Franciscan
ST. ELIZABETH HEALTH
Crawfordsville



Community Health Needs Assessment— Crawfordsville

Franciscan St. Elizabeth Health-Crawfordsville

Winter 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-Crawfordsville (FSEH-Crawfordsville). 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-Crawfordsville in providing essential services to those most in need. Based on the findings in this report, FSEH-Crawfordsville will develop a three year strategic plan on meeting community health needs as capacity and resources allow.

This report focuses on Montgomery County, the location of most of FSEH-Crawfordsville patient residences. Because Indiana is a home rule state, data by zip code is limited. Based on the primary survey of residents in the county, some zip code level data was attainable and shows small nuances between the county of Montgomery and the city of Crawfordsville.

Montgomery 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. Respiratory Diseases: Perhaps linked to the high tobacco use rates, asthma and COPD rates are high and management is poor, especially in children.

5. Tobacco: As is true in most Indiana counties, tobacco continues to be an issue and may contribute to other conditions, including lung, oral cavity, and pharynx cancers.

6. Youth Health: Compounding factors, such as health and safety issues, lead to adverse childhood experiences. Teen birth rates, high food insecurity rates, use of alcohol, tobacco, and other drugs, and cases of child abuse and neglect contribute to poor well-being of youth.

Census Data: Social Determinants of Health

Montgomery County vs. Indiana: Social Determinants of Health		
Characteristic	**Montgomery County**	**Indiana**
Veteran Population	9.50%	9.30%
Race/Ethnicity: Caucasian Origin	96.40%	98.60%
Over 18 Population	76.60%	74.10%
High School Graduation Rates	87.80%	86.00%
Employment: Educational Services/Health	20.30%	23.20%
Employment: Construction or Manufacturing	34.40%	24.20%
Unemployment	6.20%	6.20%
Children Not Insured	5.40%	8.50%
Adults Not Insured	15.90%	16.10%
Poverty	16.80%	15.40%

Franciscan St. Elizabeth Health-Crawfordsville

A trusted leader in providing faith-based, integrated health care, FSEH-Crawfordsville is a full-service, acute-care medical center. Franciscan St. Elizabeth Health –Crawfordsville provides cancer care, emergency medicine, imaging, rehabilitation, sports medicine and women's health.

FSEH-Crawfordsville 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.

FSEH-Crawfordsville is located in Montgomery County, 1710 Lafayette Road, Crawfordsville, IN 47923. The CEO of FSEH- Crawfordsville is Terry Wilson.

The FSEH statistics include:

FSEH Services	
Average Annual Inpatient Admissions	6,332
Annual Outpatient Visits	341,238
Annual Emergency Department Visits	34,000
Annual Surgical Procedures	12,774
Births	591
Employees	949
Volunteers	32
Total Physicians (includes Franciscan Physician Network and affiliated doctors)	324
Average length of patient stay	4.09 days
Franciscan Visiting Nurse Service Employees	0
Franciscan Express Care-Michigan City Physicians	2

FSEH-Crawfordsville services Include:

Behavioral Health	Hospitalists	Primary Care Physicians
Cancer Care	Imaging	Rehabilitation Services
Emergency Medicine	Intensive Care Unit	Senior Services
Franciscan Physician Network	Joint & Spine Care	Sleep Disorders
Home Health Care	Laboratory Services	Sports Medicine
Hospice	Orthopedics	Surgical Services

The FSEH- Crawfordsville 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.

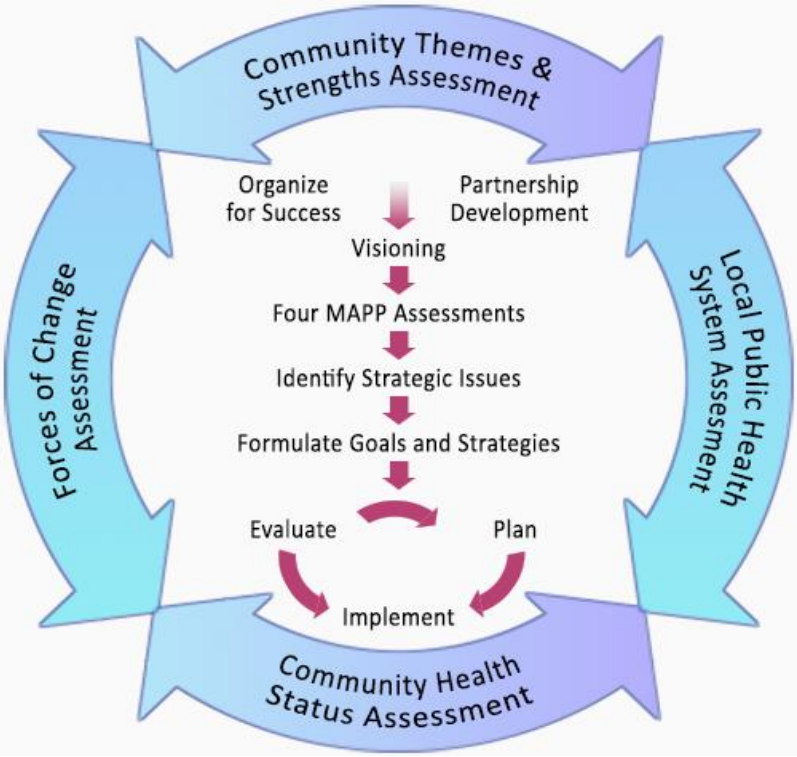
Compassionate Concern
In openness and concern for the welfare of the patients, especially the aged, the poor and the disabled, the staff works with select associations and organizations to provide a continuum of care commensurate with the individual's needs.

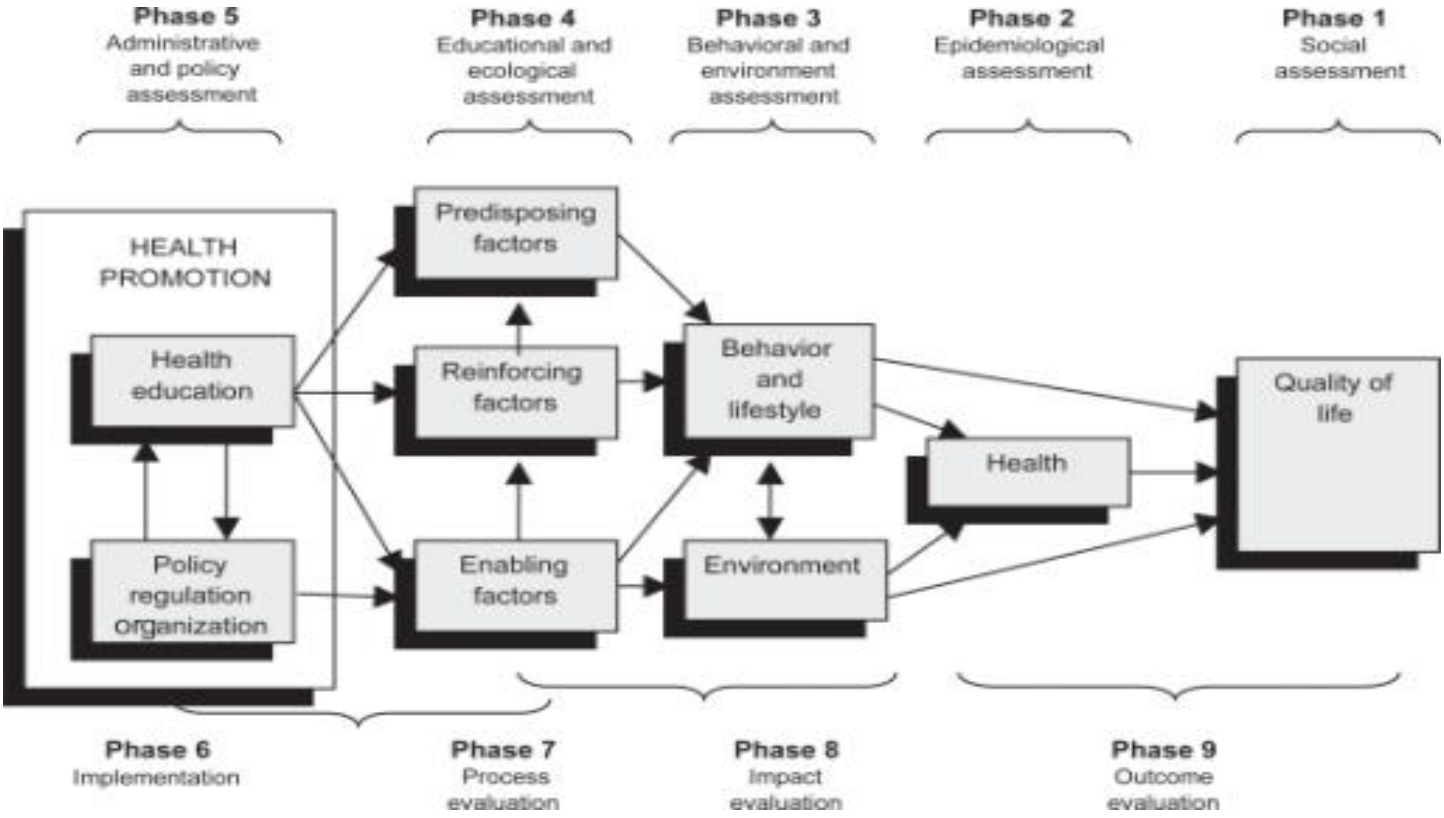
Joyful Service
The witness of Franciscan presence throughout the institution encompasses, but is not limited to, joyful availability, compassionate, respectful care and dynamic stewardship in the service of the Church.

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-Crawfordsville partnered with the Montgomery County Health Department. Because Indiana operates as a home rule state, each county has a different public health infrastructure and resources in addition to the variations based on urban/rural status, population, and economic mix. Data on zip code or census track is highly lacking; therefore the design was built on a county basis.





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 in Montgomery County, as the county health departments are working on accreditation through the Public Health Accreditation Board (PHAB). The MAPP model includes several components for community assessment. FHEH-Crawfordsville participated in all of the assessment activities that were in process during the period of the hospital partnership's time frame.

Indiana does not require PHAB accreditation by county health departments and a vast majority of health departments are not seeking accreditation. In remaining counties identified in this assessment, the PRECEDE-PROCEDE method was utilized. This assessment reflects Phases 1 through 5.

Data was collected in three ways:

1. Community Health Survey: Questions based on perception of community and personal needs was created.

2. Focus Groups; Each focus group determined the top four to six health needs in the community; potential resources or partners; and some actions/interventions that might work best.

