

Community Health ~  
Needs Assessment

Community Health ~  
Improvement Plan

*Please address written  
comments on the  
Community Health  
Needs Assessment  
as well as requests for a  
paper copy to*

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**2020 - 2022**

COMMUNITY HEALTH  
NEEDS ASSESSMENT ~

COMMUNITY HEALTH ~  
IMPROVEMENT PLAN

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**MAJOR HOSPITAL**

**November 2019**

# Preface

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## Community Health

A *Community Health Needs Assessment* is designed to give a community the information it needs to improve the health and wellness of its people. This may include, but is not limited to information about rate of disease, recreation facilities, education, and socio-economic determinants of health. No two assessments are alike due to the unique nature of each community. However, there are similarities as regions, states, and the nation tackle similar challenges such as obesity.

A *Community Health Needs Assessment* (CHNA) and *Community Health Improvement Plan* (CHIP) are federal requirements for non-profit hospitals. The information is used to guide hospital and community leaders in implementing environmental, system, policy and program change strategies for improving opportunities for health wherever people live, learn, work, play and gather.

This CHNA is based on primary and secondary data. Primary data is gained by interviewing and surveying residents of the community. A Community Health Survey was conducted in Shelby County from October 9 – November 9, 2019.

Socio-economic factors are increasingly experienced as barriers to health by individuals and families. They create significant challenges to health care systems, schools and employers. These barriers and challenges were a key focus of the Community Health Survey. Stakeholders well-acquainted with how socio-economic determinants impact those they serve were part of focus groups or interviews that determined the direction of the survey.

Secondary data is reportable information from schools, government, hospitals and other organizations. Data about disease, health and the socio-economic determinants of health are compiled and analyzed by several public health entities, such as universities, foundations and the *Centers for Disease Control and Prevention*. Published data is typically 2 or more years behind the current calendar year. Even so, this public information provides a data-driven picture of Shelby County's health over time.

Together, primary and secondary data provide a picture of Shelby County's well-being. This information will help guide efforts to improve our county's health over the next three years.

This CHNA is made possible by: **MAJOR HEALTH PARTNERS – MAJOR HOSPITAL.**

# Preface

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## Major Health Partners ~ Major Hospital Overview

*Major Hospital* has been serving Shelby County since 1924. Longtime residents of Shelby County have witnessed the Major medical system evolve and grow in order to meet the health needs of the County. Some changes have been bittersweet; some challenging; some taking healthcare to a new level for the residents of Shelby County.

*Major Health Partners – Major Hospital’s* mission is to create and deliver superior healthcare solutions by providing patients and other customers with optimal clinical and economic outcomes.

*Major Health Partners – Major Hospital (MHP)* accomplishes this mission through

- Highly skilled professionals and caring staff at every level of the enterprise;
- Adaptability to an ever-changing medical field;
- Supportive technology at every level;
- Disease prevention and optimal management;
- Stewardship of financial and human resources;
- Health care for those without the ability to pay;
- Leadership to improve the health and wellness of the residents of Shelby County.

Since January 2017 patients and guests have received care in the new *MHP Medical Center* located at 2451 Intelliplex Drive in Shelbyville. The medical center is a state of the art facility designed around patient safety, care, convenience and comfort. The new facility joins *MHP Oncology* and *Renovo Orthopaedics Center*. New in September 2019 has been the addition of the *MHP Professional Building*, home to the *Sue Ann Wortman Nephrology Center*. Here Shelby County and area residents with kidney disease are able to receive specialized care including dialysis treatment.

The *MHP Medical Center* is located less than 40 minutes away from a Level I Trauma Center and has a helipad on its campus.

MHP provides a broad range of health and medical care in order to serve the residents of Shelby County with the expertise expected of larger urban health systems and the compassion and personal service expected from neighbors.

# Preface

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## Major Health Partners ~ Major Hospital Overview

### MHP Health Services

- Bone Health
- Cardiovascular Health
- Diabetes Management
- Dialysis
- Dietary Services
- Dietitians
- Emergency Medicine
- Foot and Ankle
- Gastrointestinal Health
- Health Screenings
- Home Health
- Imaging
- Industry Health Clinics
- Laboratory Services
- Maternity Care
- Nephrology
- Oncology and Hematology
- OnSite Clinics
- Orthopaedics
- Otolaryngology
- Pain Management
- Palliative Care
- Pediatrics
- Plastics and Cosmetic Surgery
- Physical, Occupational & Speech Therapy
- Podiatry
- Primary Care
- Psychology
- Pulmonology and Respiratory Care
- Rehab: Cardiac and Pulmonology
- Sleep Medicine
- Spine Medicine
- Sports Medicine
- Support and Educational Groups
- Surgical Services
- Urgent Care and Occupational Health
- Urology
- Virtual Medical Provider Visits
- Women's Health
- Wound Care

The health of Shelby County, however, is not the sole responsibility of MHP or any other health system in the county. Improving the health and wellness of Shelby County residents requires expertise, commitment and investment from multiple sectors: government, education, business, industry, faith communities, health care, civic and non-profit organizations, and individual citizens. All are stakeholders in an improved quality of life. Health is everybody's business.

*Major Health Partners – Major Hospital* recognizes and values the vital work of the many people and organizations that are working to make Shelby County a better place to live and raise a family for a lifetime. Many MHP employees serve as community leaders and key collaborators in these organizations. This CHNA will provide information for stakeholders and decision-makers as they strategically plan and collaborate to improve the health of Shelby County.

# Community Stakeholders

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## Interviews and Focus Groups

To understand the strengths and barriers to a healthier Shelby County and to set the direction of the Community Health Survey, many voices were heard.

### Behavioral Health and Substance Use

ER Counseling: Therapist/Owner

Goodwill Nurse-Family Partnership: Nurse Supervisor

Indiana Tobacco Prevention and Cessation Grant Project Manager

Jane Pauley Community Health Center: Psychiatric Nurse Practitioner

MHP Baby and Me Tobacco Free: Maternal Child Navigator and Program Coordinator

MHP Cessation Specialists

Shelby County Drug Free Coalition/Drug Free Shelby County: Executive Director and ITPC Grant Project Manager

### Business and Industry

Indiana Grand Casino and Racing: Race Marketing Manager

Sharp Trophies by Mack

Seniors Helping Seniors

### Disabilities

#### **Livable Communities Coalition**

- City Council Member
- City of Shelbyville Engineer
- City of Shelbyville Street Commissioner
- Invested Citizens
- Shelbyville Senior Services: Executive Director; Food Pantry Coordinator

Shares, Incorporated: Fund Development Associate/Program Manager

### Diversity

Healthy Shelby County Diversity Action team: Chairperson

MHP Spanish Language Translator

### Faith Community

Christian Life Center: Ministry Team member

### Government

City Council Member

County Council Member

City of Shelbyville Building and Planning Commissioner

### Health and Wellness

ABM Healthcare Support Services: Director Dietary Services

Clarity Cares Pregnancy Services

Goodwill Nurse-Family Partnership: Supervisor, Robert Wood Johnson Future of Nursing Scholar

# Community Stakeholders

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## Interviews and Focus Groups

### Health and Wellness continued

Healthy Partners: Director

Healthy Shelby County Active Living Action Team: Chairperson

Healthy Shelby County Healthy Eating Action Team: Co-chairs

Healthy Shelby County Tobacco-Free Action Team: Co-chairs and ITPC Grant Project Manager

Jane Pauley Community Health Center: Practice Manager & Patient Outreach Coordinator

### **Healthy Shelby County Coalition**

- Ashford Place Health Campus
- Clarity Cares Pregnancy Services
- ER Counseling
- Goodwill Nurse-Family Partnership
- Jane Pauley Community Health Center
- Purdue Extension Community Wellness Coordinator
- Shares, Incorporated
- Shelbyville Central Schools
- Shelby County Drug Free Coalition/Drug Free Shelby County
- Shelby County Health Department Community Health Worker

- Turning Point Domestic Violence Services

### **MHP Director's Retreat**

- MHP Ambulatory Care Population Health Coordinator
- MHP Administrative Services Manager
- MHP Chief Technical Officer and Supply Chain Management
- MHP Director Business Development
- MHP Director Clinical Support Services
- MHP Director Clinical Technology
- MHP Director Disease Management
- MHP Director Education Services
- MHP Director Emergency Services
- MHP Director Home Health and Palliative Care
- MHP Director Inpatient Care
- MHP Director Integrated Clinical/Financial Support Service and Referral Call Center
- MHP Director Maternal Child Care
- MHP Director Nephrology and Infectious Disease
- MHP Director Oncology
- MHP Director Orthopaedics
- MHP Director Patient Experience and Volunteer Services
- MHP Director Pediatrics and OB/GYN
- MHP Director of Pharmacy
- MHP Director Surgical Services
- MHP Risk Manager
- MHP VP-Chief Nursing Officer and Operations Officer

# Community Stakeholders

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## Interviews and Focus Groups

### Low Income and Under-Served Populations

Excel Center: Office Manager

Family Services and Prevention Programs:  
Executive Director

Goodwill Nurse-Family Partnership: Nurse  
Supervisor

Healthy Shelby County Healthy Eating  
Action Team: Co-Chairs

Jane Pauley Community Health Center:  
Practice Manager and Patient Outreach  
Coordinator

MHP Spanish Language Translator

Shelby County Health Department  
Community Health Worker

Shelby County Purdue Extension:  
Community Wellness Coordinator

Shelby Senior Services: Family Caregiver  
Services Coordinator

Turning Point Domestic Violence Services:  
Community Services Director and Case  
Manager

### Older Adults

Horizon Center Round Table: Fairland

Horizon Center Round Table: Morristown

Horizon Center Round Table: Waldron

Shelby Senior Services: Executive Director;  
Family Caregiver Services Coordinator;  
Health and Wellness Coordinator

### Shelby County Council on Aging Focus Group:

- Angels of Mercy Home Care
- Aperion Health Care
- Ashford Place Health Campus
- Central Indiana Council on Aging
- Great Lakes Home Care
- McKay Manor
- Seniors Helping Seniors
- Walker Place

### Schools

Blue River Adult Education: Director

Excel Center: Office Manager

Ivy Tech, Shelbyville Campus: Site Director

Shelbyville Central Schools: Corporate Nurse

### Young Children

Early Learning Shelby County

Family Services and Prevention Programs

Goodwill-Nurse Family Partnership



# PREFACE

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## Survey Methodology

In order to adequately represent the diversity by which residents receive information, a variety of options for responding to the survey was available from October 9 – November 9, 2019.

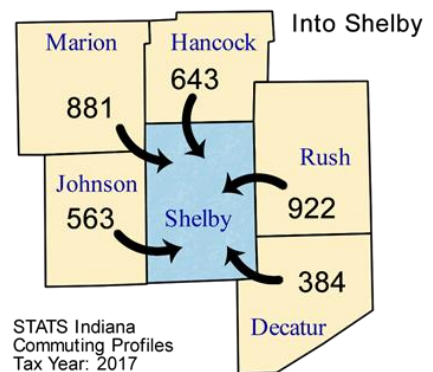
- **Email Distribution:** The survey was distributed through multiple distribution lists for community service providers, ministerial association, medical and ancillary providers, government, schools, nonprofits, and the *Healthy Shelby County* coalition.
- **Internal Communication Systems:** Business and industry, City and County government, *Major Health Partners*, schools, and non-profits distributed the survey through their internal communication systems to their employees and board members.
- **Printed Surveys:** Paper surveys were broadly distributed throughout the county with special attention to areas where older seniors live and receive services; the agencies and housing campuses that provide services to lower-income residents; the *Shelby County Public Health Department*, healthcare facilities; the *Shelby County Public Library* and its Morristown branch, *Shelby County Community Corrections*, *Blue River Career Programs*, MHP volunteers and patients, and Hispanic - Latino communities of faith and service providers. The survey was available in Spanish and English languages.
- **Promotional Signs and Fliers:** Signs and fliers noted URLs and QR codes of English and Spanish surveys; location of paper surveys; and highlighted the ability to use smart phones to take the survey. Signs and fliers were broadly distributed to places where people congregate and/or must wait to be served and to where public notices are posted in schools, youth programs, community senior centers, retail establishments, industry, health clinics, neighborhoods and all the towns of Shelby County. Special attention was given to low-income neighborhoods that might have limited access to other promotions.
- **Meetings and Events:** The MHP Community Liaison promoted the survey at many public gatherings, organization meetings, and public events.
- **Social Media:** The survey was promoted on the *Facebook*, *Instagram* and *Twitter* pages of *Major Health Partners* and *Healthy Shelby County*. *Healthy Shelby County* participants cross-promoted the survey on their social media pages.
- **Websites:** The survey was promoted on the *Shelby County Chamber of Commerce* website and a link to the survey was provided on the MHP website.
- **Traditional Media:** The survey in its entirety appeared 2 times in the *Shelbyville News* along with an article about the Community Health Needs Assessment. The survey was featured through the *Shelby County Chamber of Commerce*.

# PREFACE

## Survey Methodology

Steps were taken to give full voice to the entire county, regardless of geography, gender, race, or socio-economic level. There is fairly good distribution across ages, household income, ethnicities, and population centers. However, the smaller communities of Shelby County have limited representation in the survey. The Hispanic – Latino population is under-represented even though concerted effort was made to engage trusted members of this community in explaining and promoting the *Community Health Survey*. The current climate has found the Hispanic community more guarded. Finally, because of the workers commuting into the county, the percentage of high-end earners is greater than the county’s income rates per the 2017 census estimates.

Based on the 2017 Tax Year, 12.9% of Shelby County’s workforce commuted from 24 other counties and 4 other states. The chart shows the top 5 counties sending workers into Shelby County. These employees use the *MHP OnSite Clinics*, teach our children, eat in our restaurants, put out our fires, provide medical care for our families, and work in our industries. Therefore, they are important stakeholders in Shelby County and their viewpoints will be heard in the *Community Health Survey*.



## Community Health Survey

The sample size of the survey is 797. The sample size is not specific because a different number of individuals opted to answer each question. The sample size is significant. According to the county’s estimated 2018 population of 35,564 citizens age 15 and older, a minimum of 381 respondents were needed to adequately reflect the county’s population at a 95% confidence level. The data was separated by age, ethnicity, income and zip code.

Because it was a City of Shelbyville election year, a few respondents used the comment boxes as an opportunity to vent their political views unrelated to the survey questions. Their comments were not counted, though they did make for interesting reading. Some respondents also used the survey as a vehicle for venting about particular experiences with *Major Health Partners*. These comments will be shared with appropriate persons at MHP for ongoing quality improvement.

In order to compare the secondary data with perceptions of Shelby County residents, results from survey questions are incorporated into the data report rather than as a distinct section in the *Community Health Needs Assessment*.

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# COMMUNITY HEALTH ~ NEEDS ASSESSMENT

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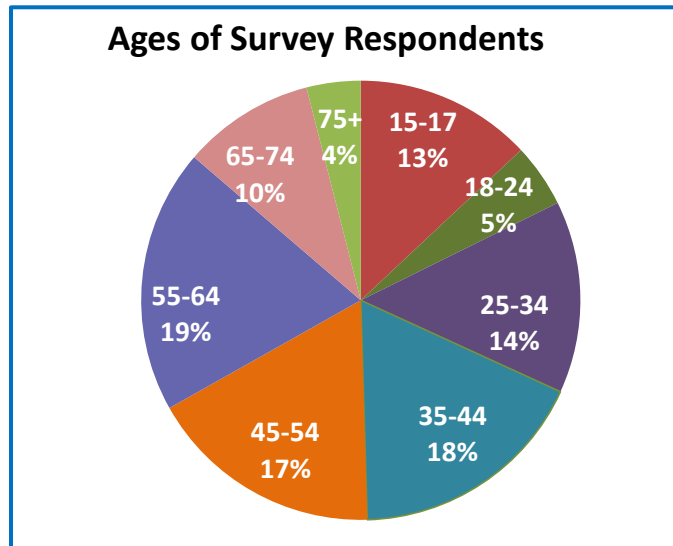
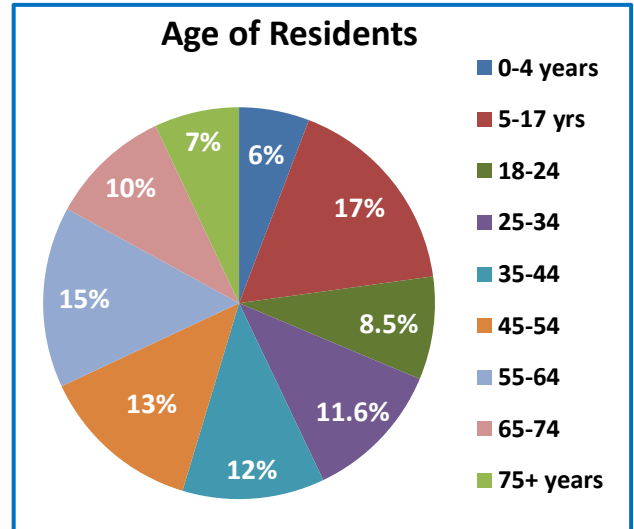
**Who are the people of Shelby County?**

# Demographics

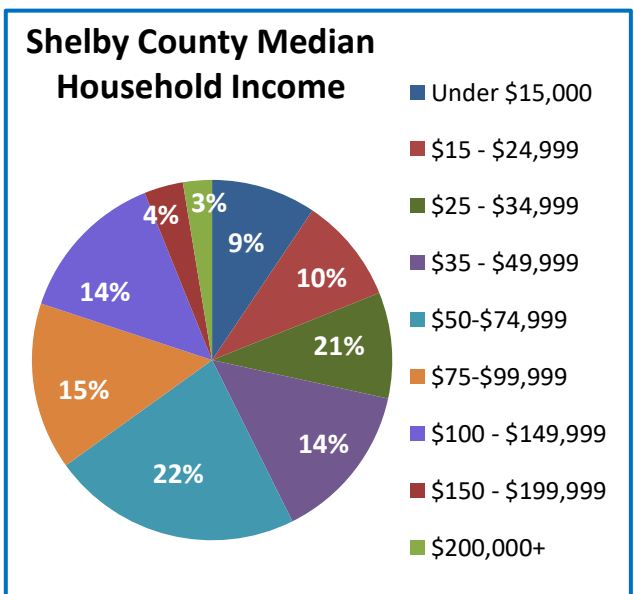
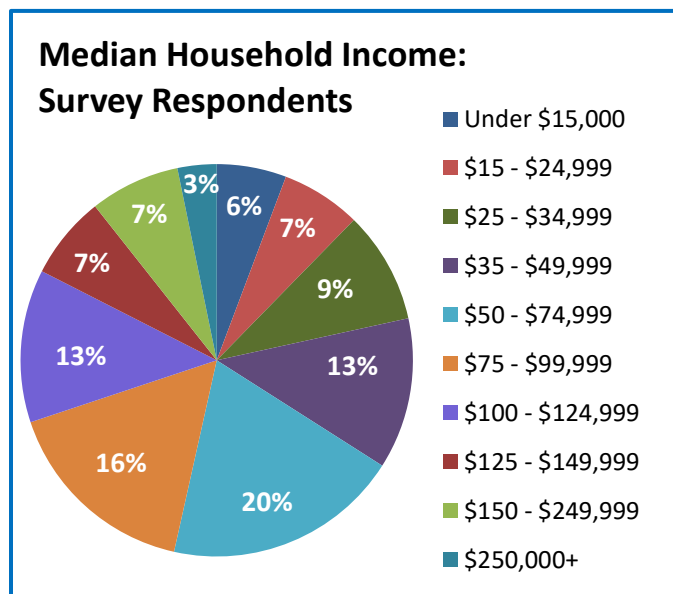
## Census and Survey Respondents

### Shelby County Census (2018):

- Shelby County population  
44,593 residents
- 23% are under the age of 18 years
  - 6% are under the age of 5 years
- 77% are over the age of 18
  - 20% are ages 18 – 34
  - 40% are ages 35 - 64
  - 17% are over the age of 65



The 2016 *Ball State University* economic analysis of Shelby County found that since 2010 there has been migration into the county of children ages 1-4 and adults ages 25-35 – demographic of young families. The highest percentage of people moving into the county has been 35-33 year olds.



# Demographics

## Census and Survey Respondents

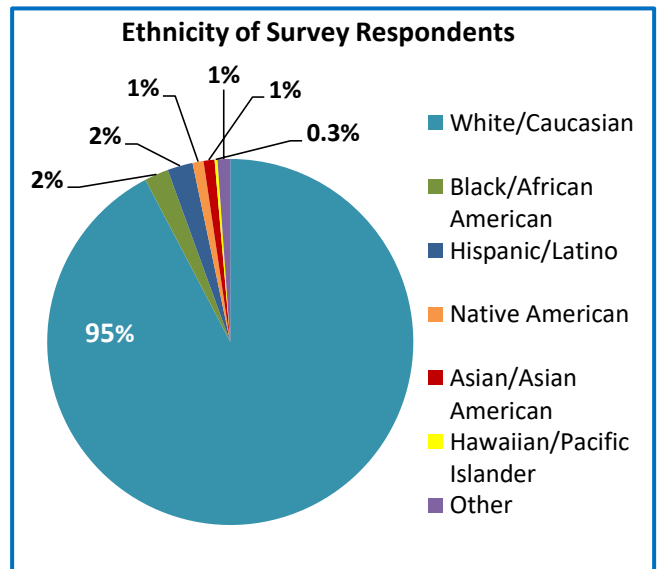
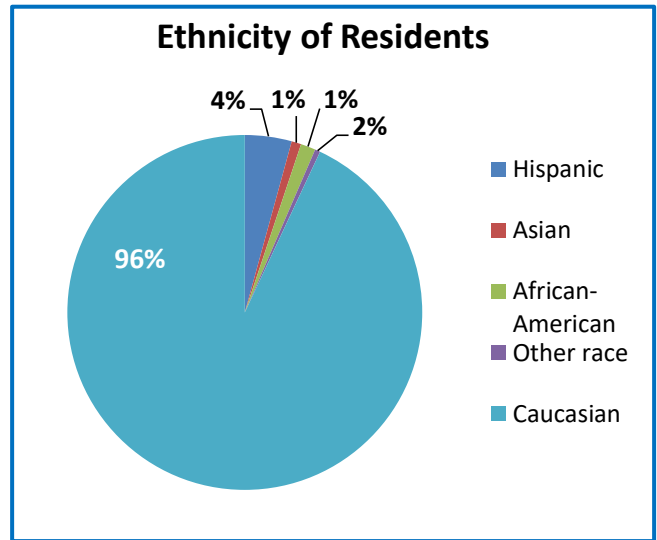
### Shelby County Census (2018):

- 96% identify as Caucasian/White
- 4.4% as Hispanic or Latino
- 1.4% as African American/Black
- 0.9% as Asian
- 0.5% as Native American or Hawaiian
- 2.4% as some other race
- 1.3% identify as being two or more races

English is the primary language in Shelby County. Per the 2017 census estimates, 4.2% of the population may speak another language at home.

Nearly 100% of Shelby County residents are native or naturalized U.S. Citizens. Residents enrich the county with diverse cultural and ethnic roots such as

- German
- English
- Hispanic/Latino
- Japanese
- Burmese



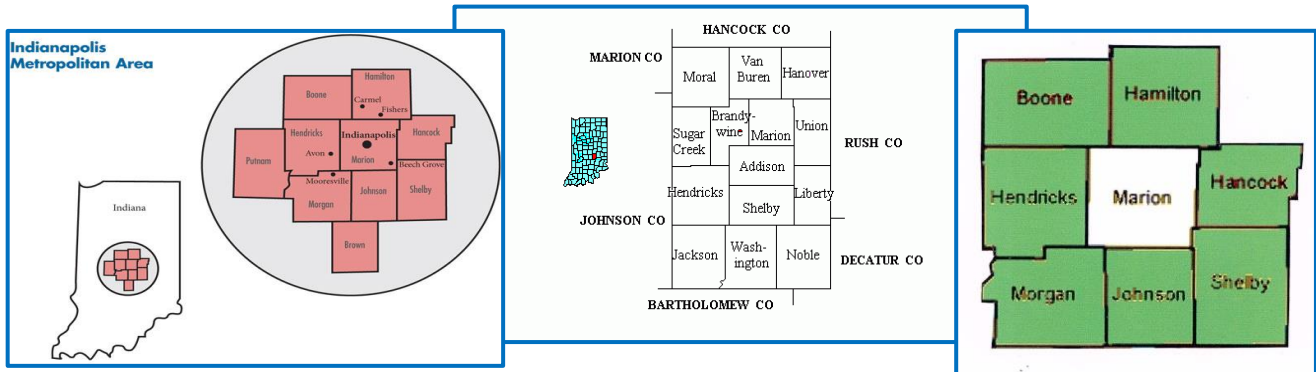
## Geography

### Geographic Region of the Community Health Needs Assessment

The CHNA covers the geographic region of Shelby County, Indiana. Shelby County is primarily a rural community of just over 411.15 square miles located in central Indiana with 108.5 people per square mile (per 2018 census estimates). The county is considered a “donut” county along with Boone, Hamilton, Hancock, Hendricks, Johnson and Morgan Counties that surround Marion County, home of the state capitol, Indianapolis. Shelby County is considered part of the Indianapolis Metropolitan Statistical Area.

# Demographics

## Geography

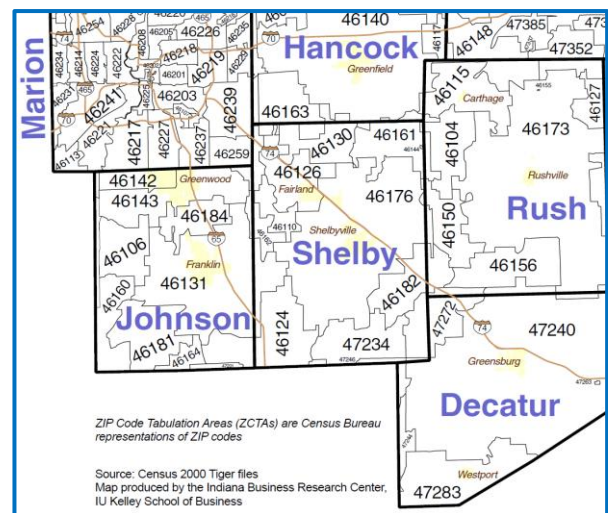
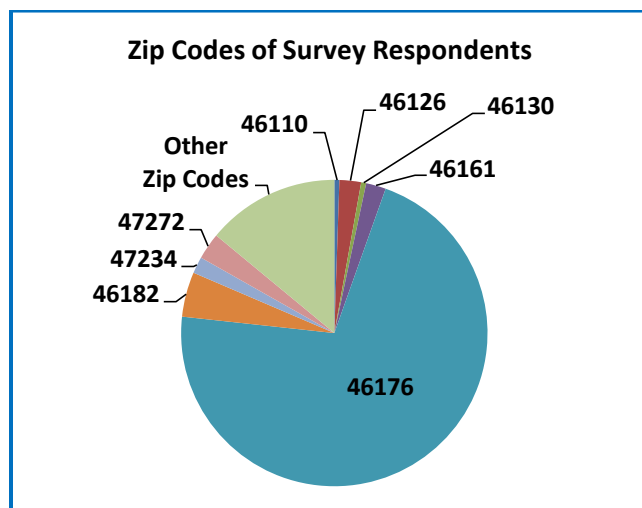


The County Seat of Shelbyville is located in the middle of the county, 28 miles from Indianapolis. The county borders Rush, Bartholomew, Decatur, Hancock, Johnson, and Marion Counties. There are 14 townships and several small towns in the county including 3 moderately sized towns: Waldron, Morristown, and Fairland.

