

Community Health Needs Assessment 2013

St. Mary Medical Center

Knox County

Warren County

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Executive Summary

The Knox and Warren Counties Community Health-Needs Assessment (CHNA) is an undertaking by St. Mary Medical Center and OSF Holy Family Medical Center to highlight the health needs and well-being of residents in Knox and Warren Counties.

Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in Knox and Warren Counties. Several themes are prevalent in this health-needs assessment – the demographic composition of Knox and Warren Counties, the predictors and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Specifically, team members included representatives from St. Mary Medical Center and OSF Holy Family Medical Center, administrators from the Knox and Warren Counties Health Departments, as well as community experts that serve various segments of the population.

Why Focus on the Health Needs of Knox and Warren Counties?

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 hospitals, as well as perceptions of targeted stakeholder groups.

Specifically, this assessment provides a detailed analysis of:

- (1) Knox and Warren Counties community health needs using secondary data; and
- (2) An assessment of perceptions and behaviors regarding health-related challenges in the community, including accessibility to needed health care.

Methodology

The community health-needs assessment is divided into three distinct phases.

PHASE I

The collection of existing secondary data to develop a comprehensive health profile and identify strategic inferences.

The CHNA includes detailed analyses of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publically available sources, such as County-based data, as well as private sources of data, such as hospital-specific data. Strategic implications are discussed at the end of each chapter. Specifically, findings from secondary sources of data highlight several critical areas of community needs.

PHASE II

Survey data collection to assess perspectives of key stakeholders, including those with special knowledge. This includes a concerted effort to target the at-risk population in the region.

To collect data in this study, two surveying techniques were used. First, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. Second, online and paper surveys were employed to gain insight into resident perceptions of the community. To specifically target the at-risk population, surveys were distributed at all homeless shelters and soup kitchens. In sum, a total of 1,447 residents were surveyed.

PHASE III

A summary of key health-related issues. Using an importance/urgency matrix methodology, health-related needs are prioritized.

The identification and prioritization of the most important health-related issues in Knox and Warren Counties are identified in Phase III. After summarizing all of the issues in the Community Health Needs Assessment, a comprehensive assessment of existing community resources was performed to identify the efficacy to which health-related issues were already being addressed. Approximately 15 organizations that serve the needs of Knox and Warren Counties were identified. Finally a collaborative effort of leaders in the healthcare community used an importance/urgency methodology to identify the most critical issues in the area.

Phase 1: Demographics

Demographics

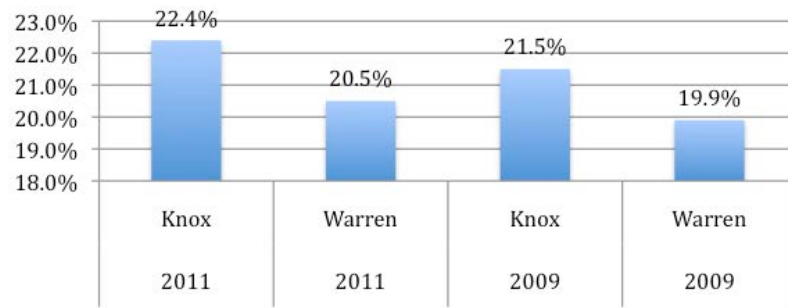
including increasing of the elderly population, depression, risky behaviors, and poverty will have significant impact on the health needs of Knox and Warren Counties

Increasing Elderly Population -

The 62 and older population increased between 2007 and 2010 in both Knox County and Warren County. National forecasts estimate that individuals over age 65 will increase by one-third by 2022. For both Knox County and Warren County, the percentage of individuals aged 65-74 and 85 years and over showed the strongest growth.

As individuals age and live with disabilities, it greatly impacts the degree of self-sufficiency and medical care required to maintain satisfactory well-being. With the changing demographics resulting from the aging of baby boomers, it is anticipated Knox and Warren Counties will experience an increase in the number of elderly individuals living with the difficulties of disabilities and chronic conditions, such as diabetes, asthma, and heart disease, and obesity will contribute to the growing cost of health care.

**Population 62 Years of Age and Over,
2011 vs. 2009**



Phase 1: Demographics

Risky Behaviors

Data from the Illinois Behavioral Risk Factor Surveillance System (BRFSS) suggests 18.2% of Knox County residents and 20.9% of Warren County residents identify as smokers, compared to 18.8% of residents across the State of Illinois.