3. 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.

In advance of the focus groups, a focus group for state-wide organizations was held. Leaders from organizations that serve the entire state gathered to discuss trends and growing concerns by preparedness district and by age of the population. The results were used as a probe in the remaining focus groups and as areas for further study in secondary data.

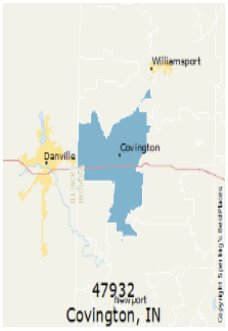
A focus group of high school students convened by the Indiana Chapter of Health Occupation Student Association during their annual conference also offered some insight, as we did not promote the survey to high school students. This focus group yielded some interesting insights from the teen perspective. Results from both of the focus groups are in the focus group section.

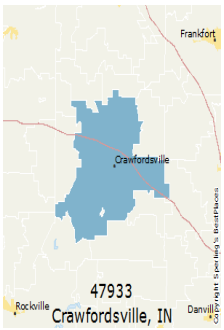
Communities We Serve

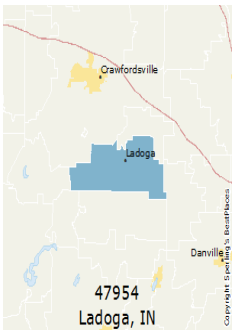
FSEH- Crawfordsville serves Montgomery County primary with a majority of patients from these zip codes: 47932, 47933, 47954, 47987, and 47990

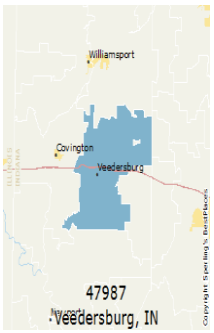
A review of patient zip codes was also completed. The map below show the four zip codes in which the majority of each location's patients reside by type of service. The zip codes are shaded in blue.

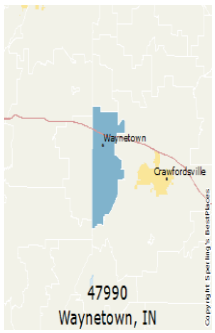












Special Populations

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	Montgomery County	Indiana
Single Parent Households	28.00%	25.70%
Median Household Income	46,797	48,248
Households with Cash Public Assistance Income	3.00%	2.40%
Renters Spending 30% or More of Household Income on Rent	46.20%	23.70%
Children Living Below Poverty Level	24.00%	17.40%
Young Children Living Below Poverty Level	31.50%	26.0%
Families Living Below Poverty Level	13.00%	XX
Students Eligible for the Free Lunch Program	39.10%	34.80%

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		

Insurance and Demographic	Montgomery
Insured, Private Health Insurance	67.60%
Insured, Public Health Insurance	32.90%
No Health Insurance	13.00%
No Health Insurance under 18 years	5.40%

Census

Focus Groups

FSFH- Crawfordsville partnered with the local health department in this process, and these are their findings. The report from the focus group is posted below.

Memorandum on Montgomery County Public Health Department Community Forums

On February 2 and 3 Kyle Stucker, Austin Weirich, and Dr. Sara Drury of the Wabash Democracy and Public Discourse initiative facilitated a prioritization session in conjunction with the Montgomery County Public Health Department, represented by Luke Wren and Amber Reed. The facilitation was conducted in the Hays Center on Washington Street in Crawfordsville, IN and involved several participants from the community. There were two different events that occurred from 11:30am - 1:00pm on Tuesday and Wednesday, and one event that occurred on Thursday from 4:30 – 6:00pm. Attendance varied slightly at each meeting: 7 and 6 participants at the Tuesday conversations, and 12 at the final session on Wednesday. All of the information conveyed by this report is derived from the notes, recordings, and voting results collected by Wabash Democracy and Public Discourse fellows.

Each event followed the same process. The meetings began with a presentation by Luke Wren that informed the participants on the importance and purpose of the discussion. Kyle then gave a short discussion about the general process of the event and of deliberation in general. The event next proceeded to the deliberative stage. The participants were instructed that the purpose of the event was to talk through important public health issues, with the goal of prioritizing top issues at the end of the conversation. The conversation guide displayed eight these issues along with a statistic and description from the Community Health Improvement Plan; the eight issues had been pre-determined by the Community Health Advisory Committee in December 2015. The facilitators guided the participants through a series of questions in order to accomplish the prioritization. Participants deliberated which issue was the most important, the most feasible to address given our resources, and what would be the most impactful to address. After the discussion had ended the participants ranked their top three issues using a digital response system. The top four issues across the three groups were Drug and Alcohol Abuse, Mental health, Young people's health, and access to care.

Priority Ranking, Combined 3 Community Forums

Topics	Weighted %	Weighted vote
Drug and Alcohol Abuse	38.95%	37
Mental health	25.27%	24
Young People's Health	14.75%	14
Access to care	13.68%	13
Chronic Disease	4.21%	4
Physical Activity	2.12%	2
Sexual Health	1.02%	1
Housing	0	0

19 total respondents; each respondent ranked their top three priorities.
The top vote was weighted 3 votes; the second 2 votes; and the third 1 vote.

The deliberations had fairly similar themes across the sessions. Drug and alcohol abuse was the health of issue that attracted the most conversation by the participants. Each community member identified that this was one of the major problems that needed to be addressed. In fact, each focus group identified drug and alcohol abuse as their top concern. Mental health was the second most frequently discussed health issue by every group. Participants identified a likely link between mental health and drug abuse. Some community members believed that mental health issues led to drug abuse, and others primarily believed the opposite. The members of the community believed that every other issue that was available to discuss actually arose from either drug abuse or mental health issues. Education about these issues and their relationships was often believed to be the greatest solution to the problems. Not only is education a very feasible solution, but it could also have a great impact on the choices that people make throughout their lives. Accessibility to care and young people's health were identified as the next most important issues to address, but these issues were often framed by participants as being related to addressing the drug, alcohol, and mental health issues. Finally, while access to care was an important issue for some at the forums, the groups discussed that improving access was believed to be less feasible to solve than the other top issues, citing that they believed the community culture would need to change in order to attract more health industry workers.

The meeting closed with the Health Department and Wabash Democracy and Public Discourse fellows thanking everyone for their participation, and explaining that the results of this meeting will be incorporated into the Health Department's CHIP.

Social Determinants of Health

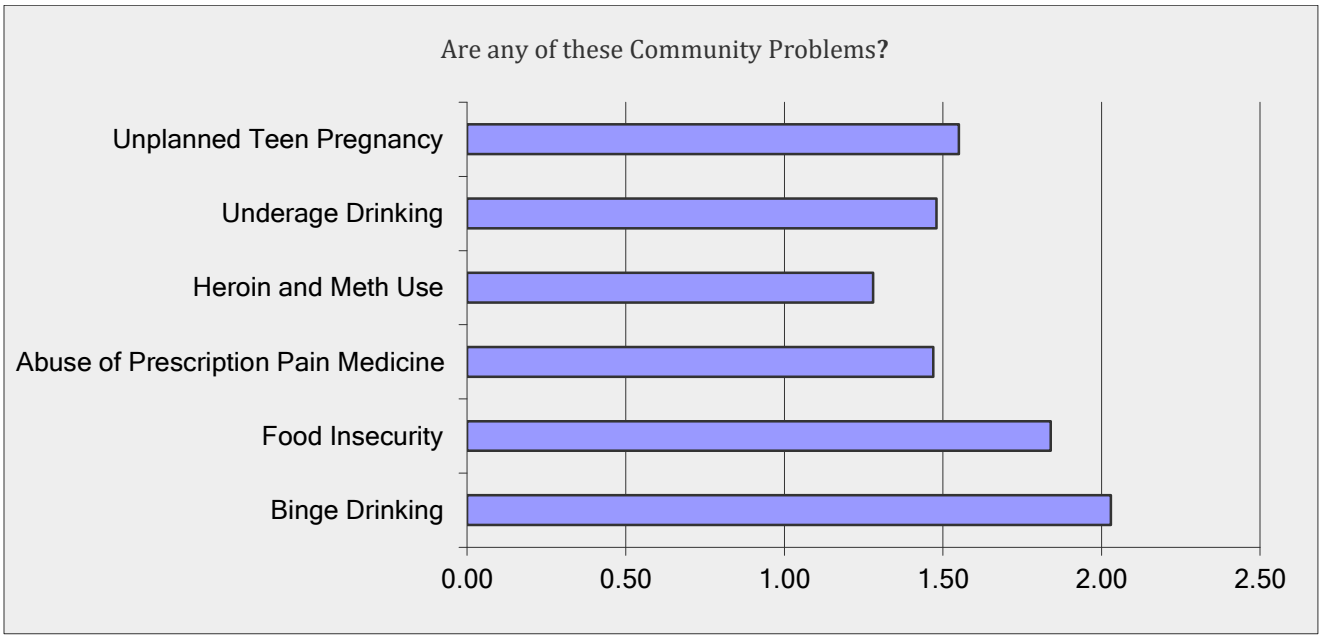
Montgomery County vs. Indiana Narrative				
Characteristic	Montgomery County Total	Percentage	Indiana Total	Percentage
Population	38,215		6,080,485	
Median Household Income	$46,797		48,248	
Veteran Population	29,284	9.50%	455,105	9.30%
Race/Ethnicity: Caucasian Origin	36,858	96.40%	5,320,022	98.60%
Over 18 Population	29,284	76.60%	4,506,089	74.10%
Homeowners: Occupied Units	14,590	88.30%	2,481,793	88.60%
High School Graduation Rates		87.80%		86.00%
Employment: Educational Services/Health	9,691	20.30%	688,595	23.20%
Employment: Construction or Manufacturing	12,500	34.40%	715,913	24.20%
Unemployment		6.20%		6.20%
Children Not Insured	485	5.40%	135,593	8.50%
Adults Not Insured	2,563	15.90%	450,951	16.10%
Poverty		16.80%		15.40%

Poverty can be displayed through the amount of students receiving free or reduced lunch within the school system. In Montgomery County, 39.10% of children are eligible for the free lunch program. (Census, 2015). In Montgomery County, 16.80% of people live in poverty and 13.00% of families live under the poverty level. (Census, 2015). The top five industries that employ residents are within these sectors (Census, 2015):