### Shelby County includes the following primary zip codes:

- |                      |                    |
|----------------------|--------------------|
| 46110 (Boggestown)   | 46161 (Morristown) |
| 46176 (Shelbyville)  | 46126 (Fairland)   |
| 46130 (Fountaintown) | 46182 (Waldron)    |
| 46144 (Gwynnville)   | 47234 (Flat Rock)  |

Several zip codes have a small presence in Shelby County but their population centers are located in another county: small areas of 46131 (Franklin), 46150 (Manilla), 46162 (Needham), 46163 (New Palestine), 46259 (Marion County), 46104 (Rush County), and 47246 (Hope). St. Paul (47272) and Edinburgh (46124) are in the Shelby Eastern (Waldron) and Southwestern school districts, respectively. The area of St. Paul within Shelby County is 9% and the Edinburgh area is 2% of Shelby County's total population. (STATS Indiana, 2017).





# Demographics

## Shelby County Characteristics

The following information about Shelby County is from the 2017-18 *U.S. Census Bureau* data.












Dials indicating in which quartile Shelby County falls within Indiana’s 92 counties are from *Conduent Healthy Communities*.

Per the 2018 Census estimates, Shelby County’s population is 44,593. It has had a 0.4% population increase since the 2010 census.

- Shelbyville, the County Seat, has 43.3% of the population: 19,326 persons.
- Per the 2018 Census estimates, there are 17,603 households in the county.
  - 17.4% households with children have married parents
  - 8.8% headed by single parents
  - Married couples: 9,130
    - 34% married couples do not have children in the household
  - Living alone: 4,710 households – 26.8% of the households in Shelby County
    - 33.2% of adults 65 years and older live alone
- Female and male residents are nearly even, with females 50.5% of the population.
- There are 3,141 civilian veterans.
- Foreign born citizens comprise 2.3% of the population.

### Shelby County – County Seat Comparison (2013-2017)

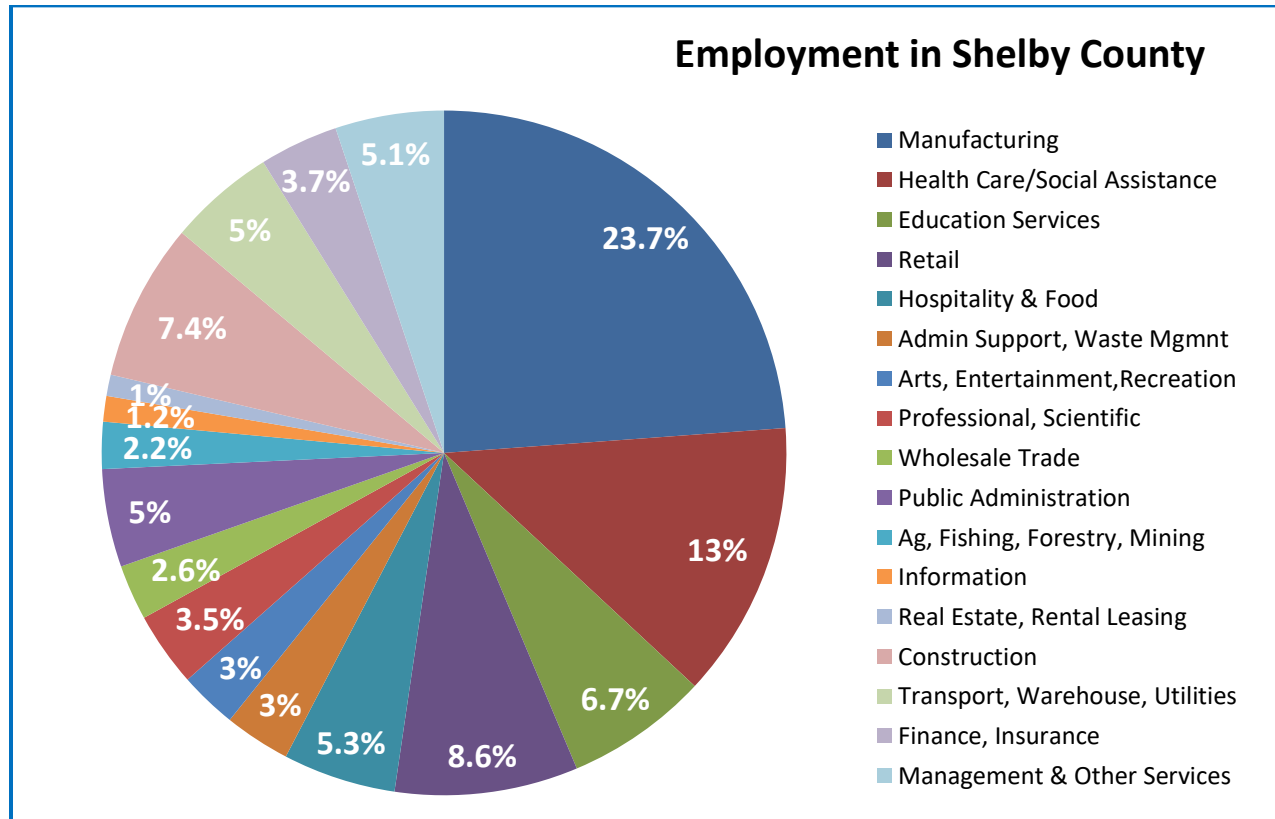
Community Health Indicator	Shelby County	Shelbyville
Median Age	41.5	36.7
Per Capita Income	\$27,317 	\$24,675 
Median Household Income	\$57,216 	\$48,071 
Owner-Occupied Homes	67.3% 	59.3% 
Renter-Occupied Homes	24.4%	42.9%
Poverty	10.6% 	16.2% 
Children Living in Poverty	14.3% 	18.7%

*U.S. Census Bureau American Community Survey 5 Year Estimates*

# Demographics

## Employment

As of September 2019 the unemployment rate in Shelby County was 2.5%. The annual unemployment rate for 2018 was 3.1%. In 2019 the largest employers in Shelby County were Manufacturing, Health and Social Assistance, Retail Trade, and Education Services. Per the census, there are 3,602 companies in the county.



U.S. Census Bureau American Community Survey 5 Year Estimates & STATS Indiana

Per the 2017 tax year, 23.4% of the implied *resident* labor force worked outside of Shelby County. The implied workforce receives 12.6% of its labor from outside Shelby County.

Workforce (2018)	
Number of people who live in Shelby County and work ( <i>implied resident labor force</i> )	23,195
Total number of people who work in Shelby County ( <i>implied workforce</i> )	22,476
Commuters	
Number of people who live in Shelby County and work outside the county	7,973
Number of people who live in another county (or state) and work in Shelby County	4,647

STATS Indiana, 2018

# Demographics

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## Education

### Preparatory and Post-Secondary Education in Shelby County

- Four public school districts
- Two parochial schools (one elementary, one K – 12)
- *Blue River Career Education* – vocational school for high school students
- Two adult learner programs for those without high school diplomas:
  - High School Equivalency program of the *Blue River Adult Education*
  - High school diploma program through the *Excel Center* – a *Goodwill Industries* program.
  - Both schools offer high quality certificate programs.
- *Ivy Tech Community College* campus through Indianapolis: part of the Shelbyville, Franklin and Mooresville cluster of campuses
  - *Ivy Tech* and *Blue River Adult Education* also provide continuing education for re-tooling.
  - The 3 adult education schools have begun collaborating in order to increase access to classes and certificate programs and to eliminate duplication.
- *Advantage Shelby County* - a partnership between *Ivy Tech Community College*, Shelby County and the City of Shelbyville.
  - Shelby County graduates who meet criteria can achieve an Associate’s Degree through *Advantage Shelby County*
  - City and County provide funding of last resort to eligible students who can obtain a free degree in Advanced Automation and Robotics, General Studies, or General Education Core in preparation for transfer to a 4 year college.

# Demographics

## Education



Shelby County is in the top 25% of Indiana counties with its high school graduation rate of 95.4%. By 2025 the *Lumina Foundation's* goal is for 60% of American's to have earned post-secondary degrees or high quality certificates. The *Lumina Foundation* is a nonprofit focused on post-secondary education and training as a quality of life and economic driver for the nation. As of 2017, 88.1% of Shelby County residents aged 25 and older had high school diplomas (or equivalent) and post-secondary degrees or high quality certificates. Bachelor's degrees and higher were held by 18% of that cohort.

**Disparity:** Nearly 39% of the Latino and Hispanic population in the county do not have a high school diploma or equivalent.

### Shelby County's schools are in the top 50% of Indiana's 92 counties in these areas:

Indiana County Comparison	Benchmark	Value
	4 <sup>th</sup> Grade Students Proficient in English/Language Arts	71.7%
	4 <sup>th</sup> Grade Students Proficient in Math	66.7%
	8 <sup>th</sup> Grade Students Proficient in English/Language Arts	71.2%
	8 <sup>th</sup> Grade Students Proficient in Math	68.1%
	High School Graduation (within 4 years of entering 9 <sup>th</sup> grade	95.4%

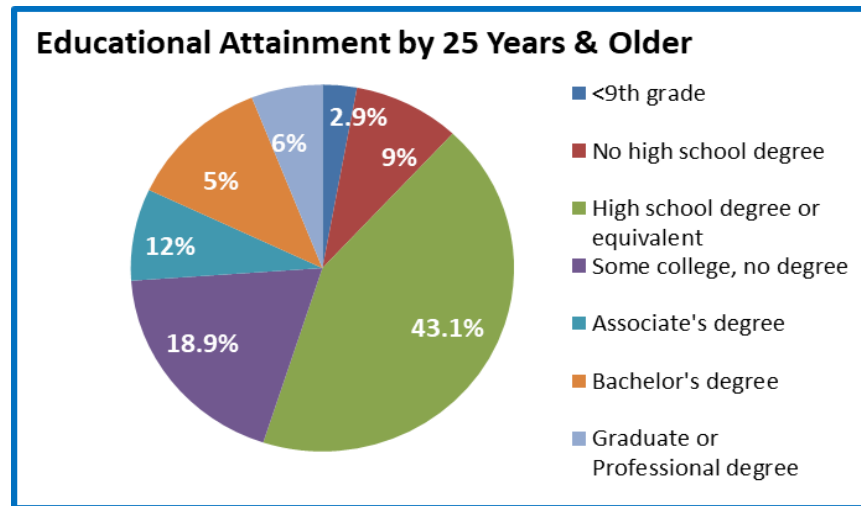


High school and post-secondary career-ready education opportunities have impacted educational achievement in Shelby County. 2018 Census estimates 88.1% of Shelby County has a high school diploma (or equivalent) and higher. In 2009 86.2% of the County had a high school diploma or higher.

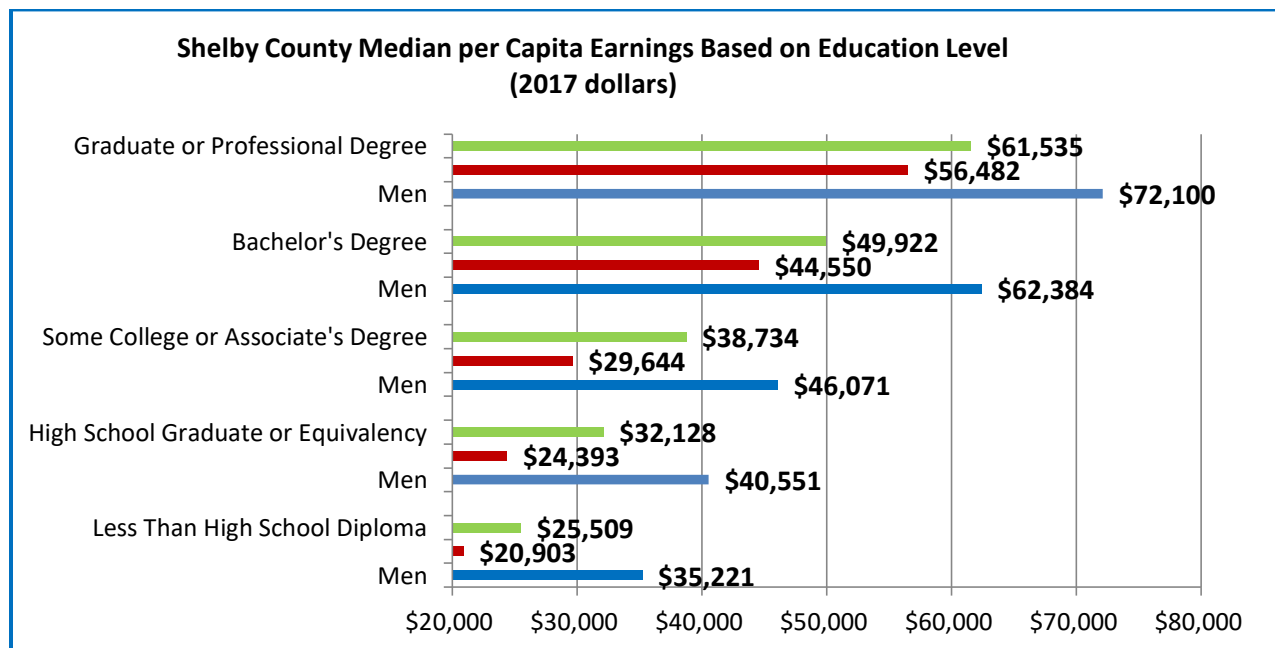
**Education level impacts income and health.** Later in this report, the impact of education and income on health behaviors will be highlighted. Earning power impacts the ability to purchase healthy foods, afford quality childcare, access preventative healthcare, and invest in other activities that improve quality of life.

# Demographics

## Education and Income



Between 2009 and 2017 there was a 36% increase in the number of residents with a Graduate or Professional Degree; 21% increase in Bachelor's Degrees; and a 6.5% increase in Associate's Degrees or industry Certificates.



U.S. Census American Community Survey 5 Year Estimates

**Disparities:** At every level of education, there is a wage disparity between female and male earners. This disparity is most significant at lower education levels. Men with or without a high school diploma, an Associate's Degree, or some college/post-secondary training earn from \$14,000 - \$16,000 more than women.

Diverse race and ethnic populations of Shelby County have high school diploma (or equivalent) rates between 74 – 89%. Latino and Hispanic population rates are 61%.

# Demographics

## Disability

Per the 2017 census, in Shelby County there were 6,119 persons age 0 – 75+ living with at least one disability. The *United States Census Bureau* identifies the following disabilities:

- **Hearing:** deaf or having serious difficulty hearing.
- **Vision:** blind or having serious difficulty seeing, even when wearing glasses.
- **Cognitive:** due to a physical, mental, or emotional problem; includes dementing illnesses as well as intellectual and developmental disabilities that begin in childhood and typically last throughout a person’s lifetime.
- **Ambulatory:** having serious difficulty walking or climbing stairs.
- **Self-care:** having difficulty bathing, dressing or feeding one’s self.
- **Independent Living:** due to a physical, mental, or emotional problem.

Age	2017 Disability Estimates: Number and %	Hearing	Vision	Cognitive	Ambulatory	Self-Care	Independent Living
<b>*With any disability</b>	6,119 persons – 13.8% of civilian population						
<b>0-4</b>	18 – 0.7%		0.4%				
<b>5-17</b>	411 – 5.3%	1%	0.2%	4%	0.1%	1%	
<b>18-34</b>	510 – 6%	1%	2%	4%	1%	1%	2%
<b>35-64</b>	2,411 – 13.3%	3%	2%	4%	8%	2%	4%
<b>65-74</b>	1,254 – 31.9%	10%	5%	5%	21%	6%	11%
<b>75+</b>	1,401 – 49%	20%	7%	10%	31%	11%	25%

*U.S. Census American Community Survey 5 Year Estimates*

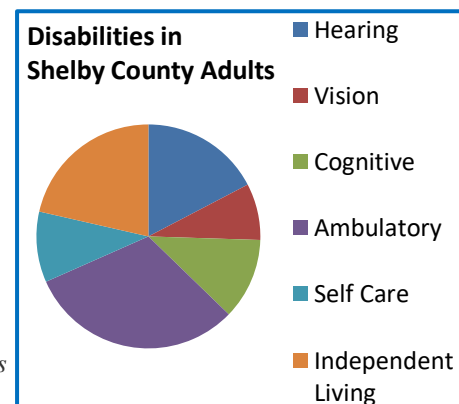
*Percentages for disabilities are rounded up & do not equal 100%: a person may have more than 1 disability.*

*\*Civilian population = non-active duty military, non-institutionalized residents (nursing homes, prisons, jails, mental hospitals & juvenile correctional facilities)*

### Among working age adults (18 – 64 years) with disabilities in Shelby County:

- 49.3% participate in the labor force
- 9.2% are unemployed
- 19.2% live in poverty

*(American Community Survey 5 Year Estimates; Annual Disability Statistics Compendium, Institute on Disability, University of New Hampshire, 2019)*



# Demographics

## Developmental Disability

### Developmental Disabilities (DD):

- Per the CDC, 25.5% of adults in Indiana have a developmental disability. This is congruent with the National statistic of 25.6%.
- **Developmental Disability costs in healthcare expenditures are \$8.4 billion per year in Indiana** (2006 dollars). This is approximately 27% of total healthcare expenditures for the state.
- Adults with Developmental Disabilities are more likely than adults without DD to be:

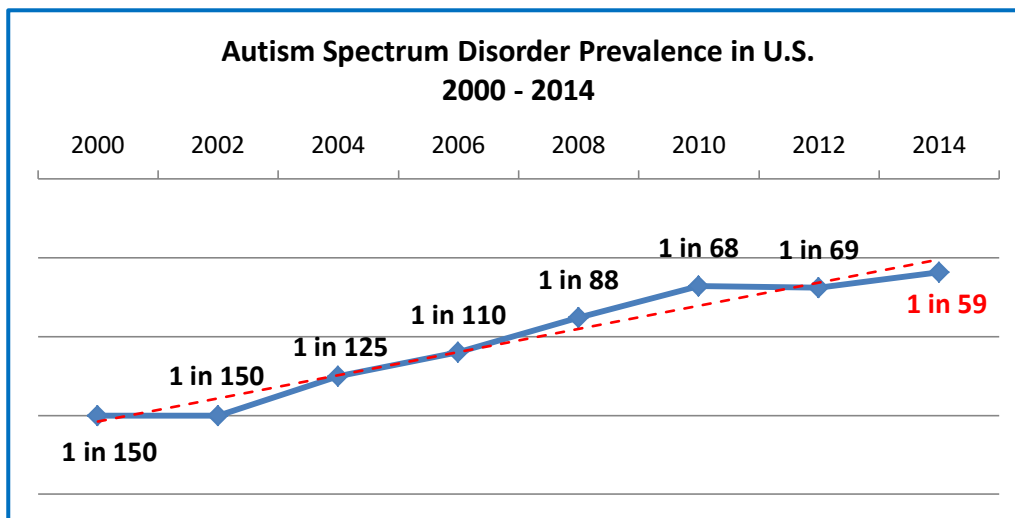
Health Indicator	Indiana Adults with DD	Indiana Adults
Inactive	48.9%	27.8%
Have high blood pressure	44.5%	28.8%
Smoke	35.5%	18.3%
Be obese	41%	30.3%

Centers for Disease Control and Prevention, Disability and Health U.S. State Profile Data for Indiana (Adults 18+ Years of Age, <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/indiana.html> )

- From 2009 - 2017, 17% or 1 in 6 children was diagnosed with a developmental disorder. These disorders range from mild disabilities such as a speech and language disorder to more complex disabilities such as Cerebral Palsy or Autism Spectrum Disorder.

(CDC, Increase in Developmental Disabilities among Children in the United States, <https://www.cdc.gov/ncbddd/developmentaldisabilities/features/increase-in-developmental-disabilities.html> )

- Autism Spectrum Disorder (ASD) is the fastest growing developmental disability in the United States, impacting 1 in 59 children.



CDC, Data and Statistics on Autism Spectrum Disorders

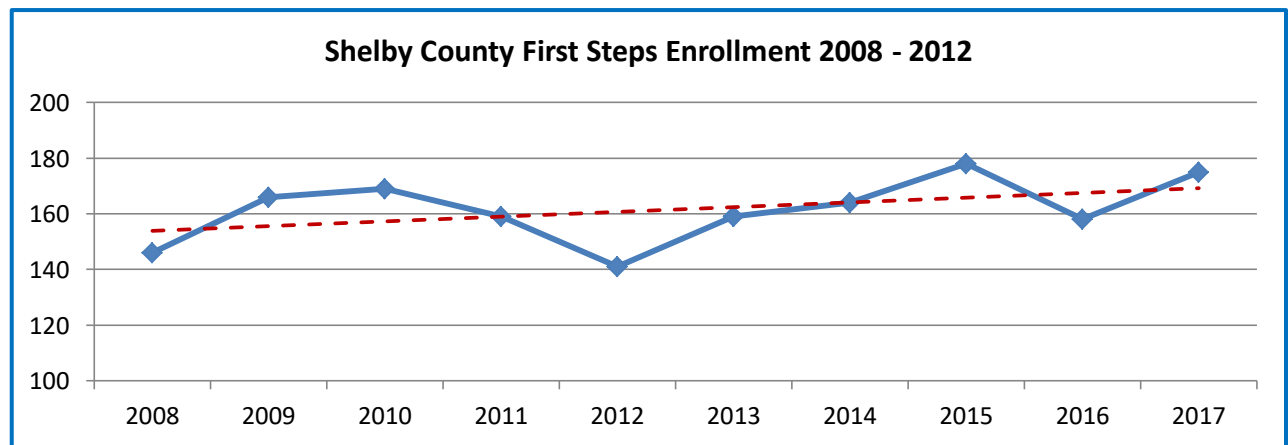
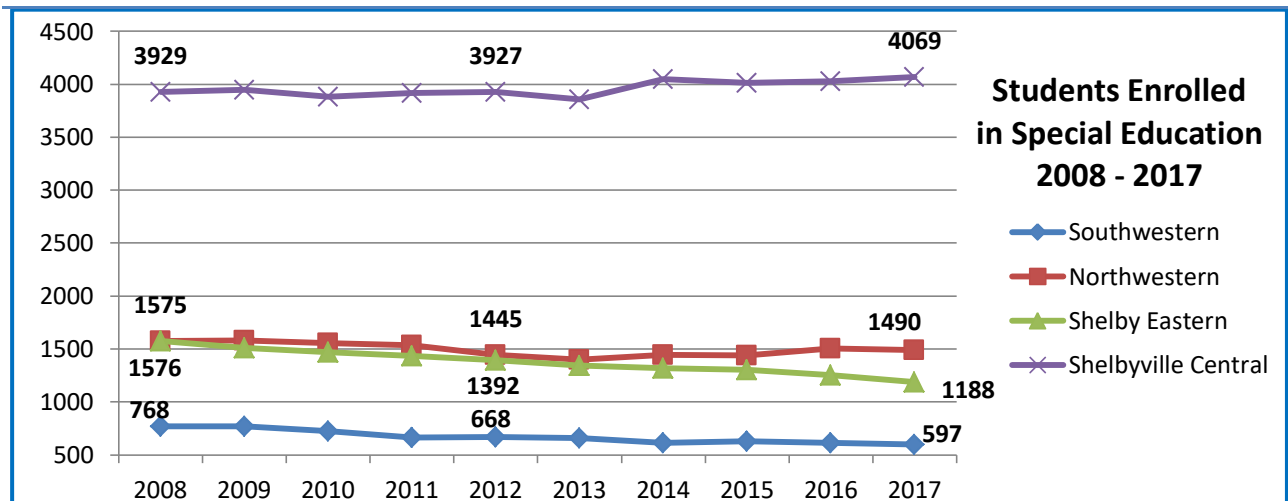
# Demographics

## Developmental Disability

- Children and youth with ASD have annual medical costs from \$4,110 - \$6,200 greater than those without ASD (2008 dollars).
- Children with ASD enrolled in Medicaid have annual medical costs 6 times higher than enrolled children without ASD (\$10,709 versus \$1,812, 2005 dollars).
- Intensive behavioral interventions for children with ASD can cost \$40,000 - \$60,000 annually (2011 dollars).

(CDC, *Data and Statistics on Autism Spectrum Disorder*, <https://www.cdc.gov/ncbddd/autism/data.html>)

Children and youth with Developmental Disabilities often receive early intervention services and special education services through First Steps – the state’s early intervention program for 0-3 years and through the public school system.



*Special Education and First Steps Data pulled from Annie E Casey Foundation Kids Count Data Center*



# Demographics

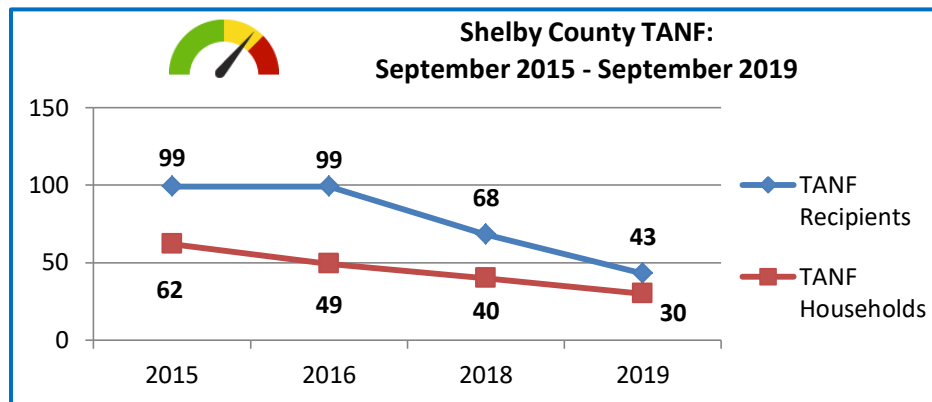


## TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF)

TANF is a cash assistance program for children under 18 who are living with their parent(s) or relative such as a grandparent, who meet specific nonfinancial criteria, and whose countable family monthly income meets income guidelines. (*Guidelines at <https://www.in.gov/fssa/dfr/2684.htm>*).

The chart below compares TANF households to TANF recipients (two-parents, single-parent and child-only) for the single month of September between 2015 and 2019. The number of two-parent families receiving TANF is small: average of 1-2 families a month. The number of single parents/guardians receiving TANF is also small, averaging 4-5 adults a month. **In 2017 2.1% of older adults received TANF subsequent to being a low income household with a minor.**

**Average monthly payment per recipient September 2018 – September 2019 is \$102.08.**



<https://www.in.gov/fssa/dfr>  
*Monthly Management Reports,  
 Shelby County*

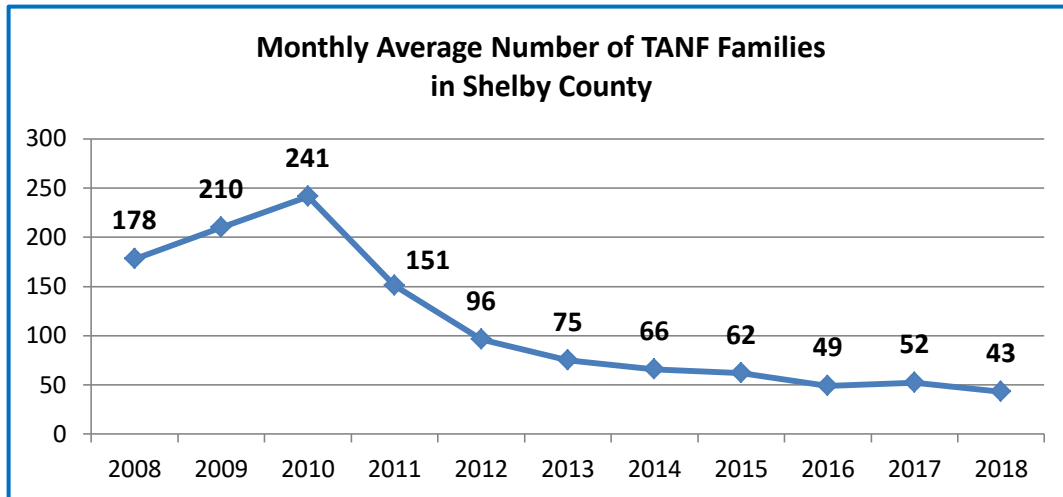
From 2015 to 2019, TANF caseloads shifted from families headed by an unemployed adult to families who receive TANF for children only. These are families headed by an employed adult whose income is 250% *below* the Federal Poverty Level (FPL). The following chart compares the FPL and the TANF eligibility income for three different family types.

