Franciscan ST. ELIZABETH HEALTH Lafayette East

Franciscan ST. ELIZABETH HEALTH Lafayette Central





Community Health Needs Assessment— Lafayette Central and East

Franciscan St. Elizabeth Health-Lafayette Central and East

Fall 2015/Spring 2016

Community Health Needs Assessment

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Executive Summary

The Community Health Needs Assessment (CHNA) is designed to provide an understanding of the current health status and needs of the residents in the communities served by Franciscan St. Elizabeth Health-Lafayette East and Central (FSEH). This report meets the current Internal Revenue Service's requirement for tax-exempt hospitals, which is based on the Patient Protection and Affordable Care Act of 2010. More importantly, this document assists FSEH in providing essential services to those most in need. Based on the findings in this report, FSEH will develop a three year strategic plan on meeting community health needs as capacity and resources allow.

This report focuses on Tippecanoe County, the location of most of FSEH patient residences. Because Indiana is a home rule state, data by zip code is limited.

Tippecanoe County faces several challenges due to its socioeconomic factors, built environment, industry types, and geographical location. Using mixed methods to evaluate the primary and secondary data, the following health-related issues are top concerns:

1. Physical Activity and Nutrition: Obesity, diabetes management, arthritis, and cardiovascular conditions all score highly in incident rates and perception of need. A common theme amongst all of these clinical issues is the lack of physical activity and proper nutrition. Concerns about public safety, lack of built environment, and access to healthy food also contribute to this issue.
2. Behavioral Health: Suicide rates are higher than the state average. National data indicates of the reported completed suicides, many more are unreported due to the listed cause of death. Substance abuse rates are also quite high, especially with alcohol and opiates. Stress, depression, and poor mental health rates also contribute to poor chronic disease management, obesity, and self-satisfaction.
3. Access to Health Care: Cost of co-pays, deductibles, medications, and durable medical equipment are reported most frequently as barriers to clinical care. While the county is not a federally designated health professions shortage area, there is a shortage of providers, or long waits to see a primary care provider.
4. Tobacco: As is true in most Indiana counties, tobacco continues to be an issue and may contribute to other conditions, including lung cancer and asthma.

Census Data: Social Determinants of Health

Tippecanoe County vs. Indiana: Social Determinants of Health		
Characteristic	**Tippecanoe County**	**Indiana**
Veteran Population	8,783	441,925
Race/Ethnicity: Caucasian Origin	85.40%	86.10%
Median Age	28.00	37.50
High School Graduation Rates	83.00%	86.00%
Employment: Healthcare, Social Services	10.90%	23.20%
Employment: Construction or Manufacturing	17.60%	24.20%
Unemployment	6.50%	6.20%
Children Not Insured	5.40%	8.50%
Adults Not Insured	14.00%	16.10%
Poverty	22.10%	15.40%

Franciscan St. Elizabeth Health- Lafayette

Franciscan St. Elizabeth Health - Lafayette East facility blends the best attributes of our original facilities but stands as a unique, state-of-the-art hospital designed for the future, equipped to deliver clinical excellence and focused on compassionate patient-focused care. Opened in February 2010, this location is our primary facility for surgery, cardiac and women's services.

Franciscan St. Elizabeth Health - Lafayette Central provides services for long-term care patients. Additionally, the facility currently houses inpatient rehabilitation center, inpatient psychiatric services, outpatient lab, wound care, Franciscan ExpressCare, Home Healthcare, Hospice, Kathryn Weil Center for Education, Healthy Living Center, and outpatient therapy. More support staff/offices are also located at the central campus.

FSEH-Lafayette is a member of the Mishawaka, Ind.-based Franciscan Alliance, one of the largest Catholic health care systems in the Midwest with 14 growing hospitals, approximately 20,000 employees and a number of nationally recognized Centers of Health Care Excellence is one of a 14-member hospital system, the Franciscan Alliance.

FSEH-Lafayette East is located in Tippecanoe County, 1701 South Creasy Lane, Lafayette, IN 47905. FSEH-Lafayette Central is located in Tippecanoe County, 1501 Hartford Street, Lafayette, IN 47904. The president of the hospitals is Terry Wilson.

The FSEH-Lafayette statistics include:

FSEH Services	Central East
Average Annual Inpatient Admissions	10,792
Annual Outpatient Visits	358,152
Annual Emergency Department Visits	52,038
Annual Surgical Procedures	12,056
Births	2,125
Employees	1,567
Volunteers	176
Total Physicians (includes Franciscan Physician Network and affiliated doctors)	58
Average length of patient stay	4.0 days

FSEH- Services Include:

Anticoagulation Clinics	Home Health Care	Neurodiagnostics	Pulmonary Medicine
Behavioral Health	Home Health Pharmacy	Neurosurgery	Registered Dietitians
Cardiac Rehabilitation	Hospice	Nuclear Medicine	Rehabilitation Services
Cancer Care	Hospitalists	Observation Center	Sleep Disorders
Diabetes Care	Imaging	Occupational Health	Stroke Care
Dietitians	Intensive Care Unit	Orthopedics	Surgical Services
Franciscan Express Care	Joint & Spine Care	Outpatient Services	Therapy Services
Healthy Living Center	Laboratory Services	Palliative Services	Women's Health/OBGYN
Heart & Vascular	Mammography	Pediatrics	Wound Care

The FSEH-Lafayette mission is To Continue Christ's Ministry in our Franciscan Tradition. Values include:

Respect for Life
The gift of life is so valued that each person is cared for with such joy, respect, dignity, fairness and compassion that he or she is consciously aware of being loved.

Fidelity to Our Mission
Loyalty to and pride in the health care facility are exemplified by members of the health care family through their joy and respect in empathetically ministering to patients, visitors and co-workers.

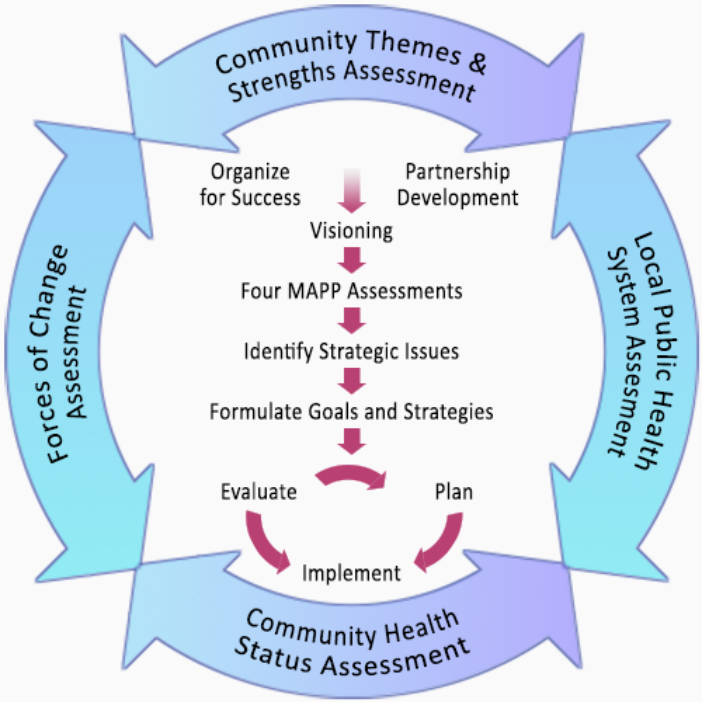
Compassionate Concern
In openness and concern for the welfare of the patients, especially the aged, the poor and the disabled, the staff works with select associations and organizations to provide a continuum of care commensurate with the individual's needs.

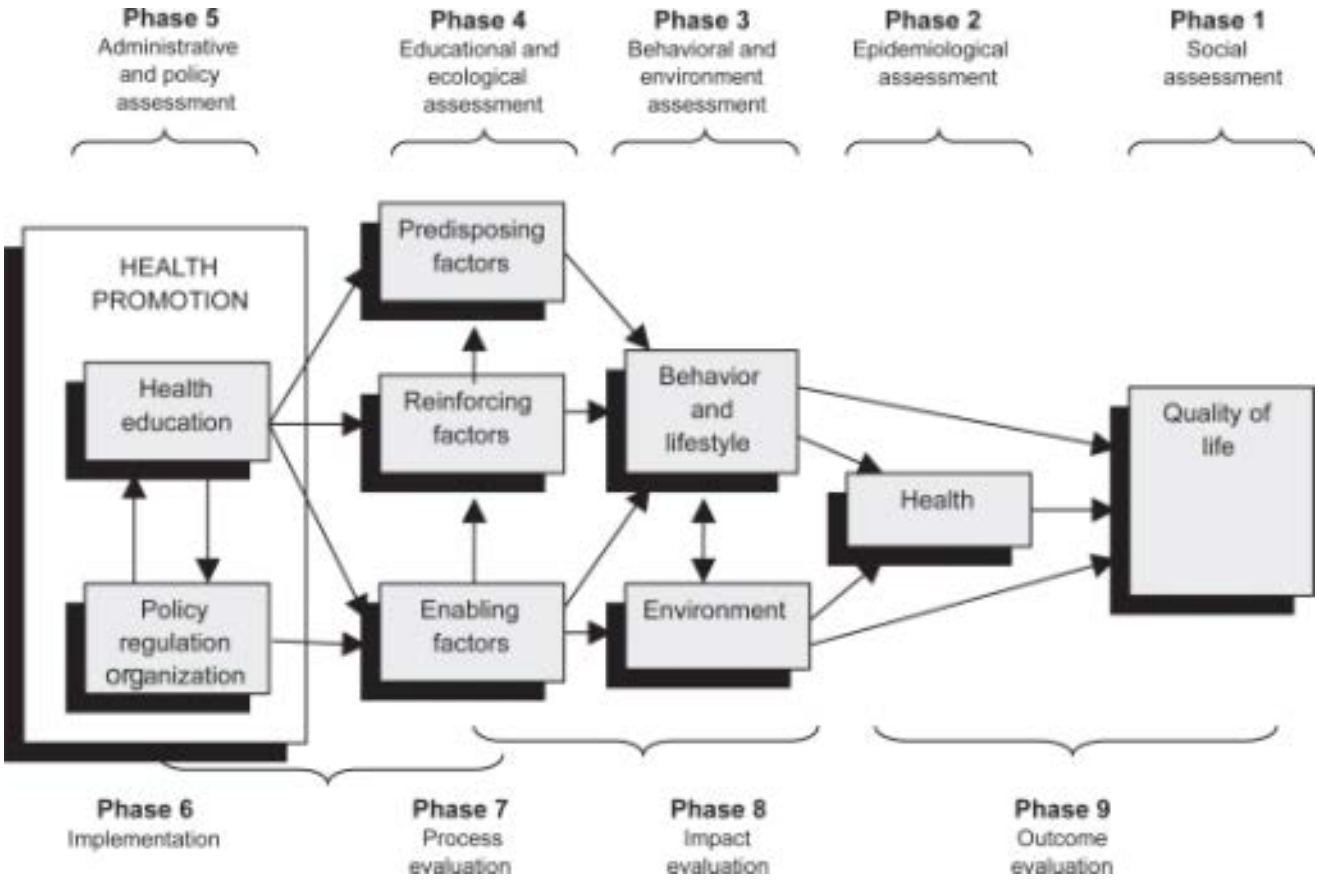
Joyful Service
The witness of Franciscan presence throughout the institution encompasses, but is not limited to, joyful availability, compassionate, respectful care and dynamic stewardship in the service of the Church.