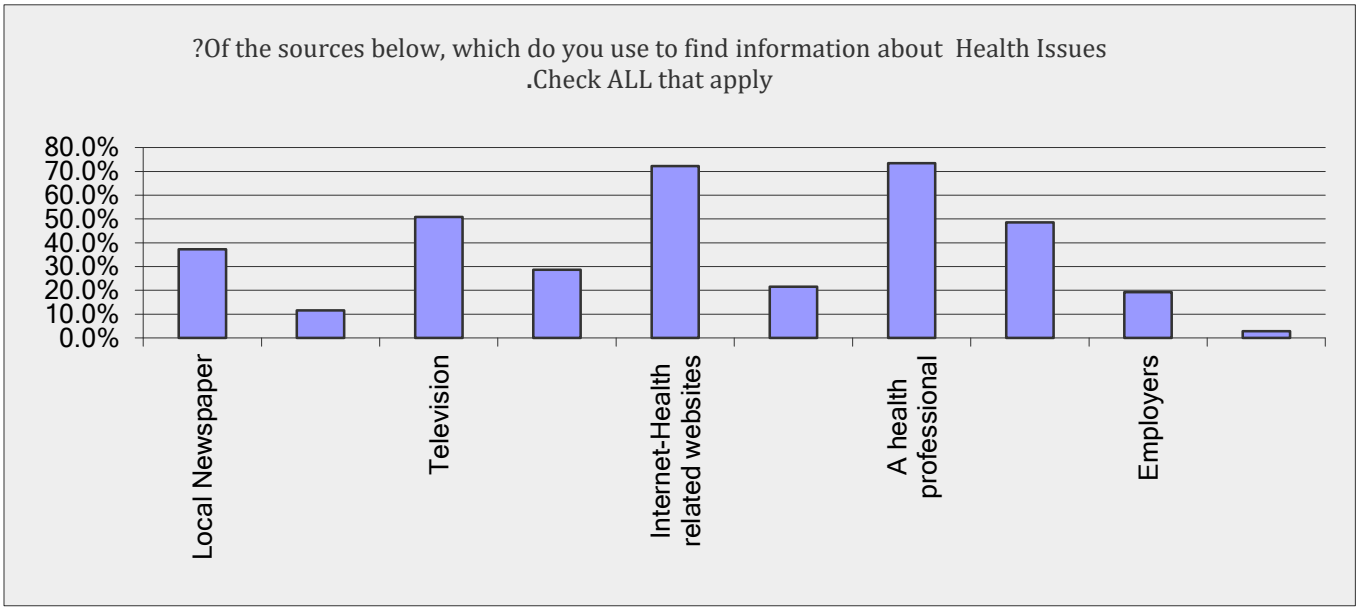
1. Manufacturing: 28.50% of the total working population
2. Educational services, and health care and social assistance: 20.30% of the total working population
3. Construction: 5.90%
4. Retail Trade: 11.60% of the total working population
5. Arts, entertainment, and recreation, and accommodation and food services: 7.30% of the total population

General Health

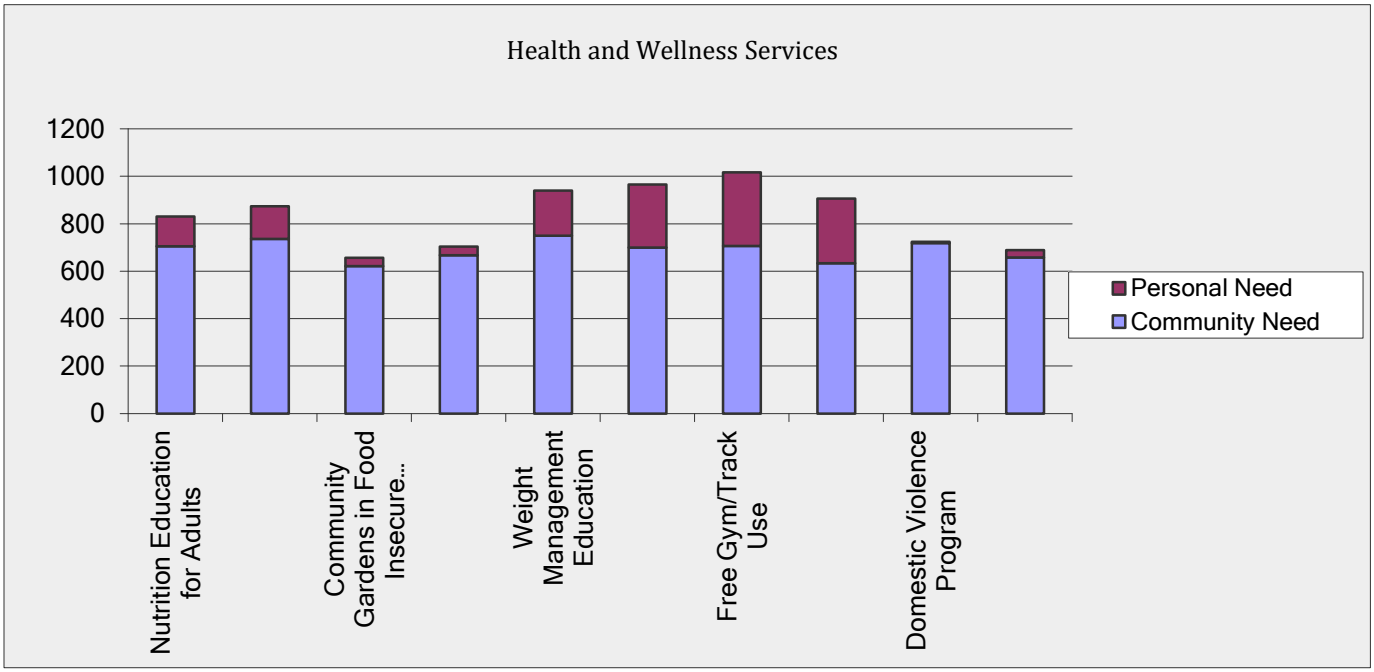
The survey asked the respondents: "Are any of these community problems?"



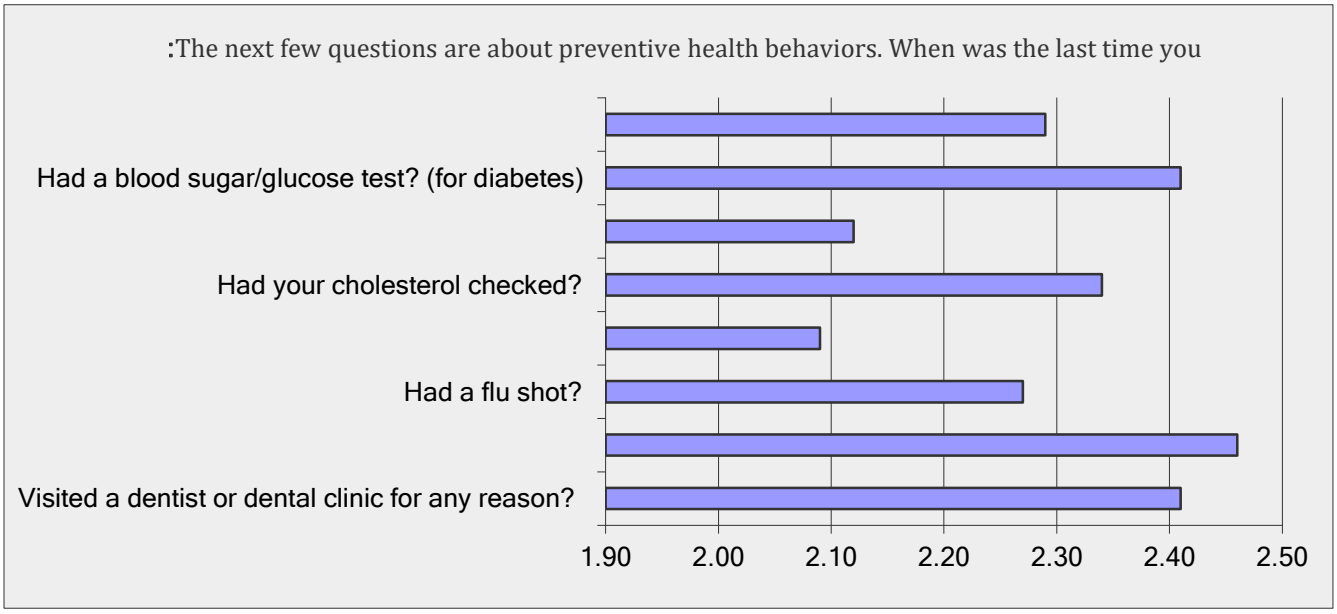
All respondents were asked what do they use to find information about health issues?



The survey asked the respondents about health and wellness services.



The survey asked the respondents about preventive health behaviors.



Overall Physical Health

Physical health is based on physical activity, air and water quality, and access to recreational parks and centers. In Montgomery County, 25.0% 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 3.5 days during the last 30 days (INdicators, 2013). Other indicators include:

Air and Water Quality Linked to Health Disparities: Montgomery County, Indiana	
Recognized Carcinogens Released into the Air	11,315lbs.
Air Pollution- Particulate Matter	12.90
Drinking Water Violations	0
Physical Environment Ranking	39
Age-Adjusted ER Rate due to Urinary Tract Infection	148.4 per 10,000
Age-Adjusted Hospitalization Rate due to Urinary Tract Infection	17.20 per 10,000
Age-Adjusted ER Rate due to Dehydration	19.90 per 10,000
Age-Adjusted Hospitalization Rate due to Dehydration	8.30 per 10,000
Asthma: Medicare Population	3.70%
Age-Adjusted ER Rate due to Asthma	56.50 per 10,000
Age-Adjusted Hospitalization Rate due to Asthma	8.20 per 10,000
Age-Adjusted ER Rate due to Pediatric Asthma	77.00 per 10,000
Age-Adjusted Hospitalization Rate due to Pediatric Asthma	4.70 per 10,000
Age-Adjusted ER Rate due to Adult Asthma	49.30 per 10,000
Age-Adjusted Hospitalization Rate due to Adult Asthma	9.40 per 10,000
Age-Adjusted ER Rate due to COPD	44.20 per 10,000
Age-Adjusted Hospitalization Rate due to COPD	31.40 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.