Family Size	FPL Gross Annual Income	250% or More Below FPL Gross Annual Income
Single parent/guardian, 1 child under 18	\$16,910	\$5,661
Single parent/guardian, 2 children under 18	\$21,33	\$7,104
Two parents, 2 children under 18	\$25,750	\$8,547

# Demographics

## TANF

In 2018 Shelby County ranked 29th out of Indiana counties for the number of families receiving TANF benefits.



*Indiana Family and Social Services Administration, Department of Family Resources data pulled from The Annie E Casey Foundation, Kids Count Data Center, 2019*

Follows is a 2017 comparison of the counties surrounding Shelby County and Marion County regarding the average monthly number of TANF families.

Rush	Boone	Hancock	Decatur	Shelby	Hamilton	Morgan	Hendricks	Johnson	Bartholomew
15	26	29	38	52	58	58	60	86	92

*Indiana Family and Social Services Administration, Department of Family Resources data pulled from The Annie E Casey Foundation, Kids Count Data Center & STATS Indiana*

The following chart is a September 2019 comparison of the counties surrounding Shelby and Marion counties regarding the amount spent per person in TANF benefits. Benefits are determined by criteria established by the State and are not a local decision. By comparison Shelby County has a lower number of persons receiving TANF but the recipients have incomes more than 250% below the FPL and lack non-financial assets.

	Decatur	Hancock	Rush	Bartholomew	Johnson	Morgan	Hamilton	Hendricks	Boone	Shelby
<b>Money/ Person</b>	\$81.03	\$82.48	\$83.61	\$88.60	\$95.82	\$99.22	\$99.65	\$101.17	\$101.20	<b>\$101.60</b>
<b>Persons</b>	31	33	23	98	154	82	84	77	49	<b>43</b>

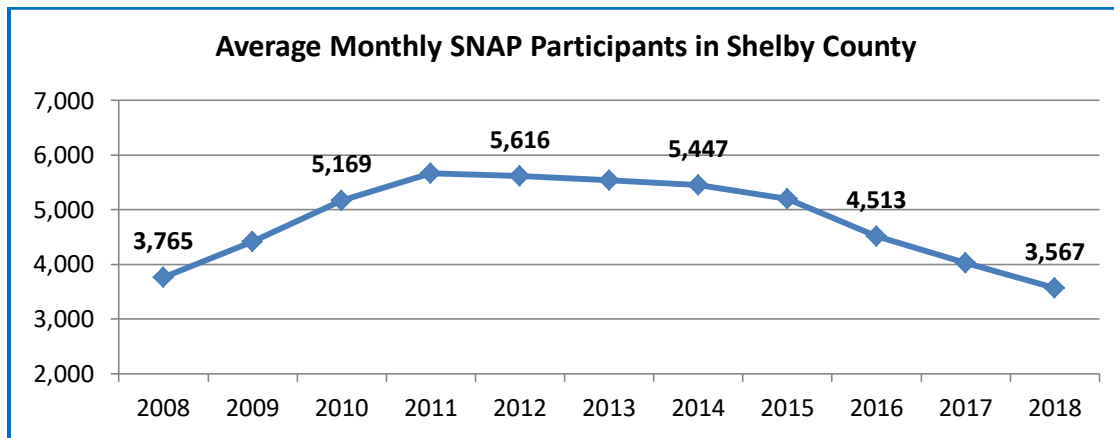
*Indiana Family and Social Services Administration, Department of Family Resources, Monthly Management Reports, September 2019*

# Demographics

## SNAP

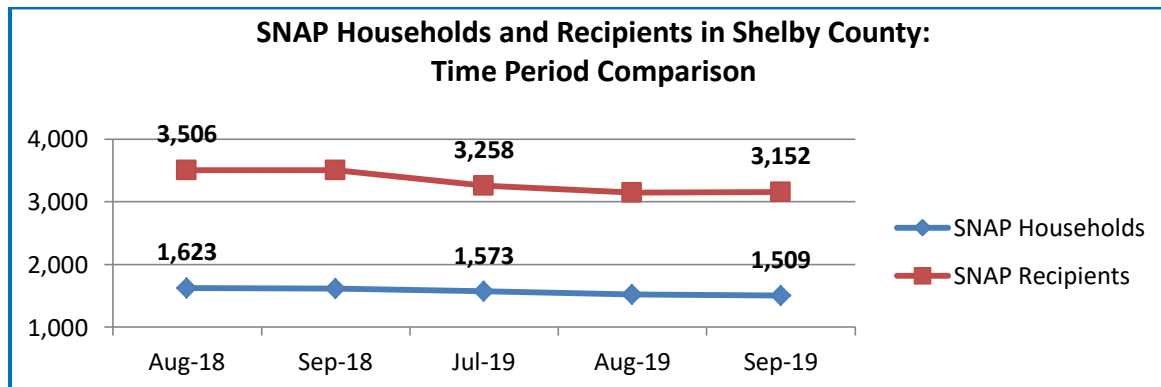
### SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)

SNAP (previously known as food stamps) provides food assistance to low- and no-income individuals and families who meet eligibility criteria. SNAP provides for the purchase of nutritious food through Electronic Benefits Transfer (EBT) cards. SNAP helps lift families above the Federal Poverty Line and is responsive to needs during economic crises and disasters. Studies have found SNAP is consistently an effectively and efficiently managed government program.



*Indiana Family and Social Services Administration, Department of Family Resources data pulled from The Annie E Casey Foundation, Kids Count Data Center & STATS Indiana*

The following chart shows a representative snapshot of the number of SNAP recipients in comparison to the number of SNAP households (or cases).



<https://www.in.gov/fssa/dfr>, Monthly Management Reports, Shelby County

# Demographics

## SNAP

In 2018 Shelby County ranked 30<sup>th</sup> in the State for its number of SNAP recipients. Follows is a 2017 comparison of the counties surrounding Shelby County and Marion County regarding the average monthly number of persons receiving SNAP.

Rush	Decatur	Boone	Hancock	Shelby	Hendricks	Morgan	Bartholomew	Hamilton	Johnson
1,608	2,292	2,728	3,740	4,022	5,748	6,049	6,428	7,711	9,203

*Indiana Family and Social Services Administration, Department of Family Resources data pulled from The Annie E Casey Foundation, Kids Count Data Center*

### From 2013 – 2017, 60.9% of Shelby County households with children received SNAP

**benefits. During the same time, 6.7% of the county’s older adults received SNAP.** Follows is a snapshot of simplified income eligibility for SNAP for an individual and for 3 sample family types. Both monthly gross and net incomes are considered for SNAP eligibility. For persons who are disabled or elderly, only net income is considered. Additional financial and non-financial criteria may be viewed at <https://www.fns.usda.gov/snap/recipient/eligibility>.

Family Size	FPL Gross Annual Income	FPL Gross Monthly Income	130% or less FPL Gross Monthly Income	100% or less FPL Net Monthly Income
<b>Individual</b>	\$12,490	\$1,041	\$2,394	\$1041
<b>Single parent/guardian, 1 child under 18</b>	\$16,910	\$1,409	\$3,241	\$1,409
<b>Single parent/guardian, 2 children under 18</b>	\$21,330	\$1,778	\$4,089	\$1,778
<b>Two parents, 2 children under 18</b>	\$25,750	\$2,146	\$4,936	\$2,146

While Shelby County may have fewer persons receiving SNAP than many surrounding counties, those receiving benefits are older, or disabled, or have lower income and fewer assets; therefore, they receive a higher monthly SNAP benefit. Shelby Senior Services reports that more older adults are eligible for SNAP than who are willing to participate in the benefit.

	Rush	Hendricks	Morgan	Boone	Decatur	Hamilton	Johnson	Hancock	Bartholomew	Shelby
<b>Money/ Person</b>	\$113.74	\$114.79	\$115.61	\$115.62	\$115.97	\$118.07	\$118.21	\$120.31	\$126.28	<b>\$127.96</b>
<b>Persons</b>	1,302	4,729	4,832	1,881	1,756	6,751	8,183	2,991	5,143	<b>3,152</b>

*Indiana Family & Social Services Administration, Dept Family Resources, Monthly Management Reports, September 2019*

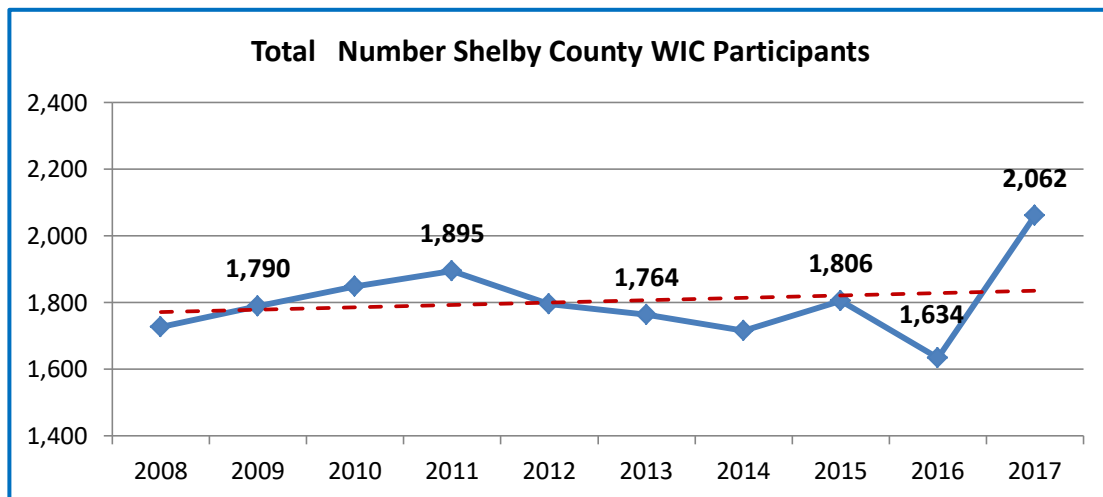
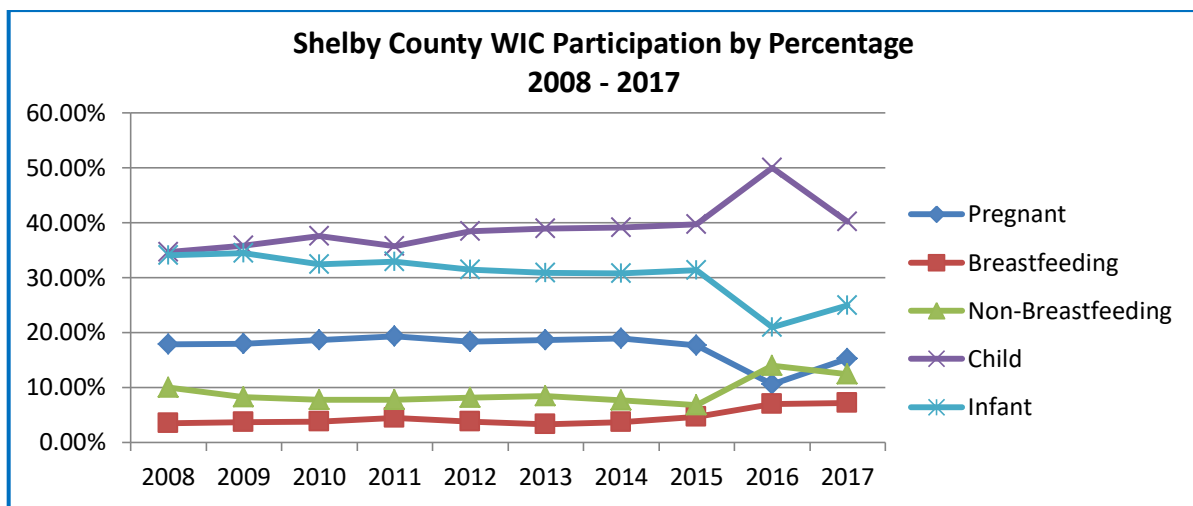
# Demographics

## WIC

### WOMEN, INFANTS AND CHILDREN (WIC)

WIC is for income eligible (up to 185% of *Federal Poverty Level*) and health or nutritionally at-risk women and their children. WIC provides direct food support as well as counseling, education, and breast feeding support. Breast feeding is an important protective health factor for infants and women. For every dollar spent on pregnant women enrolled in the WIC program, up to \$4.21 is saved in Medicaid spending. (*State of Obesity 2016: Better Policies for a Healthier America. Robert Wood Johnson Foundation and Trust for America's Health.*)

**Disparity:** More Hispanic – Latina mothers breastfeed (80%) than do Caucasian mothers (73.5%).



Indiana State Department of Health, WIC Division, pulled from Annie E. Casey Foundation, Kids Count Data Center

# Demographics

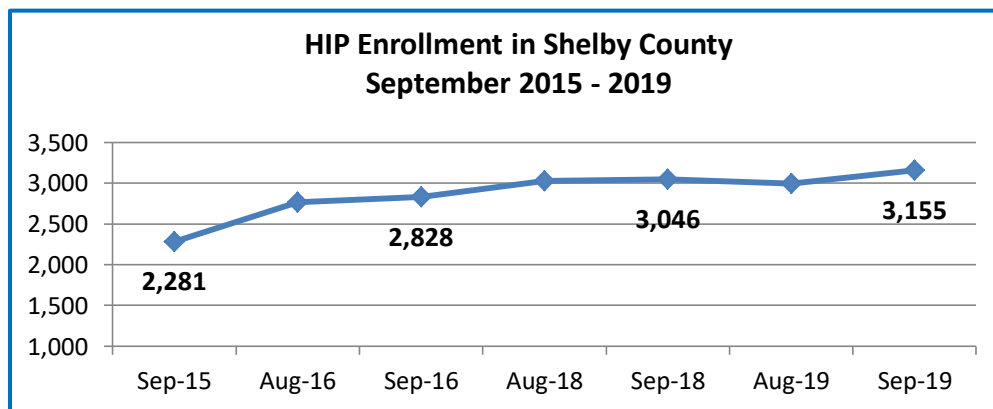
## Health Insurance

Per the *U.S. Census Bureau’s Small Area Health Insurance Estimates, 2015-2019* (pulled from the *County Health Rankings, October 2019*) 10% of adults and 7% of children in Shelby County were uninsured. The majority of residents have employer-based health insurance. Around 1,800 minors and adults purchase health insurance from the federal insurance exchange or private vendors.

**Disparity:** In 2017 33% of Hispanic and Latino residents were uninsured.

**The Healthy Indiana Plan (HIP)** is a State insurance program for eligible low-income adults ages 19 – 64 who are not eligible for Medicaid or Medicare. HIP emphasizes preventative care. Persons whose income ranges from 22% to around 138% of the FPL and who pay into “Power Accounts” have more comprehensive insurance coverage including dental, vision and chiropractic care. Monthly Power Account contributions are based on income level, ranging from \$1 to \$20 equal to 2% of the household income. HIP Basic is a less comprehensive plan for people who are eligible but who are not making Power Account payments. It has a co-pay for covered services.

<https://www.in.gov/fssa/hip/2452.htm>



*Indiana Family and Social Services Administration, Department of Family Resources, Monthly Management Reports, Shelby County*

Household Size	22% of FPL	Federal Poverty Level	HIP (139.65%)
Single Adult	\$2,748	\$12,490	\$17,443
Couple	\$3,720	\$16,910	\$23,615

# Demographics

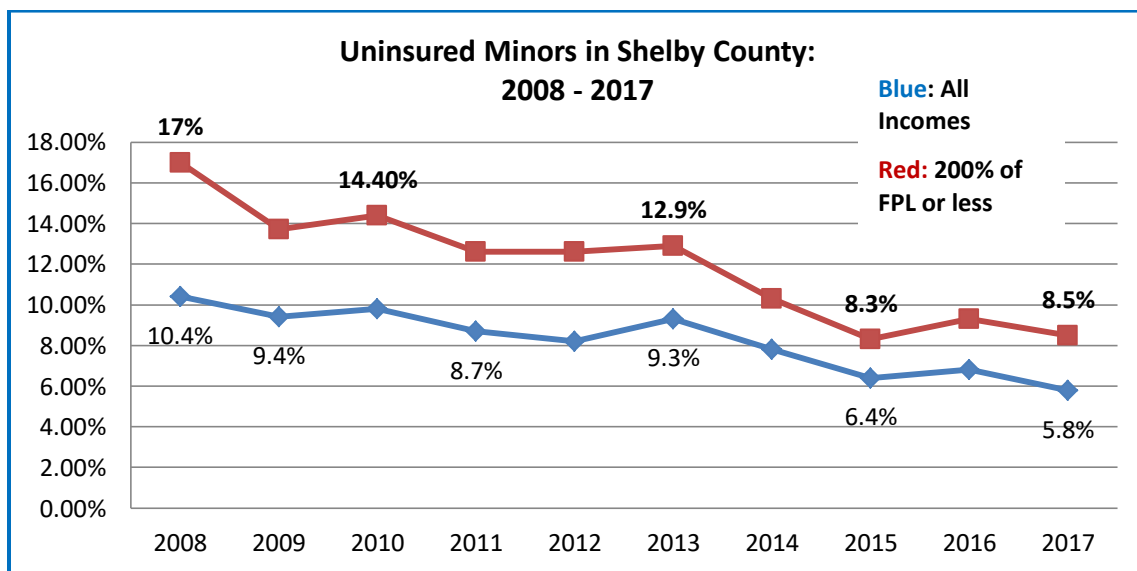
## Health Insurance

There are many means-tested, financial and asset based State Medicaid insurance plans covering emergency services, family planning, pregnancy and a range of health services.

(<https://www.in.gov/medicaid/files/membereligibilitybenefitcover.pdf>)

### Per the American Community Survey 5 Year Estimates, around

- 1,400 adults age 19 – 64 were covered by one of the State’s Medicaid programs
- 380 adults over the age of 64 were covered by both Medicare and Medicaid
- 2,900 children under the age of 19 were covered by **Hoosier Healthwise** for pregnant women, children and their eligible parents/guardians until a child turns 19 years old. Medical care, prescriptions, mental health care, dental care, surgeries, hospitalizations, and family planning are covered for low- or no-cost. Per the 2013-2017 Census estimates, around 2,900 children under 19 years were covered by *Hoosier Healthwise*. (For eligibility guidelines: <https://www.in.gov/medicaid/members/174.htm>)

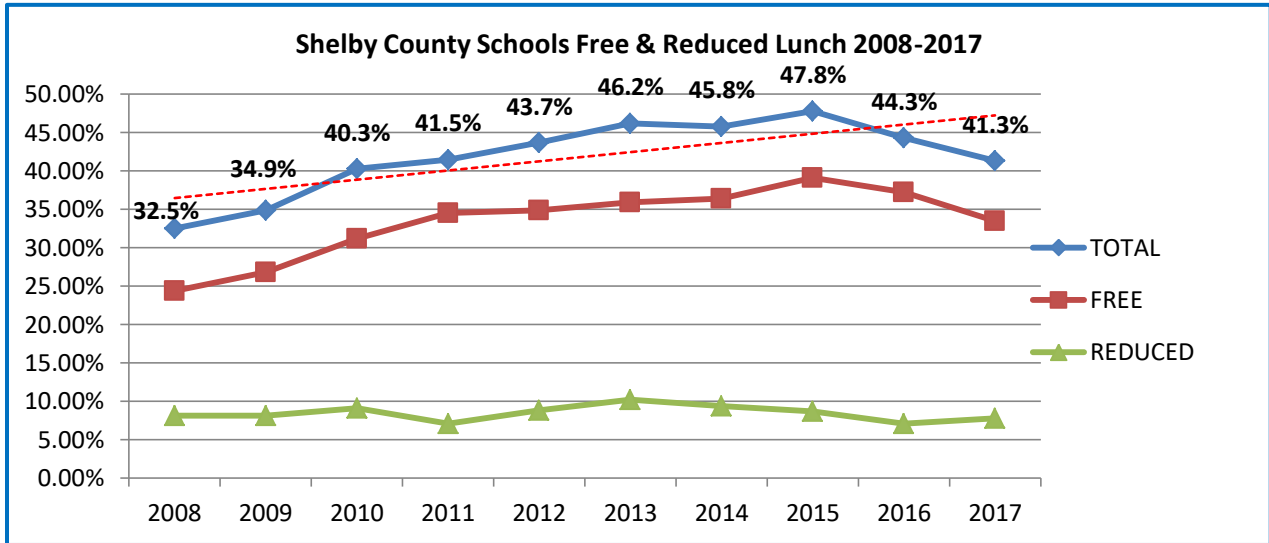


U.S. Census Bureau, *Small Area Health Insurance Estimates* pulled from Annie E. Casey Foundation Kids Count Data Center

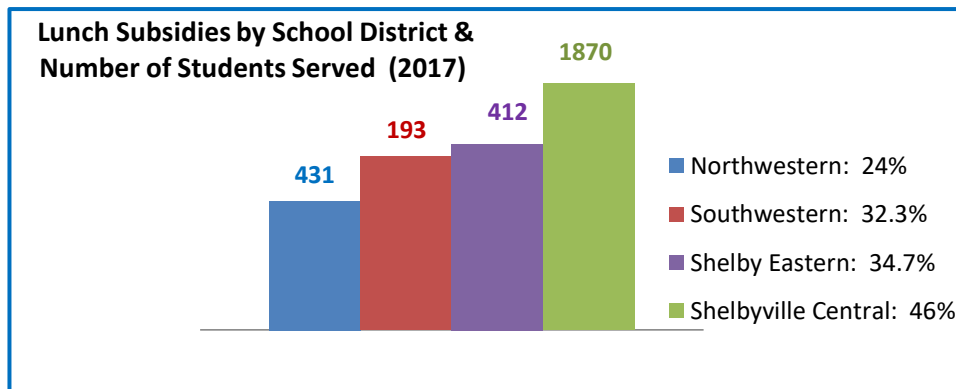
# Demographics

## School Lunch Subsidies

In the 2018-2019 school year, lunch subsidies were received by 3,579 Shelby County students. Shelby County ranked 31<sup>st</sup> out of all Indiana counties for the number of students receiving free or reduced lunch and is in the top 25% in the State. Household income for free lunches is 130% of the *Federal Poverty Level*. For reduced lunches, household income is between 130% and 185%.



Indiana Department of Education pulled from The Annie E. Casey Foundation Kids Count Data Center



Indiana Department of Education pulled from The Annie E. Casey Foundation Kids Count Data Center

Follows is an example of household incomes eligible for free or reduced lunch. Rural schools report there are likely more eligible students than whose families participate in subsidized lunches.

Family Size	100% Federal Poverty Level	130% FPL	185% FPL
Single Parent, 1 Child	\$16,910	\$21,983	\$31,284
Two parents, 2 Children	\$25,750	\$33,475	\$55,815





# Demographics


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## Health Providers


### Primary Care Physicians

-  In 2016 the ratio of primary care physicians to patients in Shelby County was 3,410 patients to each physician (if the population was distributed equally to physicians).
- Shelby County's physician to patient ratio looks similar to that of the nation. 
  - Optimal physician – patient ratio is a challenge across the nation for rural counties.

### Non-Physician Primary Care Providers

-  In 2018 Shelby County was in the top 25% of Indiana counties for non-physician primary care providers such as Nurse Practitioners and Physician Assistants.
- In 2016 the provider to patient ratio was 1,306:1.

### Dentists

-  In 2016 there were 2,610 patients per every dentist in Shelby County, placing the county just within the top 50% of Indiana counties.

### Mental Health Practitioners

- In 2018 there were 1,140 patients for every mental health provider in Shelby County.
- Indiana's ratio was 670 patients to every provider.
- This includes providers such as psychiatrists, psychologists, social workers, counselors, marriage and family therapists, drug and alcohol counselors, and psychiatric advance practice nurses –all of whom may be licensed to provide substance use, mental health, and other kinds of behavioral health care.
- The County Health Rankings pulled data from the *National Provider Identification* data base to determine the provider ratio. Practitioners in the data base have identification numbers for electronic billing.
  - While the data base provides an estimate of the number of providers in the county, it is an imperfect system since not every provider engages in electronic billing.

**Access to care is not only about affordability and health insurance. It is also about adequate providers in order to provide timely care and a medical home for prevention and optimal disease management.**

# COMMUNITY HEALTH ~ NEEDS ASSESSMENT

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**What are the health challenges for the people of  
Shelby County?**

# DATA

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## Secondary Community Health Data Sources

In addition to the following general data sources, particular sources are noted throughout the document.

- *AdvantAge Initiative Survey, 2015*
- *ALICE Indiana Study of Financial Hardship, 2016 & 2018*
- *America's Health Rankings*
- *Annie E. Casey Foundation, Kids Count Data Center*
- *"An Assessment of Shelby County: Strategies for Economic Resiliency and Growth," Indiana Communities Institute, Ball State University, 2016*
- *Centers for Disease Control and Prevention (CDC)*
  - *Behavioral Risk Factor Surveillance System for adults (BRFSS) and youth (YBRFSS)*
  - *Multiple data bases and tools noted throughout the CHNA*
- *Conduent Healthy Communities Institute*
- *County Health Rankings and Roadmaps*
- *Department of Child Services (DCS)*
- *Healthy Partners*
- *Healthy People 2020*
- *Indiana Family and Social Services Administration (FSSA)*
- *Indiana INDicators*
- *Indiana State Department of Health*
  - *Indiana Epidemiology Resource Center*
  - *Indiana Infant Mortality Report*
- *Indiana Mortality Report*
- *Indiana State Cancer Registry*
- *Indiana Statewide Comprehensive Outdoor Recreation Plan*
- *Indiana Youth Tobacco Survey*
- *National Institute of Mental Health (NIMH)*
- *STATS Indiana through the Indiana Business Research Center at Indiana University's Kelley School of Business*
- *Shelby County Drug Free Coalition*
- *The Robert Wood Johnson Foundation (RWJF)*
  - *Institute for Health Promotion Research, Salud America*
  - *Trust for America's Health*
- *Turning Point Domestic Violence*
- *United States Census Bureau*
  - *American Community Survey - multiple data bases tools*
- *United States Department of Agriculture (USDA) Economic Research Food Atlas*

# DATA

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## Understanding the County Health Rankings

The *County Health Rankings and Roadmaps* is an annual analysis that provides a model of population health emphasizing the many factors that when improved can help make communities healthier places to live, learn, work, play and gather. Indiana's 92 counties are ranked against each other. There are no ties and rankings can change based on factors other than a county's specific progress or lack thereof. The specific data about Shelby County's residents is more important than its ranking.

**Health Outcomes** measure how long people live and how healthy people feel while alive.

**Health Factors** measure the following categories that impact health and wellness:

- **Health Behaviors**: Unhealthy food choices, tobacco use, and physical inactivity are responsible for many preventable diseases and deaths.
- **Clinical Care**: Individuals without insurance or adequate financial resources may not seek and receive preventive care. Clinical care is also impacted by the availability of local primary and specialty care providers.
- **Social and Economic Factors**: Education, employment, poverty, social support, and crime impact an individual's or family's ability to meet basic needs, manage stressors, and engage in health and wellness activities.
- **Physical Environment**: Access to recreational facilities, number of fast food restaurants, and how the built environment supports or challenges health for all ages and abilities.

**Some of the data is "age-adjusted"**: Almost all diseases or health outcomes occur at different rates in different age groups. A community made up of more families with young children will have a higher rate of bicycle injuries. While a community with a larger number of older persons will have higher rates of cancer, hospitalizations, and deaths. Age-adjustment is a statistical process applied to rates of disease, death, and injuries that allows communities with different age distributions to be fairly compared. For more information, visit <http://www.cdc.gov/nchs>.