Christian Stewardship
Christian stewardship is evidenced by just and fair allocation of human, spiritual, physical and financial resources in a manner respectful of the individual, responsive to the needs of society, and consistent with Church teachings.

Approach and Methodology

FSEH-Lafayette partnered with Tippecanoe County Health Department, Riggs Community Health Center, Unity Healthcare, and United Way of Health Lafayette to complete this assessment. The partnership allowed for better data collection, reduced burden on residents to complete surveys, and a platform to combine efforts on various community health needs.





The Mobilizing for Action through Planning and Partnership (MAPP) model, developed by the National Association of County and City Health Officials (NACCHO), guided the assessment process, as the county health department is working on accreditation through the Public Health Accreditation Board (PHAB). The MAPP model includes several components for community assessment. In addition to MAPP,, the PRECEDE-PROCEDE method was utilized. This assessment reflects Phases 1 through 5.

Community benefit professionals from each system worked together on data collected in three ways:

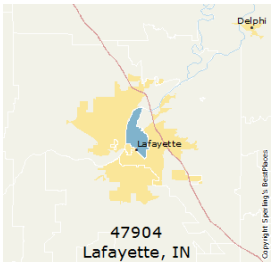
1. Community Health Survey: Questions based on perception of community and personal needs was created. The survey was distributed electronically and on paper. The survey consisted of questions based on the community needs and personal needs. These included, senior services, youth services, health services, wellness services, etc. In most counties, the sample size met this goal; however, particular emphasis on vulnerable populations means the survey results are not a true representation of the entire county population; but skewed to represent the most in need.

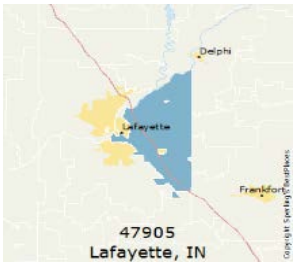
2. Secondary Data Collection: With the assistance of public health undergraduate and graduate students, data on health and wellness issues was collected. Sources include County Health Rankings, Census Bureau Data, various reports from the Indiana State Department of Health, and other national reports. Indiana Indicators, Community Commons, and Healthy Communities Institute data management systems also contributed to the secondary data used. Sources of the secondary data are identified throughout this report.

Communities We Serve

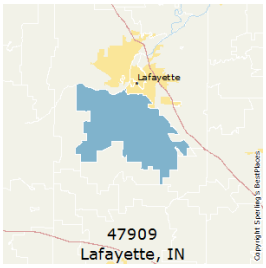
FSEH serves Tippecanoe County primary with a majority of patients from these zipcodes: 47904, 47905, 47906, and 47909.

A review of patient zip codes was also completed. The map below show the four zip codes in which the majority of each location's patients reside by type of service.









Special Populations

Our primary populations served include, White, African American, and Hispanic. As seen below, the students eligible for the free lunch program is very high. This correlates to the children living below the poverty level.

Characteristics- Special Populations	Tippecanoe County	Indiana
Single Parent Households	33.80%	25.70%
Median Household Income	44,474	48,248
Households with Cash Public Assistance Income	1.60%	1.30%
Renters Spending 30% or More of Household Income on Rent	59.90%	23.70%
Children Living Below Poverty Level	21.70%	17.40%
Young Children Living Below Poverty Level	30.80%	26.0%
Families Living Below Poverty Level	11.50%	XX
Students Eligible for the Free Lunch Program	39.60%	34.80%

Key Leader Survey

A short survey was given to key community members who were asked to rank the top issues from their professional experience. The community members represented the local government of West Lafayette and Lafayette, Purdue University employees, local school administrator, Health Officer, Health Board, Health insurance provider, private and nonprofit organizations and social agencies.

Findings

1. Substance Abuse
2. Food Insecurity
3. Mental Health and Homelessness
4. Domestic Violence
5. Public Safety

Food insecurity continues to be a problem for adults and children in the county. Substance abuse, mental health and domestic violence all go together and the members agreed that funding should be spent on these areas.

Social Determinants of Health

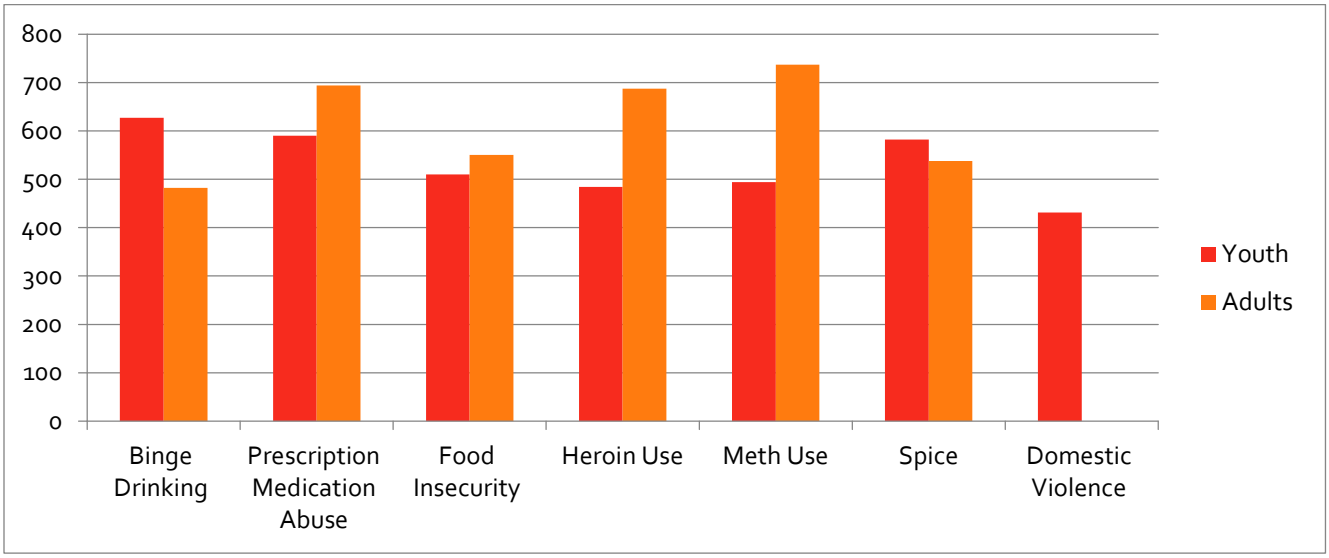
Characteristic	Tippecanoe County Total	Indiana Total	Percentage
Population	183,074	6,080,485	
Median Household Income	$44,474	48,248	
Veteran Population	8,783	455,105	9.30%
Race/Ethnicity: Caucasian Origin	156,386	5,320,022	98.60%
Homeowners: Occupied Units	35,944	1,736,481	
High School Graduation Rates			86.00%
Employment: Healthcare and Social Services	11,603	688,595	23.20%
Employment: Construction or Manufacturing	18,726	715,913	24.20%
Unemployment			6.20%
Children Not Insured	5.40%	13,593	8.50%
Adults Not Insured	14.00%	450,951	16.10%
Poverty			15.40%

Poverty can be displayed through the amount of students receiving free or reduced lunch within the school system. In Tippecanoe County, 39.60 % are eligible for free lunch. (Census, 2015). In Tippecanoe County, 22.10% of people live in poverty. (Census, 2015). The top five industries that employ residents are within these sectors (Census, 2015):

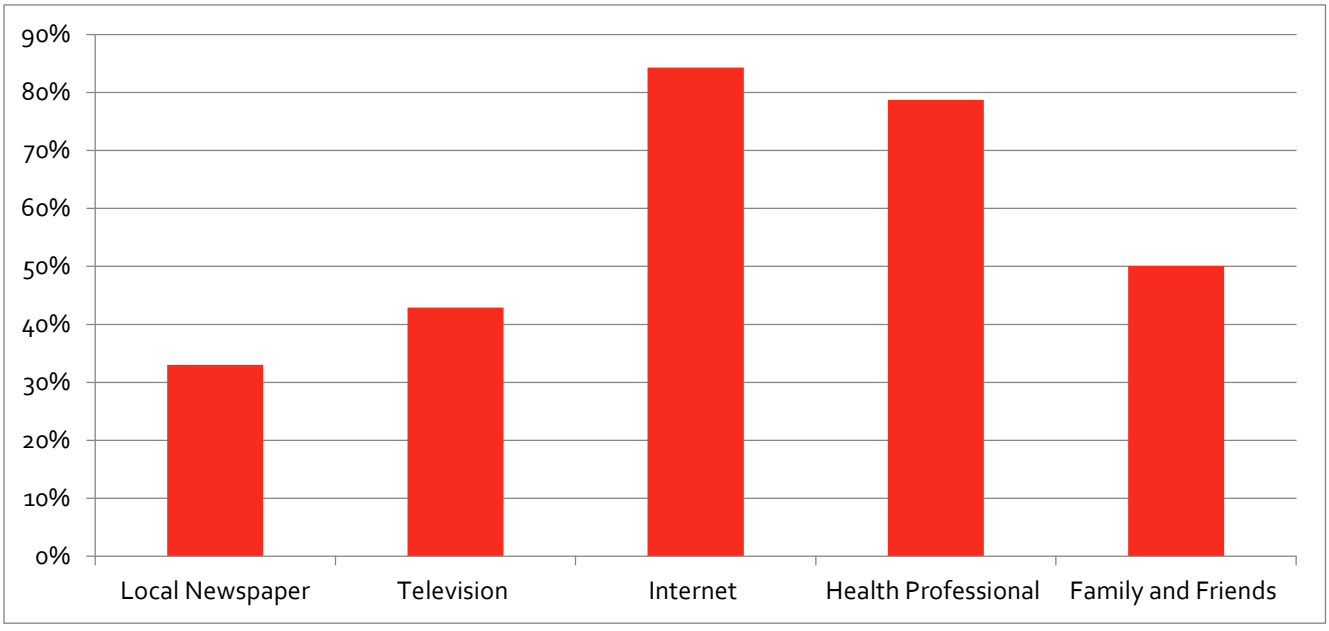
1. Manufacturing: 13.70% of the total working population
2. Healthcare and Social Services: 10.90% of the total working population
3. Retail Trade: 10.20% of the total working population
4. Accommodation and Food Services: 7.90% of the total working population
5. Professional and Technical Services: 4.40% of the total population