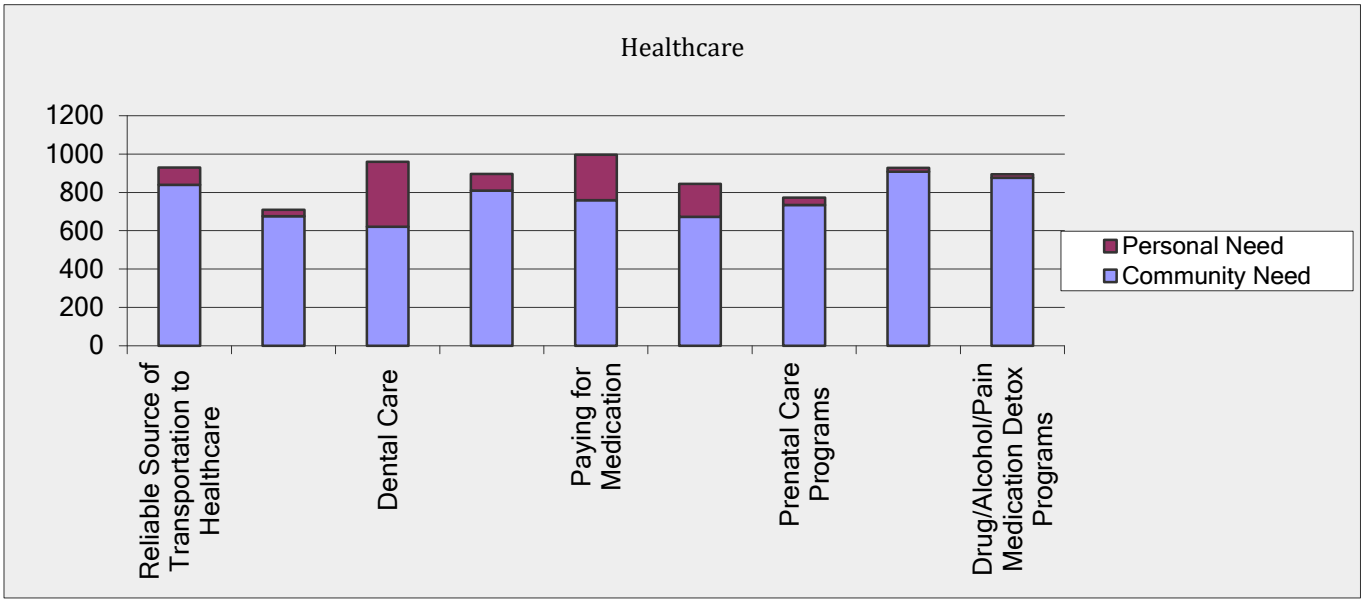
Montgomery County State Rankings (Out of 92 Counties)	
Characteristic	Rank
Health Outcomes	45
Health Factors	48
Clinical Care	43
Health Behaviors	58
Physical Environment	39
Socioeconomic Factors	49
Quality of Life	58

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	Montgomery County
Binge or Heavy Drinkers	15.60%
Alcohol- Impaired Driving Deaths	20.00%
ER Rate due to Alcohol Abuse	27.40%
Violent Crime Rate per 100,000	167

In the survey, all respondents were asked about their personal needs and the community needs.



Chronic Disease, Mortality, Morbidity

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."

"During the period July 1, 2013 to June 30, 2014, there were 67 domestic violence homicides in Indiana" (Indiana Coalition against Domestic Violence, 2014). In Montgomery County, 202 victims received residential services and 212 victims received non-residential services. Throughout Indiana, 10,531 victims received residential services and 15,707 victims received non-residential services.

According to the CDC (2014), Montgomery 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: 228.0
- Cancer: 160.3
- Stroke: 40.4
- Chronic Lower Respiratory Disease: 58.3
- Diabetes: 36.3
- Suicide: 16.4
- Alzheimer's Disease: 19.8
- Kidney Disease: 13.8
- Lung Cancer: 50.5
- Unintentional Injury: 80.6

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:

Montgomery County vs. Indiana		
Description	Montgomery County Data	Indiana Data
Unintentional Injury Mortality Rate	80.6 per 100,000	44.1 per 100,000
Traffic Injury Mortality Rate	12.0 per 100,000	800 total deaths
Injury Emergency Department Visits	757.4 per 10,000	More than 600,000
Injury Hospitalizations	74.7 per 10,000	More than 300,000
Homicide in 2013	0 per 10,0000	6.1 per 100,000

INdicators, 2013

Cancer

Cancer greatly affects these county mortality rates as well. The cancer mortality rate in Montgomery County is 160.3 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: 50.5
- Female Breast Cancer: 13.1
- Colorectal Cancer: 7.3
- Prostate Cancer: 8.2

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. Montgomery 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
Montgomery	419.1	160.3	91.4	13.1	40.1	7.3	77.1	50.5	86.3	8.2
INdicators, 2015										

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:

Montgomery County vs. Indiana		
Description	Montgomery County Data	Indiana Data
Age-Adjusted Death Rate due to Stroke (per 100,000)	41.3	44.5
Age-Adjusted Death Rate due to Coronary Heart Disease (per 100,000)	119.0	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 Montgomery County is 36.3 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.

Montgomery County has a HIV prevalence rate of 76.1 per 100,000 (INdicators, 2015).
Montgomery County has an unintentional injury mortality rate of 80.6 per 100,000 (INdicators, 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 Montgomery County is 19.8 per 100,000 (INdicators, 2015).

Respiratory

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

- Asthma ED Visits: 55.8 per 10,000
- Child Asthma ED Visits: 66.2 per 10,000
- Asthma Hospitalization: 9.7 per 10,000
- Child Asthma Hospitalization: 1.5 per 10,000
- Chronic Lower Respiratory Disease Mortality: 58.3 per 100,000

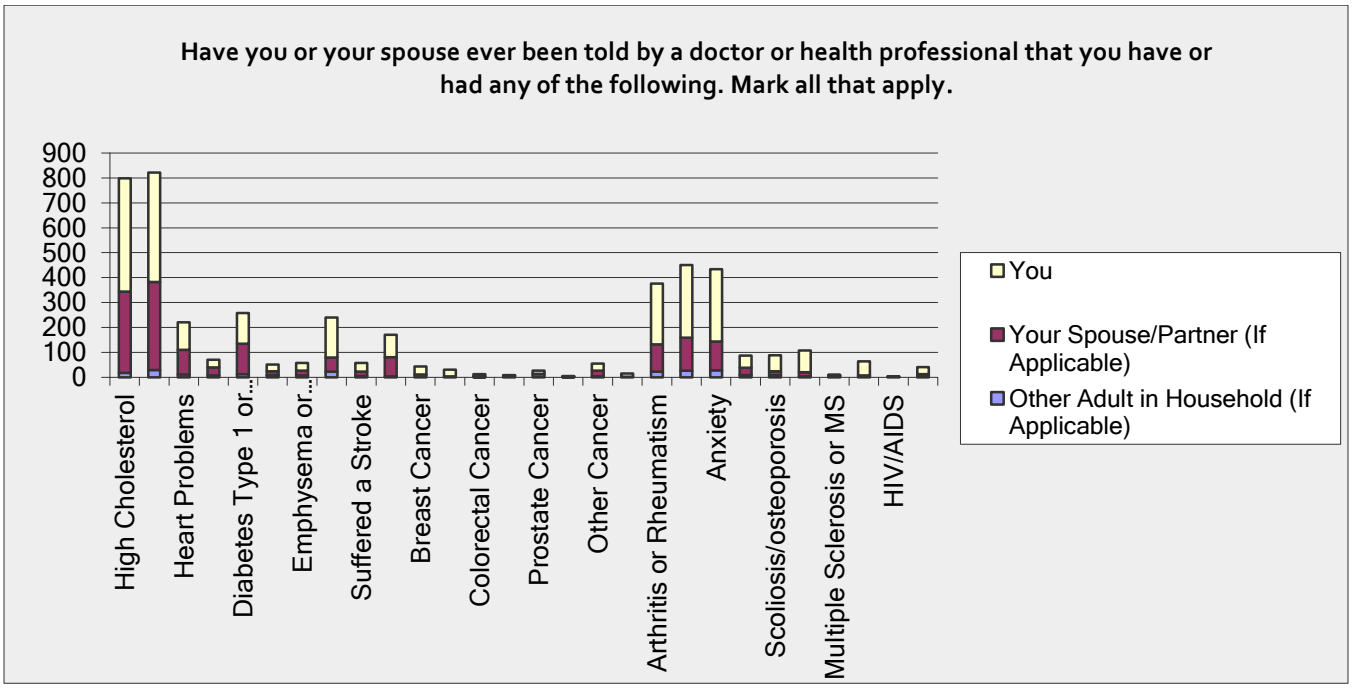
Rheumatic/Joint Related

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

Occurrence	Montgomery County	Indiana
Hip Fracture Hospitalization (65+)	72.2 per 10,000	60.80 per 10,000
Adults 18+ Diagnosed with Arthritis	72.2%	30.10%
Arthritis Hospitalization	38.9 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?"