20.1% of Knox County respondents and 17.1% of Warren County respondents engage in binge drinking versus 17.5% of respondents across the State of Illinois. Both figures exceed the US national 90th percentile benchmark of 8%.

In Knox County, the past 30-day use is higher for tobacco and marijuana use for 12th graders when compared to State of Illinois averages. In Warren County, the past 30-day use is higher for tobacco use for 8th graders when compared to State of Illinois averages.

Birth rates to teenage mothers in Knox County exceed the State of Illinois average in 2009.

Mental Health

There was a significant increase for both Knox County residents and Warren County residents reporting they felt mentally unhealthy on 8 or more days per month between 2006 (Knox: 13.7%; Warren: 10.8%) and 2009 (Knox: 19.1%; Warren: 14.1%). For comparison, there was an only a modest increase Illinois residents reporting they felt mentally unhealthy on 8 or more days per month between 2006 (12.4%) and 2009 (13.8%).

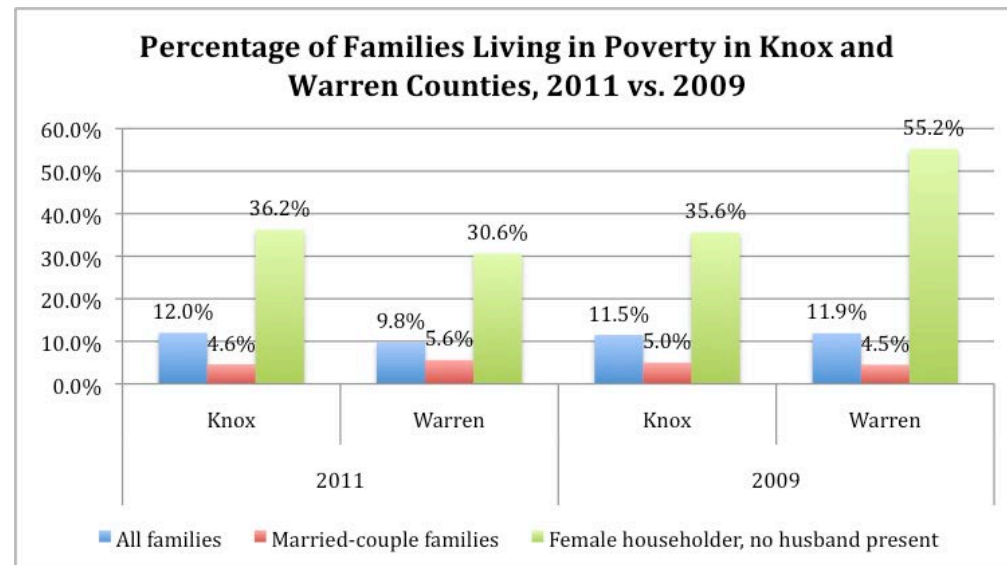
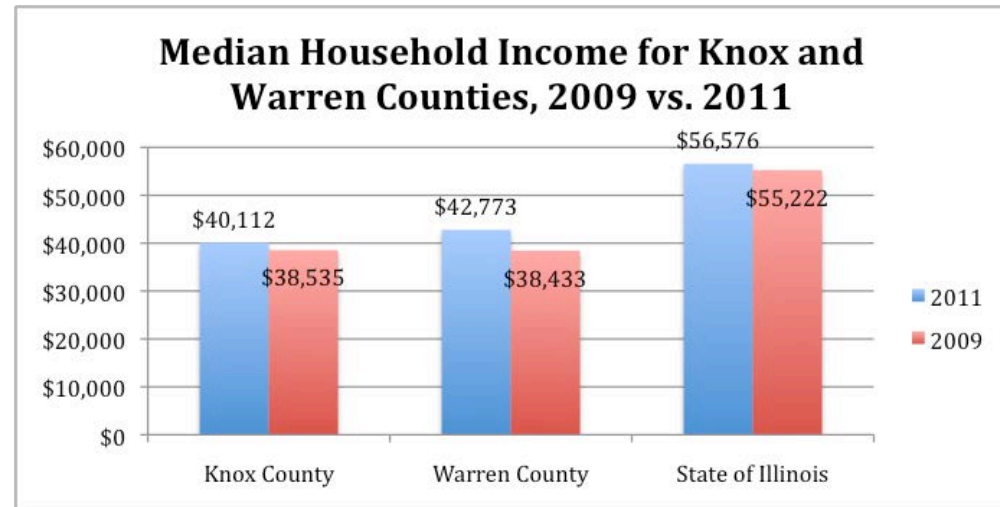
Phase 1: Demographics

Poverty

Poverty has a significant impact on the development of children and youth. Knox and Warren Counties have seen an increase in families living in poverty between 2009 and 2011. Data from 2011 indicate poverty rates have increased for three categories of families: all families (Knox), married-couple families (Warren), and families led by single-mothers with no husband present (Knox).