**Rate**: A large population has more health events simply due to its larger size. A rate is a measure of a disease, condition, or event in relationship to a unit of population during a period of time. It allows for comparison of communities of different sizes. If 60 men out of 50,000 have prostate cancer, then that is the same as 120 out of 100,000. The total number of events is divided by the total applicable population for a given year and then multiplied by standard values such as 10,000 or 100,000. The number is then expressed as "rate per 100,000 population".

# DATA




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## Understanding the County Health Rankings

The *County Health Rankings & Roadmaps* is used as a foundational data set for this CHNA. The community health report is a partnership of the *Robert Wood Johnson Foundation* and the *University of Wisconsin Population Health Institute*. More than an annual report, the *County Health Rankings* is an institute of programs and resources to support local communities in creating a *Culture of Health*. To learn more, visit <http://www.countyhealthrankings.org>.

Reportable data is annually compiled, analyzed, and then released to the public each March. Because it is an annual report, new data emerges in between reports. Counties within each state are ranked against each other. There are no ties. While the top and bottom Indiana counties tend not to have dramatic changes in rank from year to year, most counties' rankings are impacted by significant improvements or the sudden availability of data for any given county. Therefore, the ranking is not as important as the progress or lack thereof that a county is making over time.

For this CHNA, along with data from the 2019 report, data is shared from the last 2 CHNA reports of 2016 and 2013. Included are graphs showing key indicators over time. Reports from 2011 – 2019 may be viewed on the *County Health Rankings* website along with other county's reports and a deeper dive into the data sources and importance of each health indicator.

Included in the following report are health indicators that are not used to determine county rankings. They are noted with a **red asterisk\***. If the indicator is a *Healthy People 2020* goal a red icon  or  green icon is added to note whether Shelby County has met the goal. More about *Healthy People 2020* follows in this report. Where possible dials will also be added to show at a glance how Shelby County compares with the other 91 Indiana counties.  The dial shows the top 50%, mid and lowest quartiles.

# DATA

## 2019 County Health Rankings

**County Ranking:** Lower number is better.

**Indicators:** Lower or higher number is better depending on whether more or less of something is desirable.

**Red Vertical Bars:** Indicate change in definition or methodology. Data before and after bar cannot be compared.

INDICATORS	IN 2019	2019 Top Performers	2019	2016	2013	Data for 2019 Report	Definitions
<b>OVER ALL HEALTH OUTCOMES</b>			<b>53</b>	27	61		
<b>HEALTH OUTCOME: LENGTH OF LIFE</b>			<b>63</b>	40	47		
Premature Death	8,200	5,400	<b>9,200</b>	7,500	7,529	2011 - 2013	Years potential life lost before age 75
<b>HEALTH OUTCOME: QUALITY OF LIFE</b>			<b>38</b>	21	63		
Poor or fair health	18%	12%	<b>17%</b>	15%	22%	2014	Self-report on health quality of life
Poor physical health days	3.9	3.0	<b>4.0</b>	3.6	4.8	2014	Self-report on days health not good
Poor mental health days	4.3	3.1	<b>4.1</b>	3.9	4.4	2014	Self-report on days mental health not good
✓ Low birth weight	8%	6%	<b>7%</b>	6%	8.0%	2007-2013	% live births ≤ 5lbs 8oz
✗ *Infant mortality	7	4	<b>9</b>	7	617.3	2011-2017	#deaths within 1 <sup>st</sup> year of life per 1,000 live births
*Diabetes Prevalence	12%	9%	<b>14%</b>	10%	11%	2015	% of adults 20 years & older with diagnosed diabetes
<b>OVER ALL HEALTH FACTORS</b>			<b>42</b>	45	63		
<b>HEALTH FACTOR: HEALTH BEHAVIORS</b>			<b>50</b>	53	88		
✗ Adult Smoking	21%	14%	<b>19%</b>	21%	29%	2014	% of adults smoking most days/100 cigarettes in lifetime
✗ Adult Obesity	33%	26%	<b>37%</b>	32%	36%	2012	% 20+ year old adults with BMI of 30 & over
Food Environment Index	7.1	8.7	<b>8.2</b>	7.9	—	2012 & 2013	0-10 scale, 10 is best; % of low income – no access to grocery & those without reliable access to food past year
✓ Physical Inactivity	25%	19%	<b>29%</b>	31%	33%	2012	% of 20+ year old adults reporting no leisure time physical activity
Access to Exercise Opportunities	75%	91%	<b>54%</b>	54%	—	2014	% of adults living 1-3 miles from a park or recreational facility
✓ Excessive Drinking	19%	13%	<b>17%</b>	15%	19%	2014	% adults binge/heavy drinking last 30 days
Alcohol-impaired Driving Deaths	21%	13%	<b>2%</b>	15%	—	2010-2014	% motor vehicle crashes involving alcohol
Sexually Transmitted Infections	466	152.8	<b>411.4</b>	285.6	203	2013	% newly diagnosed Chlamydia infections per 100,000 population
Teen Births	28	14	<b>34</b>	44	45	2007-2013	# births per 100,000 women 15-19
*Food Insecurity	14%	9%	<b>12%</b>	14%	—	2016	% of population who lack adequate access to food

INDICATORS		IN 2019	2019 Top Performers	2019	2016	2013	Data for 2019 Report	Definitions
*Drug Overdose Deaths		23	10	17	15	—	2015-2017	#of drug poisoning deaths per 100,000 population
*Motor Vehicle Crash Deaths		12	9	16			2011-2017	#deaths per 100,000 population
*Insufficient Sleep		36%	27%	36%	33%	—	2016	% of adults reporting < 7 hours of sleep on average
<b>HEALTH FACTOR: CLINICAL CARE</b>				51	55	60		
Uninsured		9%	6%	9%	16%	17%	2013	% under 65 with no health insurance
Primary Care Physicians		1,490:1	1,040:1	3,410:1	4,970:1	3,697:1	2013	Ratio of population to primary care MD
Dentists		1,930:1	1,340:1	2,610:1	2,970:1	3,697:1	2014	Ratio of population to primary dentists
Mental Health Providers		710:1	370:1	1,140:1	1,240:1	11,092:1	2015	Ratio population to mental health clinicians
*Other Non-physician Primary Care Providers		1,245:1	726:1	1,306:1	2,026:1	—	2018	Ratio population to nurse practitioners, physician assistants & clinical nurse specialists
Preventable Hospital Stays		5,023	2,765	5,784	63	79	2013	Hospitalization for OP treatable diagnoses, Medicare population
Diabetic Monitoring		84%	90%		82%	80%	2013	Pts 65-75 with blood sugar clinically monitored in last year
Mammography Screening		62%	71%	44%	60%	63.2%	2013	% females 67-69 with screening in last 2 years
<b>HEALTH FACTOR: SOCIAL/ ECONOMIC FACTORS</b>				34	40	39	30	
High School Graduation		87%	93%	95%	93%	89%	2012-2013	% 9 <sup>th</sup> grade cohort that graduate in 4 years
Some College		61.0%	72%	52%	50%	49.4%	2010-2014	% 25-44 with at least some post-secondary education, even if no degree obtained
Unemployment		6.0%	3.5%	3.3%	5.6%	10.0%	2014	% 16+ unemployed & looking for work
Children in Poverty		21%	13%	14%	17%	19%	2014	% children under 18 living in poverty
Income Inequality		4.4	3.7	3.9	3.6	—	2010 – 2014	Ratio of households in 80 <sup>th</sup> percentile income to those in 20 <sup>th</sup> percentile
Children in Single-Parent Households		34%	21%	32%	36%	30%	2010 – 2014	% of children living in single-parent headed household
Social Associations				12	11.7	17%	2016	# membership associations per 100,000 population
Violent Crime		334	59	535	77	100	2010-2012	# reported violent crime per 100,000 population
Injury Deaths		63	51	69	66	—	2009-2013	# deaths due to injury per 100,000 population
*Disconnected Youth		7%	4%	10%	—	—	2013-2017	% of 16-19 year olds not working or in school
*Firearm Fatalities		14	7	12	—	—	2013-2017	#of deaths per 100,000 population
<b>HEALTH FACTOR: PHYSICAL ENVIRONMENT</b>				53	23	57		
Air Pollution/Particulates		13.5	9.5	11.8	13.6	13.2	2011	Average daily density of fine particulates

INDICATORS	IN 2019	2019 Top Performers	2019	2016	2013	Data for 2019 Report	Definitions
Drinking Water Violations	0%	0%	0%	0%	0%	FY2013-FY2014	% population exposed to water violation last year
Severe Housing Problems	14%	9%	12%	10%	—	2008 – 2012	% of households with 1 of these: high cost, overcrowding, lack of kitchen or plumbing
Driving Alone to Work	83%	71%	85%	83%	84%	2010-2014	% of workforce driving alone to work
Long Commute – Driving Alone	30%	15%	36%	36%	—	2010 – 2014	% driving to work alone more than 30 min.
*Severe Housing Cost Burden	12%	7%	9%	—	—	2013-2017	% of people spending 50% or more of household income on housing

County Health Rankings & Roadmaps, Shelby County, 2013-2019

## DATA

### County Health Rankings and Healthy People 2020

*Healthy People* provides science-based, 10 year national objectives for improving the health of all Americans. For three decades, *Healthy People* has established benchmarks and monitored progress to achieve the following goals. Learn more at <https://www.healthypeople.gov/>.

- High-quality, longer lives free of preventable disease, disability, injury, and premature death
- Health equity: eliminate disparities and improve the health of all groups
- Social and physical environments that promote good health for all
- Quality of life, healthy development, and healthy behaviors across all life stages

*Healthy People 2020* goals will be noted throughout the CHNA. Estimated number of Shelby County population per 2018 census estimates appears in parentheses.

- **Obesity:** 30.5% or fewer of the adult population (*10,091 or fewer adults*)
- **Stroke Deaths:** 34.8 or fewer per 100,000 adult population (*11.5 or fewer deaths*)
- **Lung Cancer Deaths:** 45.5 deaths or fewer per 100,000 adult population (*15 deaths*)
- **New Breast Cancer cases:** 41 per 100,000 adult population (*14 or fewer new cases*)
- **Colorectal Cancer:** 46 cases or fewer per 100,000 adult population (*15 or fewer cases*)
- **Colorectal Cancer Deaths:** 14.5 deaths or fewer per 100,000 adult population (*5 or fewer*)
- **Physically Inactive Adults:** 32.6% or fewer per 100,000 population (*11,194 or fewer adults*)
- **Suicide:** 10.2 deaths or fewer per 100,000 total population (*5 or fewer persons*)
- **Unintentional Injury Deaths:** 36.4 deaths per 100,000 population (*12 or fewer deaths*)



# DATA

## County Health Rankings and Healthy People 2020

### Healthy People 2020 goals continued:

- **Smoking:** 12% or less of the adult population (3,970 or fewer adults)
- **Women Smoking During Pregnancy:** 1.4% of pregnant women \*(around 7 or fewer)
- **Infant Mortality:** 6.0 deaths per 1,000 live births. \*(around 3 or fewer deaths)
- **Early Prenatal Care:** 77.9% of pregnant women \*(around 389 or more women)
- **Pre-term Births:** 9.4% per 1,000 live births. \*(around 5 or fewer pre-term births)
- **Motor Vehicle Collision Deaths:** 12.4% deaths per 100,000 population (4 or fewer deaths)
- **Commuters:** 5.5% or more of the commuting workforce use public transportation  
\*\*(around 381 persons)

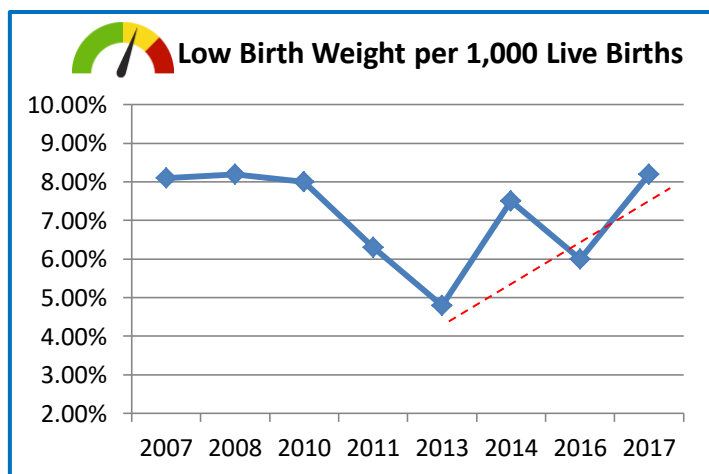
\*Estimate based on the number of live births in 2017, assuming 1 live birth per pregnant woman: 499

\*\*Based on the top 5 Shelby County work commuting destinations for the 2017 tax year.

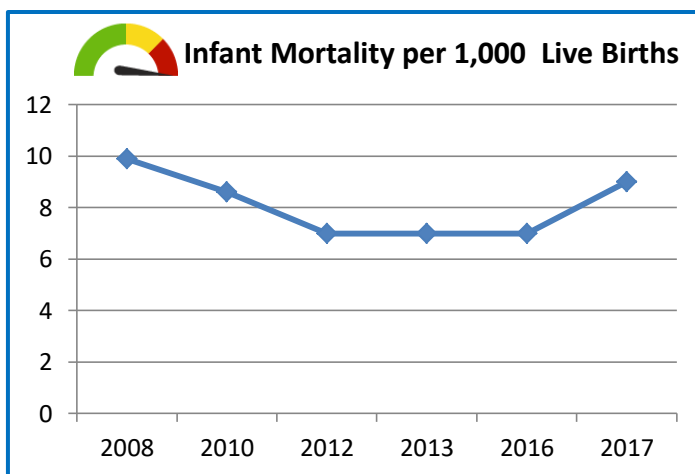
### Health Outcome: Quality of Life

Low birth weight and infant mortality may reveal health and socio-economic challenges of the birth mother such as tobacco use, access to nutritional food, personal safety, and pre-natal care.

⊗ **Healthy People 2020 goals are 7.8% or fewer live births weighing less than 5lbs. 8 oz. per 1,000 live births and within the first year of life, 6 infants or fewer will die per 1,000 live births (around 3 or fewer infant deaths).**



National Center for Health Statistics pulled from County Health Rankings; ISDH pulled from Indiana INDicators



CDC Wonder Mortality data pulled from County Health Rankings & Roadmaps

# DATA

## County Health Rankings and Healthy People 2020

### Health Factor: Health Behaviors

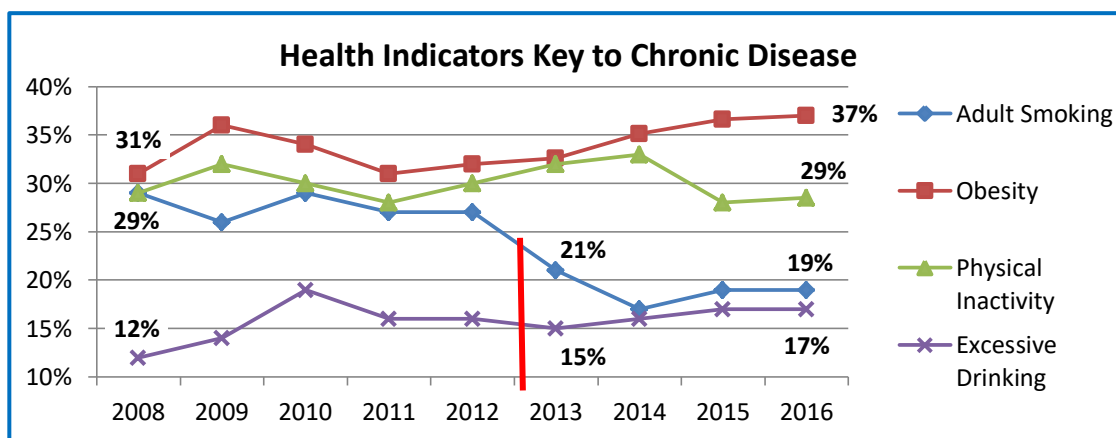
An unhealthy lifestyle increases the risk of chronic disease and premature death.

 **Healthy People 2020 goals:**

- 30.5% or fewer adults with obesity
- 12% or fewer adults who smoke

 **Healthy People 2020 goals met**


- 25.4% or fewer adults who drink excessively
- 32.6% or fewer adults who lead a sedentary lifestyle.

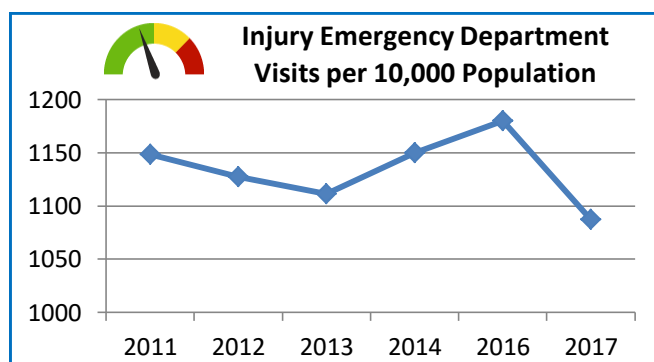
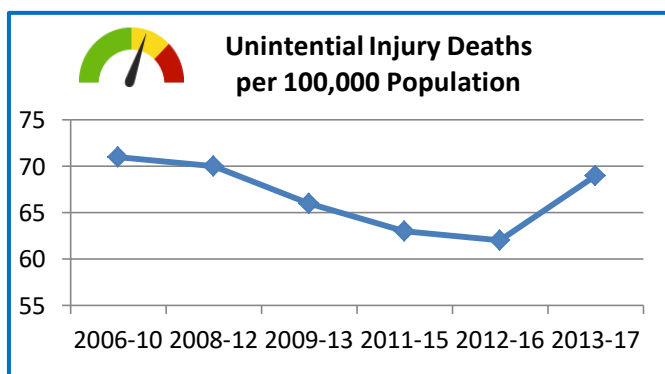


*Data before 2016 cannot be compared with data after 2016 due to change in methodology*

CDC Interactive Diabetes Atlas; CDC Behavioral Risk Factor Surveillance System pulled from County Health Ranking

### Health Factor: Health Behaviors

Unintentional injury fatalities do not include motor vehicle crash fatalities or intentional firearm fatalities. It does include accidental firearm discharge as well as falls, explosions, fires, electrocution, choking, drowning, poisoning and severe weather events.  **Healthy People 2020 goal is 36.4 or fewer unintentional injury deaths per 100,000 population (12 or fewer deaths).**



CDC WONDER Mortality data pulled from County Health Rankings ISDH pulled from Indiana INDicators

# DATA

## County Health Rankings and Healthy People 2020

### Health Factor: Health Behaviors

The *2018 State of Indiana Traffic Safety Annual Report* by the *Indiana Criminal Justice Institute* reports on the following measures designed to minimize motor vehicle crashes and fatalities: impaired driving education and intervention; motorcycle safety, correct installation and use of infant and child restraints, seatbelt use, young driver education, anti-texting campaigns and work zone safety. While I-74 may increase the risk of vehicle crash fatalities, the aforementioned measures address driving situations that are not unique to interstate traffic.

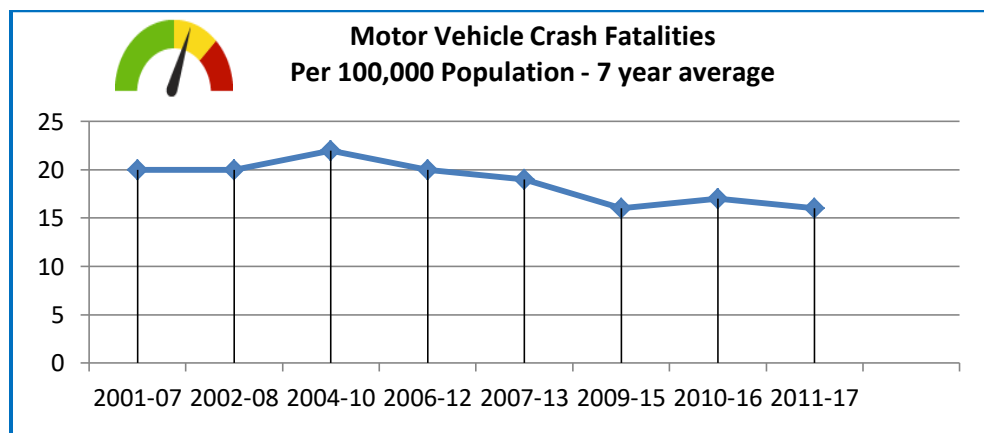
*Indiana Crash Facts*, a 2016 publication by the *Indiana University Public Policy Institute* reported that in Shelby County there were 11 collision fatalities involving the death of 11 persons in 2016. This placed the County in the bottom quartile of the State, ranked 15<sup>th</sup> based on a composite of all collision causes and outcomes.

**Cost of Vehicle Crashes** *Indiana Crash Facts* estimated that in 2016 motor vehicle crashes in Shelby County cost \$45.2 million in loss of life, damage to property, injuries, damage to vehicle, and the like. The average county cost was \$55.1 million.

Crash fatality data from 2015 – 2017 rates Shelby County at 18.8 per 100,000 population for motor vehicle collision deaths. The chart provides 7 year averages rather than raw data from each year.



**Healthy People 2020 goal: 12.4% or fewer motor vehicle crash fatalities per 100,000 population (4 or fewer deaths).**



*CDC Wonder mortality data pulled from County Health Rankings and Roadmaps*

# DATA

## Mortality Rate



The most recent *Indiana Mortality Report* lists the following top 10 causes of death in Shelby County. The number is age-adjusted per 100,000 deaths in order to allow for comparison between Indiana counties. The actual number of deaths in 2017 was 501, selected from 39 causes of death established by the *Centers for Disease Control and Prevention*. The percentage of the total number of deaths is somewhat different from the ranking secondary to the statistical process of age-adjustment.

Rank	Cause of Death	*Percentage of Total Deaths (501)	2017 Mortality Report	2013 Mortality Report	2009 Mortality Report
1	<b>Major Cardiovascular Disease</b>	24%	204	253	266
2	<b>All Cancers</b>	22.8%	197	168	166
3	<b>Chronic Lower Respiratory Diseases</b>	8%	72	71	48
4	<b>Accidents &amp; Adverse Effects</b>	4.6%	51	14	22
5	<b>Alzheimer's Disease</b>	4.8%	42	55	36
6	<b>Influenza &amp; Pneumonia</b>	2.8%	26	14	16
7	<b>*Motor Vehicle Accidents</b>	1.6%	19	14	14
8	<b>*Suicide</b>	1%	7	17	16
9	<b>*Diabetes</b>	1.6%	14	17	18
10	<b>*Kidney Disease</b>	1.2%	10	20	23

*Indiana State Department of Health, 2017*

*\*Age-adjusted death rates of < 20 deaths are considered unreliable for comparison with other counties*

### Major Cardiovascular Disease includes:

- Diseases of the heart
- Hypertensive heart disease with or without renal failure
- Ischemic heart disease
- Other heart diseases
- Essential hypertension and hypertensive renal disease
- Cerebrovascular diseases (stroke)
- Atherosclerosis
- Other diseases of circulatory system

### Accidents and Adverse Effects include:

- Unintentional injuries
- Accidental firearm discharge
- Falls
- Explosions, fires, electricity
- Choking
- Drowning
- Lightening, floods
- Poisoning

# DATA

## Major Health Partners Community Biometric Report

Major Health Partners provides biometric health screenings to local businesses and industry. From 2017 – 2018, they screened an average of 810 persons living-in and/or working-in Shelby County. The range of adult participants screened for each risk factor ranged from 768 - 826 persons. (For various reasons, not every person participated in every biometric screening.) Follows are the risk factors and the percentage of participants that fell into the each risk category, including comparison with previous years and with State and County Health Data. Arrows **↑** **↓** note changes and **○** notes comparison with state or national data where Shelby County workers are not doing as well.

RISK FACTOR	# of People 2017-18	% at Risk	% at Risk 2015-16	Comparison with County and State Health Data
<b>Total Cholesterol</b> 200-239 = <b>borderline high</b>	821	<b>22%</b>	22.4%	34% of Indiana adults 20 & older have had their blood cholesterol checked & been told it was high (*2018)
<b>Total Cholesterol</b> ≥ 240, <b>high</b>	821	<b>7%</b>	6.7%	
<b>LDL “bad” Cholesterol</b> ≤ 130 (for borderline, high, or very high risk categories)	768	<b>20%↑</b>	15.7%	
<b>Pre-Diabetic &amp; Diabetic Range.</b> Includes A1C test results (≥6.5)	<b>826</b>	<b>28%↑</b>	11.6%	6.4% of Indiana adults 20 & older have been diagnosed with pre-diabetes (*2015)
<b>Diabetic Range</b> <b>Known diabetic or</b> <b>**A1C results ≥ 6.5</b>			10.1%	14% of Shelby County adults age 20 & older have been diagnosed with diabetes (*2019)
<b>Blood Pressure</b> ≥ 140/90 (f/u with healthcare provider to make diagnosis of Hypertension)	<b>822</b>	<b>16.5%↓</b>	19.5%	35.2% of Indiana adults 20 & older have been diagnosed with high blood pressure (*2017)
<b>Overweight</b> ***BMI of 25-29.9	<b>815</b>	<b>32%↑</b>	29.5%	34.4% of Indiana adults age 18 & older are overweight (*2017)
<b>Obese</b> BMI ≥ 30	<b>815</b>	<b>46%↑</b>	41.5%	36.8% of Shelby County adults 18 & older are Obese (*2016)
<b>Tobacco or Nicotine Use</b>	834	<b>24%↓</b>	25.7%	19.4% of Shelby County adults 18 & over smoke (*2016) – <i>does not include smokeless tobacco, e-cigarettes or hookahs</i>

\*Behavioral Risk Factor Surveillance Survey (BRFSS) by Centers for Disease Control & Prevention

\*\*A1C: blood test that provides information about a person's average levels of blood glucose (sugar) over the past 3 months.

\*\*\*Body Mass Index (BMI): measure of body fat based on weight in relation to height, and applies to most adults age 20 and older.

**Medication, treatment, and fasting status are not reflected in this data.**

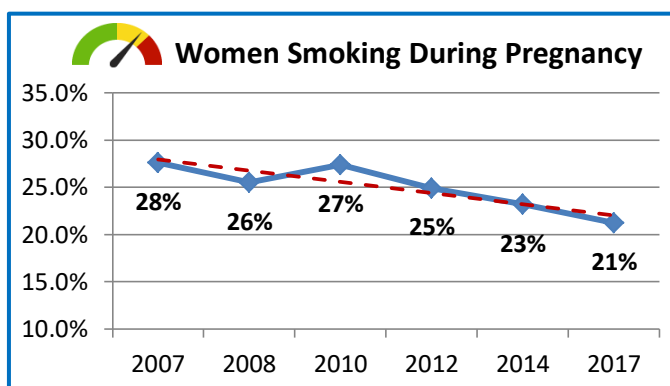
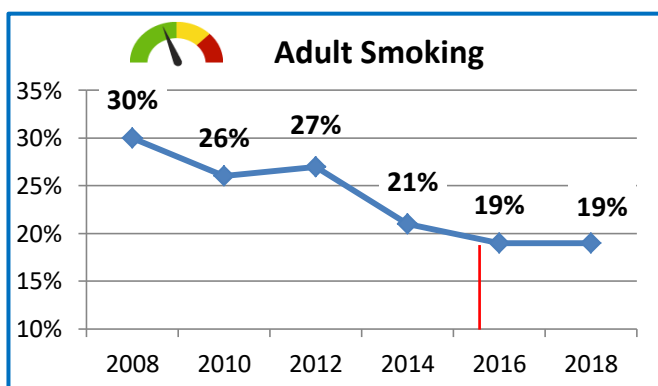
# DATA

## Tobacco Use

**Tobacco use remains the nation's number 1 preventable cause of premature death and disease.** Per the *American Cancer Society*, evidence also continues to grow for the negative impact of second- hand and third-hand smoke (smoke particles left on materials and surfaces) on the health of non-smokers. Vulnerable populations are infants, children, elderly and medically fragile.