General Health

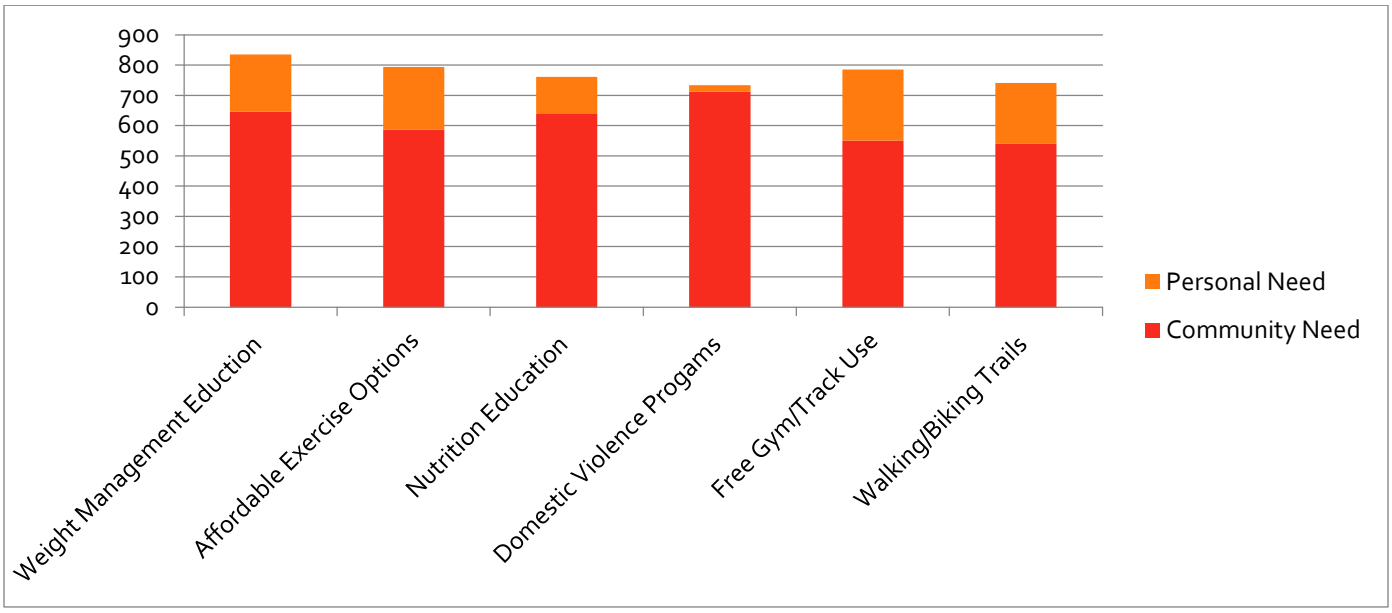
The survey asked the respondents: "Are any of these community problems?"



The survey asked the respondents: "What do you use to find information about health issues?"



The survey asked respondents about health and wellness services.



Overall Physical Health

Physical health is based on physical activity, air and water quality, and access to recreational parks and centers. In Tippecanoe County, 25.3% of adults are physically inactive; 15.7% of adults report having a fair or poor health status. The average number of physically unhealthy days is 3.2 days during the last 30 days (INdicators, 2013). Other indicators include:

Air and Water Quality Linked to Health Disparities: Tippecanoe County, Indiana	
Recognized Carcinogens Released into the Air	265,200 lbs.
Air Quality Index	2
Drinking Water Violations	0.3
Physical Environment Ranking	50
Age-Adjusted ER Rate due to Urinary Tract Infection	87.6 per 10,000
Age-Adjusted Hospitalization Rate due to Urinary Tract Infection	16.2 per 10,000
Age-Adjusted ER Rate due to Dehydration	21.9 per 10,000
Age-Adjusted Hospitalization Rate due to Dehydration	8.7 per 10,000
Asthma: Medicare Population	6.4%
Age-Adjusted ER Rate due to Asthma	42.5 per 10,000
Age-Adjusted Hospitalization Rate due to Asthma	6.5 per 10,000
Age-Adjusted ER Rate due to Pediatric Asthma	69.1 per 10,000
Age-Adjusted Hospitalization Rate due to Pediatric Asthma	6.1 per 10,000
Age-Adjusted ER Rate due to Adult Asthma	33.3 per 10,000
Age-Adjusted Hospitalization Rate due to Adult Asthma	6.7 per 10,000
Age-Adjusted ER Rate due to COPD	36.1 per 10,000
Age-Adjusted Hospitalization Rate due to COPD	24.0 per 10,000
HCI, 2015	

Overall Mental Health

Mental health is a combination of all factors, especially social and emotional support and drug and alcohol-related behaviors. The rank is out of 92.

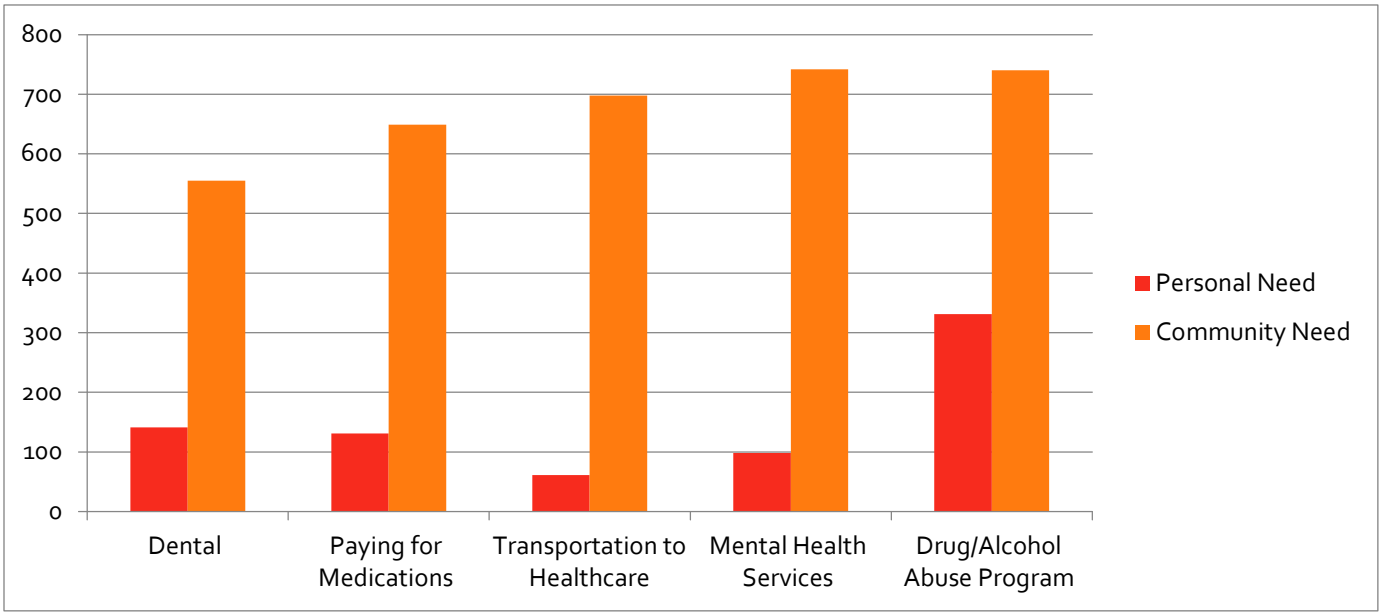
Tippecanoe County State Rankings (Out of 92 Counties)	
Characteristic	Rank
Health Outcomes	8
Health Factors	8
Clinical Care	25
Health Behaviors	3
Physical Environment	60
Socioeconomic Factors	28
Quality of Life	21

County Health Rankings 2015

A lack of social and emotional support can be the cause of several health disparities. Factors that can be attributed to this statistic are listed below:

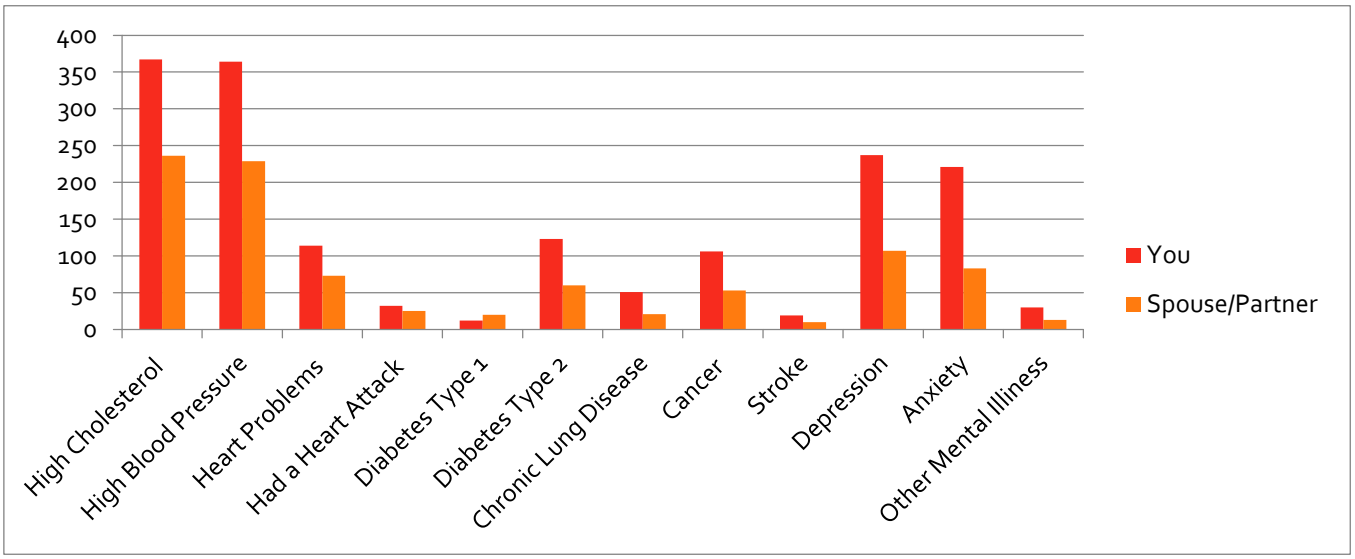
Indicator	Tippecanoe County
Binge or Heavy Drinkers	17.30%
Drug Poisoning deaths	11.2 per 100,000
ER Rate due to alcohol abuse	28.10 per 10,000
Violent Crime Rate per 100,000	274

In the survey, all respondents were asked about personal and community needs. The table shows the top five responses based off the respondents.



Chronic Disease, Mortality, Morbidity

Respondents were asked "Have you or your spouse ever been told by a doctor or health professional that you have or had any of the following?"



Leading Causes of Death

According to the Indiana State Department of Health (2012), "Chronic diseases and injuries have a considerable impact on morbidity (health) and mortality (death) in Indiana and across the country. In 2010, almost 50% of Indiana adults reported having a history of heart disease, stroke, cancer, chronic lower respiratory disease (like asthma), diabetes, or arthritis."

According to the CDC (2014), Tippecanoe County was ranked in ten of the top fifteen leading causes of death in the United States last year. In order, here are the causes and rates per 100,000:

- Heart Disease: 164.3
- Cancer: 161.5
- Stroke: 29.2
- Unintentional Poisoning: 13.8
- Diabetes: 12.5
- Suicide: 15.9
- Alzheimer's Disease: 36.0
- Kidney Disease: 19.8
- Lung Cancer: 41.8
- Homicide: 1.9

Accidents, Injuries, and Homicide

Unintentional injury and accidents continue to rank in the top ten (sometimes top five) leading causes of injury or death, statewide and locally. County and state data are compared below:

Tippecanoe County vs. Indiana		
Description	Tippecanoe County Data	Indiana Data
Unintentional Injury Mortality Rate	40.3 per 100,000	44.1 per 100,000
Traffic Injury Mortality Rate	9.6 per 100,000	800 total deaths
Injury Emergency Department Visits	516.1 per 10,000	More than 600,000
Injury Hospitalizations	64.6 per 10,000	More than 300,000
Homicide in 2013	1.9 per 100, 000	6.1 per 100,000

Indicators, 2013

Cancer

Cancer greatly affects these county mortality rates as well. The cancer mortality rate in Tippecanoe County is 161.5 per 100,000, which is below the state average of 178.7. The top four causes of cancer mortality are listed below and the rate are per 100,000 (INdicators, 2015):

- Lung Cancer: 41.8
- Female Breast Cancer: 10.6
- Colorectal Cancer: 14.5
- Prostate Cancer: 3.1

According to the Indiana State Department of Health (2012), the top three cancers that affect the state of Indiana are lung cancer, breast cancer, and prostate cancer. The INdicators projected the estimated number of new cases and deaths for selected cancers in each Indiana County. Tippecanoe County's projections were:

	Estimated Number of New Cases and Deaths for Selected Cancers: Indiana 2014									
	All Cancer Sites		Female Breast		Colorectal		Lung/Bronchus		Prostate	
	New	Mortality	New	Mortality	New	Mortality	New	Mortality	New	Mortality
Indiana	35620	13420	4600	870	2890	1080	5510	4060	4040	540
Tippecanoe	477.7	161.5	125.3	10.6	42.9	14.5	68.5	41.8	113.2	3.1
INdicators, 2015										

Smoking can be attributed to several health disparities, including cancer. Adult smoking is defined as the percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime (County Health Rankings, 2015). In Tippecanoe County, the adult smoking rate is 17%, which is below the state percentage of 23%.

Cardiovascular

Indiana ranks 39th in the nation for the prevalence of heart attack and 38th for heart disease (Indiana State Department of Health, 2013). Last year, 257.37 deaths per 100,000 were cardiovascular related. Other statistics include age-adjusted rates in the table below:

Tippecanoe County vs. Indiana		
Description	Tippecanoe County Data	Indiana Data
Age-Adjusted Death Rate due to Stroke (per 100,000)	29.2	44.5
Age-Adjusted Death Rate due to Coronary Heart Disease (per 100,000)	164.3	190.9

Data: (INdicators, 2015)

Diabetes

Obesity is a contributing factor to diabetes; both factors relate to poverty, physical environment, and food insecurity. Approximately 8.7% of adults ages 18 and older have been medically diagnosed with diabetes. The diabetes mortality rate for Tippecanoe County is 12.5 per 100,000 (INdicators, 2015).

Infectious Disease

Infectious disease is inevitable, but rates can be reduced through preventative care (vaccines) or lifestyle changes/choices. According to the Indiana State Department of Health, for the 2014-2015 influenza season there has been a total of 146 deaths.

Tippecanoe County has a HIV prevalence rate of 97.2 per 100,000 (County Health Rankings, 2015).

Neurological

Most neurological illness occurrence is not reported by county, but Alzheimer's disease mortality rates are reported. The Alzheimer's disease mortality rate for Tippecanoe County is 36.0 per 100,000 (INdicators, 2015).

Respiratory

Respiratory issues continue to fill the Emergency Department and hospital rooms (INdicators, 2015):

- Asthma ED Visits: 42.6 per 10,000
- Child Asthma ED Visits: 63.0 per 10,000
- Asthma Hospitalization: 7.4 per 10,000
- Child Asthma Hospitalization: 3.1 per 10,000
- Chronic Lower Respiratory Disease Mortality: 53.6 per 100,000

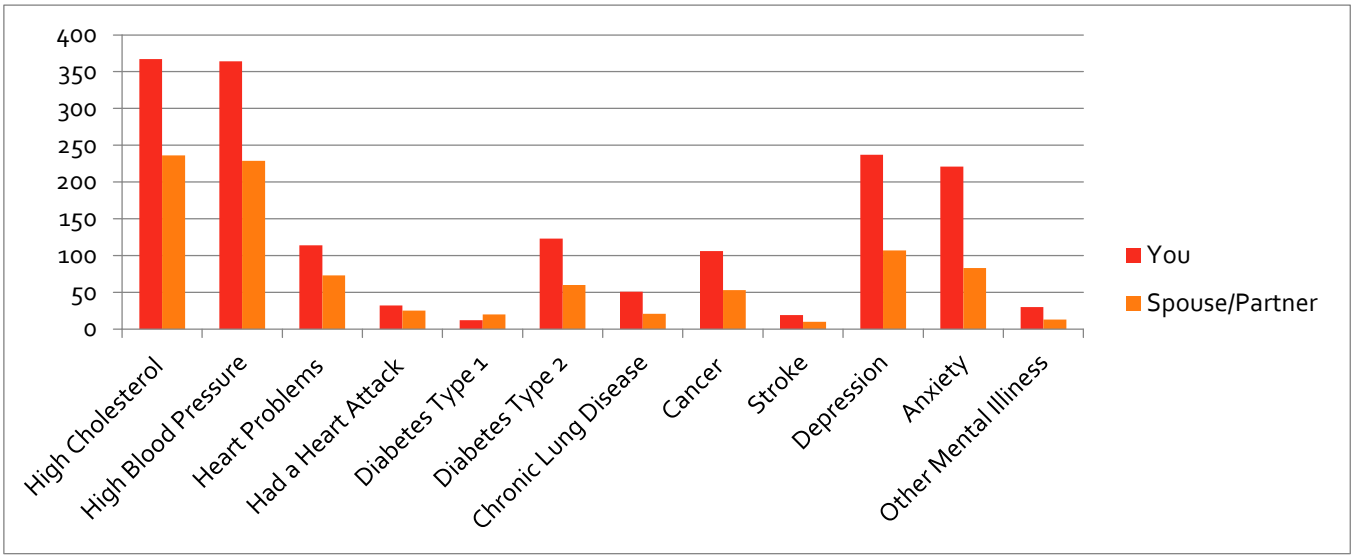
Rheumatic/Joint Related

Arthritis and hip fractures continue to fill the Emergency Department and hospital rooms:

Occurrence	Tippecanoe County	Indiana
Hip Fracture Hospitalization (65+)	63.4 per 10,000	60.80 per 10,000
Adults 18+ Diagnosed with Arthritis	23.7%	30.10%
Arthritis Hospitalization	35.6 per 10,000	34.00 per 10,000

(INdicators, 2015)

Respondents were asked "Have you or your spouse ever been told by a doctor or health professional that you have or had any of the following?"



Behavioral Health

Substance Abuse

Substance abuse is an issue statewide and locally; task forces have been tackling the ever-growing issue. In 2015, the Lafayette Police Department reported 553 drug arrests. Between January and November of 2015, there were a total of 110 heroin cases.

Suicide

Suicide is one of the most preventable causes of death, but it still has a major impact in the state of Indiana The suicide mortality rate was 15.9 per 100,000. Along with these cases, there were 691 self-inflicted injury ED visits and 517 hospitalizations due to attempted suicide. (Suicide in Indiana, 2013). Tippecanoe County is ranked 77th (out of 92 counties) for a suicide.