However, the percentage of families led by single-mothers with no husband present is significantly higher than the State of Illinois average (28.5%) for both Knox and Warren Counties.

In 2011, the median household income for both Knox and Warren Counties was significantly less than the State of Illinois average.

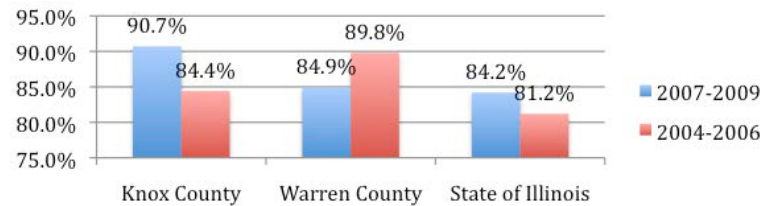


Phase 1: Access to Health Services

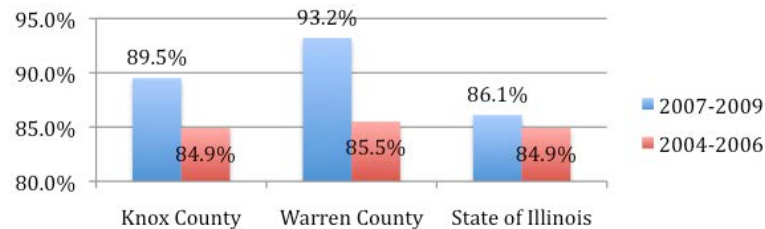
Accessibility to Health Care

The lack of insurance coverage is more prevalent among socioeconomically disadvantaged groups that are often at high risk for disease and illness. Thus, a vicious cycle results where individuals who are at the highest risk for diseases are unable to receive screenings, thus perpetuating a cycle of disease. This is compounded by unhealthy lifestyles.

Percentage of Knox and Warren Counties Region Respondents with a Usual Health Care Provider, 2004-2006 vs. 2007-2009



Percentage of Knox and Warren Counties Region Respondents with Health Care Coverage, 2004-2006 vs. 2007-2009



Dental Care: 25.0% of Knox County residents and 24.2% of Warren County residents did not see a dentist in the last year compared to 19.8% of residents across the State of Illinois did not visit a dentist in the last year.

Research suggests that private health insurance companies cover nearly 1/3 of national health expenditures.

Medicare covered approximately 20.2% of national health expenditures in 2010, up nearly 4% since 2000. According to the Illinois BRFSS, approximately a quarter of Knox and Warren Counties residents rely on Medicare coverage as their primary insurance coverage. Recent data suggest about 90% of Knox and Warren Counties residents possess medical health care coverage, exceeding the 86% response rate for the State of Illinois.