The *Indiana 2020 Tobacco Control Strategic Plan* defines adult smoking as adults 18 and older who report smoking at least 100 cigarettes during their lifetime and who currently smoke "every day" or on "some days." The strategic plan is for 18% or fewer adults to be smoking at this level. In 2016 19.4% of adults smoked. In 2017-2018 in industries served by *Major Health Partners*, 24% of employees used tobacco products.

 **The Healthy People 2020 goal is a smoking rate of 12% or less of the adult population.**



*Indiana State Department of Health data pulled from Indiana Indicators* *Indiana State Department of Health Natality Reports*  
Adult smoking data before & after 2016 cannot be compared **Tobacco use does not include e-cigarettes, vaping, hookahs or smokeless tobacco.**

### Cost of Smoking

Indiana's average annual healthcare costs related to tobacco use are \$2.93 billion. That includes over \$1 billion in hospital costs. Annual Medicaid expenditures are \$590 million in tobacco cessation and healthcare costs. Indiana employers spend \$2.6 billion annually in tobacco-related lost productivity, absenteeism, and disability claims. Annual health expenditures from exposure to second hand smoke is \$328 per person (2014 dollars). Every pack of cigarettes sold costs \$15.90 in healthcare costs and lost productivity related to smoking (2010 dollars). (<https://www.in.gov/isdh/tpc/2341.htm>)

# DATA

## Smoking and Maternal – Child Health










### Smoking during pregnancy is associated with poor health outcomes for mother and infant:

- Higher risk of low birth weight
- Higher risk of Sudden Infant Death Syndrome
- Higher risk of ectopic pregnancy (A pregnancy in which the fertilized egg implants outside the uterus.)
- Higher risk of miscarriage
- Higher risk of pre-term delivery

Shelby County’s percentage of mothers smoking during pregnancy (21.2%) is higher than the state’s average (13.5%). In the fall of 2017, *Major Health Partners* launched *Baby and Me, Tobacco Free*, a national, evidence-based program that supports and incentivizes smoking cessation for women and their partners during pregnancy and for the first year after giving birth.

Of pregnant women delivering at *Major Hospital* in 2016, 25.2% smoked. By 2018 the number was 21.2%. By the end of the 3rd quarter of 2019 17% of women were smoking at delivery. In the first 2 years of the cessation program, *Major Hospital* has had a 67% success rate of women continuing to not smoke 6 months after delivery. The national *Baby and Me, Tobacco Free* 6 month rate is 60%.

 **Healthy People 2020 goal is for 1.4% or fewer women to be smoking during pregnancy.**

Indiana County Comparison	Health Indicator	Value
 	Babies with Low Birthweight	7%
 	Babies with Very Low Birthweight	0.6%
	Infant Mortality Rate	9.2 deaths per 1,000 live births
	Mothers Who Received Early Prenatal Care	82%
 	Mothers Who Smoked During Pregnancy	21.2%
	Preterm Births	12%

*Indiana State Department of Health Natality Report*  = significant trend

**Disparity:** The percentage of Hispanic pregnant women who receive early prenatal care (73.3%) is less than for White (81.9%) and Black (83.3%) pregnant women in Shelby County.

# DATA

## Teen Nicotine and Tobacco Use

In 2015 and 2016, *Shelbyville High School* students completed the national *Youth Risk Behavior Surveillance System* (YRBSS) survey. The 2003 and 2015 YRBSS data below reflects Indiana only.

Youth, especially middle school youth use fruit and candy flavored cigarillos, e-cigarettes and vaping. Cigarillos have not been regulated as cigarettes have been, but there is no difference other than the color of the wrapper. The amount of nicotine in the liquid or “juice” for vaping or e-cigarettes is frequently inconsistent with labeling, even if the label states no nicotine is in the product. Labs have found some liquid to be equal to a pack of cigarettes or more. The 2017 YRBSS found that 42.2% of high school youth had tried a vaping product. A 2016 law to regulate electronic nicotine delivery systems has been tied up in legal proceedings.

By November of 2019 there were 4 deaths from vaping in Indiana, 55 confirmed and 57 probable cases of **EVALI** (*e-cigarette or vaping associated lung illness*). Young adults age 18 – 29 have been the primary victims. The first confirmed chemical causing EVALI is Vitamin E Acetate, routinely but not exclusively found in THC used in e-cigarettes and vaping. The CDC has issued a warning that all e-cigarette and vaping be suspended and in particular, THC use in the devices be suspended.

Health Indicator: Nicotine Delivery Product Use	2003	2015	2017
Use of all nicotine delivery products: <i>e-cigarettes, smokeless tobacco, cigars, cigarillos, cigarettes</i> <b>Other than electronic devices, use of tobacco products has decreased among genders and both white students and those of color</b>	* ____	32.4%	19.5%
Smoked cigarettes on 20 of the last 30 days <b>Decrease among genders and both white students and those of color. Highest use with white males and 12<sup>th</sup> grade students</b>	12.4%	3.4%	8.8%
Among those smoking in the previous 12 months, students who attempted to quit smoking. <b>Female students had the highest percentage of students trying to stop using tobacco products.</b>	59.7%	49%	41.4%
Smokeless tobacco used in the previous 30 days: chewing tobacco, snuff, dip. <b>Male students are more likely to use smokeless tobacco.</b>	7.2%	9.4%	5.5%
Smoked cigars, cigarillos, or little cigars in the previous 30 days. <b>Male students and 12<sup>th</sup> grade students have the highest use.</b>	14.7%	11.4%	8%
Ever used e-cigarettes, e-cigars, e-pipes, vaping pens or hookahs in the previous 30 days. <b>Black students, females and 9<sup>th</sup> grade students had somewhat lower use.</b>	* ____	43.9%	13.2%
Used electronic nicotine delivery product 20 days or more in the last 30 days. <b>Male, Hispanic and 12<sup>th</sup> grade students have highest frequent use.</b>	* ____	4.1%	3.3%

\*e-nicotine delivery products not previously surveyed

Youth Risk Behavior Surveillance System

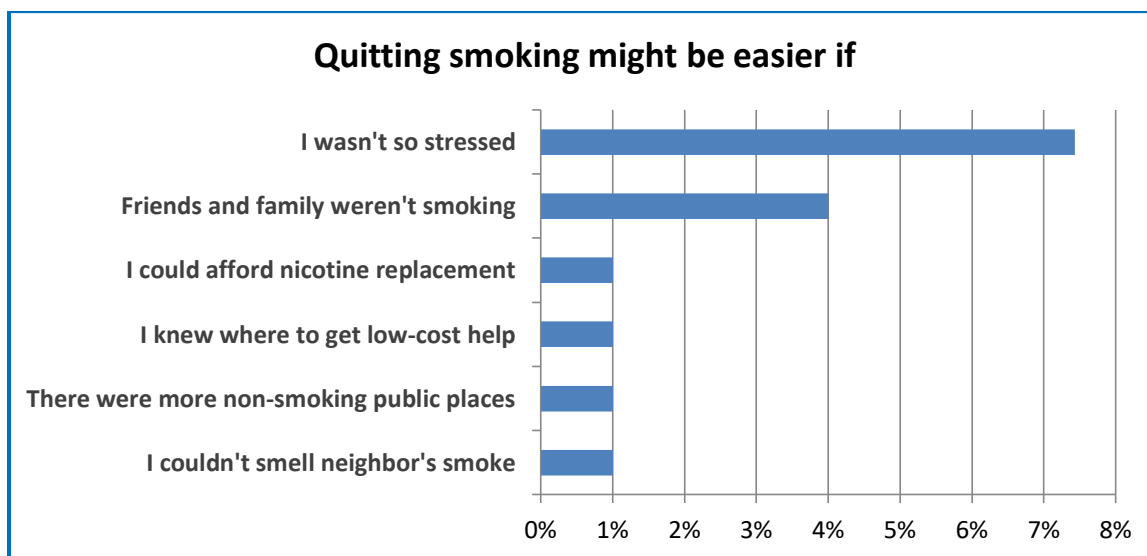


# DATA

## Community Health Survey: Tobacco Use

**66.3% of respondents have never smoked. 22.3% are former smokers.**

*(2019 Community Health Survey)*



*Rules of rounding followed; percentages rounded to nearest whole number.*

### Considerations

- This question generated 37 comments. In lieu of marking never smoked or quit smoking, 9 respondents commented that they did not smoke.
  - 8 respondents commented on how long ago they had quit smoking: from 15 months to 50 years.
  - 2 respondents are in the process of quitting.
- 80% of 15 – 34 year old adults have never smoked.
- More respondents age 35 and older have quit smoking rather than having never smoked.
  - This is the point when comments began to appear about enjoying smoking and having no interest in stopping.

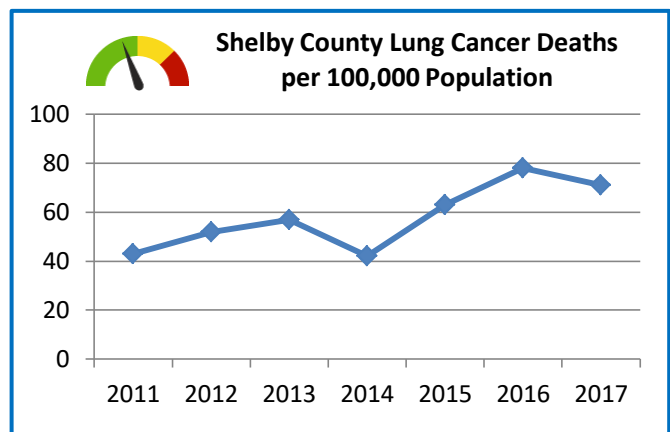
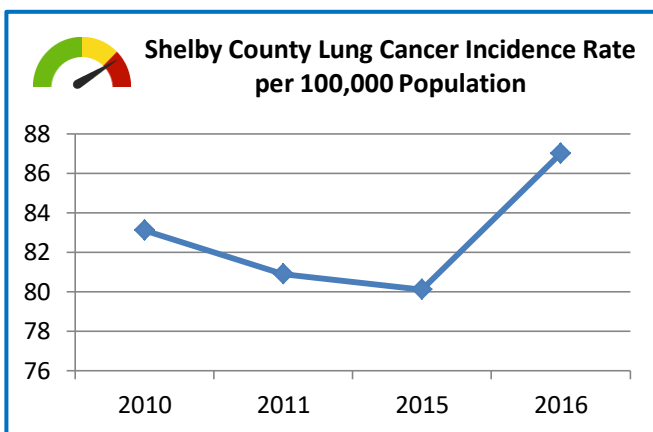
### Disparity

- Respondents whose incomes ranged from less than \$15,000 to \$25,000 cited stress as a barrier to stopping smoking.
- Ages of these respondents were 15 – 24 and 55 – 64 years old.

# DATA

## Smoking and Cancer

Per the *American Cancer Society*, a quarter of all cancer deaths are from lung cancer. While not all lung cancers or head, throat and mouth cancers are related to tobacco use, the **duration and quantity of smoking remain the greatest risk factor for lung cancer and oral cavity and pharynx cancers** (the membrane-lined cavity behind the nose and mouth). Heavy alcohol use is also a risk factor for oral cancers.



Indiana State Department of Health data pulled from Indiana Indicators, October 2019

Indiana County Comparison	Health Indicator	Data Years	Value per 100,000 Population
	Lung & Bronchus Cancer Incidence Rate	2012-2016	87 New Cases
	Oral Cavity & Pharynx Cancer Incidence Rate	2011-2015	15.5 Deaths
	Age-Adjusted Death Rate Due to Lung Cancer	2017	71.2 Deaths <b>45.5 Deaths</b> (15 or fewer deaths)

Indiana State Department of Health pulled from Indiana Indicators; <https://www.healthypeople.gov>

= a significant trend



**Obesity contributes to chronic disease and premature death.** The Body Mass Index (BMI) is the standard for measuring underweight to obese. While BMI does not capture all the dynamics of a given individual's body, it is the accepted standard of measurement for identifying risks and trends. A BMI of 25.0 – 29.9 is overweight and a BMI 30.0 and above is obese.

**The Indiana State Department of Health (ISDH) identifies risk factors for obesity:**

- Physical Inactivity
- Unhealthy Diet and Eating Habits
- Social and Economic Issues
- Not Breastfed as an Infant
- Family Lifestyle
- Genetics
- Age

**Per the ISDH, the health impact of being overweight or obese includes:**

- High Blood Pressure
- Asthma
- Heart disease
- Gallbladder disease
- Sleep apnea and respiratory problems
- Kidney Disease
- Type 2 Diabetes
- Liver Disease
- Stroke
- Arthritis
- Some Cancers
- Depression and Other Mental Illness

**Per the CDC in 2016, 36.8% of adults age 20 and older were obese in Shelby County.**

 **The Healthy People 2020 target is 30.5% or fewer obese adults.**

### Cost of Obesity

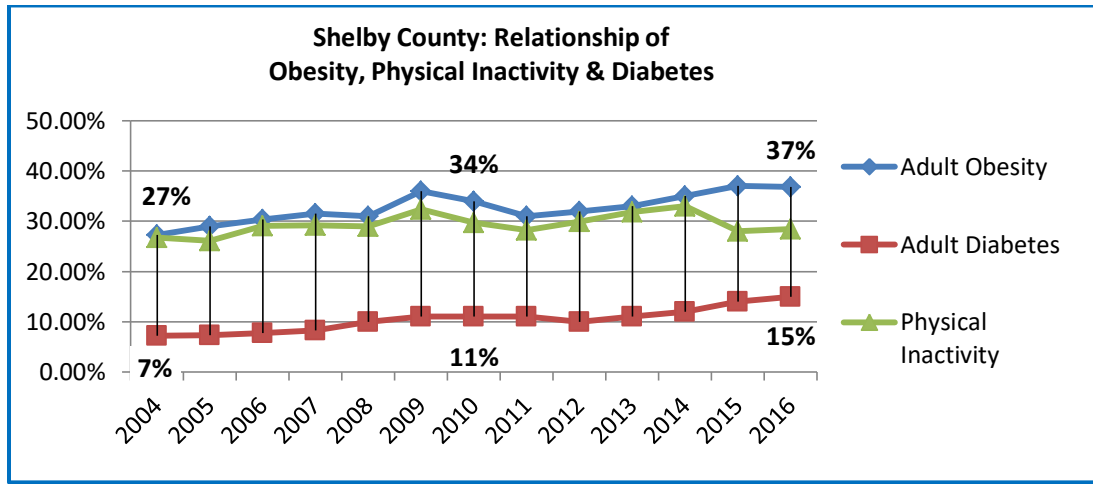
- In 2017 the estimated annual economic impact of obesity in Indiana was \$8.5 billion dollars in increased healthcare costs, absenteeism, lower productivity, lost future earnings, and premature death. It was \$3.5 billion in 2012. As obesity increases, the economic costs rise.
- An obese adult shoulders around \$3,430 more in annual healthcare costs than someone who is not obese. (*America's Health Rankings, 2018*)
- Individuals, business and industry bear the most of the economic burden of obesity.
- Medicare and Medicaid shoulder around 37% of the costs of obesity in the State.

*"Indiana's Obesity Epidemic: Causes, Consequences and Effective Solutions."* Richard M Fairbanks Foundation, March 2019.  
<https://stateofchildhoodobesity.org/states/in/>

# DATA

## Obesity and Diabetes

**Type 2 Diabetes is largely preventable when healthy eating and physical activity are incorporated into daily routines and tobacco use is curtailed.**



CDC Diabetes Interactive Atlas; <https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html>

Type 1 Diabetes (Juvenile Diabetes) is an autoimmune disease in which the pancreas stops producing insulin, a hormone that enables people to get energy from food. Type 2 Diabetes causes blood glucose (sugar) levels to rise higher than normal. The body does not use insulin properly. Type 2 Diabetes is the most common form of Diabetes.






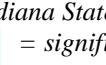
Diabetes can be harmful to most of the body's organ systems. It is a frequent cause of renal (kidney) disease, lower-extremity amputation, and a leading cause of blindness among working age adults. Persons with diabetes are also at increased risk for ischemic heart disease (restricted blood flow to the heart), neuropathy (nerve numbness, typically in hands and feet), and stroke.

### Cost of Diabetes


In 2014 the *American Diabetes Association* estimated Diabetes and Prediabetes cost \$6.6 billion in Indiana each year from lost productivity; routine medical costs; serious complications including heart disease, stroke, amputation, end-stage kidney disease, blindness; and premature death.

# DATA

## Obesity and Diabetes

Indiana County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Death Rate due to Diabetes	2015-2017	12.6 Deaths per 100,000 Population
	Age-adjusted Hospitalization Rate due to Diabetes	2014-2016	18.9 Hospitalizations per 18+ Years
	Age-adjusted Hospitalization Rate due to Long-Term Complications of Diabetes	2014-2016	9.1 Hospitalizations per 18+ Years
	Age-adjusted Hospitalization Rate due to Short-Term Complications of Diabetes	2014-2016	8.5 Hospitalizations per 18+ Years
	Diabetes in Medicare Population	2017	28.9%
	Diabetic Monitoring in Medicare Population	2017	87.8%

Indiana State Department of Health and Indiana INdicators

 = significant trend

### Healthy People 2020 objectives for diabetes include

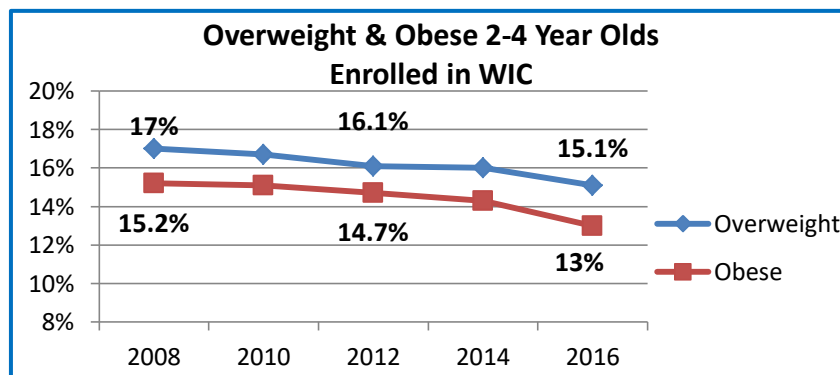
- Reducing the annual number of new cases of diagnosed diabetes or pre-diabetes
- Increasing health monitoring behaviors in persons with diabetes
  - Dental Care
  - Foot Care
  - Eye Care
  - Blood Sugar Monitoring
  - Cholesterol Monitoring
- Increasing prevention behaviors for persons at high risk for developing diabetes
  - Physical Activity
  - Healthy Weight
- Improving management of co-occurring chronic diseases in persons with diabetes
  - Cardiovascular Disease
  - Hypertension
- Improving quality of life for all persons who have or who are at risk for diabetes
- Decreasing premature death for persons with diabetes

# DATA

## Child and Youth Obesity

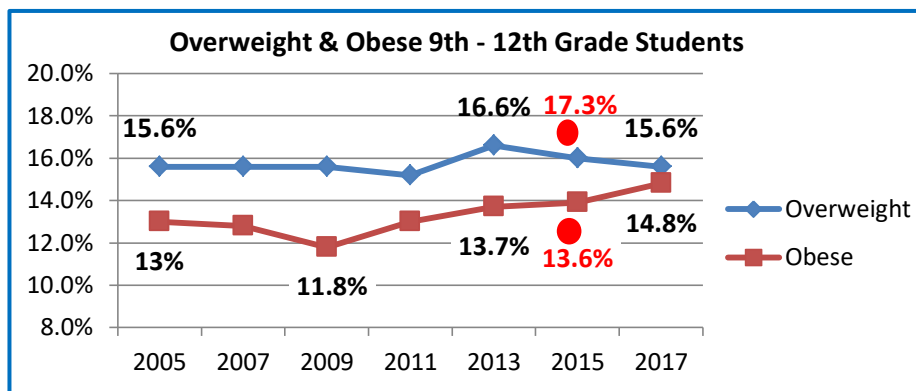
Per the Centers for Disease Control and Prevention, 1 in 5 children is obese. Children who are overweight when they enter kindergarten are 4 times more likely to be obese in 8th grade compared to their peers who are normal weight. Indiana ranks 13<sup>th</sup> in the nation for its rate of obesity among 10 – 17 year olds. Children who have obesity are at higher risk for growing up to be adults with obesity.

Obesity in childhood may involve health factors such as genetics, physical activity level, food insecurity, access to recreational opportunities or family income and culture. A decrease in overweight and obese low-income preschoolers whose mothers participated in WIC in Indiana is promising.



Indiana State Department of Health. WIC Division pulled from Annie E Casey Foundation Kids Count Data Center

In 2015 and 2016, *Shelbyville High School* students participated in the national *Youth Risk Behavior Surveillance System* Survey (YRBSS). The red data is Indiana specific for 2015.



Centers for Disease Control and Prevention Youth Risk Behavior Surveillance System

### Disparities:


- Higher rates of overweight and obesity among
- 11<sup>th</sup> grade students
- Male students
- Black and Hispanic students
- Black and Hispanic females had higher rates of being overweight.

### **Per the CDC, childhood obesity can have a harmful effect on the body in both the immediate and the long-term:**

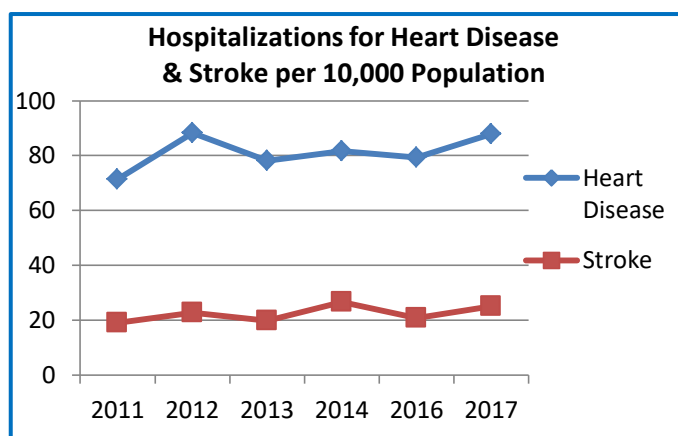
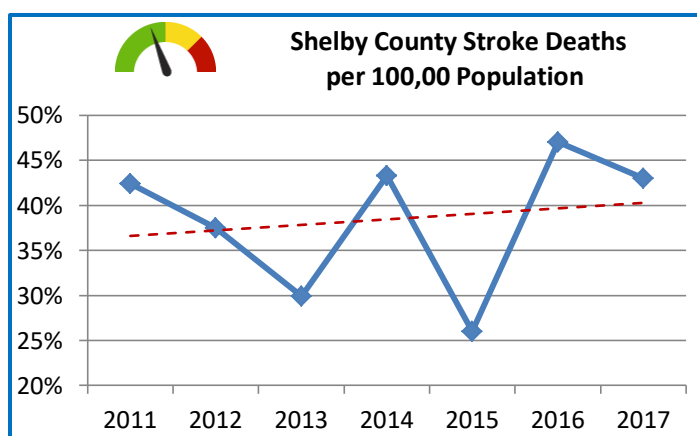
- High blood pressure and high cholesterol: risk factors for cardiovascular disease.
  - 70% of children with obesity have at least one cardiovascular disease risk factor
  - 39% have two or more.
- Increased risk of impaired glucose tolerance, insulin resistance and Type 2 Diabetes
- Breathing problems, such as sleep apnea, and asthma
- Joint problems and musculoskeletal discomfort
- Fatty liver disease, gallstones, and gastro-esophageal reflux (heartburn)
- Psychological stress such as depression, behavioral problems, and issues in school
- Low self-esteem and low self-reported quality of life
- Impaired social, physical, and emotional functioning





# DATA







## Cardiovascular Disease

**Cardiovascular Disease is the number 1 cause of death in Shelby County.** Compared with healthy weight individuals, lifetime risk of cardiovascular disease is greater in persons who are overweight or obese: **Overweight:** 21 – 32% higher risk; **Obese:** 67 – 85% higher risk. Obesity increases risk of high blood pressure, high cholesterol, sleep apnea and inflammation which lead to heart disease and stroke.  Shelby County is in the top 50<sup>th</sup> percentile of Indiana counties for its rate of stroke deaths.



 **Healthy People 2020 goal: 34.8 or fewer stroke deaths per 100,000 adults (12 or fewer deaths).**



IN County Comparison	Health Indicator	Data Years	Value per 100,000 population
	Age-Adjusted Hospitalization Rate due to Heart Failure	2014-2016	31 Hospitalizations 18+ years per 10,000
	Age-Adjusted Hospitalization Rate due to Hypertension	2014-2016	3.1 Hospitalizations 18+ years per 10,000
	Age-Adjusted Death Rate due to Coronary Heart Disease	2015-2017	89.7 Deaths per 100,000 population
	Age-Adjusted Death Rate due to Heart Attack	2016	65.7 Deaths 35 years & older per 100,000 population

IN County Comparison	Medicare Recipient Health Indicator Data Year: 2017	% of Medicare Population
	Stroke	4.1%
	Atrial Fibrillation	8.9%
	Heart Failure	14.9%
	Hyperlipidemia	47.7%
	Hypertension	61.1%
	Ischemic Heart Disease	30.2%

*Heart Disease data from the Indiana State Department of Health pulled from Indiana Indicators*

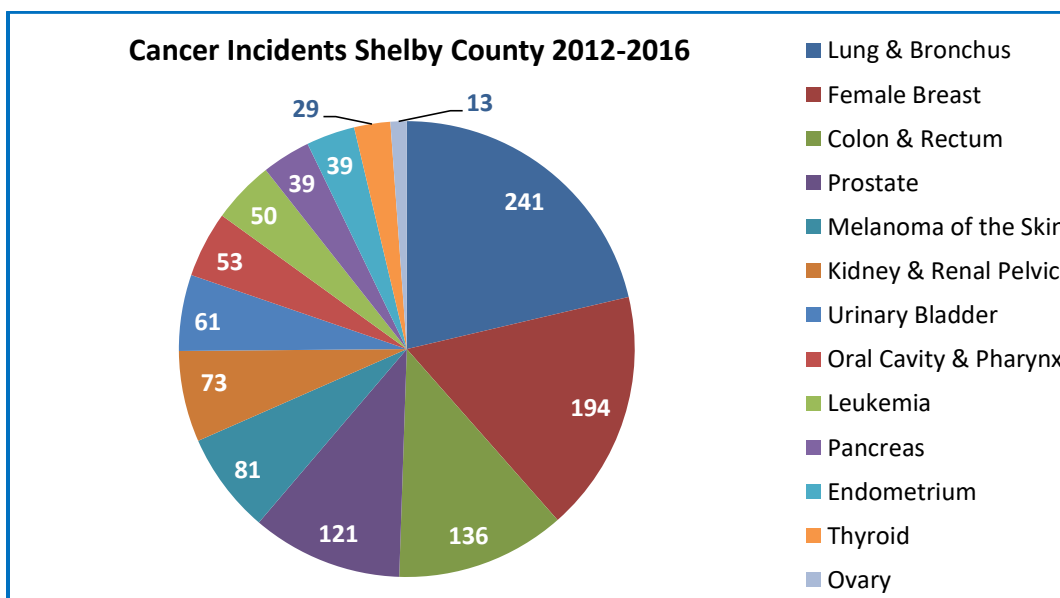
  = Significant Trend



# DATA

## Cancer

Cancer is the 2<sup>nd</sup> leading cause of death in Shelby County. Of cancer cases, 743 were men and 731 were women during the 2012 – 2016 data in the ISDH Cancer Registry.