According to the 2011 National Youth Risk Behavior Survey, "Students in Indiana were more likely than students across the U.S. to attempt suicide during the 12 months before the survey, increasing from seven percent in 2003 to 11 percent in 2011. From 2003 to 2011, the number of Indiana students to attempt suicide one or more times during the 12 months before the survey increased from seven to 11 percent" (CDC, 2012). Indiana has the highest rate of students who have contemplated suicide, 19%, and it is has the second highest rate of high school students attempting suicide-11%. Teen suicide is the second leading cause of death in ages 15-24 (17.5%) and the fourth leading cause of death in ages 5-14 (6.1%). From 2007-2011, there were 1,722 Hoosiers ages 10-19 that were treated in an inpatient +setting for attempting suicide or self-inflicting injury (Kids Count, 2015).

Prenatal Through 18 Years of Age

Prenatal Care

Prenatal care seems to be declining, causing other issues to arise. Although 71.8% of pregnant women sought prenatal care during the first trimester in Tippecanoe County, 14.5% of women smoked throughout their pregnancy (INdicators, 2013). Healthy People 2020's objective for the state's breastfeeding rate is to be 81.9%. Tippecanoe County's breastfeeding rate is 79.7% (Indiana Breastfeeding Initiation by County, 2014).

Birth Outcomes

The state average for low birth weight is 8.3%; Tippecanoe County's low birth weight percentage is 7.0%. The county's infant mortality rate is 5.8 per 1,000 live births, and 8.1% of births are premature (INdicators, 2015).

Youth Indicators

Three of the youth indicators include child food insecurity, public school drop outs, and idle teen rate. All three of these pertain to the issues being reviewed in Tippecanoe Child food insecurity "[r]efers to the USDA's measure of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods" (Kids Count, 2015). Forty percent of the children in Indiana qualify for free lunch; 39.60% of the children in Tippecanoe County qualify for free lunch (County Health Rankings, 2013).

According to the CDC (2015), the Youth Risk Behavior Surveillance System "monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults including: behaviors that contribute to unintentional injuries and violence, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection, alcohol and other drug use, tobacco use, unhealthy dietary behaviors, and inadequate physical activity. In 2011, the YRBSS report was released, and all of these behaviors were

assessed. For example, in Indiana, 49.5% of students tried cigarette smoking, even one or two puffs. The survey revealed that 18.1% of students smoked cigarettes on one or more of the past 30 days, and 56.8% of students who reported current cigarette use have tried to quit in the past 30 days. Alcohol usage is prevalent in Indiana high schools as well. The survey showed that 21.7% of students rode one or more times in the past 30 days in a car or other vehicle by someone who had been drinking alcohol. The survey also showed that 19.8% of students had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days; 39% of students who reported current alcohol use usually got the alcohol they drank from someone who gave it to them during the past 30 days. Besides smoking and alcohol, sexual activity is another prevalent health-risk behavior. According to the survey, 51% of students have had sexual intercourse, and 38.5% of students have had sexual intercourse with one or more people during the past three months. Although the percentage is low, 17.5% of students who had intercourse during the past three months used a condom during the last intercourse and used birth control pills or Depo-Provera before the last sexual intercourse to prevent pregnancy.

HOSA, according to the Indiana HOSA website, "was created with the idea of providing students opportunities to develop as a leader and a future employee. The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill, and leadership development of all health science technology education students, therefore, helping students to meet the needs of the healthcare community" (Indiana HOSA, 2015). The website shows a map of the current chapters; Tippecanoe County does not have a local chapter.

"DCS Ombudsman responded to 660 Information and Referral inquiries, conducted 78 assists, opened 256 cases and closed 236 cases with 19 pending closure in the first quarter of 2015, provided 24 case specific recommendations, and 10 systematic recommendations" (Department of Child Services and Ombudsman Bureau 2014 Annual Report).

Child abuse and neglect cases are reported by county and labeled as sexual, physical, or neglect. The cases are then categorized as substantiated and unsubstantiated. "Substantiated means an investigation by Child Protective Services determined there is a reasonable cause to believe that the child has been abused or neglected. Unsubstantiated means an investigation determined no maltreatment occurred or there was insufficient evidence under state law or agency policy to conclude that the child was maltreated. Some states require the coworker to determine not only whether the incident of abuse or neglect occurred, but also whether the child is at risk for future maltreatment" (Child Welfare Information Gateway, 2003).

First Steps is a program in Indiana with the mission "to assure that all Indiana families with infants and toddlers experiencing developmental delays or disabilities have access to early intervention services close to home when they need them" (Family and Social Services Administration, 2015). April 1, 2014-March 31, 2015, First Steps served a total of 22,617 children. There were 189 children under three where services were no longer needed, and 395 children moved to preschool special education (Kids Count, 2015).

Another program available for at-risk children is Head Start. Head Start's mission is to "provide health, education, and promote self-sufficiency for children and families facing adversity" (Head Start, 2015). In Tippecanoe County, there are 360 Head Start enrollment slots (Kids Count, 2015).

Modifiable Health Risks

Weight

Weight can be attributed to several health disparities, and it seems to be an issue in Tippecanoe County. Approximately 25.5% of adults in Tippecanoe County are obese. Obesity can be a cause of diabetes. In Tippecanoe County, the diabetes prevalence rate is 7.7%, with a mortality rate of 12.5 per 100,000 (INdicators, 2013).

Physical Activity

Physical activity is defined as "any body movement produced by the skeletal muscles that results in substantial increase over resting energy expenditure" (Bouchard & Shepard, 1994). Physical inactivity is defined as participating in an insufficient amount of moderate-to-vigorous physical activity according to the age specific physical activity guidelines. Sedentary behavior is defined as any walking activity characterized by an energy expenditure less than or equal to 1.5 METS and in a sitting or reclined posture (Sedentary Behavior Research Network, 2012). MET is an acronym that stands for metabolic equivalent; it represents the intensity of an exercise. MET refers to the amount of oxygen a person consumes and the number of calories a person burns at rest (Fitness for Weight Loss, 2015).

Although access to exercise is at 73% in Tippecanoe County (County Health Rankings and Roadmaps, 2015), and 25.3% of adults are physically inactive. This could be linked to the violent crime if residents believe that it is unsafe to exercise outside. The county's violent crime rate is 274 per 100,000.

Nutrition

Nutrition can be analyzed by several societal factors such as food insecurity, limited access to healthy foods, food environment index, etc. Data for Tippecanoe County is listed below:

Nutrition Factors	
Occurrence	Tippecanoe County
Food Insecurity	16.8%
Households with No Car and Low Access to a Grocery Store	1.61%
Food Environment Index*	6.4
Recommended Adult Fruit and Vegetable Consumption	25.4%
Children with Low-Access to a Grocery Store	5.2%
Low-Income and Low Access to a Grocery Store	8.59%
**on a scale of 1-10 with 10 being the best*	
County Health Rankings and Roadmaps, 2015; HCI, 2015; INdicators, 2013	

Substance Abuse

Illicit drug use, smoking, and alcohol-related behaviors continue to be issues for Tippecanoe County. "According to findings from the National Survey on Drug Use and Health (NSDUH), nearly 23 percent of Indiana residents ages 12 and older engaged in binge drinking at least once in the past month; the prevalence rate for underage individuals ages 12 to 20, alone was 16.4 percent. Furthermore, 9 percent of Hoosiers ages 12 and older reported current (past-month) use of an illicit substance, with the highest rate among young adults ages 18 to 25 (22 percent). Most of the illicit drug use was attributable to marijuana with an annual prevalence rate of 10.3 percent, followed by nonmedical pain reliever use (5.7 percent) among Indiana residents ages 12 and older... (NSDUH defines binge alcohol use as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days)" (Center for Health Policy, 2013).

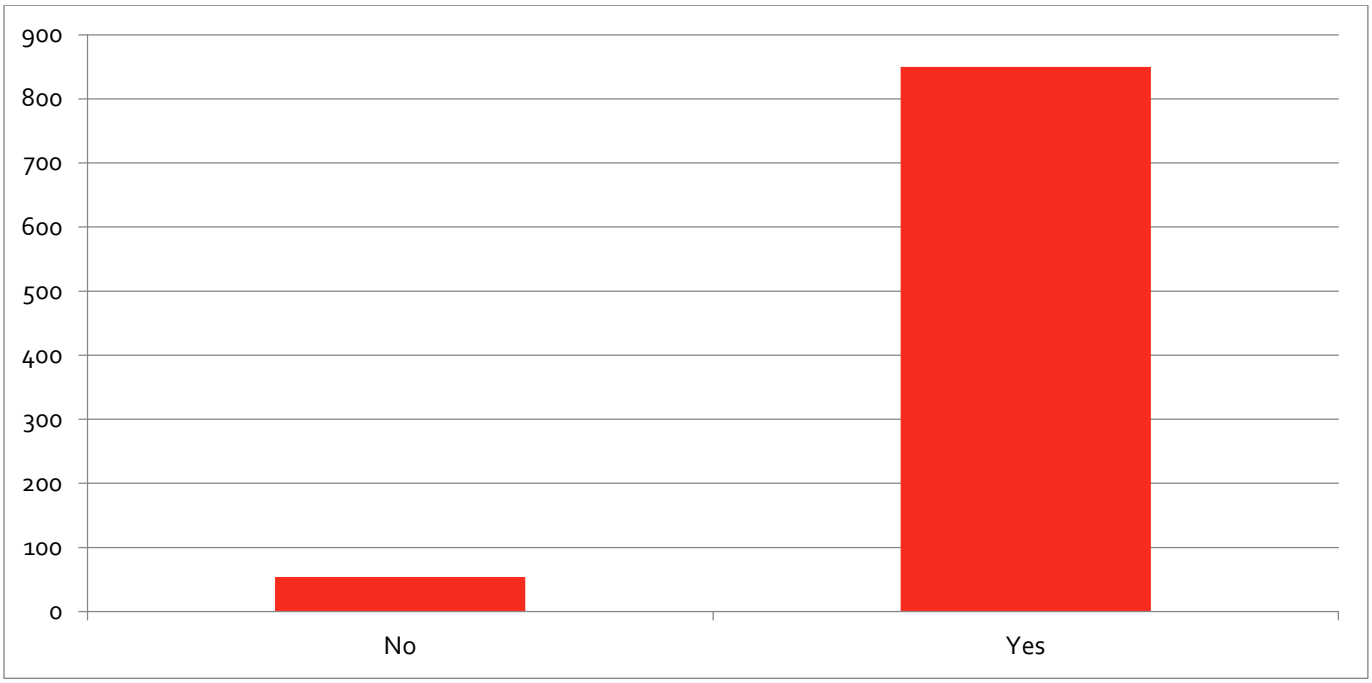
In Tippecanoe county, 17.3% of adults drink excessively (INdicators, 2013), and 32% of car accident deaths are alcohol-impaired driving deaths (County Health Rankings, 2015).