Phase 1: Predictors of Morbidity and Mortality

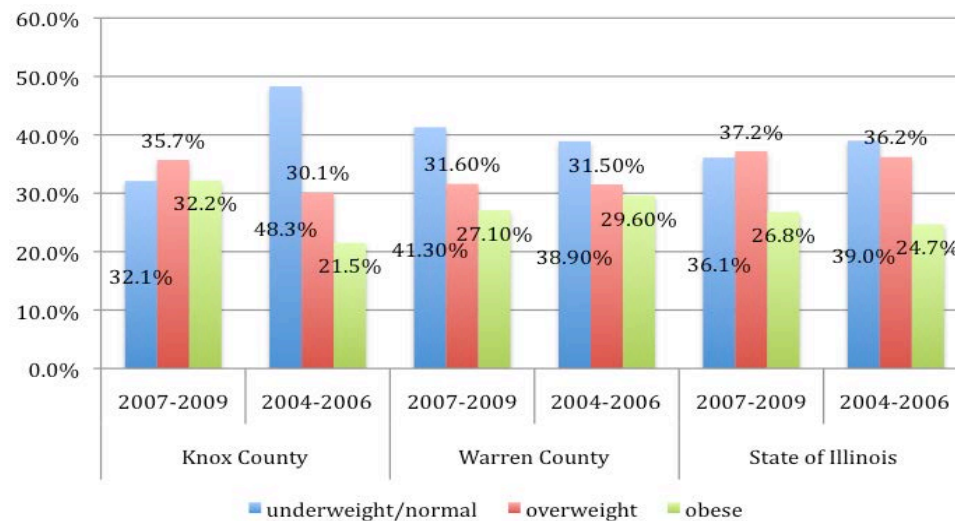
Predictors of Morbidity and Mortality

Research concludes that predictors such as obesity, drug abuse, alcohol abuse and unhealthy habits such as poor diet and lack of exercise dramatically impact incidence of both morbidity and mortality

Obesity - Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Knox and Warren Counties. In terms of individuals who are obese, rates in both Knox and Warren Counties are higher than the state average. Considering Illinois has the 6th highest obesity rate in the United States, this is an important issue. Accordingly, the U.S. Surgeon General characterized obesity as "the fastest-growing, most threatening disease in America today."

Data from 2010 indicate 64% of Illinois adults are obese or overweight, with a disproportionate number of obese or overweight individuals living in rural areas.

Percentage of People Diagnosed with Overweight or Obesity in Knox and Warren Counties and Illinois



Within Knox and Warren Counties, leading indicators suggest obesity is a growing concern.

With regard to nutrition, evidence suggests residents in Knox and Warren Counties are not eating enough fruits and vegetables. Between 2007 and 2009, 82% Knox County residents and 85% of Warren County residents consumed less than 5 servings of fruits or vegetables per day.

Approximately 26% Knox and Warren Counties residents report that they did not participate in any leisure-time physical activities or exercises during the past month.

Phase 1: Predictors of Morbidity and Mortality

Consequences of Obesity for Children...

According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems with 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 studies suggest that overweight students miss one day of school per month on average and school absenteeism of obese children is six times higher than that of non-obese children.

...and Adults

With adults, obesity has far-reaching consequences. 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. The financial costs of obesity are staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion.

Phase 1: Morbidity and Mortality Issues

Morbidity and Mortality Issues

Several different disease categories have been identified as very important to the community

Heart disease, the leading cause of death in both Knox and Warren Counties, is impacted by the following related cardiovascular conditions:

Hypertension – High blood pressure, which is also known as hypertension, is dangerous because it forces the heart to work extra hard to pump blood out to the rest of the body and contributes to the development of the hardening of arteries and heart failure. Data from the Illinois BRFSS suggest an increase in the percentage of Knox County residents having high cholesterol between 2006 (23.4%) and 2009 (34.8%) and data from Galesburg area hospitals report the number of cases of inpatient hypertension complication has increased 23% between 2009 (22 cases) and 2012 (27 cases).

Myocardial infarction – Cases of myocardial infarction at Galesburg area hospitals have increased by 9.9% between 2009 and 2012 and peaking in 2010 with 114 reported cases. The number of cases of inpatient myocardial infarction for individuals 45 to 64 years of age has increased 142% between 2009 (7 cases) and 2012 (17 cases).

Dysrhythmia and cardiac arrest – Cases of dysrhythmia and cardiac arrest at Galesburg area hospitals have increased by 2% between 2009 and 2012. The number of cases of inpatient dysrhythmia and cardiac arrest increased 33% between 2009 (39 cases) and 2012 (52 cases) for individuals 45 to 64 years of age.

Cardiovascular Disease – The number of cases of inpatient dysrhythmia and cardiac arrest at Galesburg area hospitals from Warren and Knox Counties increased 33% between 2009 (39 cases) and 2012 (52 cases) for individuals 45 to 64 years of age.

Cases of stroke – Cases of stroke at Galesburg area hospitals have decreased by 20% between 2009 (181 cases) and 2012 (145 cases) for inpatient admissions.

Phase 1: Morbidity and Mortality Issues

Other prevalent issues in Knox and Warren Counties include:

Asthma – There was a 31% increase in the relative percentage of Knox County residents reporting they had asthma between 2006 (10.4%) and 2009 (13.6%). Similarly, there was a 6% growth in the percentage of Warren County residents reporting they had asthma between 2006 (12.4%) and 2009 (13.1%). For comparison, there was only a 2% increase in the relative percentage of Illinois residents reporting they had asthma between 2006 (13.0%) and 2009 (13.3%). Rates in Knox County now exceed the State of Illinois average.