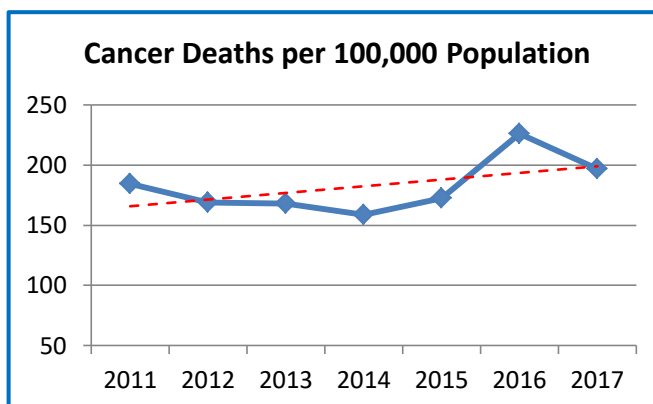
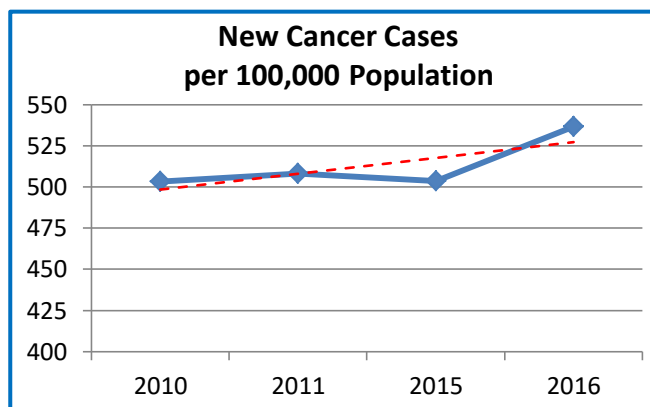


Indiana State Department of Health Cancer Registry

Per the *National Cancer Institute*, obesity is associated with an increased risk for the following types of cancer:

- Breast Cancer (after menopause)
- Colon & Rectum
- Endometrium
- Esophagus
- Gallbladder
- Kidney
- Prostrate
- Liver
- Ovaries
- Pancreas
- Stomach
- Thyroid

Indiana State Department of Health data pulled from Indiana Indicators

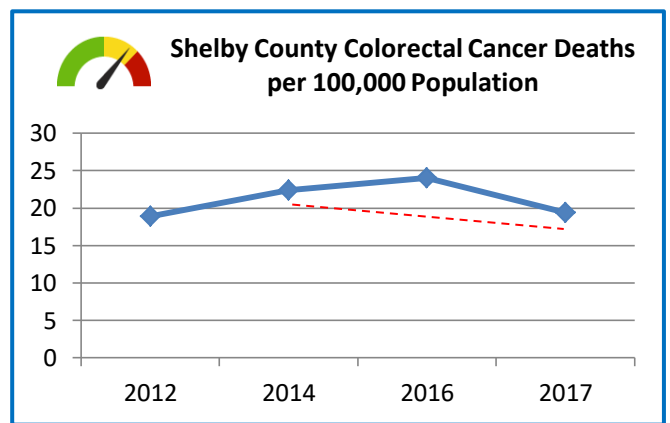
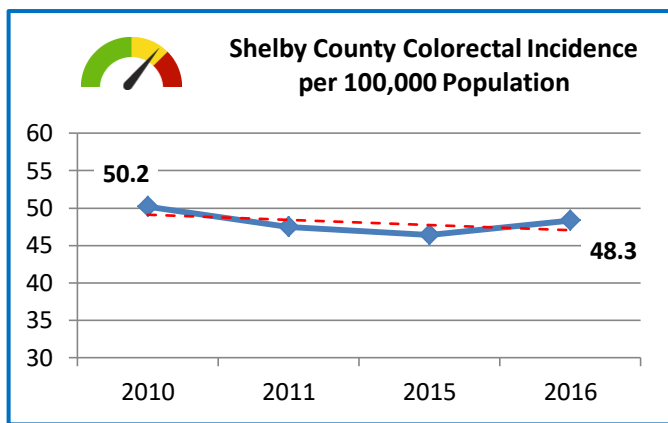


# DATA

## Colorectal and Prostate Cancer

**Colorectal Cancer is a leading cause of cancer deaths in the United States.** There are both hereditary and lifestyle risk factors. Obesity, tobacco use, physical inactivity and heavy alcohol use are modifiable risk factors. The *Centers for Disease Control and Prevention* estimates that with regular screening, 60% of deaths from colorectal cancer could be prevented.

Indiana County Comparison	Health Indicator	Data Years	Value per 100,000 Population
	Colorectal Cancer Incidence Rate <b>Healthy People 2020 goal</b>	2010-2016	48.3 Cases <b>39 or Fewer</b>
	Age-adjusted Death Rate due to Colorectal Cancer <b>Healthy People 2020 goal</b>	2012-2017	15.2 Deaths <b>14.5 or Fewer</b>
	% of New Cancer Cases in Medicare Populations	2017	8.3% of older adult population



Colorectal data from Indiana State Department of Health, pulled from Indiana INdicators  
 Healthy People 2020: <https://www.healthypeople.gov>

IN County Comparison	Health Indicator	Data Years	Value per 100,000 Population
	Prostate Cancer Incidence	2012-2016	86.7 Cases
	Age-adjusted Death Rate due to Prostate Cancer <b>Healthy People 2020 goal</b>	2011-2017	0.0 Deaths <b>21.8 Deaths</b>

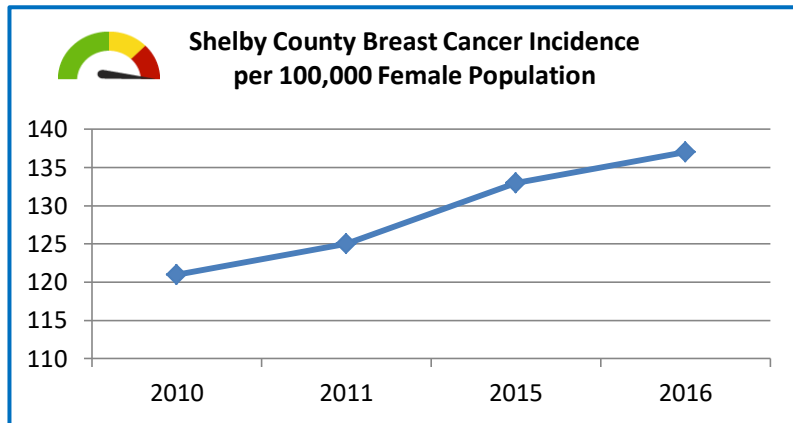
Indiana State Department of Health data pulled from Indiana INdicators  
 Healthy People 2020: <https://www.healthypeople.gov>

= significant trend


# DATA






## Breast Cancer

According to the *American Cancer Society*, 1 in 8 women will develop breast cancer and 1 in 38 women will die from breast cancer. It is the second leading cause of cancer death in women behind lung cancer.





Indiana State Department of Health data pulled from Indiana INdicators

 **Healthy People 2020 target is 41 or fewer new breast cancer cases annually per 100,000 female population (14 or fewer new cases annually).**

Indiana County Comparison	Health Indicator Data Years 2010-2016	Value per 100,000 Female Population
 	Breast Cancer Incidence	134.7
 	Age-adjusted Death Rate due to Breast Cancer	18.5
	Mammography Screening in Medicare Population	82.2

2017 Indiana Mortality Report; Indiana State Department of Health data pulled from Indiana INdicators

  = significant trend

# DATA


## Suicide

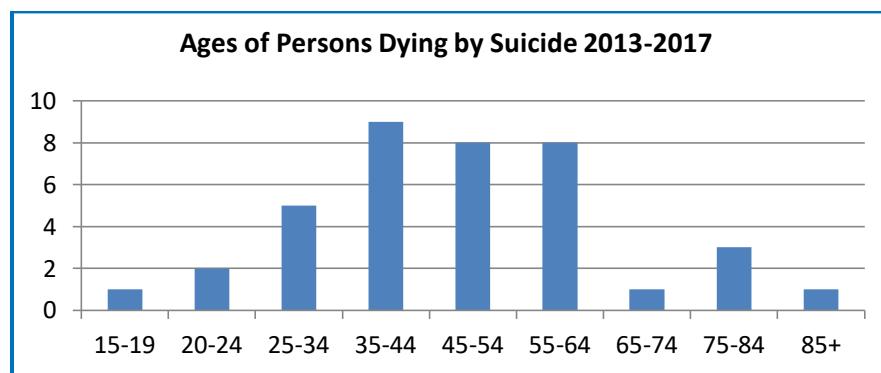
### Suicide is the 10<sup>th</sup> leading cause of death of adults in Indiana.

- Suicide is the 2nd leading cause of death in the nation for people age 15 to 34. (*CDC*)
- Women, youth, and the elderly attempt suicide more often than men do; however, men more frequently die by suicide (*ISDH*).
- Many suicide attempts go unreported because not all self-injury results in medical attention.



### From 2013 – 2017 there were 38 suicide deaths in Shelby County.

- This does not include suicide deaths by residents that occurred outside of the county or suicide deaths that were not noted as such on death certificates.
- The majority of suicide deaths were by firearms - 66%.
- Per the *Indiana Mortality Report*, there were 7 suicide deaths in Shelby County in 2017.

 **The Healthy People 2020 goal: 10.2 or fewer annual suicide deaths per 100,000 population (5 or fewer persons).**



*Indiana State Department of Health, Epidemiology Resource Center*

Indiana County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Death Rate due to Suicide	2015-2017	15.5 Deaths per 100,000 Population
	Age-adjusted Hospitalization Rate due to Suicide & Intentional Self-Injury	2014-2018	40.1 Hospitalizations per 10,000 Population 18+ Years

*Indiana State Department of Health 2017 Mortality Report and Epidemiology Resource Center*

# DATA

## Suicide and Youth

**“While suicide isn’t a big problem, suicidal thoughts and attempts are a problem.”**

(2019 Community Health Survey)



In 2015 and 2016, *Shelbyville High School* students participated in the national *Youth Risk Behavior Surveillance System* survey (YRBSS). In the chart below, YRBSS data from 2015 is Indiana specific.

**Disparities:** A greater percentage of sexually active Sexual Minority students struggle with persistent sadness that interferes with their daily functioning and with suicide ideation and attempts.

- 63.0% of gay, lesbian and bi-sexual youth and 46.4% of students not sure of their sexual identity experienced persistent feelings of sadness or hopelessness. 27.5% of heterosexual students experienced these feelings.
- 47.7% of lesbian, gay & bisexual youth seriously considered suicide as did 31.8% of students uncertain of their sexual identity. This was true for 13.3% of heterosexual students.
- Suicide attempts happened more frequently among sexual minority youth: 23% versus 5.4% of heterosexual youth.
- All non-sexually active youth had significantly lower rates of suicidal ideation and attempts.

Health Indicator: Suicide Factors in 12 Months Prior to Survey	2005	2015	2017
Feelings of sadness & hopelessness resulting in withdrawing from normal activities <b>Female students more likely to report sadness &amp; hopelessness: 41%</b>	28.5%	29.9%	31.5%
Seriously considered suicide <b>Female students more likely to report compelling suicidal ideation: 22.1%</b>	16.9%	19.8%	17.2%
Made a plan to commit suicide <b>Female students more likely to make suicide plan.</b>	13%	17%	14.6%
Attempted suicide <b>Black students and female students were more likely to attempt suicide.</b>	8.4%	10%	7.4%
Suicide attempt requiring medical treatment <b>Black students and female students were more likely to attempt suicide.</b>	2.3%	4%	2.4%

Youth Behavior Risk Surveillance System <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

Indiana County Comparison	Health Indicator 2014-2016	Value
	Age-adjusted Hospitalization Rate due to Adolescent Suicide & Self-inflicted injury	79.1 Hospitalizations per 10,000 Population 12-17 Years
	Age-adjusted Hospitalization Rate due to Pediatric Mental Health	38.4 Hospitalizations per 10,000 Population under 18 Years

*Indiana State Department of Health data pulled from Conduent Healthy Communities Institute*

# DATA

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## Mental Illness

### Nearly 1 in 4 Americans have some type of mental illness each year.

- Half of all long-term mental illness starts by age 14.
  - “. . . you should spend money on therapists for these young people in school. These kids have mental health issues that are not being addressed at home or school.” (2019 Community Health Survey)
- The *National Institutes of Mental Health* reports 50% of all persons with substance use disorders have co-occurring mental illnesses.
- The 2015 *AdvantAge Survey* found that 11% of respondents age 55 and older acknowledged needing professional help for depression or anxiety but nearly half of this group did not get the help they thought they needed.
  - “People who have Medicare or Medicaid that reside in Shelby County do not have access to 1:1 mental [health] counseling and therapy. [The local community mental health clinic] offers . . . group counseling. This is not helping the situation in Shelby County.” (2019 Community Health Survey)
- Untreated mental illness or substance use disorders increases risk of suicide. <sup>1</sup>Persons with untreated or ineffectively treated mental illness such as Major Depression, Bi-polar Disorder and Schizophrenia die an average of 14-32 years earlier than the general population. This is akin to life expectancy in Sudan and Ethiopia!
  - Premature death stems from a lack of *preventive health care and medical care* for obesity, physical inactivity, chronic disease, addiction, poverty and poor nutrition not the mental illness itself.
  - Mental illness may complicate an individual’s ability to access health care and providers may view complaints as an expression of the mental illness.
- Unaddressed or under-treated health conditions result in a cost burden for the health care system as this population is treated in Emergency Departments and Intensive Care Units.

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<sup>1</sup>World Health Organization [https://www.who.int/mental\\_health/management/info\\_sheet.pdf](https://www.who.int/mental_health/management/info_sheet.pdf) ; Colton and Manderscheid. *Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Preventing Chronic Disease. 2006 April cited by Thomas Insel. No Health without Mental Health. National Institutes of Mental Health. 2011 Sept.*

# DATA

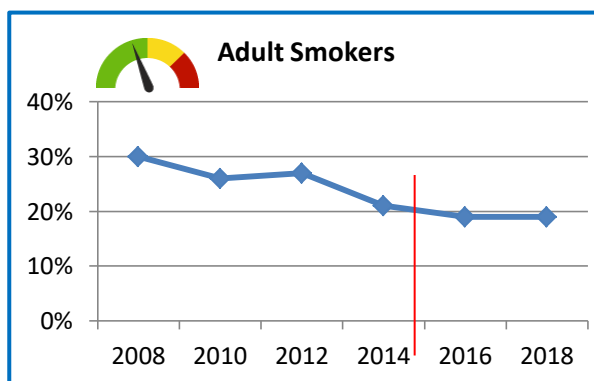
## Substance Use: Tobacco and Alcohol

Excessive alcohol use can lead to health problems such as liver disease, unintentional injuries, or an increased risk of some cancers. Per the Centers for Disease Control and Prevention, it is the third leading lifestyle cause of death in the nation. Excessive drinking includes any alcohol use by pregnant women, and heavy and binge drinking. Heavy drinking equals more than 2 drinks daily for men and more than 1 drink daily for women. Binge drinking equals more than 4 drinks in a single drinking occasion, more than 3 drinks for women. (<https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>)

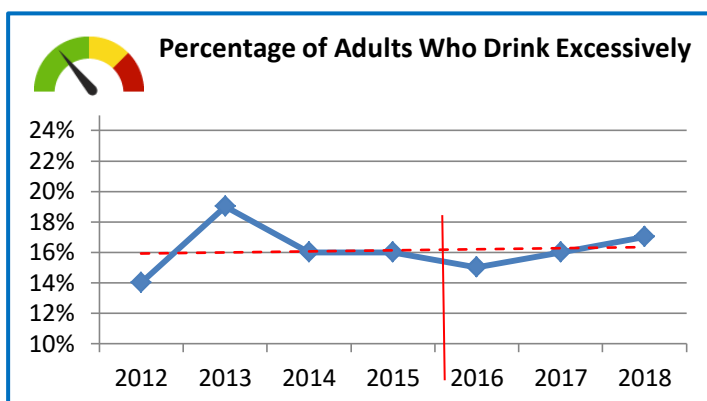
An analysis published in the Lancet concluded that drinking any alcohol carries health risks that outweigh any small benefit from moderate alcohol consumption. (Gakidou, E. Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2016; 392(10152): 1015-1035.)

IN County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Hospitalization Rate due to Alcohol Use	2014-2016	10.2 Hospitalizations per 10,000 population 18+ years
	Alcohol Abuse Treatment Rate	2015	119.2 per 100,000 population

Indiana State Department of Health pulled from Indiana INdicators



Indiana State Department of Health data pulled from Indiana INdicators  
Data before & after 2016 cannot be compared due to change in methodology.

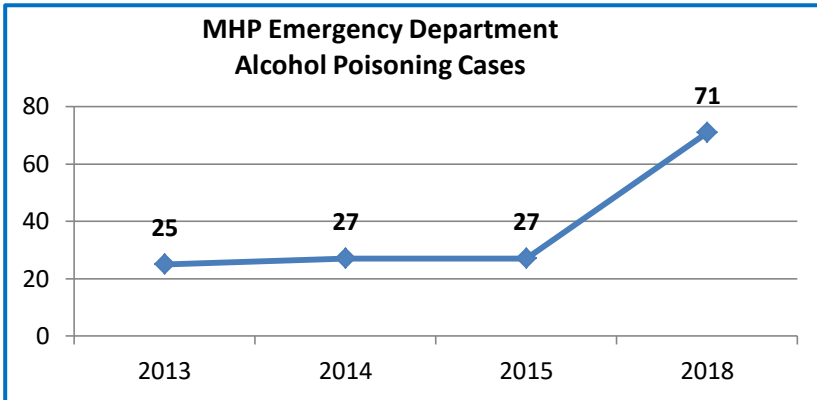


Indiana State Department of Health data pulled from Indiana INdicators  
Data before & after 2016 cannot be compared due to change in methodology.

While tobacco and alcohol are legal substances, they are still chemicals that when used present significant health risks. Tobacco remains the number 1 modifiable cause of death across the nation and in Shelby County.

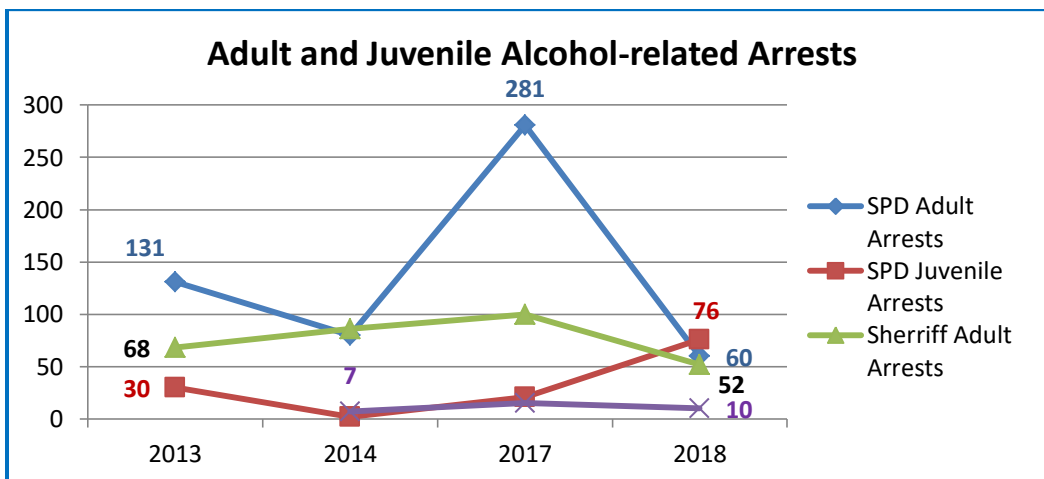
# DATA

## Substance Use: Alcohol and Marijuana

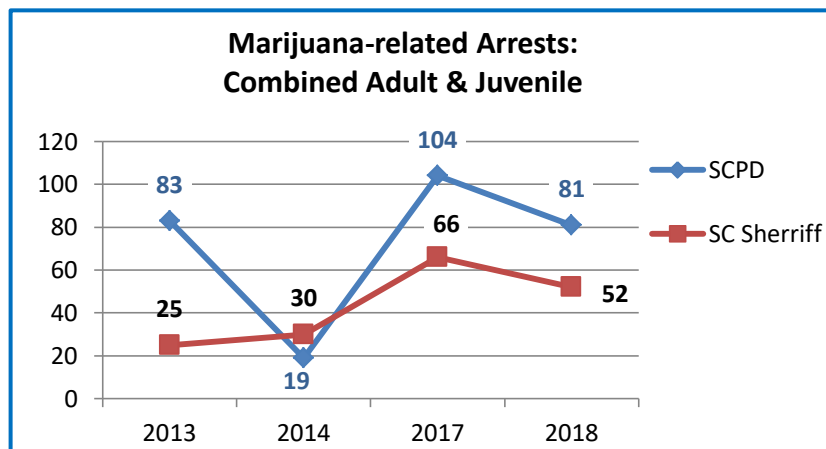


Major Health Partners  
Emergency Department

The *Shelby County Drug Free Coalition* is organized around prevention, treatment, and law enforcement activities in 4 impact areas: underage drinking; adult misuse of alcohol; marijuana use; and prescription drug abuse. Follows is data from the coalition on these problem areas:



Shelbyville Police  
Department & Shelby  
County Sherriff's  
Department data  
provided by Shelby  
County Drug  
Free Coalition



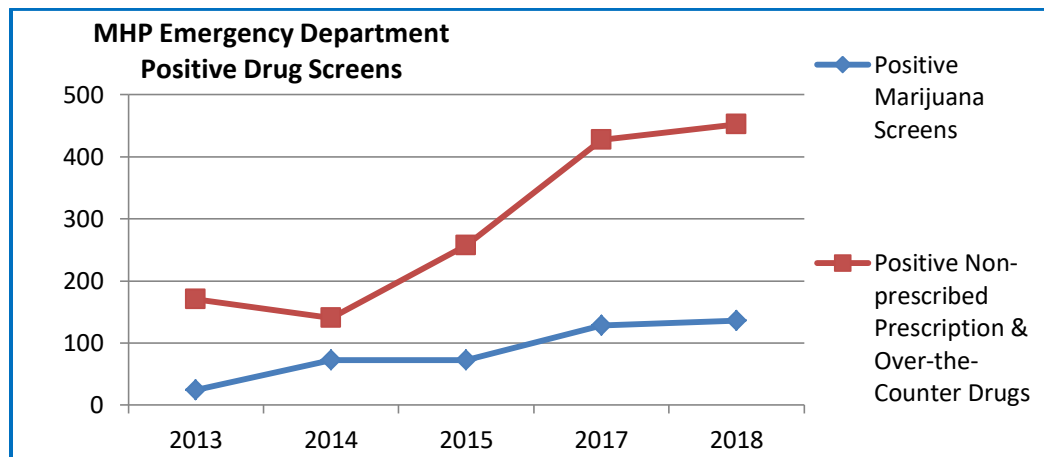
Shelbyville Police Department &  
Shelby County Sherriff's Department  
data provided by Shelby County Drug  
Free Coalition



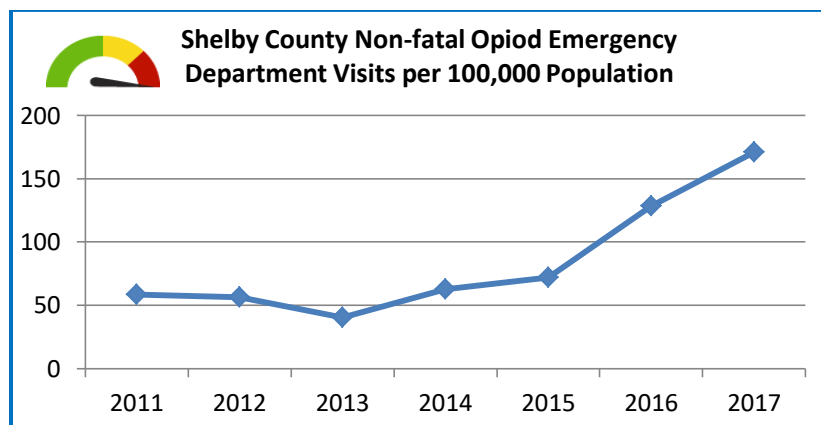
# DATA

## Controlled Substances

**Addressing the opioid epidemic requires a multi-sector response from the communities of Shelby County.** Individuals and families can lock-up and monitor their medications and dispose of them when no longer used or outdated. The legal system can support treatment. Employers can provide jobs to people who are in recovery. Schools, churches, and youth serving organizations can provide both education and a rich array of affordable, accessible activities and supports to provide opportunities for youth to be meaningfully engaged with adult oversight. For the last decade Major Health Partners has increasingly addressed prescription drug misuse: first in the Emergency Department and then through the outpatient physician practices. Patient education, alternative pain management strategies, appropriate prescribing and monitoring are MHP's response to preventing and managing opioid misuse.



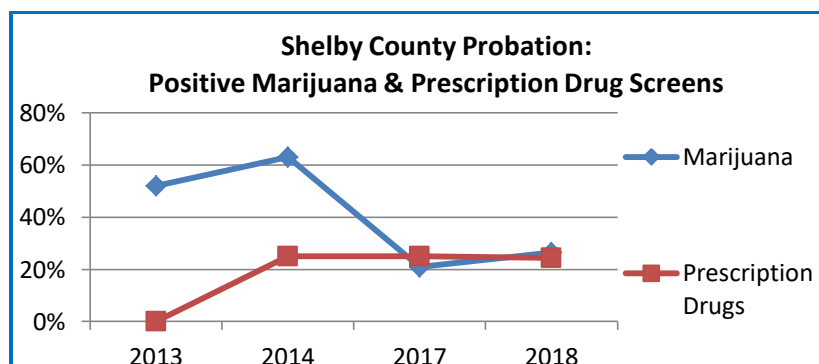
*Major Hospital  
Emergency  
Department*



*Indiana State Department of Health  
pulled from Indiana Indicators  
Indiana State Department of Health  
pulled from Conduent Healthy  
Communities Institute*

# DATA

## Substance Use

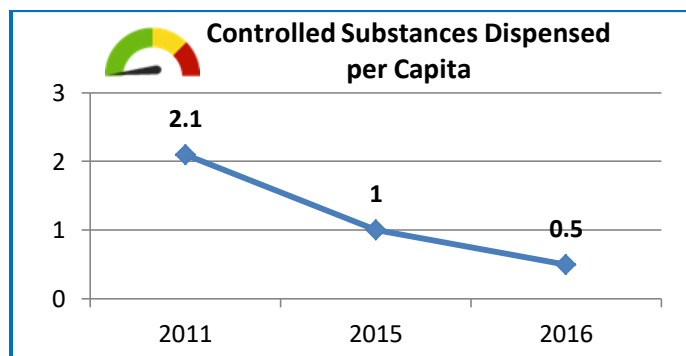


Shelby County Probation data provided by SC Drug Free Coalition

One key tenet of prescription drug abuse prevention is a safe, consistent location for people to dispose outdated or unused medications. Since January 2016 a prescription drug Drop Box has been located in the lobby of the Shelby County Sheriff’s Department.

IN County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Hospitalization Rate due to Substance Use	2014-2016	15.2 Hospitalizations per 10,000 Population 18+ Years
	Death Rate due to Drug Poisoning	2015-2017	17.3 Deaths per 100,000 Population
	Marijuana Abuse Treatment Rate	2015	51.7 per 100,000 Population

Indiana State Department of Health pulled from Conduent Healthy Communities Institute



Indiana Prevention Resource Center; Conduent Healthy Communities Institute

In Shelby County, the number of controlled substances *dispensed per capita* has decreased. This indicator shows the number of controlled substances dispensed by a licensed pharmacist per person in the county if these substances were evenly distributed to the population.