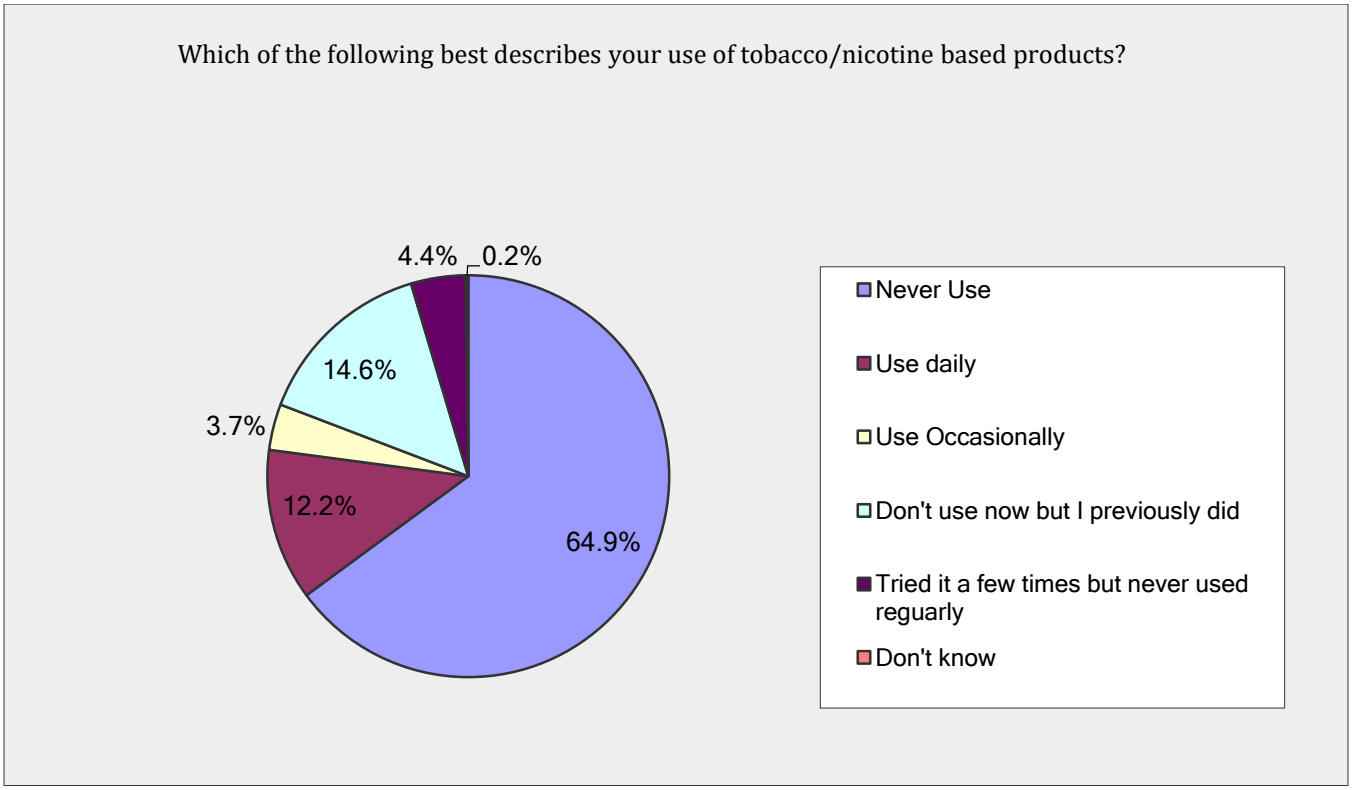


Behavioral Health

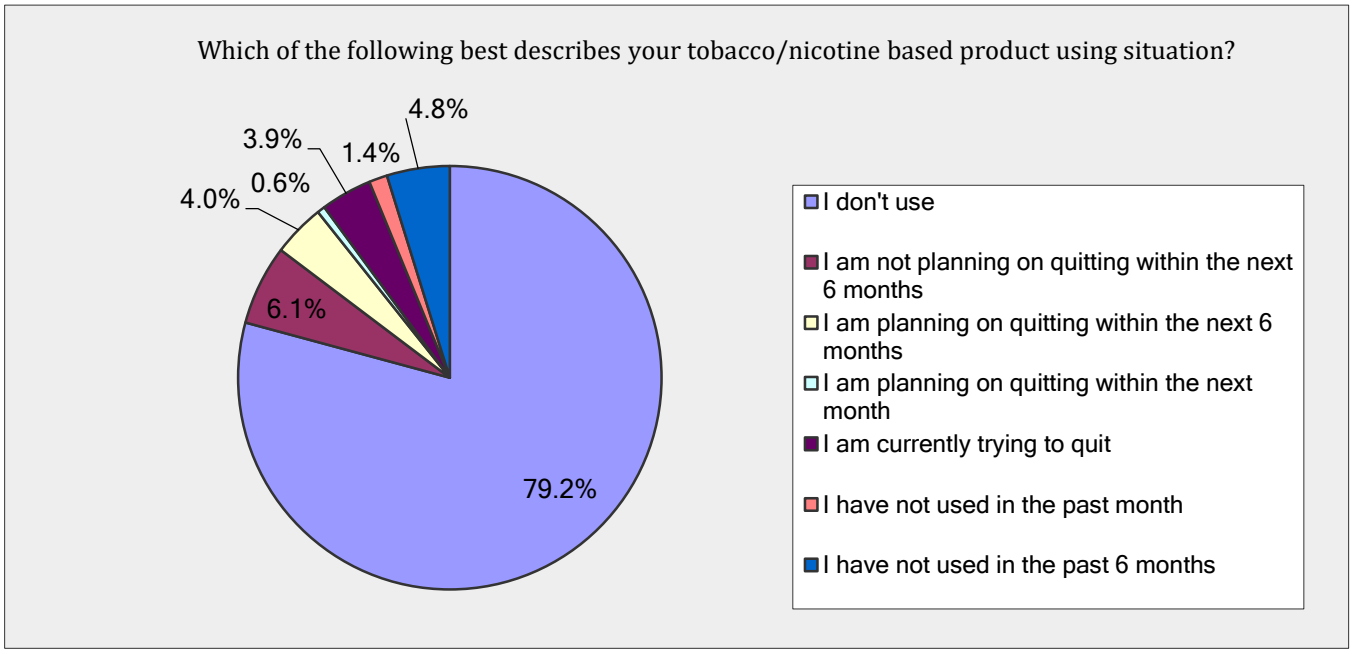
Substance Abuse

Substance abuse is an issue statewide and locally; task forces have been tackling the ever-growing issue. According to Governor's Commission Plan for Montgomery County, the county 's number one drug related cause of deat in 2012 involved prescription drugs. According to the 2011 Youth Use Report, the average first time drug use is age 13.8.

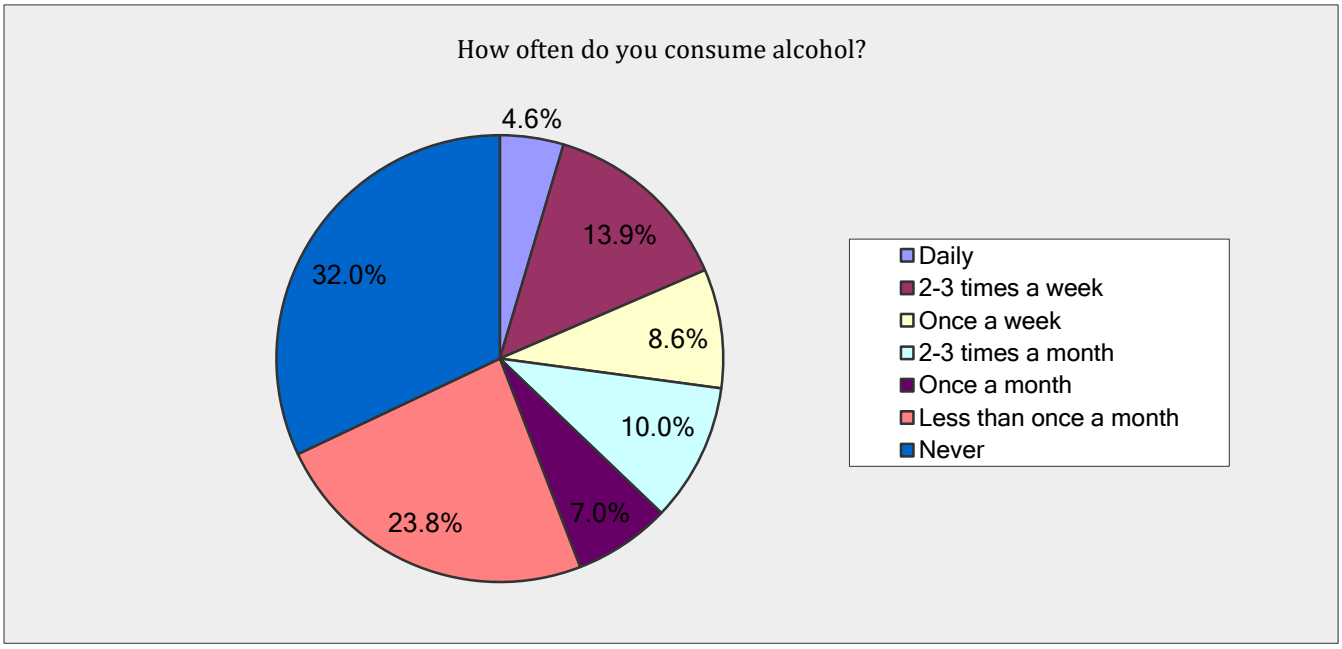
The survey asked respondents: "Which of the following best describes your use of tobacco/nicotine based products?"



The survey asked respondents: "Which of the following best describes your tobacco/nicotine based product using situation?"



The survey asked the respondents: "How often do you consume alcohol?"



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 17.1 per 100,000. Along with these cases, there were 331 self-inflicted injury ED visits and 178 hospitalizations due to attempted suicide. (Suicide in Indiana, 2013). Montgomery County had 112 hospitalizations and 240 ED visits between 2007-2011.

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 69.3% of pregnant women sought prenatal care during the first trimester in Montgomery County, 23.8% of women smoked throughout their pregnancy (INdicators, 2013). Healthy People 2020's objective for the state's breastfeeding rate is to be 81.9%. Montgomery County's breastfeeding rate is 73.0% (Indiana Breastfeeding Initiation by County, 2014).

Birth Outcomes

The state average for low birth weight is 8.3%; Montgomery County's low birth weight percentage is 6.9%. The county's infant mortality rate is 8.6 per 1,000 live births, and 8.4% 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 Montgomery Child food insecurity "[r]refers 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). In 2013, 24.6% of the youth in Montgomery fell into the child food insecurity category, which is below the state average of 21.8%. Forty percent of the children in Indiana qualify for free lunch; 39.10% of the children in Montgomery 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 Youth Risk Behavior Surveillance System 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 Health Occupations Students of America website, "was created with the idea of providing students opportunities to develop as a deader 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; Montgomery County doesn't have a local chapter at Montgomery County Career and Tech Center.