Tobacco Use

Tobacco use continues to impact the health and wellness of county residents, and the health cost of tobacco continues to impact the communities' wellness and healthcare costs.

Tippecanoe County Tobacco Data	
Adults (18+) that smoke	20.8%
Births affected by smoking *	376
Cost of smoking-related births	$650,993
Pregnant women who smoke	16.2%
Deaths attributable to smoking	238
Deaths due to secondhand smoke	29
Economic burden of secondhand smoke	$10.6 million
Smoking-related illnesses	4,766
**Low birth weight, SIDS, and reduced lung function (State of Indiana, 2015)*	

In the survey, all respondents were asked: "Do you smoke?"

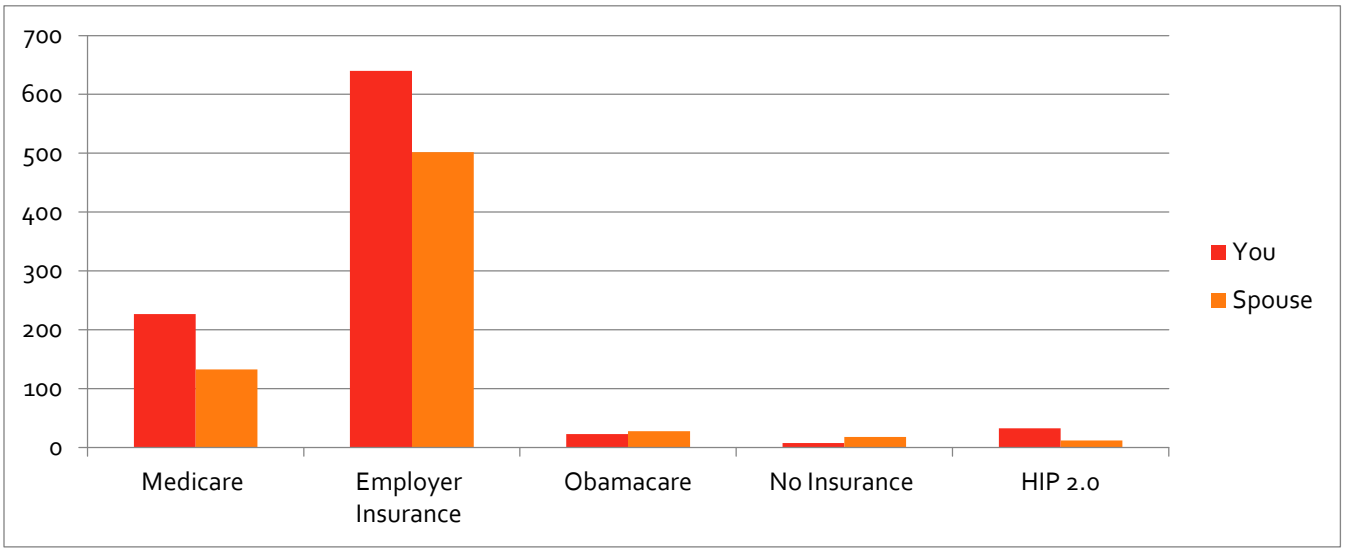


Oral Health

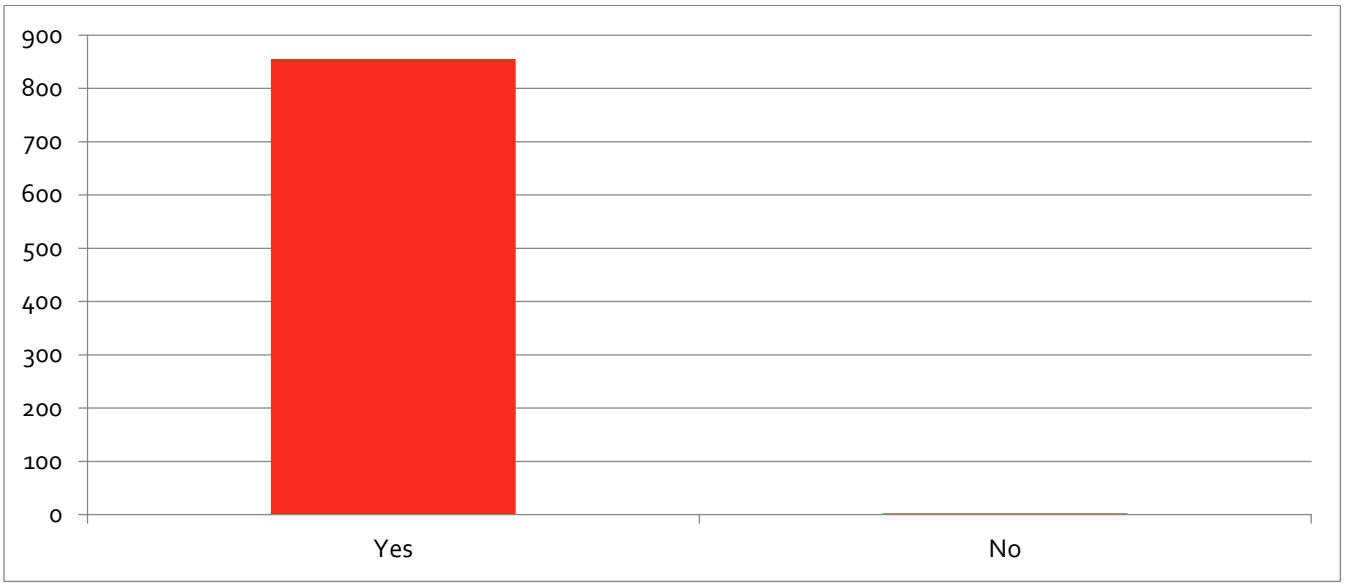
Dental care opportunities are prevalent in Tippecanoe County. Because the patient to dentist ratio is 2,182:1 (County Health Rankings, 2015), 66% of adults visited the dentist at least once in the past year (INdicators, 2015).

Access to Health Care Challenges

Respondents were asked how they paid for their health needs:



Respondents were asked: "Do you have a health professional that you got for family care?"



Health Professions Shortage Areas

The patient to mental health provider ratio is 748:1. Also, the ratio of population to primary care physicians is 1,479:1. The ratio for dentists is 2,310:1 (County Health Rankings, 2015).

Insurance/Payment

Insurance affordability is a barrier that many residents encounter in Tippecanoe County. According to INdicators (2013), 11.7% of the adults in Tippecanoe County that needed healthcare could not see a doctor in the last 12 months due to cost.

Summary

Data Gaps and Challenges

As in every data collection and analysis processes, there are limits to the data collected. The survey was available electronically and on paper at special events. If a resident of the county did not receive the promotional messages or attend an event, they would not have an opportunity to offer input.

Focus groups were primarily attended by professionals in the community speaking on behalf of their observations or clientele. Therefore, focus group data may be skewed towards secondary hearsay or from a population health management perspective.

Public health data and infrastructure is severely lacking in Indiana, as the state consistently ranks in the bottom two to three states for public health funding, service, and support. Much of the data used is from state and national collections that are only implemented every few years. Data may not reflect the current status of health. Also, as a home rule state, county data isn't always available or reliable. Zip code data rarely is available, except in national databases, such as the US Census Bureau.

It is the team's hope that by using the available secondary data with the collected primary data, a relatively accurate picture of community health is presented.

Response to Findings

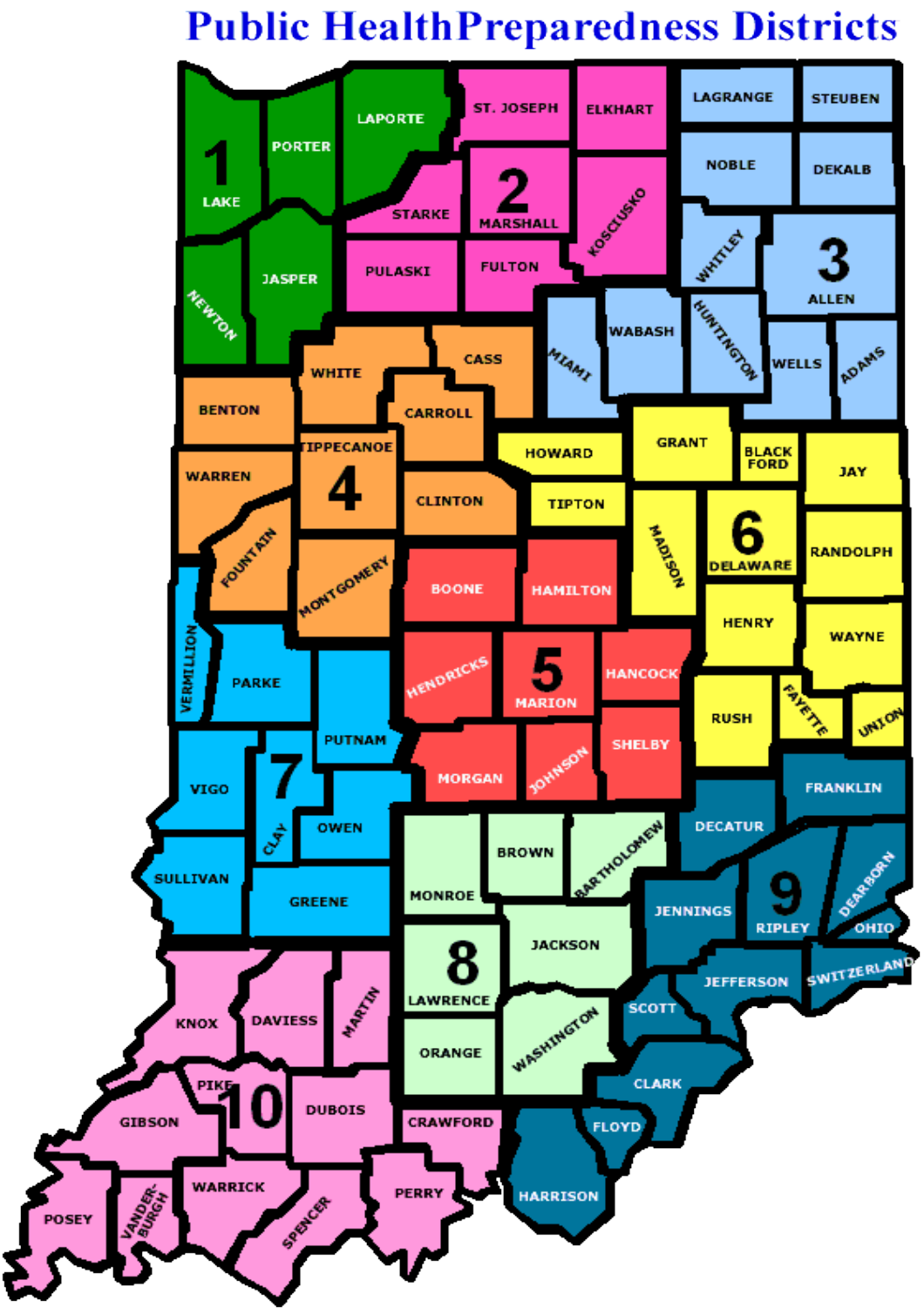
FSEH belongs to the Tippecanoe County healthy communities partnership. The findings of this report are in alignment with their findings and those of the county health department. The senior leadership of the hospital, mission committee, and local board of directors agrees that this assessment is a good representation of the community.