Diabetes - 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).

Data from the Illinois BRFSS indicate that 10.6% of Knox County Region residents have diabetes. Compared to data from 2006, the prevalence of diabetes has increased in Knox County and now exceeds the State of Illinois average.

Cancer – Cancer is the second leading cause of death Knox and Warren Counties.

Two types of cancer are becoming more prevalent in Knox and Warren Counties: breast and colorectal. Between 2009 and 2012, there were 36 reported cases of inpatient breast cancer at Galesburg area hospitals. Inpatient cases of breast cancer peaked in 2009 and 2011 with 11 cases.

With regard to colorectal cancer, between 2009 and 2012, inpatient cases of colorectal cancer for individuals age 65 and older increased 40% with 21 reported cases in 2012.

Overall, *the leading causes of death* in Knox and Warren Counties include diseases of the heart, malignant neoplasm, chronic lower respiratory disease, cerebrovascular disease, accidents, and diabetes mellitus.

Phase 2: Survey Results

Misperceptions of Community Health Issues

Inconsistencies exist
between people's
perception of health
issues and actual
data

Heart Disease – Residents in Knox and Warren Counties rate heart disease relatively low compared to actual causes of mortality. While heart disease is the most common cause of mortality in both Knox and Warren Counties, often times, it did not make the top-five perceived health issues for survey respondents.

Diabetes – Residents of Knox and Warren Counties also rate diabetes relatively low, even though rates diabetes growth rates in Knox County are higher than growth rates across the State of Illinois and mortality data indicates diabetes is the 5th leading cause of death in Warren County.

Sexual Health – Residents of Knox and Warren Counties rate teenage pregnancy relatively low despite data indicating the teen pregnancy rate in Knox County (11.6%) exceeded the State of Illinois rate (9.6%) in 2009.

Dental – Residents of Knox and Warren Counties also rate dental relatively low despite data from the Illinois BRFSS suggesting nearly 25% of residents have not seen a dentist in two or more years.

Phase 2: Survey Results

Perceptions of the Importance of Access to Health Services

Access to health services was the second most important determinant to quality of life (after availability of jobs). *Access to health services* was particularly important among older individuals residing in Knox and Warren Counties.

Physical Exercise – Younger people and non-white people are more likely to engage in physical exercise. Although only 7% of the population engages in exercise at least 5 times a week.

Healthy Eating – Only 3% of the population exceeds the minimum recommended servings of fruits/vegetables in a day. Those that are more likely to have healthy eating habits include women, people with higher educations and more income.

Decrease Smoking – Smoking is on the decline, however, less educated people, men, younger people, lower income respondents and homeless people are still more likely to smoke. Latino/a residents are less likely to smoke.

Self-Perceptions of Health – In terms of self-perceptions of physical and mental health, over 90% of the population indicated that they were in average or good physical health. Similar results were found for residents' self-perceptions of mental health.

Healthy Behaviors

Several issues relating to healthy behaviors were identified

Phase 2: Survey Results

Access to Medical Services

Several issues relating to health service access in Knox and Warren Counties were identified

Choice of Medical Care – Results from survey respondents living in poverty indicated that access to healthcare is limited. This includes medical, dental and mental healthcare. Poverty is a key factor, as 13% of people living in poverty in Knox and Warren Counties consider the Emergency Department their primary source of health care.

Access to Medical Care and Prescription Medications – Approximately 23% of the population living in deep poverty indicated there was a time in the last year when they were not able to get medical care when needed. The leading causes were lack of insurance and inability to afford a copayment or deductible. Similar results were found for access to prescription medication.

Access to Dental Care – While significant research exists linking dental care to numerous diseases, including heart disease, 35% of individuals living in poverty in Knox and Warren Counties needed dental care, but were unable to have access.

Access to Counseling – Approximately 15% of people living in deep poverty indicated they were not able to get counseling when they needed it over the last 12 months. While affordability and insurance were the leading reasons, fear and embarrassment were also significant.

Access to Information – Across categories, residents of Knox and Warren Counties get most of their medical information from doctors and the next most prevalent is the Internet.

Type of Insurance – Across both counties, the most prevalent type of insurance is private or commercial; however, those living in Warren County are disproportionately more reliant on Medicaid. Also for those living in poverty, 26% do not have any type of insurance at all.

