upper Peninsula

Substance Abuse-Alcohol, Mental Health, Not seeking health care

Catholic Social Services has a large mental health and substance abuse outpatient-counseling ministry. Last year it served over 2,000 UP residents with 12,000 appointments. Counseling offices are in Marquette, Escanaba, and Iron Mountain. The agency has recently taken over the Keenagers Home in Wakefield. This home is on the site of the former Divine Infant Hospital and is home to 42 residents in either adult foster care, assisted living, or independent living. Catholic Social Services offers a general assessment for substance abuse and assesses the risk factors for the person's involvement in substance abuse, and will make treatment recommendations and/or refer individuals to the inpatient, outpatient or residential treatment services they need.

Central Upper Peninsula Planning and Development Regional Commission (CUPPAD)

The mission of the Central Upper Peninsula Planning and Development (CUPPAD) Regional Commission is to foster cooperative analysis, planning and action for economic, social and physical development and conservation within the central Upper Peninsula. Their staff consists of dedicated planners, economic developers and GIS professionals who are passionate about the prosperity of the region. They understand the rigors of local governance and the disparity of resources and serve as an advocate, working to help the community prosper with sound planning practices, federal funding opportunities, technical assistance, and much more.

Child and Family Services of the Upper Peninsula

Mental Health

Child and Family Services is a private, non-profit, non-sectarian agency dedicated to strengthening children and families by providing high-quality programs structured around five major themes: counseling services, child welfare services, home-based services, homeless prevention services, and community-based services.

Community Action Agency

Obesity, Access to Health Services, Healthy Behaviors

The Community Action Agency provides programs to negate the causes and symptoms of poverty. Specific programs of interest include the Senior Nutrition Services (*Obesity*), and RSVP (*Access to Health Services*).

Delta County Cancer Alliance

Access to Health Services, Cancer

DCCA provides wheelchairs, commodes, canes, lift chairs, hospital beds and various other equipment and supplies that are available to cancer patients free of charge.

Michigan State University Extension - Family Nutrition and Food Safety Program

Obesity, Healthy Behaviors, Diabetes

The Family Nutrition and Food Safety program, offered through the Michigan State University Extension provides information concerning the basic principles of healthy eating, food handling and preparation, and shopping skills.

Great Lakes Recovery Centers – Escanaba Outpatient Services

Addictions, Mental Health

GLRC offers comprehensive outpatient drug abuse treatment services to families and individuals of all ages recovering from substance abuse. These services may include but are not limited to assessment, group therapy and relapse prevention.

Lutheran Social Services of Wisconsin and Upper Michigan

Mental Health, Access to Health Care, Healthy Behaviors, Substance Abuse-Alcohol, Tobacco Usage

Lutheran Social Services provides behavioral health services (counseling, substance abuse, mental health and developmental disabilities), children's community services (adoption, foster care, pregnancy counseling, residential services and Head Start), nursing and community services (long-term care and rehabilitation, home care services, adult day services, respite services for caregivers and retirement communities), prisoner and family ministry (support for children of incarcerated parents and their caregivers, re-entry programs, on-site prison programs, and justice education), and senior housing services (affordable housing for low-income seniors and people with disabilities).

Pathways Community Mental Health

Mental Health, Substance Abuse-Alcohol, Tobacco Usage, Healthy Behaviors, Access to Health Care, Emergency Department Misuse

Pathways Community Mental Health primarily addresses mental health care. Pathways provides integrated substance abuse services for those individuals with a primary mental health, development disability, or severe emotional disturbance who also have a secondary substance use disorder. Case

management services are provided to eligible consumers who need assistance in gaining access to health and dental services, financial assistance, housing, employment, education, social services, and other services and natural supports.

Salvation Army – Escanaba

Mental Health, Healthy Behaviors, Access to Health Care, Substance Abuse-Alcohol, Tobacco Usage, Food Insecurity

The Salvation Army provides individual and family trauma counseling and emotional support. They also manage one of the largest food pantries in Delta County.