Appendix

Regions: 1, 2 and 3				
Access to healthcare	Access to home healthcare providers	Transportation	Lack of healthcare providers	Geriatricians
Obesity	Access to food deserts	Nutrition education	Pre-diabetes/diabetes	Smoking mothers
Nutrition	Low immunization rates	Unhealthy home	Suicide	Substance Abuse
Maternal Infant Health	Mental health services	Behavior health services	Tobacco	E-Cigarettes
Mental/Behavior Health	Cancer	Lung cancer	Prostate cancer	Colorectal cancer
Nicotine Products	Poor oral health in Amish	Increased preparedness in dementia care	Emphasis on community based transitions of care	
Regions: Southern 3, 4 and 6				
Access to healthcare	Emphasis on integration of healthcare and social services at individual level	Increase Hispanic population- translators	Increased preparedness in dementia care	
Drug abuse and mental health	Use of ER	Obesity		
Higher than state use of tobacco	Dental care	Lack of county level data		
Identification on pre-diabetes 1 at risk for type 2	Transportation	Impact of manure lagoons		
Non-management of diabetes/heart disease	Transition from hospital	Availability of home healthcare providers		
Region: 5				
Poverty	Elderly nutritional issues cause chronic disease	Design services based on culture	Lack of resources	Mental health
Obesity	Chronic infections	Breast cancer	Low immunization rates	Early childhood education
Maternal health/infant mortality	Safety	Violence	Elderly memory care	Overdose deaths
Access to healthcare	Transportation	How do we get the community to "buy in" and want to make a difference?	Empowering communities to take change	Listening vs. hearing the needs
Don't tell the communities what they need. Ask them.	Diversity of neighborhoods is as noted by variation of health, issues and culture.			
Regions: 7 and 10				
Substance abuse	Increased preparedness in dementia care	Senior poverty	Cocaine	
Black lung disease (coal mining)	Smoking- COPD	Obesity	Higher cancer incidence rates- lung cancer	
Access to primary care	Transportation	Access to home healthcare providers	Provider shortages	
Lowest infant immunization rates	Increase healthcare transitions with social services	Culture		
Mental illness	Infant mortality	STD's		
Regions: 8 and 9				
Mental health	Lack of home healthcare providers	Increased preparedness in dementia care	Suicide	
Cancer- Lung and Colorectal	Obesity	In Medicaid- Cincinnati will not take patients	Prescription abuse	
Access to healthcare	Meth/substance abuse	Access/Awareness to diabetes/cardiovascular disease		
Transportation	Social Support	Access to mental health services		

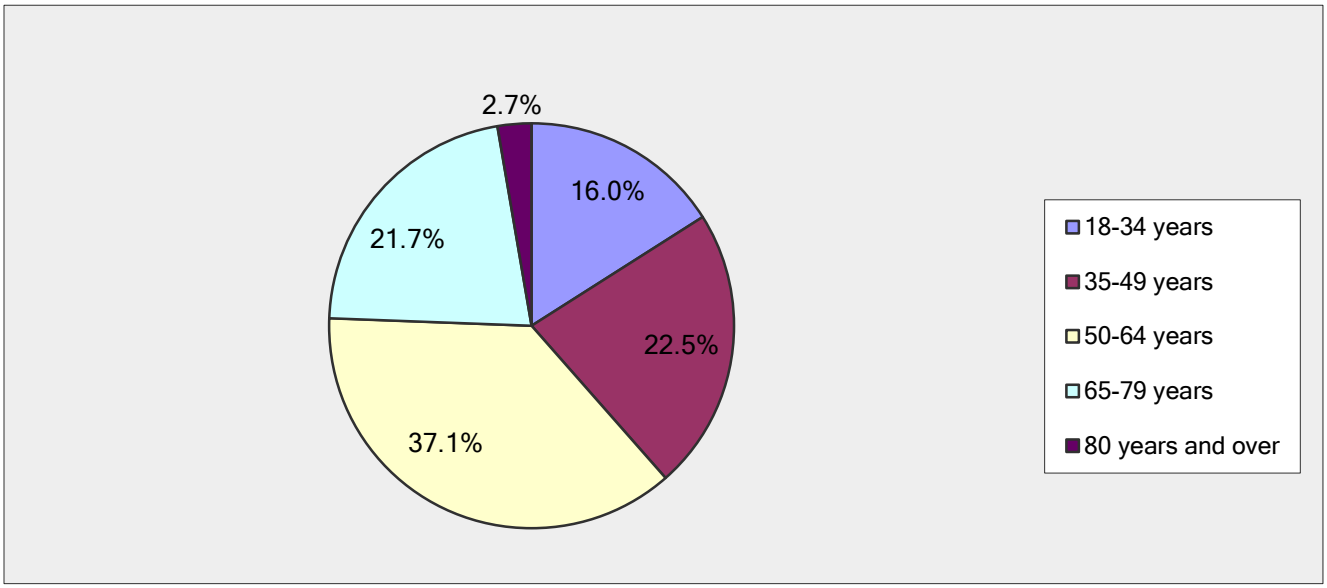
Young Children (0 – 8 years)				
Second-hand and Tobacco/Tobacco use during pregnancy	Access to support services for asthmatic + diabetic children in schools	Third hand smoke exposure	Nicotine poisoning	Prenatal exposure (drugs & alcohol)
Maternal infant health	Breastfeeding support	Infant mortality & safe sleep	Lack of physical activity	Reluctance to get immunizations
Immunizations	Access to healthy foods	Pre-diabetes services	Hunger	Lack of discipline
Nutrition	Child abuse & molestation	Poverty- food programs in schools	Poor housing conditions	Disengagement of fathers
Fitness	Social norms that promote/reward inactivity and improper nutrition			
Children (9 – 18)				
Substance abuse	Mental health	Poverty	Lack of social skills	Depression/anxiety
Safe driving	Obesity	Bullying- cyber / in person	Lack of parenting	Anger issues
Pregnancy	Family structure	Access to healthcare	Lack of physical activity	Low up take of HPV vaccine (40th in country)
Drugs	STD's	Lack of role models	Support of healthy eating	
Technology	Violence	Lack of motivation	Suicide	
Young Adults (19 – 34)				
Obesity	Low cervical cancer screening rates	Occupational exposure	Stable relationships lead to better parenting	Pre-natal care
Don't have environment that supports healthy choices	Biggest cultural impact	Lack of compliance with recommended vaccine schedule during 3rd trimester pregnancy	Access to reliable childcare to stabilize home/work life	Mental health
Worksite access/ support of physical activity	Health status to fund all healthcare	Support of family and caregivers	Insurance programs	Pre-diabetes
Gaps in Employment, College, Home	Financial issues			
Adults (35 – 54)				
Support of family/caregivers	Diabetes/Obesity	Cardiovascular disease	Tobacco	Underemployment
Financial issues	Behavioral health	Mental health	Low rates for recommended screenings (cancer, breast, cervical & colorectal)	Stress
Seniors (55+)				
Increased dementia	Financial stress (taking care of grandchildren)	Social isolation	Diabetes management	Nutrition
Family caregiver support	Shortage of providers	Transportation	Falls prevention	Low rates of cancer screenings
Abuse/neglect	Workforce issues- high turnover rate			

Student Focus Group	
Regions 1 and 2	
Largest Issues	*Possible Interventions*
Pollution	Make Pollution a Known Issue
Drug Use	Random Drug Testing at School
Healthy Food Access	Coping Skills and Rehab Centers
Unemployment	Job Fairs
Mental Health Issues	Offer Transportation
Regions 3 and 6	
Largest Issues	*Possible Interventions*
Drugs, especially Heroin	Rehabilitation Centers
Alcohol Abuse	Interventions for Substance Abuse
Teen Birth Rate	Education on Preventative Medicine
Tobacco Use	Better Healthcare Availability
Chronic Disease	Encouragement for Healthcare Patients
Access to Healthcare	
Regions 4 and 7	
Largest Issues	*Possible Interventions*
Substance Abuse	Awareness Campaigns
Access to Emergency Healthcare	More Life-Line Services from Emergency Department
Food Availability/Too Much Fast Food	Better Food Choices and Education
Farmers Markets	
Region 5	
Largest Issues	*Possible Interventions*
Education	More Discussion and Education about Health Issues
Environment	Fix Minor Problems before Problems Get Bigger
Public Safety	(Water Contamination, Infrastructures, Built Environment)
More Police Coverage	
Regions 8, 9, and 10	
Largest Issues	*Possible Interventions*
Substance abuse	Rehabilitation options
Environmental testing (experimentation with fracking, etc.)	Better technology
Hospital inefficiency	Large amounts of funding