Phase 3: Prioritization of Community Health-Related Issues

Specific criteria used to identify these issues included:

- (1) magnitude to the community;
- (2) strategic importance to the community;
- (3) existing community resources;
- (4) potential for impact; and
- (5) trends and future forecasts

The collaborative team identified the seven most critical health-related issues in Knox and Warren Counties as:

Dental

Twenty-five percent of Knox County residents and 24.2% of Warren County residents reported their last dental visit was more than 2 years ago or never between for the time period 2007-2009. For comparison, the percentage of Illinois residents reporting their last dental visit was more than 2 years ago or never was 19.8% for the same time period.

Risky Behaviors - Substance Abuse

Youth substance usage in Knox County exceeds the State of Illinois averages for 12th graders (tobacco and marijuana usage). Youth substance usage in Warren County exceeds the State of Illinois averages for 8th graders (tobacco). Moreover, there was a 33% increase in the relative percentage of Knox County residents reporting they were at risk for binge drinking between 2006 (15.1%) and 2009 (20.1%). For comparison, there was a 10% decrease in the relative percentage of Illinois residents reporting they were at risk for binge drinking between 2006 (19.4%) and 2009 (17.5%). Rates in Knox County now exceed the State average.

Healthy Behaviors

Results from survey respondents indicated that there are limited efforts at proactively managing one's own health. This includes limited exercise, as 78% of Knox and Warren Counties residents indicated they exercised 2 or fewer times per week. With regard to eating habits, 76% of survey respondents consume less than 2 servings of fruits/vegetables per day. With regard to smoking, 31% of Knox and Warren Counties residents living in poverty smoke 5 or more cigarettes per day. However, note that 87% of respondents believe they are average or above average in terms of physical health and 92% of respondents believe they are average or above average in terms of mental health.

Phase 3: Prioritization of Community Health-Related Issues

Mental Health

There was a 39% increase in the relative percentage of Knox County residents and a 31% increase in relative percentage of Warren County residents reporting they felt mentally unhealthy on 8 or more days per month between 2006 (Knox: 13.7%; Warren: 10.8%) and 2009 (Knox: 19.1%; Warren: 14.1%). For comparison, there was an only an 11% increase in the relative percentage of Illinois residents reporting they felt mentally unhealthy on 8 or more days per month between 2006 (12.4%) and 2009 (13.8%). Furthermore, rates in Knox County (19.1%) and Warren County (14.1%) exceed the State average (13.8%).

Obesity

Research strongly suggests that obesity is a significant problem facing youth and adults nationally, as it has been linked to numerous morbidities (e.g., Type II diabetes, hypertension, cardiovascular disease, cancer, etc.). There was a 50% increase in the relative percentage of Knox County residents reporting they were obese between 2006 (21.5%) and 2009 (32.2%). For comparison, there was a 9% increase in the relative percentage of Illinois residents reporting they were obese between 2006 (24.7%) and 2009 (26.8%). Rates in Knox County now exceed the State of Illinois average. This is a significant concern given that the State of Illinois has the 6th worst incidence of obesity in the U.S.

Access to Health Services

Results from survey respondents living in poverty indicated that access to healthcare is limited. This includes medical, dental and mental healthcare. Poverty is a key factor, as 13% of people living in poverty in Knox and Warren Counties consider the Emergency Department their primary source of health care. Furthermore, 23% of people in poverty were unable to obtain medical care when they needed it. Results also suggest a strong correlation between ethnicity and socioeconomic status and one's ability to obtain medical care. Survey data suggest individuals who identify as Black, possessing less education, and of lower income are more likely to use the emergency department. Furthermore, residents residing in Knox County are more likely to use the emergency department. With regard to prescription drugs, 28% of individuals living in poverty in Knox and Warren Counties were unable to fill a prescription because they lacked health care coverage. With regard to dental care, 35% of individuals living in poverty in Knox and Warren Counties needed dental care and were unable to obtain it and 15% of individuals living in poverty in Knox and Warren Counties needed counseling and were unable to obtain it. "Affordability" was cited as the leading impediment to various types of health care.

Diabetes

There was a 33% increase in the relative percentage of Knox County residents reporting they were informed they had Type II diabetes between 2006 (8.0%) and 2009 (10.6%). For comparison, the percentage of Illinois residents reporting they were informed they had diabetes remained steady between 2006 (8.2%) and 2009 (8.2%). Rates in Knox County now exceed the State of Illinois average.

Collaborative Team and Facilitators

Collaborative Team

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