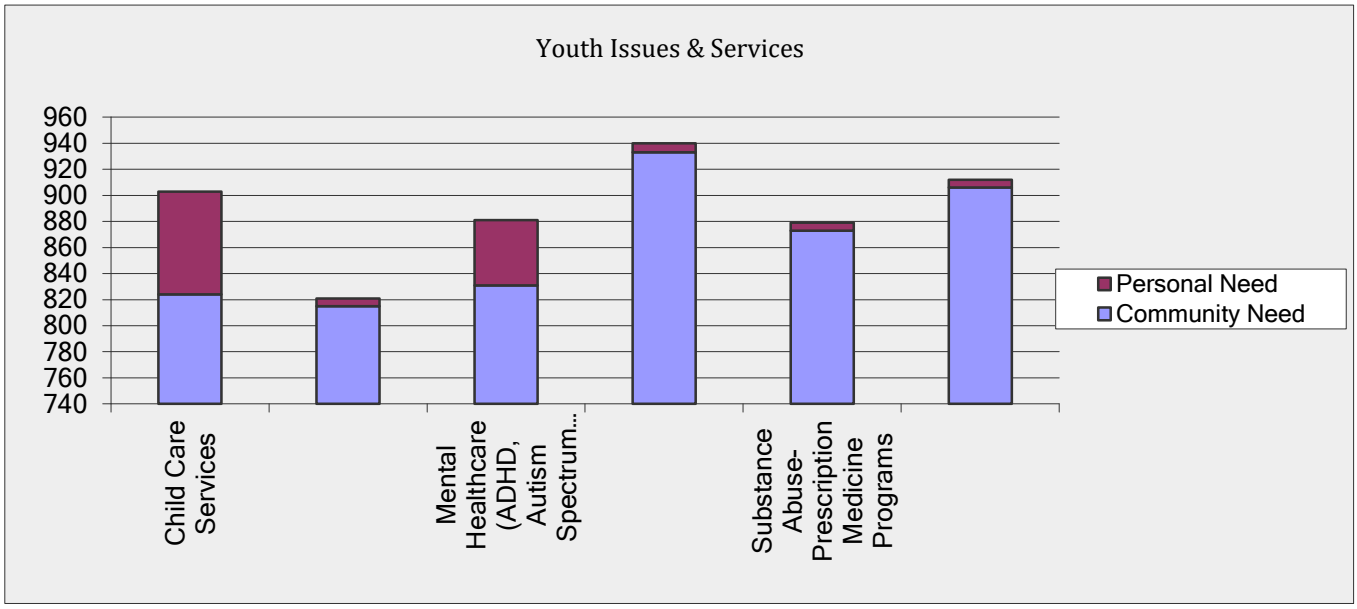
"Department of Child Services Ombudsman responded to 660 Information and Referral inquiries, conducted 78 assists, opened 256 cases and closed 236 cases with 19 pending closure in the first quarter of 2015, provided 24 case specific recommendations, and 10 systematic recommendations" (Department of Child 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 Montgomery County, there are 87 Head Start enrollment slots (Kids Count, 2015)

The survey asked the respondents about youth issues and services.



Modifiable Health Risks

Weight

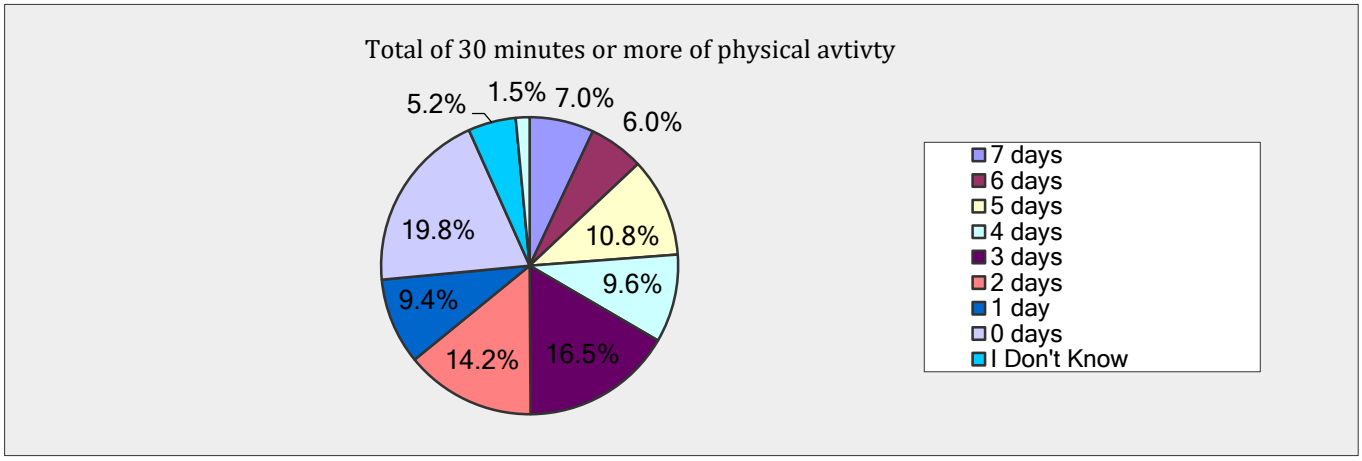
Weight can be attributed to several health disparities, and it seems to be an issue in Montgomery County. Approximately 34.6% of adults in Montgomery County are obese. Obesity can be a cause of diabetes. In Montgomery County, the diabetes prevalence rate is 12.3%, with a mortality rate of 36.3 per 100,000 (INdicators, 2013). According to the survey, 19.8% of people in one week did not participate in physical activity. Also, 30% of people ate fast food or pizza more than three times in one week.

In the survey, all residents were asked to select the top three reasons why obesity is an issue in their community. According to the graph, the top three reasons were unhealthy habits, access to healthy food, and healthy options or programs not being promoted.

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 63.1% in Montgomery County (County Health Rankings and Roadmaps, 2015), 27.3% of adults are sedentary (HCI, 2015) and 25.0% 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 167.8 per 100,000. The survey asked respondents: "In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate?"

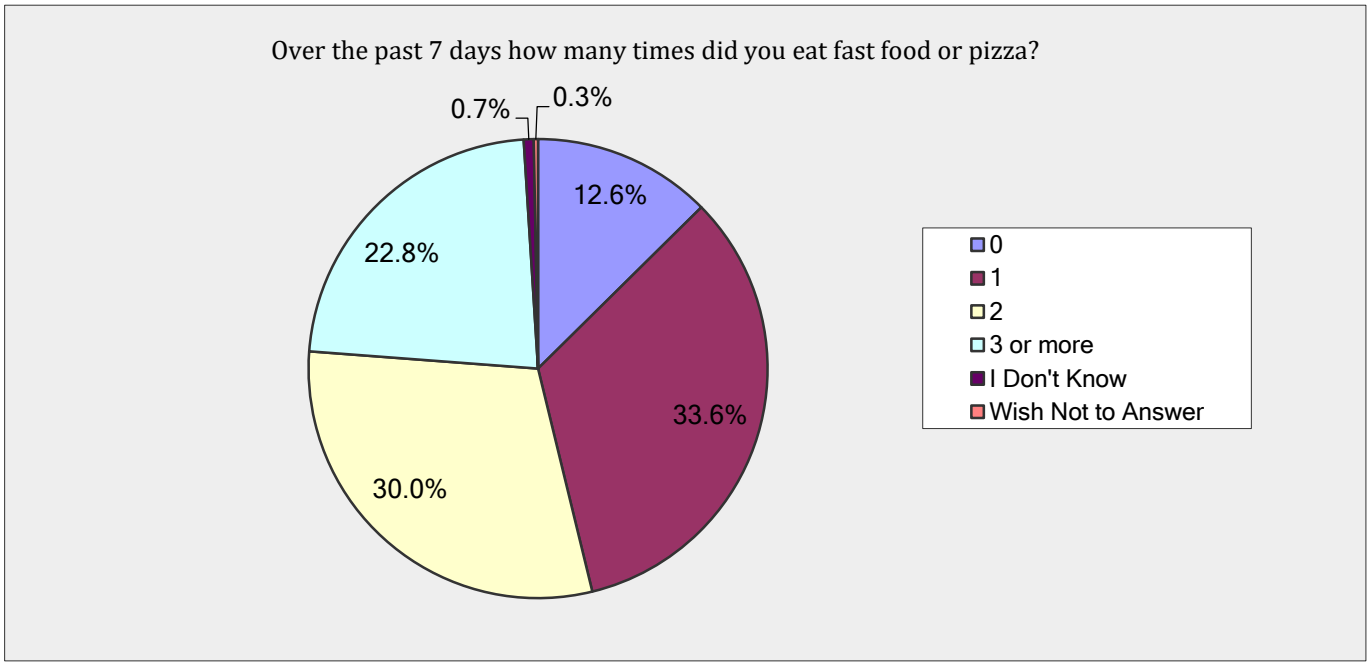


Nutrition

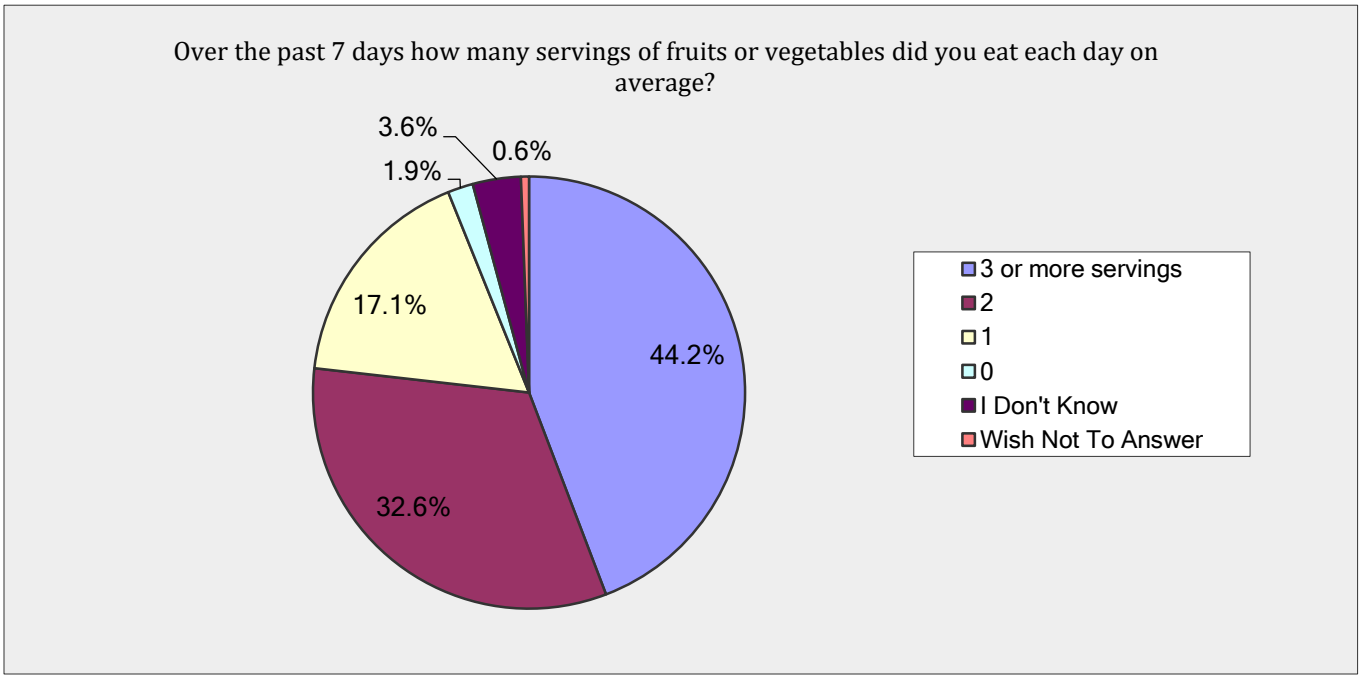
Nutrition can be analyzed by several societal factors such as food insecurity, limited access to healthy foods, food environment index, etc. Data for Montgomery County is listed below:

Nutrition Factors	
Occurrence	Montgomery County
Food Insecurity	24.6%
Households with No Car and Low Access to a Grocery Store	2.2%
Food Environment Index*	7.5%
Recommended Adult Fruit and Vegetable Consumption	13.2%
Children with Low-Access to a Grocery Store	2.9%
Low-Income and Low Access to a Grocery Store	4.1%
**on a scale of 1-10 with 10 being the best*	
County Health Rankings and Roadmaps, 2015; HCI, 2015; INdicators, 2013	

The survey asked the respondents: "Over the past 7 days how many times did you eat fast food or pizza?"