### 2019 Community Health Survey

- “Why don't you focus on the drug problem because I shouldn't have to find needles on my walk to school.” (Adolescent respondent, 2019 Community Health Survey)
- “Limited substance abuse treatment options need to be addressed: . . . [all providers] need to quit overprescribing benzos and opioids and get educated on safe benzo tapering, alternative pain management interventions and prescribing Suboxone.” (2019 Community Health Survey)

# DATA

## Substance Abuse: Youth

In 2015 and 2016, *Shelbyville High School* students participated in the national *Youth Behavior Risk Surveillance System* Survey (YRBSS). The YRBSS 2003 and 2015 data below reflects Indiana results. *Shelbyville High School* students also participate in the annual *Indiana Youth Survey*. The 2016 and 2017 data is specific to *Shelbyville High School*. The 2018 data is Indiana-specific.

Health Indicator: Substance Use	2003	2015	2016	2017
Consumed alcohol at least once in previous 30 days <b>Females and 12<sup>th</sup> grade students are more likely to have used alcohol.</b>	44.9%	30.5%	27.5%	31.3%
Used Marijuana at least once in the previous 30 days <b>11<sup>th</sup> and 12<sup>th</sup> grade students and Hispanic students more likely to use.</b>	22.1%	16.4%	16.2%	23%
Ever used any form of illicit drug one or more times during their life: cocaine, heroin, methamphetamines, inhalants, hallucinogens <b>Hallucinogens have the highest use: 6.6%. Male 12<sup>th</sup> grade students are more likely to use illicit drugs. Hispanic and white students are more likely to use hallucinogens.</b>	22.1%	6.4%	-----	14%
Used Prescription Medication without a Doctor's Prescription or differently than prescribed one or more times during their life: such as OxyContin, Percocet, Vicodin, Codeine, Adderall, Ritalin, or Xanax. <b>11<sup>th</sup> and 12<sup>th</sup> grade students and Hispanic students more likely to misuse.</b>	<b>2009</b> 22.3%	16.8%	4.8%	6.2%

*Youth Behavior Risk Surveillance System* <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>  
*Indiana Youth Survey* <https://inys.indiana.edu/survey-results>

**Note: YRBSS data is lifetime use. *Indiana Youth Survey* is monthly use.**

Health Indicator: Substance Use	2003	2015	2018: Monthly Use
Drank 5 or more drinks in a row in a couple of hours at least once in the last 30 days (4 drinks for females; <i>Indiana Youth Survey</i> = last 2 weeks)	28.9%	17.4%	9.4%
Used any form of Cocaine <i>one or more times in their life</i>	7.9%	4.0%	6%
Used Inhalants <i>one or more times in their life</i>	12.9%	7.4%	7%
Used any form of Heroin <i>one or more times in their life</i>	2.4%	2.4%	1%
Used Methamphetamines <i>one or more times in their life</i>	8.2%	2.9%	3%
Used Hallucinogens/Ecstasy <i>one or more times in their life</i>	6.4%	5.0%	1.7%

*Youth Behavior Risk Surveillance System* <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>  
*Indiana Youth Survey* <https://inys.indiana.edu/survey-results>

# DATA

## Older Adult Health

The “Silver Tsunami” of which the nation has been forewarned over the last 20 years is upon us. The 2 largest demographic groups in the county are persons 65 and older and those who are 55 – 64: 32% of Shelby County’s population is in or is about to enter expensive healthcare years.

AdvantAge Survey	Indiana County Comparison	Medicare Health Indicator	Data Years	Value
		Asthma	2017	4.7%
		Atrial Fibrillation	2017	8.9%
		Cancer	2017	8.3%
		COPD	2017	18%
		Dementia	2017	12.3%
		Depression	2017	21.2%
5		Diabetes	2014-2016	28.9%
		Diabetic Monitoring	2015	87.8%
		Heart Failure	2017	14.9%
2		Hyperlipidemia	2017	47.7%
1		Hypertension	2017	61.1%
		Ischemic Heart Disease	2017	30.2%
		Kidney Disease	2017	27.4%
		Mammography Screening	2015	72%
		Osteoporosis	2017	8.5%
3		Rheumatoid Arthritis or Osteoarthritis	2017	37.7%
		Stroke	2017	4.1%

*ISDH data pulled from Indiana Indicators; Conduent Healthy Communities Institute; County Health Rankings & Roadmaps*

= significant trend

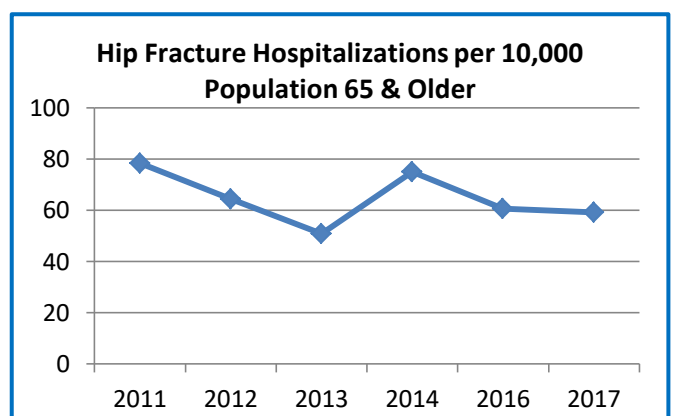
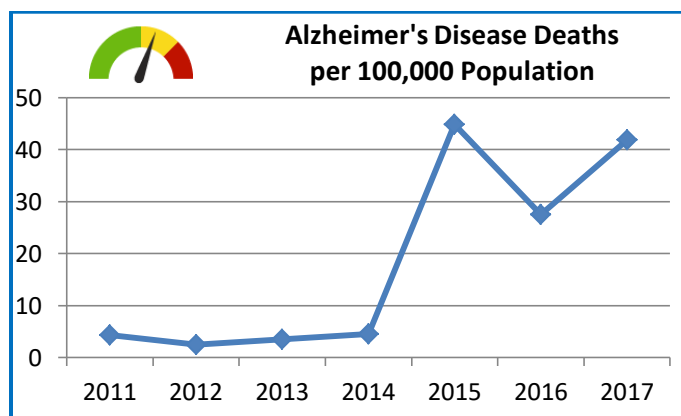
In 2015 *Shelby Senior Services* conducted the evidence-based *AdvantAge Survey*. The survey covered those 55 and older living in Shelby County. The top 5 health conditions of respondents are aligned with the top health challenges among Medicare beneficiaries. The number 4 health condition from the survey was obesity.

# DATA

## Older Adult Health

### Alzheimer's and Hip Fractures

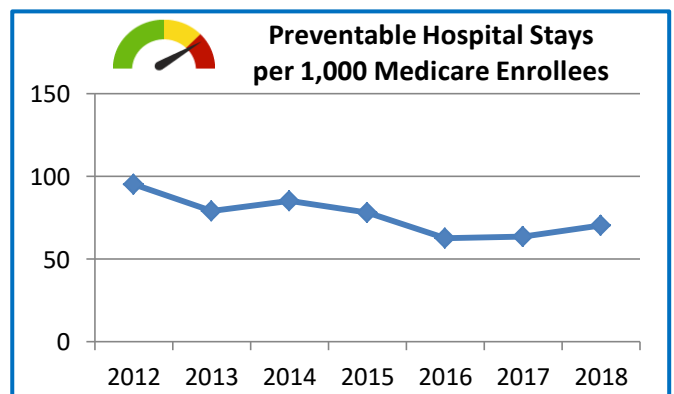
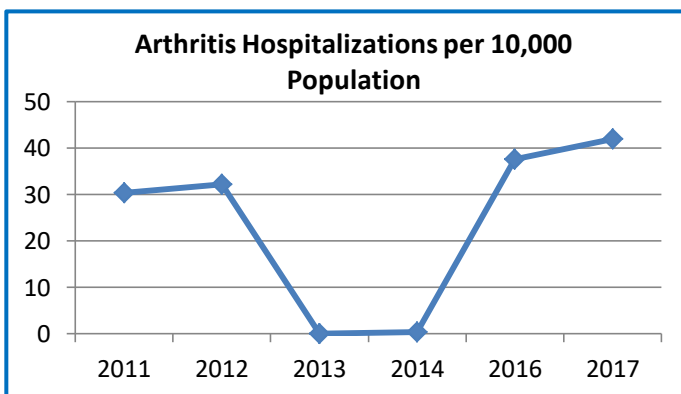
Older adults often succumb to Alzheimer's disease or other Dementia diagnoses. These diseases are devastating emotionally and financially to families. While incidence of dementing illness is increasing in Shelby County, death rates from these illnesses are trending downward across the nation. People are living longer with these illnesses. While the right medication at the right point in the disease process may improve quality of life, the progress of the disease is not slowed.



Indiana State Department of Health pulled from Indiana Indicators

### Arthritis and Preventable Hospital Stays

Osteoarthritis is not unique to older adults; however, it is a chronic condition that creates pain and mobility challenges as adults age. The 2015 AdvantAge Survey identified arthritis as the third highest health condition for older adults.



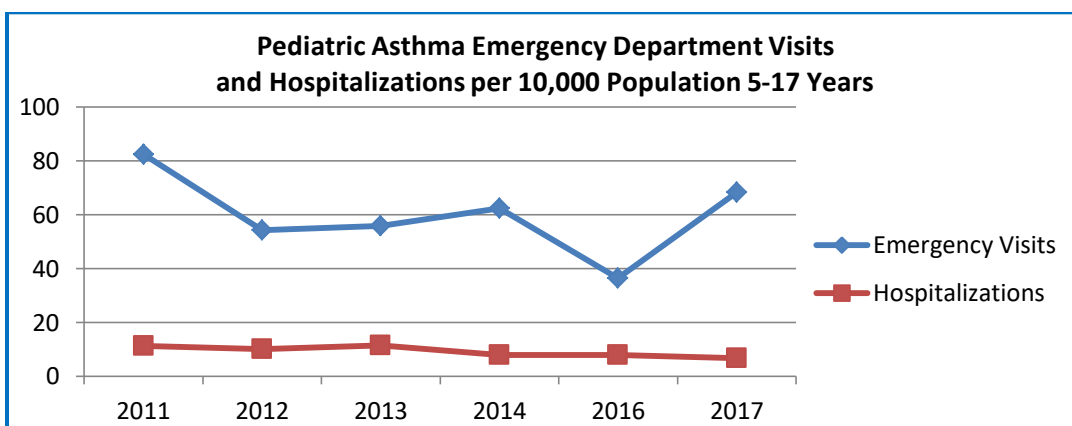
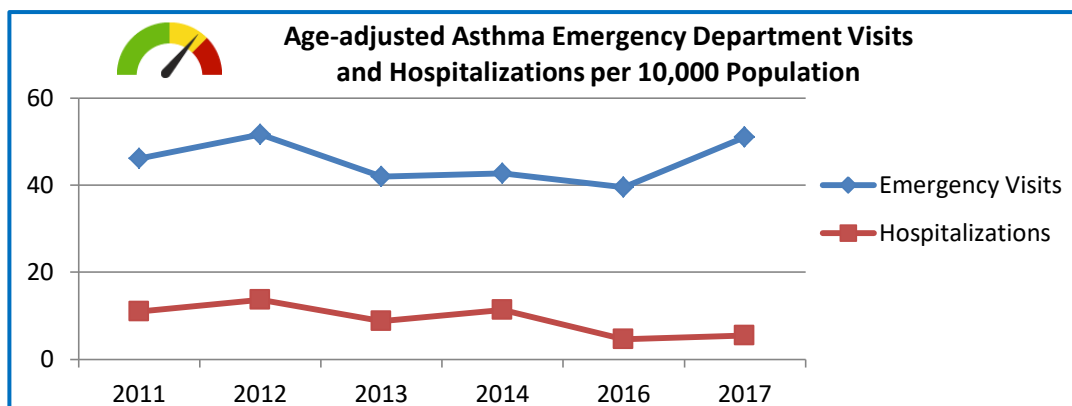
Indiana State Department of Health pulled from Indiana Indicators

# DATA

## Respiratory Disease

**Asthma** is difficulty breathing through a narrowing of air passages can be triggered by dust, pollen, cigarette smoke, environmental pollutants and other allergens. It is mostly managed through short and long term medication strategies, but may be serious enough to warrant hospitalization.

**Chronic Obstructive Pulmonary Disease (COPD)** is a group of diseases that cause airflow blockage and breathing problems other than asthma.



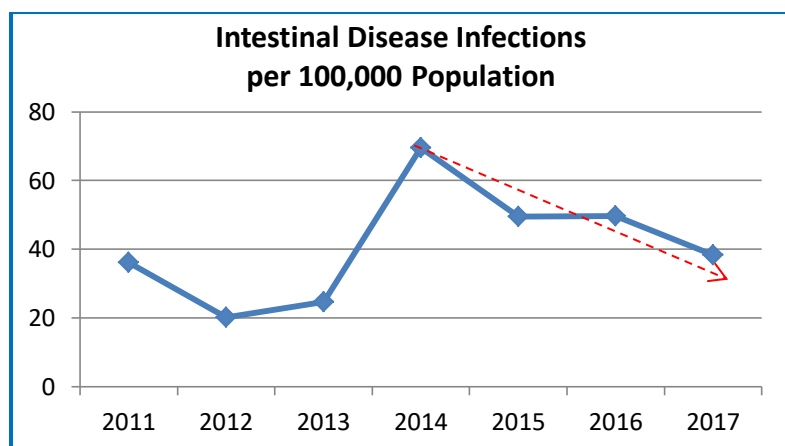
*Respiratory data: Indiana State Department of Health pulled from Indiana Indicators*

IN Country Comparison	Health Indicator	Data Years	Value
	Age-adjusted Hospitalization Rate due to COPD	2014-2016	44.5 Hospitalizations per 10,000 Population 18+ Years
	COPD: Medicare Population	2017	18%
	Age-adjusted Death Rate due to COPD	2015-2017	55.1 Deaths per 100,000 Population
	Age-adjusted Hospitalization Rate due to Adult Asthma	2014-2016	6.0 Hospitalizations per 10,000 Population 18+ Years
	Asthma: Medicare Population	2017	4.7%

# DATA

## Other Health Conditions

Intestinal disease infections may be caused by bacteria, viruses, or parasites. These infections typically result in diarrhea, nausea, vomiting and abdominal cramping. Salmonella food poisoning is one cause of intestinal infections. Shelby County had a high rate of Salmonella infections. The Shelby County Health Department has worked diligently on education and environmental interventions to impact this foodborne illness. Infants, small children, older adults and medically compromised persons can quickly develop complications of dehydration or bowel obstruction with an intestinal disease infection.



In 2014 the County's rate of Salmonella infections was 22.4 cases per 100,000 population. As of 2016, the rate was 0.0 cases per 100,000 population. Shelby County has met the **Healthy People 2020 goal of 11.4 or fewer cases of Salmonella infections per 100,000 population.**

Indiana State Department of Health pulled from Indiana INdicators

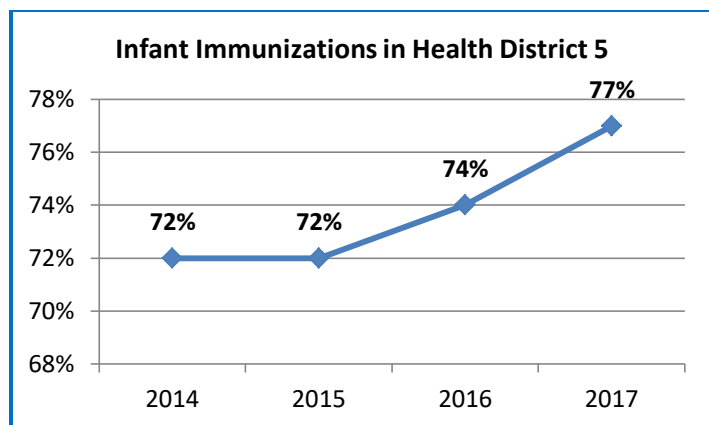
Indiana County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Death Rate due to Kidney Disease	2015-2017	13.3 Deaths per 100,000 Population
	Age-adjusted Hospitalization Rate due to Dehydration	2014-2016	10.5 Hospitalizations per 10,000 Population 18+ Years
	Age-adjusted Hospitalization Rate due to Urinary Tract Infections	2014-2016	26.9 Hospitalizations per 10,000 Population 18+ Years

Indiana State Department of Health pulled from Indiana INdicators, County Health Rankings & Conduent Healthy Communities Institute

# DATA

## Immunizations and Infectious Diseases

### Infant Immunizations



Shelby County is part of Indiana Health District 5 which includes Marion and the counties surrounding it. Recommended infant immunization data is from District 5.

**Bacterial Pneumonia:** *Major Health Partners* has been making a concerted effort to increase pneumonia vaccinations per evidence-based guidelines. Antibiotic-resistant strains of pneumonia have been on the rise. Hospitalization rates for pneumonia have been dropping since 2009. Per 2012-2014 data, the rate of hospitalization for Bacterial Pneumonia was 53.2 hospitalizations per 10,000 population. Per 2014-2016 ISDH data, the county’s hospitalization rate has decreased by 31%.




Indiana County Comparison	Health Indicator	Data Years	Value
	Age-adjusted Hospitalization Rate due to Community Acquired Pneumonia	2014-2016	36.7 Hospitalizations per 10,000 Population 18+ Years
	Age-adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia & Influenza	2014-2016	2.5 Hospitalizations per 10,000 Population 18+ Years
	Age-adjusted Death Rate due to Influenza & Pneumonia	2015-2017	18.3 Deaths per 100,000 Population
	Hepatitis C Prevalence	2017	153.2 Cases per 100,000 Population
	Age-adjusted Hospitalization Rate due to Hepatitis	2014-2016	1.8 Hospitalizations per 10,000 Population 18+ Years


*Indiana State Department of Health pulled from Conduent Healthy Communities Institute*

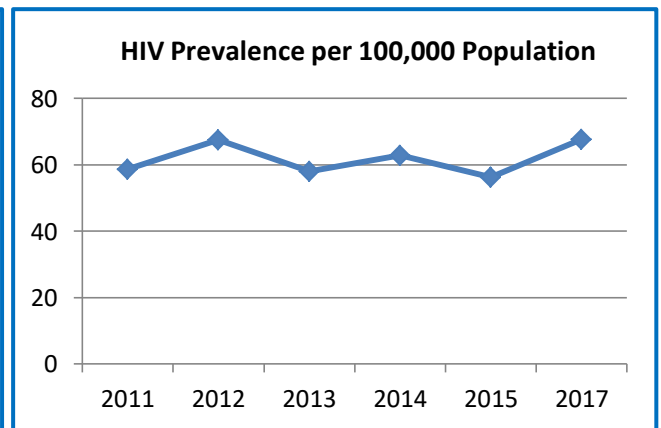
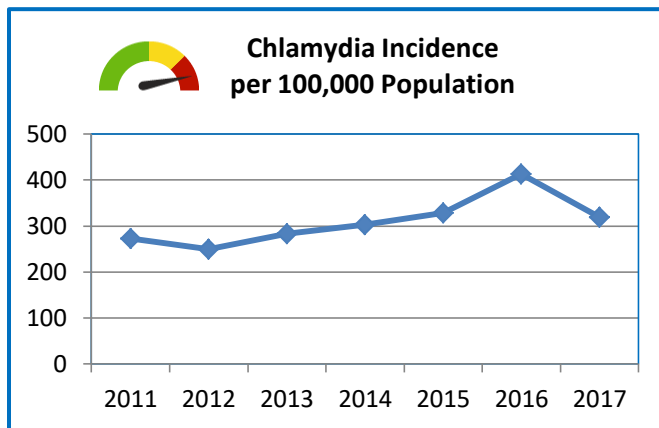


# DATA

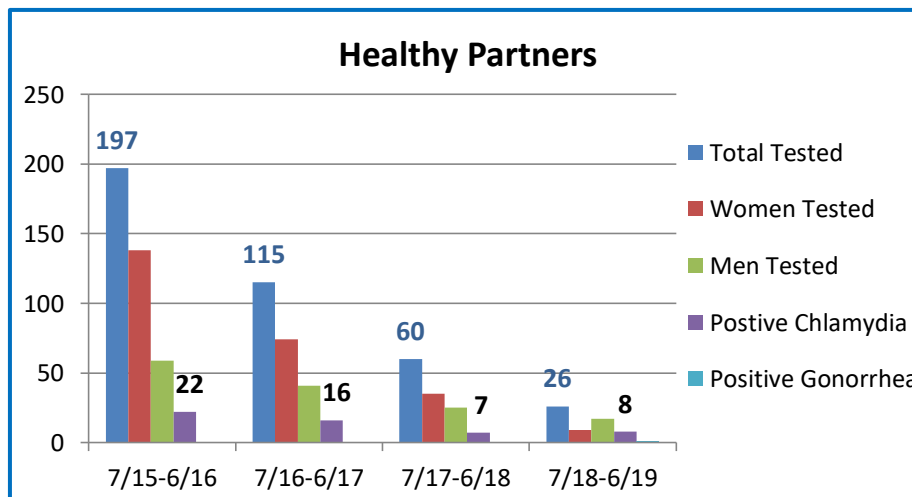
## Sexually Transmitted Infections (STIs)

Indiana County Comparison	Health Indicator	Data Years	Value
	Chlamydia Incidence Rate	2017	319.9 Cases per 100,000 Population
	Gonorrhea Incidence Rate	2016	69.7 Cases per 100,000 Population
	HIV Prevalence	2016	70 Cases per 100,000 Population

National Center for HIV/AIDS, Viral Hepatitis, STD & TB Prevention pulled from Conduent Healthy Communities Institute; Indiana State Department of Health pulled from Indiana Indicators  = significant trend



Indiana State Department of Health pulled from Indiana Indicators



The grant-funded *Healthy Partners* clinic opened in 2014. Since May 2018 it has been housed at *Family Services Prevention Programs*. Testing is free and confidential. Decrease in persons being tested does not reflect incidence but rather awareness and comprehensive health services of *Jane Pauley Community Health Center*.

# DATA

## Teen Sexual Activity and Teen Births



The teen birth rate has been decreasing. The 2017 rate of birth among 15-19 year old females was 39 births per 1,000 females.

Health Indicator: Adolescent Sexual Activity	2005	2015	2017
Are or have been sexually active <b>Especially among 12th grade students</b>	46.8%	41%	39.5%
Females report using a birth control method: pills, IUD, implant, shot, patch, or birth control ring <b>White, 12<sup>th</sup> grade female students more likely to use birth control</b>	<u>2013</u> 25.3%	29%	29.4%
Used condom during their last sexual encounter	62.8%	53.4%	53.8%
Did not use condom during their last sexual encounter <b>12<sup>th</sup> grade students less likely to use a condom.</b>	44.6%	46.6	46%
Use no pregnancy prevention method <b>9<sup>th</sup> grade students, Black and Hispanic students less likely to use a pregnancy prevention method</b>	12.7%	15.5%	13.8%
Drank alcohol or used drugs prior to intercourse <b>Male students, 9<sup>th</sup> grade and Black students were more likely</b>	23.3%	20.6%	18.8%

Youth Risk Behavior Surveillance System <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

Aforementioned data is from the national *Youth Risk Behavior Surveillance System* Survey (YRBSS). In 2015 and 2016, Shelbyville High School 9<sup>th</sup> – 12<sup>th</sup> grade students participated in the YRBSS. The 2015 data is Indiana specific.

Teen pregnancy presents health risks for mother and infant. Babies are more likely to be born pre-term and/or with a low birth weight. Teen pregnancy is not only harmful to the developing teen age body, but creates social, educational and financial challenges into the future.

Indiana County Comparison	Health Indicator	Data Year	Value
	Babies with Low Birth Weight	2017	8.2%
	Preterm Births	2017	12%

*Indiana State Department of Health data pulled from Indiana Indicators*


Unintended serious health outcomes other than pregnancy may result when teens do not abstain from sexual intercourse or use condoms during sexual intercourse. In 2017 in the United States:

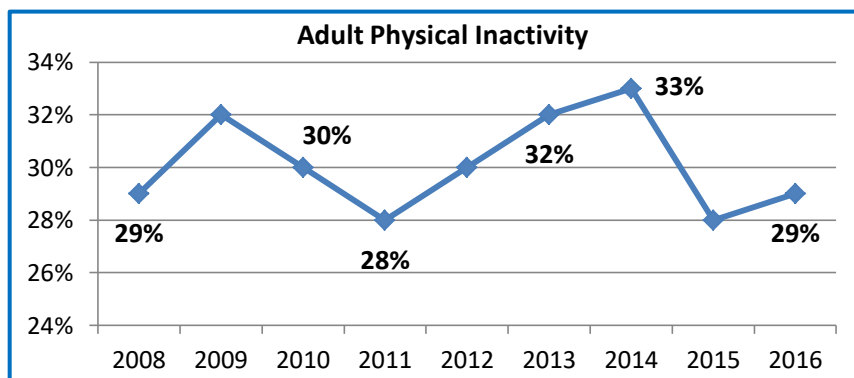
- 21% of all new HIV diagnoses were among young people aged 13-24
- Half of the 20 million new STIs reported were among young people age 15-24

# DATA

## Health Behaviors – Physical Activity

Physically inactive adults are at higher risk for obesity, heart disease, Type 2 diabetes, colon cancer, and high blood pressure. The CDC recommends at least 150 minutes of moderate-intensity aerobic activity (such as brisk walking or cycling) every week and muscle strengthening activities two or more days a week. This minimum amount has been proven to both prevent and to improve management-of chronic disease. It can also help minimize fall risk as people age.

In Shelby County, 28.5% of adults 20 years or older have sedentary lifestyles.  Shelby County has met the **Healthy People 2020 target of 32.6% or fewer adults 20+ years who are physically inactive**. Even so, when the County’s rate of chronic disease, breast cancer and colon cancer are considered, Shelby County is still challenged with needing a larger percentage of the population being physical activity in order to prevent, reduce and optimally manage these diseases.



Centers for Disease Control & Prevention  
Diabetes Interactive Atlas



### Cost of Physical Inactivity

- **Physically inactive adults spend nearly \$1,500 more annually in healthcare costs.**
  - 11.1% of total health care costs are associated with inadequate physical activity - \$117 annually
  - 8.3% of deaths of non-disabled adults age 25 and older are associated with physical inactivity
- **Physically inactive employees cost their employers.**
  - Medical costs
  - Workers Compensation costs
  - Lost Productivity: \$1,685 annually per employee
    - Presenteeism
    - Absenteeism

Carlson, et al. "Inadequate Physical Activity and Healthcare Expenditures in the United States" *Progress in Cardiovascular Diseases* 57 (2015).

# DATA

## Health Behaviors – Physical Activity

Indiana County Comparison	Health Indicator	Data Years	Value
	<b>Access to Exercise Opportunities</b>	<b>2019</b>	<b>53.9% of Population</b>
	<b>Recreation and Fitness Facilities</b>	<b>2014</b>	<b>0.04 Facilities per 1,000 Population</b>

*Centers for Disease Control and Prevention Nutrition, Obesity and Physical Activity data*

There have been multiple studies on physical activity levels in relationship to access to pedestrian paths and recreational facilities as a cost effective approach to increasing physical activity, reducing obesity; generating economic activity; increasing home and business value; and preserving green space. Part of the development of the *Indiana Statewide Comprehensive Outdoor Recreation Plan 2016 – 2020* included a public needs assessment survey. Respondents' answers were congruent with other research: proximity to a trail or recreational facility determined use and frequency of use, especially access by walking or biking. ([https://www.in.gov/dnr/outdoor/files/or-2016\\_2020\\_SCORP.pdf](https://www.in.gov/dnr/outdoor/files/or-2016_2020_SCORP.pdf))

In public use slides entitled “Research Results on Recreation Facilities, Parks, Playgrounds, Trails, and Open Space” *Active Living Research*, a national program of the *Robert Wood Johnson Foundation* cites multiple published research articles looking at physical activity in relationship to public recreational opportunities. (<https://activelivingresearch.org/recreation-facilities-parks-trails-playgrounds-and-open-space-research-summary-slides>)

### Across race and ethnicities, persons are more likely to achieve recommended levels of physical activity when they

- Have access to public space
- Live near walkable desired and needed destinations
- Have access to trails connecting green space and mixed-land use (such as housing and retail)
- Live within .25 - .50 mile of a park.