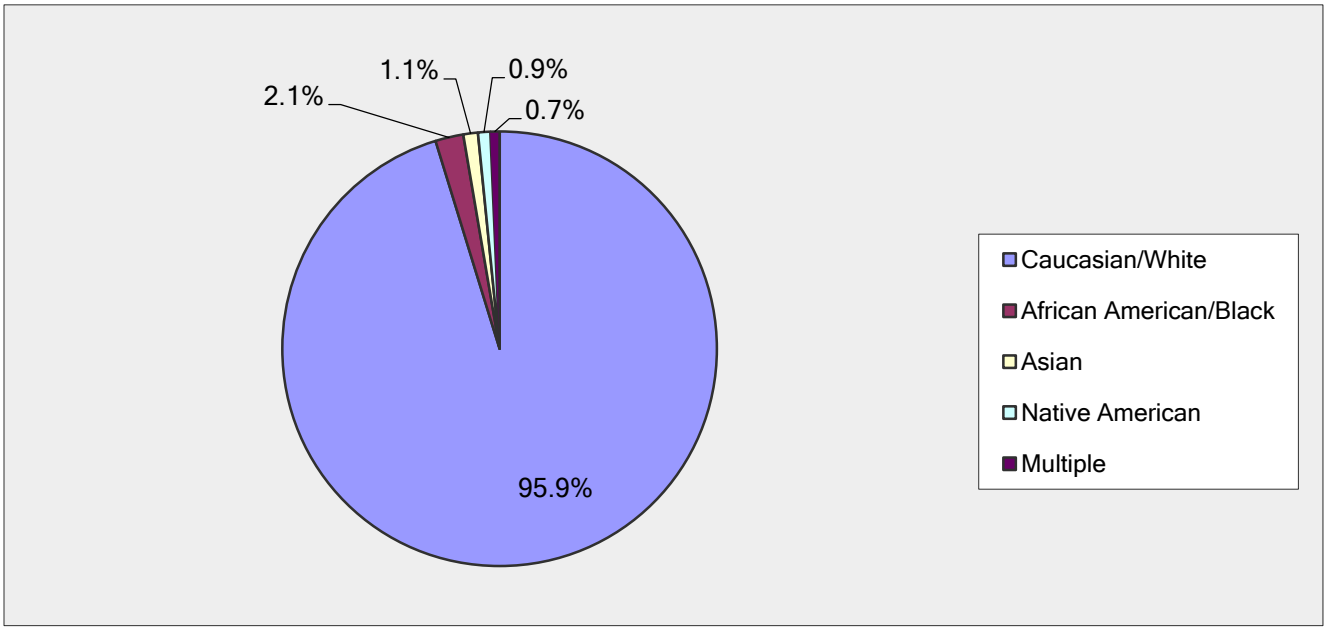

Public HealthPreparedness Districts
1
LAKE
PORTER
LAPORTE
2
MARSHALL
STARKE
PULASKI
FULTON
KOSCIUSKO
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
NOBLE
DEKALB
WHITLEY
3
ALLEN
HUNTINGTON
WELLS
ADAMS
WABASH
MIAMI
JASPER
NEWTON
WHITE
CASS
CARROLL
BENTON
TIPPECANOE
4
WARREN
FOUNTAIN
MONTGOMERY
CLINTON
HOWARD
TIPTON
GRANT
BLACK FORD
JAY
MADISON
6
DELAWARE
RANDOLPH
HENRY
WAYNE
BOONE
HAMILTON
VERMILLION
PARKE
PUTNAM
HENDRICKS
5
MARION
HANCOCK
RUSH
FAYETTE
UNION
MORGAN
JOHNSON
SHELBY
FRANKLIN
VIGO
7
CLAY
OWEN
SULLIVAN
GREENE
DECATUR
BROWN
BARTHOLOMEW
MONROE
JENNINGS
9
RIPLEY
DEARBORN
OHIO
JACKSON
8
LAWRENCE
JEFFERSON
SWITZERLAND
SCOTT
KNOX
DAVIESS
MARTIN
ORANGE
WASHINGTON
CLARK
PIKE
10
DUBOIS
GIBSON
CRAWFORD
FLOYD
WARRICK
PERRY
HARRISON
POSEY
VANDER-BURGH
SPENCER

CHNA Survey Questions

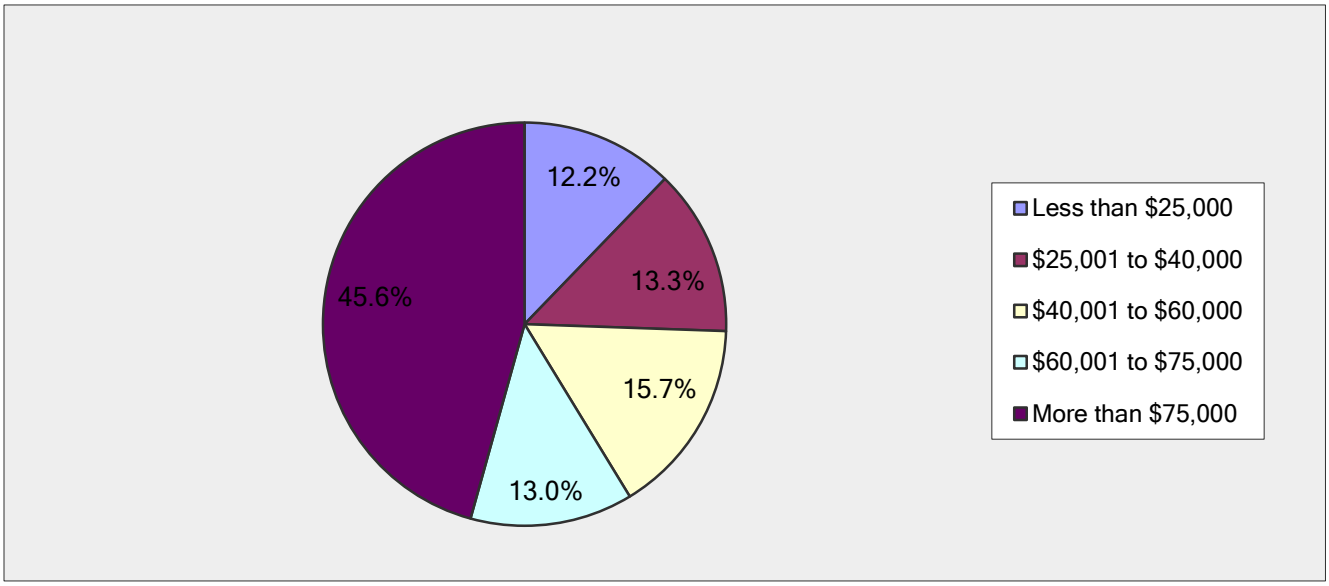
What is your age?



What is your ethnicity? (Please select all that apply.)



What is your average household income?



Practices or Ideas to Reduce Transportation Barriers (broad then more specific):

- Add a Lifeline Transit Network that could help transportation for low-income families. (http://www.transformca.org/resource/roadblocks-health)
- Policy initiatives need to include community clinics or other healthcare facilities where people often travel, instead of just hospitals. Transit agencies can conduct a "Health Access Impact Analysis" in order to determine how cutting or increasing funding for transportation can hurt/benefit them. (http://www.transformca.org/resource/roadblocks-health)
- Other states have implemented a Non-Emergency Medical Transportation service to include anyone without access to a car (not just those with disabilities). (http://www.transformca.org/resource/roadblocks-health or http://issuu.com/childrenshealthfund/docs/chf_htsi-monograph__2_?e=6796486/1866261)
- Ohio has a transportation service called CareSource that will pay a driver to take you to an appointment and back home. Each member receives 15 free rides per calendar year. (https://www.caresource.com/members/ohio/ohio-medicaid/benefits-and-services/additional-services/transportation/)
- San Diego Veterans Affairs Healthcare System includes a Veterans Transportation Network where free round-trip transportation is provided to and from the VA Medical Center and Clinic. (http://www.sandiego.va.gov/patients/veteranstravel.asp)
- 3 main models that can be used to coordinate transportation resources: Lead Agency Model, Brokerage Model, and Administrative Agency Model. (http://issuu.com/childrenshealthfund/docs/chf_htsi-monograph__2_?e=6796486/1866261)
- Coordinate health care scheduling with fixed-route transit systems, so patients could get to appointments on time. (http://issuu.com/childrenshealthfund/docs/chf_htsi-monograph__2_?e=6796486/1866261)

- Having a personal "travel navigator" in doctor's office to establish individualized travel plans. (https://www.transportation.gov/fastlane/creating-ways-to-get-to-healthcare-appointments)
- Web-based app to search for the quickest available public transportation for healthcare providers to use when scheduling appointments in order to reduce no-shows. (https://www.transportation.gov/fastlane/creating-ways-to-get-to-healthcare-appointments)
- System to identify patients at risk of readmission to the hospital and connect them with a mobility manager to schedule transportation to medical appointments. (https://www.transportation.gov/fastlane/creating-ways-to-get-to-healthcare-appointments)

Community Health Needs Assessment Collaborative Team

Action for Healthy Kids
American Health Network
Area IV on Aging and Community Action Programs
City of Lafayette
City of West Lafayette
Community Volunteers
Drug Free Coalition of Tippecanoe County
Employee Benefits Solutions
Employers Health Network
Franciscan Alliance St. Elizabeth Health
Greater Lafayette Commerce
Greater Lafayette Parish Nurse
Group Homes for Children
Hanna/Minority Health Coalition
Henriott Group
Kathryn Weil Center
Phoenix Group
IU Health Arnett
Kirby Risk
Lafayette School Corporation Wellness Committee
Lafayette Family YMCA
Lafayette YWCA
Lafayette Urban Ministry
Mental Health America
Mission Committee of the Western Indiana Board of Franciscan St. Elizabeth Health
NutriPledge
Parish Nurses
Purdue Extension
Purdue Department of Health & Kinesiology
Riggs Community Health Center
Tippecanoe County Health Department
Tobacco Free Partnership
United Way of Greater Lafayette
Unity Healthcare
Women, Infant, Children (WIC) Program

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