The survey asked the respondents: "Over the past 7 days, how many servings of fruits or vegetables did you eat each day on average?



Substance Abuse

Illicit drug use, smoking, and alcohol-related behaviors continue to be issues for Montgomery 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 Montgomery County, 15.6% of adults drink excessively (INdicators, 2013), and 20% 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.

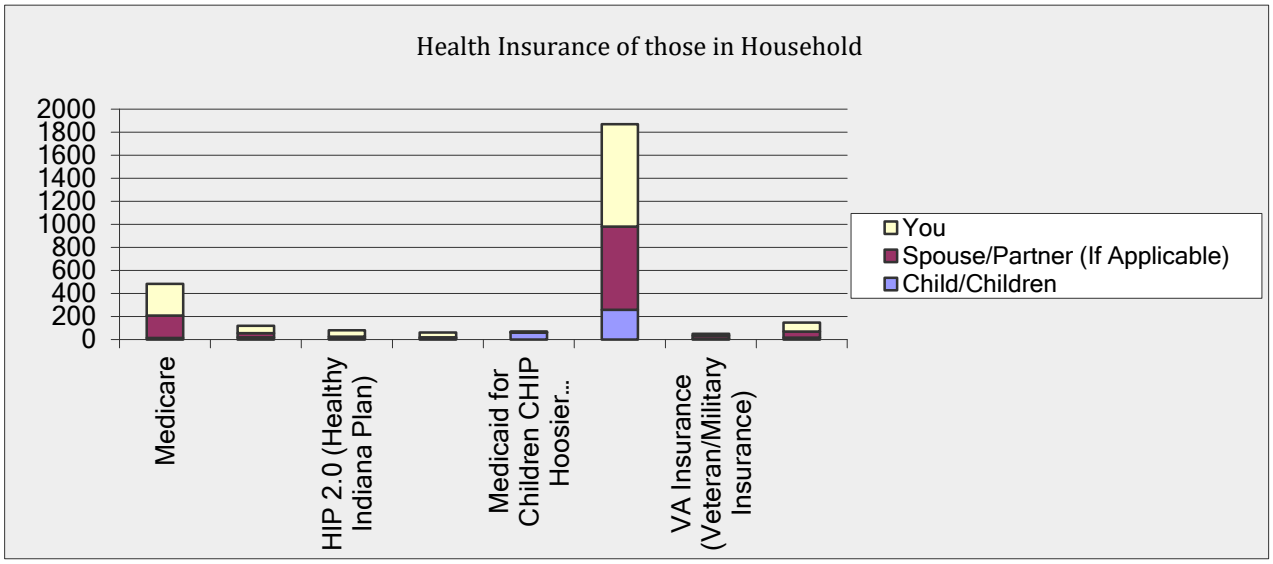
Montgomery County Tobacco Data	
Adults (18+) that smoke	23.2%
Births affected by smoking *	155
Cost of smoking-related births	$267,671
Pregnant women who smoke	31.4%
Deaths attributable to smoking	60
Deaths due to secondhand smoke	7
Economic burden of secondhand smoke	$2.3 million
Smoking-related illnesses	1,204
**Low birth weight, SIDS, and reduced lung function (State of Indiana, 2015)*	

Oral Health

Dental care opportunities are prevalent in Montgomery County. The patient to dentist ratio is 2,241:1 (County Health Rankings, 2015), 62.6% of adults visited the dentist at least once in the past year (INdicators, 2015).

Access to Health Care Challenges

Respondents were asked about their insurance and the people in the household's insurance.



Health Professions Shortage Areas

The ratio of population to primary care physicians is 2,005:1. The ratio for dentists is 2,241:1 (County Health Rankings, 2015).

Insurance/Payment

Insurance affordability is a barrier that many residents encounter in Montgomery County. According to INdicators (2013), 13.2% of the adults in Montgomery County that needed healthcare could not see a doctor in the last 12 months due to cost.

Transportation

Montgomery		
Transportation Option:	*Contact Information:*	*Populations Served:*
Veterans Transportation Service	765-364-5175 ex. 21 http://www.crawfordsville.net/topic/index.php?topicid=120	Veterans who are eligible for VA health care benefits
Sunshine Vans	765-364-5173 www.crawfordsvilleparkandrec.com	For people who are over 60
Helping Hand Chauffeur Service Inc.	Office: 765-723-2227 Cell: 765-366-7375 http://www.montcares.org/helping-hand-chauffeur-service-inc.html	Anyone is eligible Not accessible to wheelchairs unless capable of getting in and out of van

*Other: For all counties, County Connect is a service that is available to help coordinate between counties: http://www.327ride.net/pages/FAQs/

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. However, the paper surveys were used to solicit information from the most underserved populations. Therefore, the total survey results are skewed to represent those in most need.

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

The information and results of this needs assessment were shared with the Wellness Coalition of Montgomery County, which functions as the county's healthy community partnership. Participants indicated that the report would be useful for their department or organization, with most of the participants stating they would use the results to plan community based action and interventions. Because this was a joint effort with the Montgomery County Health Department, the results of the assessment have also been shared in public forums and open to feedback. Comments have indicated that this report is an adequate depiction of the state of health in the county