Society of St. Vincent de Paul

Mental Health, Healthy Behaviors, Access to Services, Food Insecurity

The Society of St. Vincent de Paul offers tangible assistance to those in need on a person-to-person basis. It is this personalized involvement that makes the work of the Society unique. This aid may take the form of intervention, consultation, or often through direct dollar or in-kind service.

Teaching Family Homes of Upper Michigan

Mental Health

Teaching Family Homes offer programs for children and youth including residential care, group homes, foster care and adoption, supervised independent living, private school, crisis intervention, mental health assessment, homeless services, in-home counseling and family preservation.

United Way of Delta County

Access to Health Care, Healthy Behaviors, Addiction, Mental Health

The United Way of Delta County brings together people from business, labor, government, health and human services to address community's needs. Money raised through the United Way of Delta County campaign stays in community funding programs and services in Delta County.

Upper Peninsula Commission for Area Progress

Healthy Behaviors, Diabetes, Access to Health Care

The UPCAP is responsible for development, coordination, and provision of human, social, and community resources within the 15 counties of the Upper Peninsula of Michigan. Specific programs of interest include the 2-1-1 Information and Resource Center (Access to Health Services) and UP Diabetes Outreach Network (Diabetes).

HOSPITALS/CLINICS (4)

Upper Peninsula Health Systems

Asthma, Cancer, Cardiovascular Disease, Diabetes, Healthy Behaviors, Mental Health, Access to Health Care, Obesity, Substance Abuse-Alcohol, Tobacco Usage

Upper Peninsula Health Systems is a 315-bed specialty care hospital that provides care in 65 specialties and subspecialties. With a medical staff of more than 200 doctors, the hospital cares for approximately 12,000 inpatients and more than 350,000 outpatients a year.

OSF St. Francis Hospital and Medical Group

Asthma, Cancer, Cardiovascular Disease, Diabetes, Emergency Department Misuse, Healthy Behaviors, Mental Health, Access to Health Care, Obesity, Substance Abuse-Alcohol, Tobacco Usage

With a medical staff of more than 100 physician and 700 employees, OSF St. Francis Hospital and Medical Group is a fully-integrated health delivery system offering hospital-based, home care, and physician clinical services. Specific centers of interest include the Diabetes and Nutrition Education Center (*Diabetes*) and Cardiac Diagnostic Services (*Cardiovascular Disease*).

Oscar G. Johnson VA Medical Center – Gladstone Clinic

Asthma, Cancer, Cardiovascular Disease, Diabetes, Healthy Behaviors, Mental Health, Access to Health Care, Obesity, Substance Abuse-Alcohol, Tobacco Usage

OGJVAMC is a leader in rural health care delivery in VHA, and employs state-of-the-art telehealth audio visual technology. Telehealth has greatly improved access to specialty care for rural Veterans by bringing these services closer to the Veterans' homes. OGJVAMC currently supports telehealth for primary medical care and over 30 specialty care areas, and sees its patients in its Gladstone outpatient clinic to assist in connecting them to the necessary resources.

Bellin Health

Access to Health Care, Emergency Department Misuse

Clinic Associated with Bellin Health System (Primarily in Wisconsin). Has Primary Care and Specialty Services. Post-Acute hospitalization care team partners with U.P. medical facilities to prevent re-admissions by access to appropriate follow up care.

SCHOOLS (2)

Delta Schoolcraft I.S.D. Career Tech Center

Mental Health, Healthy Behaviors, Access to Health Services, Obesity, Substance Abuse-Alcohol, Tobacco Usage

DSISD provides career technical education courses designed to develop basic skills required for specific vocations, specifically Health Occupations.

Menominee-Delta-Schoolcraft Early Childhood Program

Access to Health Care, Healthy Behaviors

MDS CAA ECP offers comprehensive preschool services for children ages 3-5 as well as infant/toddler services for pregnant moms and children up to age 3. All services are free of charge. Transportation is provided to classrooms whenever possible.

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)