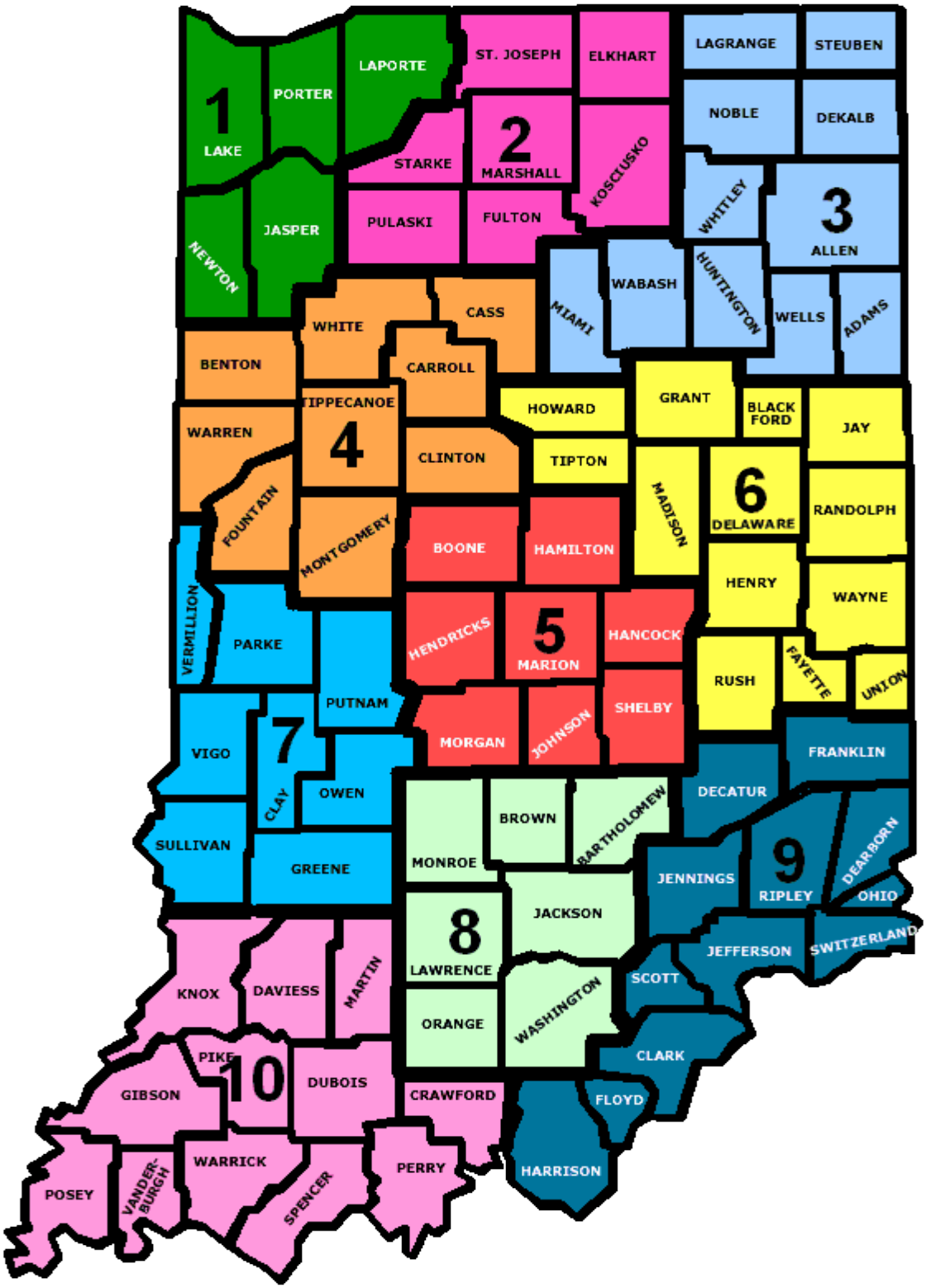
Appendix

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			

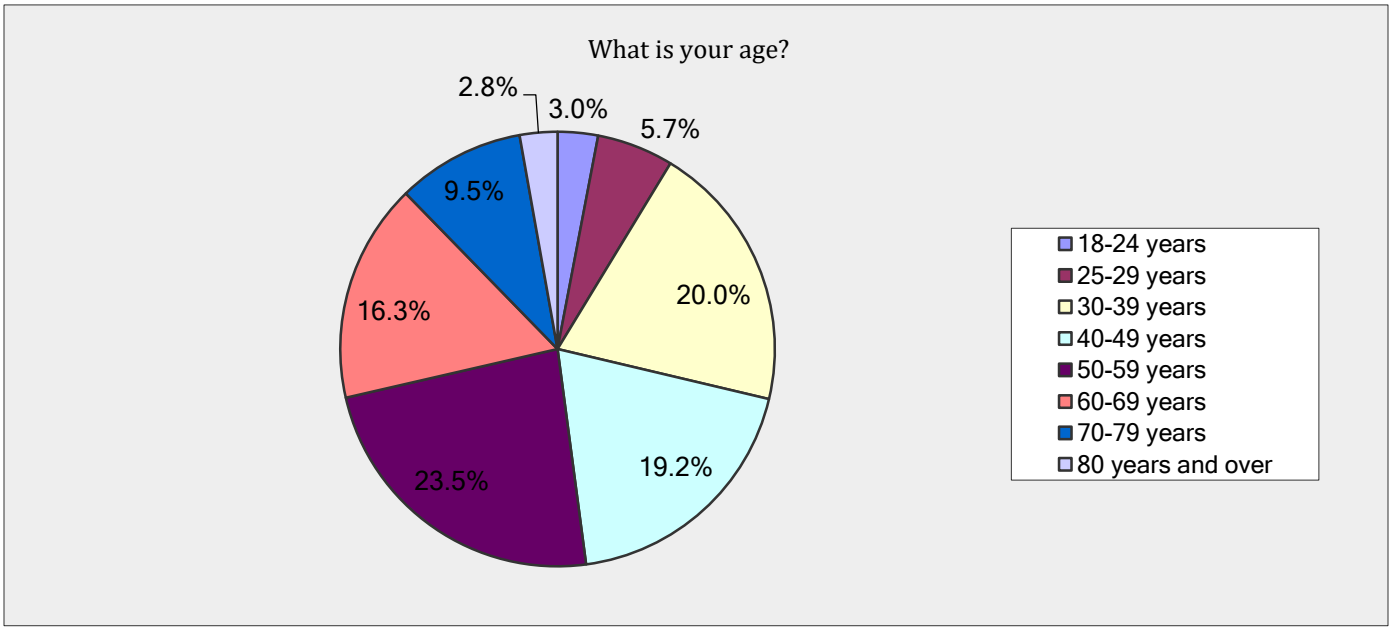
Student Focus Group	
Regions 1 and 2	
Largest Issues	*Possible Interventions*
Pollution	Make Pollution a Known Issue
Drug Use	Random Drug Testing at School
Healthy Food Access	Coping Skills and Rehab Centers
Unemployment	Job Fairs
Mental Health Issues	Offer Transportation
Regions 3 and 6	
Largest Issues	*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

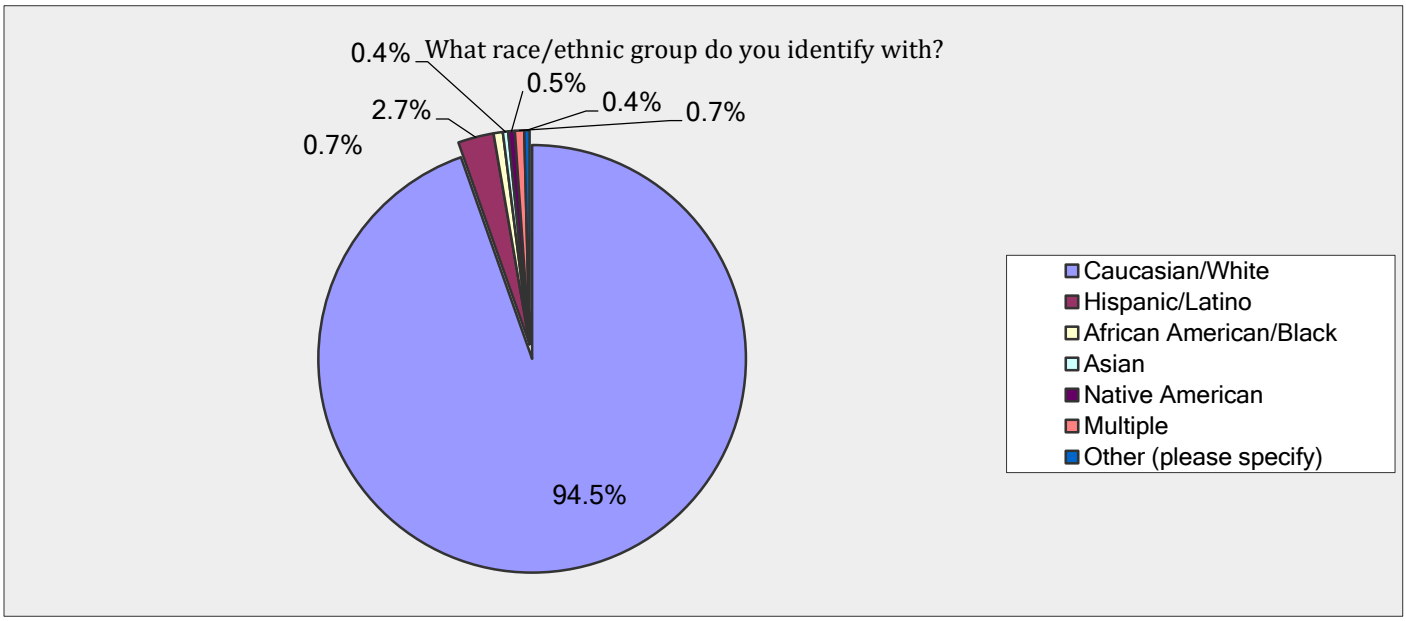


CHNA Survey Questions

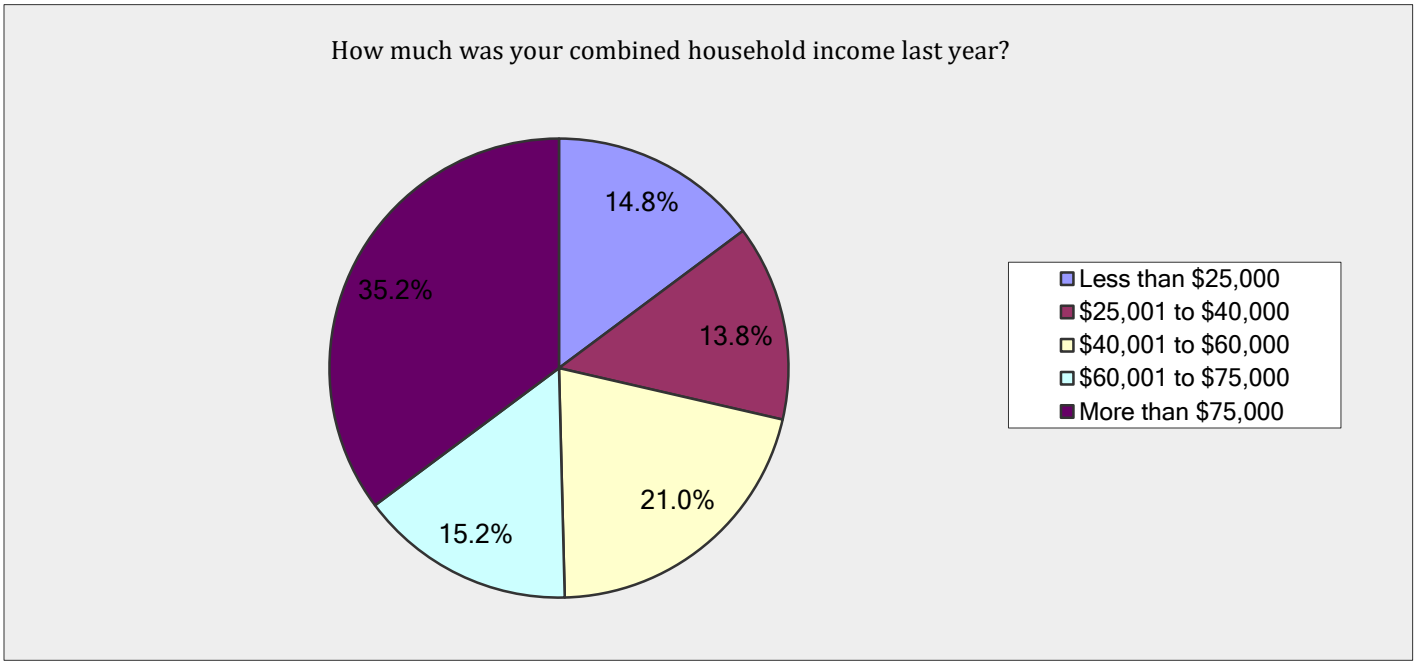
What is your age?



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 Partners and Members of the Steering Committee for the County Assessment

City of Crawfordsville, Mayor's office
Mayor Todd Barton*
City of Crawfordsville Parks & Recreation
Fawn Johnson, Director*
Chamber of Commerce
Steve House, Director*
Crawfordsville School Corporation
Rex Ryker, Assistant Superintendent*
Franciscan St Elizabeth Health - Crawfordsville
Terry Klein, VP/COO *
Sister M. Ruth Luthman OSF, Director of Mission Integration
Matt Oates, Marketing Specialist
Indiana University-Richard M. Fairbanks School of Public Health
JoBeth McCarthy-Jean, MPH, Director, Center for Public Health Practice, Indiana Public Health Training Center, and Liaison, Public Health Corps
Dr. Cynthia Stone, DrPH, RN, Clinical Associate Professor, Health Policy and Management Concentration Director
Indiana West Advantage
Zach Churney, Deputy Director
MCT (Medical Care Trust): Jill Rogers, President of the Board of MCT*
Montgomery County Health Board
Nancy Sennett, President*
Dr. Scott Douglas, Vice-President
Montgomery County Purdue Extension: Monica Nagele, Director*
Montgomery County Wellness Coalition
Montgomery County Health Department
Amber Reed, Administrator*
Luke Wren, Accreditation Coordinator*
Samantha Swearingen, Health Educator
Rebecca Lang, Public Health Nurse*
Montgomery County Council: Mark Davidson*
Nucor Steel: Leah Sinnet*
MUFFY: David Johnson, Executive Director *
Wabash College
Dr. Sara Drury, Strategic Planning Facilitator*
Kyle Stucker, Wabash Student
MCHD Accreditation Advisory Team *Denotes Advisory Group Members from Community Partners above

CHIP Collaborative Team:
Kate Hill-Johnson, Corporate Administrative Director of Community Health Improvement
Terry Klein, VP/COO
Sister Ruth Luthman, Director of Mission Integration
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