### Children and adolescents are more likely to achieve recommended levels of physical activity when

- Play areas have installed play structures (children).
- They have access to safe parks.
- They have access to parks with ball courts, open fields, swimming pools (adolescents).

# DATA

## Health Behaviors – Physical Activity

The *City of Shelbyville* and private partners have invested in the *Blue River Trail* pedestrian and bicycle path. The trail will ultimately connect all of Shelbyville’s parks. As the trail is built out, the number of persons living in close proximity to the trail increases. Per the research, persons living close to the trail are more likely to use the trail to meet recommended levels of physical activity. This is an important investment in improving the health of the community.

Proximity to Trail	2012	2019 (Built and Funded)	After NLT Grant*
Total Miles of Trail	4	10.1	14.8
Households w/in 1/4 mile from a trail	590	4134	5919
% of households within a 1/4 Mile to a trail	7.00%	47.00%	67.00%
*If the full Next Level Trails amount is funded			

*City of Shelbyville data provided by City Building and Planning Director.*

**Every \$1 spent building bike trails and pedestrian paths saves around \$3 in medical costs.** (*Smart Growth America, 2014*)

*Shelbyville High School* students participated in the 2015-16 and 2016-17 National *Youth Risk Behavior Surveillance System (YRBSS)* survey. 2015 data below is from Indiana schools alone.

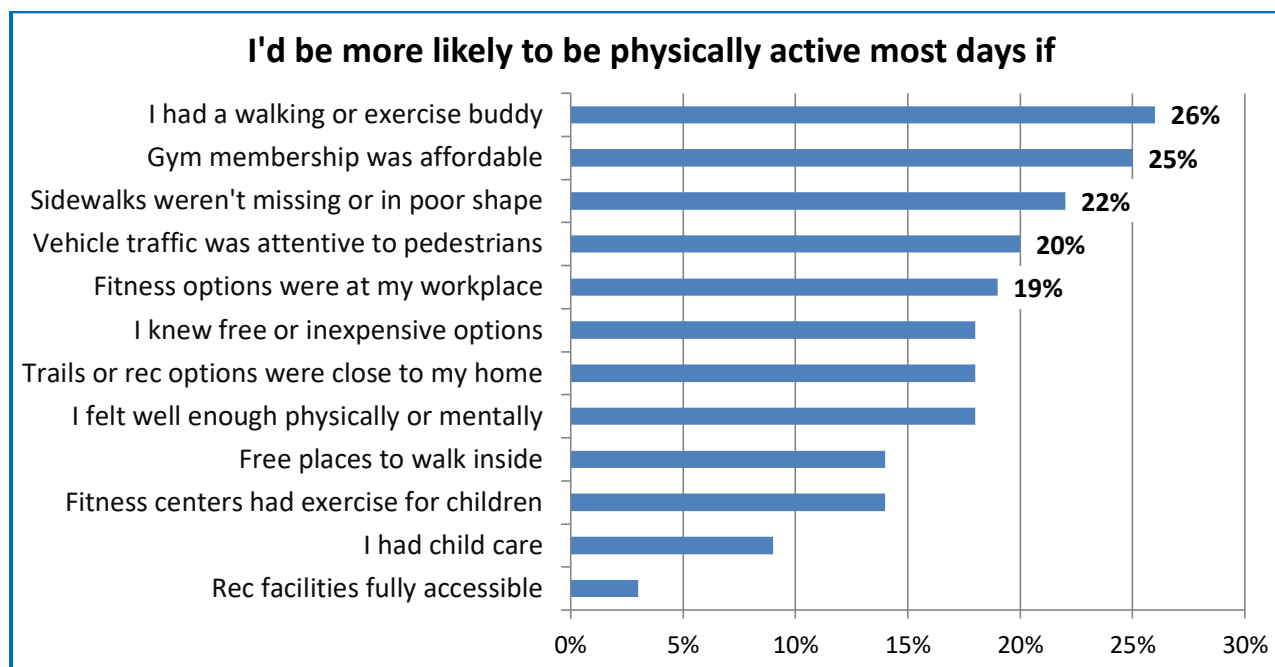
Health Indicator: Physical Activity	2005	2015	2017
Physically active, enough to increase heart rate and make breathing harder, for at least 5 out of the previous 7 days <b>More true for males &amp; 9<sup>th</sup> grade students who still have P.E. requirement</b>	32.2%	46.5%	46.5%
<b>Not</b> vigorously physically active for at least 60 minutes even 1 day in the previous 7 days <b>Females and black males had higher rates of physical inactivity</b>	15.4%	27.6%	15.4%
Vigorously physically active for at least 60 minutes each of the previous 7 days <b>Most true for 9<sup>th</sup> grade students. The older the student the less time spent active.</b>	16.4%	25.3%	26.1%
Play computer or video games or spend time on computer for 3 hours or more each day (not related to school work)	20.9%	38.4%	43%
Played on at least one organized sports team through school or the community in the last 12 months	57.1%	60.4%	54.3%

*Youth Risk Behavior Surveillance System* <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

# DATA

## Community Health Survey - Physical Activity

Number 1 challenge to a physically active lifestyle: Too busy – 49.5% across all age groups.



Rules of rounding followed; percentages rounded to nearest whole number.

### Considerations

- **Number 1 request: affordable and accessible heated swimming pool available all year long with specific times reserved for adults to exercise.**
- 26% of respondents reported they were physically active most days of the week.
- Adults aged 25 – 34 and 45 – 64 years wanted physical activity options at their workplaces.
- Safety was a frequent concern: safety of sidewalks from ill repair and debris; safety on the Blue River Trail; and safety from animals when they are walking.

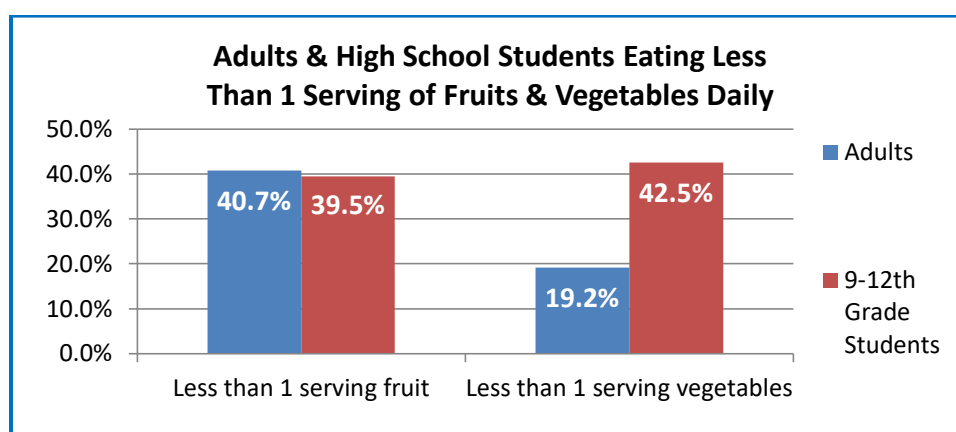
### Disparities

- Black and Hispanic respondents had highest ratings for wanting affordable gym memberships; information on free or inexpensive physical activity options; and fitness centers with exercise options for children and families.
- Respondents making \$50,000+ identified as busy but also as being physically active most days of the week. Those whose incomes were below \$50,000 were busy but had barriers: feeling unwell mentally or physically and needing free or affordable physical activity options.

# DATA

## Health Behaviors – Healthy Eating

A diet rich in a variety of fruits and vegetables can reduce the risk of chronic disease, including depression and help optimally manage existing health conditions. The *United States Department of Agriculture* provides tools to help determine the amount of fruits and vegetables different ages, genders and activity levels should eat daily (<https://www.choosemyplate.gov>). A minimum of 2 daily ½ cup servings of fruit and 3 daily ½ cups of vegetables are recommended. The general recommendation is to fill half of the plate with fruits and vegetables at each meal.



*Behavior Risk Factor Surveillance System; Youth Risk Behavior Surveillance System  
BRFSS data: 2017; YRBSS data: 2015*

- The 2015 AdvantAge survey of Shelby County residents 55 years and older found that 79% of respondents were only eating 1-3 servings of fruits and vegetables on a typical day.
- This percentage is congruent with 2005-2009 BRFSS data that found among all Shelby County residents, 79% eat less than the daily recommended fruits and vegetables.
- In Indiana as many as 89% of adults do not consume recommended fruits and 91% fail to eat recommended vegetables. (*Mantinan et. al. The Obesity Epidemic in Marion County and Indiana: Causes, Consequences, and Effective Solutions, March 2019. Cited by Richard M. Fairbanks Foundation, March 2019.*)
- The 2018 State Indicator Report on Fruits and Vegetables reports that 87.8% of Americans do not consume daily recommended fruits and 90.7% fail to eat recommended daily vegetable amounts. (*Centers for Disease Control and Prevention. [www.cdc.gov/nutrition](http://www.cdc.gov/nutrition). State Indicator report published June 2018.*)

# DATA

## Health Behaviors – Healthy Eating

In 2015 and 2016 *Shelbyville High School* students participated in the national *Risk Behavior Surveillance System* Survey (YRBSS). The following YRBSS data is Indiana specific.

Health Indicator	2003	2015
No fruits or vegetables eaten in the previous 7 days	5.8%	7.3%
Fruits and vegetables eaten once a day	64.3%	57.5%
Fruits and vegetables eaten 3 times a day	12.9%	9.8%

*Youth Risk Behavior  
Surveillance System*

***Healthy People 2020*** has several goals to improve nutrition for adults and children 2 years and older.

### Increase Access to Healthy Food

- Increase healthy food access by schools and retail establishments selling food.
- Increase access to retail establishments selling a variety of nutritional food.

### Increase Education and Counseling on Healthy Eating, Physical Activity & Weight Loss

- Increase measurement of BMI for adults and children by physician practices.
- Increase education or counseling on healthy eating, physical activity and weight reduction by physician practices and worksites.

### Increase Healthy Weight among Adults, Children and Youth

- Decrease number of children, youth and adults who are obese.
- Increase number of children, youth and adults who are a healthy weight.

### Eliminate Food Insecurity and Hunger

- Eliminate household and child food insecurity and hunger.

### Increase Fruit and Vegetable, Whole Grain Consumption

- Increase consumption of fruits by a half cup for every 1,000 calories.
- Increase consumption of vegetables by a cup for every 1,000 calories.
- Increase consumption of whole grains.

### Reduce Consumption of Solid Fats and Added Sugars

<https://www.healthypeople.gov/2020/topics-objectives/topic/nutrition-and-weight-status/objectives/>






# DATA

## Access to Nutritious Food

**Food insecurity is an economic and social indicator of the health of a community.** Food insecurity is defined as households who at various times during the year are unable to provide adequate food in both quality and quantity to all or some members of the household.

Over-all Shelby County is doing well with food access for its residents. **The Centers for Disease Control and Prevention emphasizes that how long people live and how healthy they are during their lifetimes is directly linked to where they live.** For both cities and towns, urban centers and rural areas, health can even drill down to the census tract or block where people live.

**Shelby County has census tracts where food access is a barrier to health.** There are census tracts with low access to a grocery store. Some of these tracts also have a high number of low-income households, a high number of older adults and children, or a high number of households who do not have access to a personal vehicle. If residents rely on walking in order to purchase groceries, then convenience stores may be their reliable option. However, convenience stores lack a wide variety of nutritious food even if they accept SNAP benefits. For these individuals and families, healthy eating and food access is a challenge.

Indiana County Comparison	Health Indicator	Data Years	Value
	Food Insecurity	2017	10.8% of Population
	Child Food Insecurity	2017	15.7% of 17 Years and Younger Population
	Food Insecure Children Likely Ineligible for Assistance	2017	27% of 17 Years and Younger Population






*United States Department of Agriculture Economic Research Food Atlas*

### Respondents to the 2015 AdvantAge Survey:

- Two in four respondents (42%) said there weren't convenient places in their neighborhoods to buy fresh fruits and vegetables
- 8% said that the fresh fruits and vegetables were not affordable.

# DATA

## Disparity – Access to Nutritious Food

Indiana County Comparison	Health Indicator: Access to Grocery Store	Data Years	Value
	Children with Low Access to a Grocery Store	2015	3.1% of 17 Years and Younger Population
	Households with No Car and Low Access to a Grocery Store	2015	1.8% of Population
	Low Income and Low Access to a Grocery Store	2015	4% of Population
	People 65+ with Low Access to a Grocery Store	2015	2.3% of 65+ Population
	People with Low Access to a Grocery Store	2015	13.4% of Population

*United States Department of Agriculture Economic Research Food Atlas*  
**Convenience stores and large general merchandise stores such as supercenters and warehouse clubs are not included in this count.**

**The United States Department of Agriculture standards for grocery store access are ½ to 1 mile for urban areas or 10 miles from the nearest grocery store in rural areas.** One-half mile is considered accessible by walking. Being able to walk to a grocery store is especially important in low-income neighborhoods with low access to a personal vehicle or with insufficient financial resources for gas and vehicle upkeep.



**SNAP Certified Stores in Shelby County as of 2016 were 0.6 per 1,000** (31 stores, up from 21 stores in 2012). Shelby County retailers accepting SNAP redeemed \$8,596,317 in benefits; 7% of total food dollars in the County. Per the 2018 *USDA, Food and Nutrition Service, SNAP Retailer Year End Summary*: Indiana’s 5,256 SNAP Certified Stores redeemed \$909,202,585 in SNAP benefits. (<https://www.purdue.edu/dffs/localfood/data/county/?county=Shelby> and <https://fns-prod.azureedge.net/sites/default/files/media/file/2018SNAPRetailerManagementYearEndSummary.pdf>)

**In 2015 Indiana had 619 grocery stores and 19 pharmacies that accepted WIC vouchers.**

They redeemed \$105 million in food sales. (<https://www.in.gov/isdh/19691.htm>) Shelby County has 29 participating retail establishments covering Waldron, Morristown, Fairland and Shelbyville.

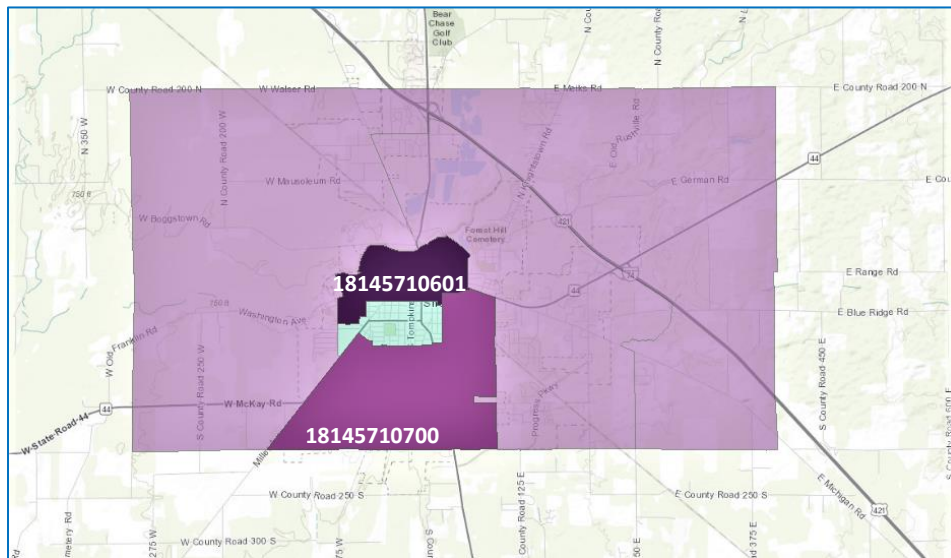
Edinburgh and Saint Paul are communities that are partially in Shelby County. Saint Paul has 3 WIC retailers and Edinburgh, 11. These are predominantly convenient stores.



# DATA

## Disparity – Access to Nutritious Food

While Census Tract 18145710700 is an area where the median household income is on par with the County and above that of Shelbyville there remains a food access disparity due to the number of older adults and children, SNAP households and households without access to a vehicle.



### Census Tract 18145710601

Low income, low access & low vehicle tract

- Housing units: 1,422
- Population: 3,477
- Median Income: \$37,917
- **Poverty Rate: 20.9%**
- **SNAP Households: 240**
- Low Access to Grocery at ½ mile: 2,102
  - Children: 948
  - Adults 65+: 349
- Low Access to Grocery at ½ mile & Low Income: 1,148 persons
- **Low Access to Grocery, Low Income & Low Access to a Vehicle: 8.1% of Households: 269 Households**

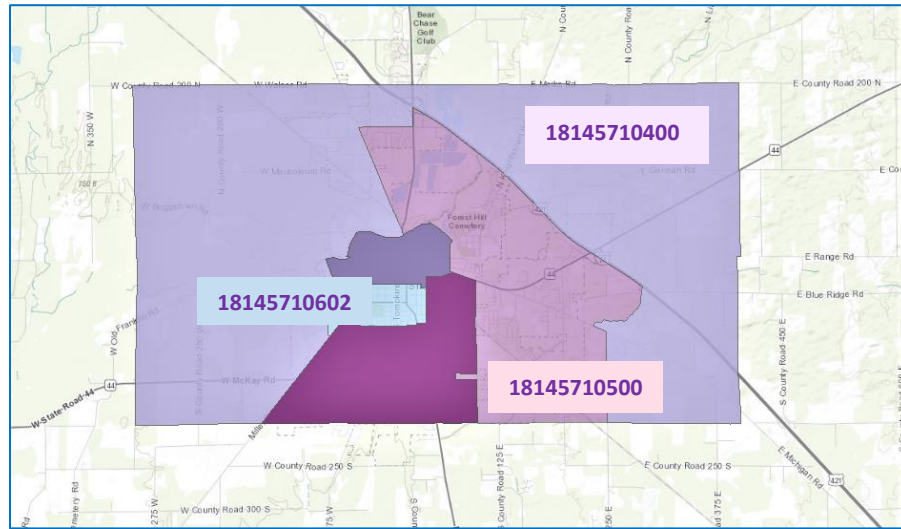
### Census Tract 18145710700

Not a low income, low access or low vehicle tract

- Housing Units: 2,569
- Population: 6,478
- Median Income: \$61,225
- Poverty Rate: 11.7%
- **SNAP Households: 230**
- Low Access to Grocery at ½ mile: 5,365
- Children: 1,236
- **Adults 65+: 906**
- Low Access to Grocery at ½ mile & Low Income: 1,717 persons
- **Low Access to Grocery & Low Access to a Vehicle: 7.7% of households: 199 Households**

# DATA

## Disparity – Access to Nutritious Food



United States Department of Agriculture Economic Research Food Atlas Maps

### Census Tract 18145710602

Low income but not a low access tract.

Access, however, is not just whether a wide variety of nutritious food is within walking or driving distance. Access is also about affordability.

- Housing units: 1,248
- Population: 3,266
- Median Income: \$33,800
- **Poverty Rate: 25%**
- SNAP Households: 60
- Low Access to Grocery at ½ mile: 610
  - Children: 168
  - Adults 65+: 56
- Low Access to Grocery at ½ mile & Low Income: 470 persons
- Low Access to Grocery, Low Income & Low Access to a Vehicle: 3% of Households: 37 Households

### Census Tract 18145710400

Low income and low access tract.

- Housing units: 1,227
- Population: 2,999
- Median Income: \$46,167
- **Poverty Rate: 22.2%**
- **SNAP Households: 123**
- Low Access to Grocery at ½ mile: 2,999
  - Children: 758
  - Adults 65+: 334
- Low Access to Grocery at ½ mile & Low Income: 1,378 persons
- Low Access to Grocery, Low Income & Low Access to a Vehicle: 3% of Households: 34 Households

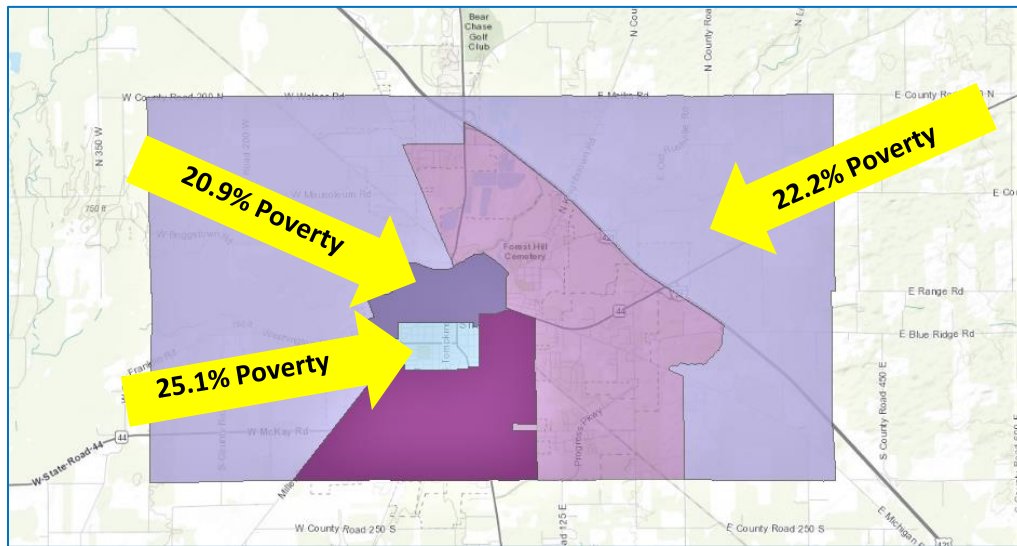
### Census Tract 18145710500

Neither a low income nor low access tract

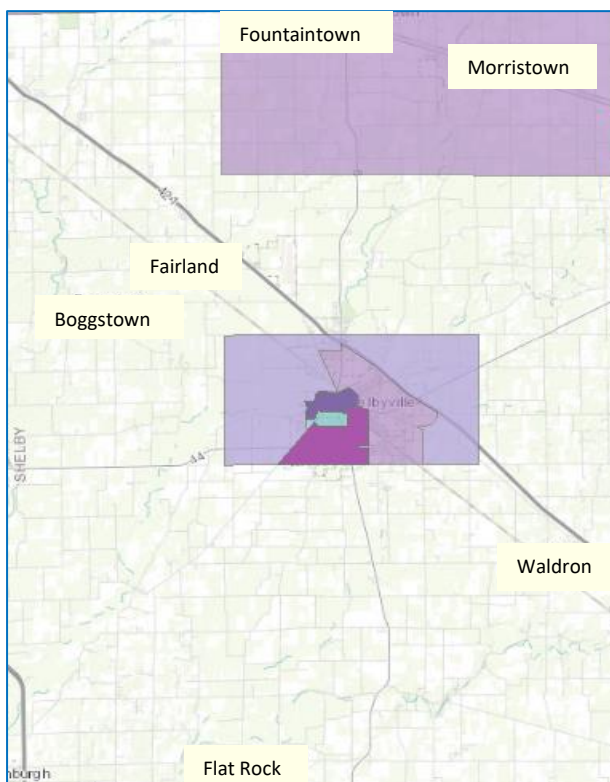
# DATA

## Health Disparity – Access to Nutritious Food

In 2017 Shelby County's poverty rate was 10.6%. Estimated poverty rate for 2018 is 8.4%. Shelbyville's poverty rate is higher at 18.1%. However, in the census tracts where food access is a concern, the poverty rate is even higher.



United States Department of Agriculture Economic Research Food Atlas Maps



### Census Tract 1814571010

Low access – Low income. Closest grocery store for Morristown is 11 – 15 miles away.

- Housing units: 1,440
- Population: 3,763
- Median Income: \$66,397
- Poverty Rate: 14.3%
- **SNAP Households: 173**
- Low Access to Grocery at ½ and 10 miles: 3,763
  - Children: 871
  - Adults 65+: 624
- Low Access to Grocery at ½ mile & Low Income: 1004 persons
- Low Access to Grocery, Low Income & Low Access to a Vehicle: 3% of Households: 45 Households

# DATA

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## Health Disparity – Access to Nutritious Food

Census Tract 18145710100 is an area with a high household median income, low poverty rate, and few residents without personal vehicles. **However, it also has vulnerable populations of children and older adults as well as 12% of households relying on SNAP benefits for their household food budget.** A little over 1,000 residents are low income and low access to a grocery store. The closest groceries are in New Palestine, Greenfield and Rushville – all outside the USDA standard of 10 miles.

Previously Morristown has relied on gas station quick marts for essential groceries. New to Morristown is a *Dollar General* that carries a variety of shelf-stable and frozen food options. It does not carry fresh produce. It does accept SNAP benefits.

This is a similar story for the west side of Shelbyville. The *Westar* mobile home neighborhood is a somewhat isolated community of over 200 households along Hale Rd. *Westar* is a diverse community of older adults, families with young children, persons with disabilities, and Hispanic residents. ***Westar* and other neighborhoods along St. Joseph Street and Miller Avenue have been without a grocery store for nearly 15 years.** It is in a low income, low access to a grocery store tract whose only local access to food has been a tobacco store.

New to the community is a *Dollar General* that carries shelf-stable and frozen food options. It does not carry fresh produce. It does accept SNAP benefits. Up until the end of November 2019, *Westar* residents did not have a safe way to get to the *Dollar General* that is located within a stones thrown of the northern part of the mobile home community. **The City of Shelbyville Street Department completed a sidewalk extension to connect with the *Dollar General* lot.**

**From June – October 2019, the Neighborhood Farmers Market was located near the *Westar* community.** The mobile farmer's market rotated among 4 primary locations. The location in the *Builder's Lumber* parking lot which is in front of *Westar* proved to be one of the more successful locations.

# DATA

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## Healthy Eating: Farmers Markets

***The Shelby County Farmers Market is the only established Farmers Market in the county.***

However, there are many roadside stands throughout the county and in Shelbyville. For the last 2 years, a mobile farmers market has also been piloted in low-food access areas. SNAP benefits are accepted and coordinated through the *Shelby County Farmers Market* sponsor – *Mainstreet Shelbyville*. Fresh produce vouchers for WIC and Senior Farmers' Market Nutrition Program for low income seniors are accepted by some vendors but must be managed by each individual vendor. In 2019 the mobile farmers market also accepted WIC and Senior Farmers' Market vouchers.

Historically, the Shelby County Farmers Market has redeemed few WIC and Senior Farmers' Market Vouchers and few SNAP benefits. A concerted effort by WIC and Healthy Shelby County in the last 2 years has increased redemption.

In 2012, Shelby County had \$94,000 in direct to consumer farm sales. This includes sales from roadside stands, farmers markets, pick-your-own, door-to-door, etc. It does not include sales of craft items or processed products. Direct to consumer farm sales per capita was \$2.12.

**Mobile Farmers Market:** Farmers Market density indicates the accessibility of fresh produce for the population in general and for vulnerable populations in particular. During the local growing seasons of 2018 and 2019, a mobile farmers market was piloted in low-access, low-income areas of Shelbyville. A different vendor was used each year. Subsidized by *Major Health Partners – Major Hospital*, the market sold fresh, locally grown produce at a discounted price for people living in neighborhoods with low food access. In addition, persons with health conditions and socio-economic barriers to healthy eating were identified by healthcare systems and organizations serving seniors and families with young children. These persons received vouchers that allowed them to purchase produce at a steep discount for their household size. The mobile *Neighborhood Farmers Market* also sold or distributed three thousand pounds of produce in 2019 from July thru October.

Farmers markets increase access to fresh, nutritious food, stimulate local economies, support healthy communities, promote sustainable farming practices and preserve farmlands and rural livelihoods.

(<https://www.in.gov/isdh/28320.htm>)



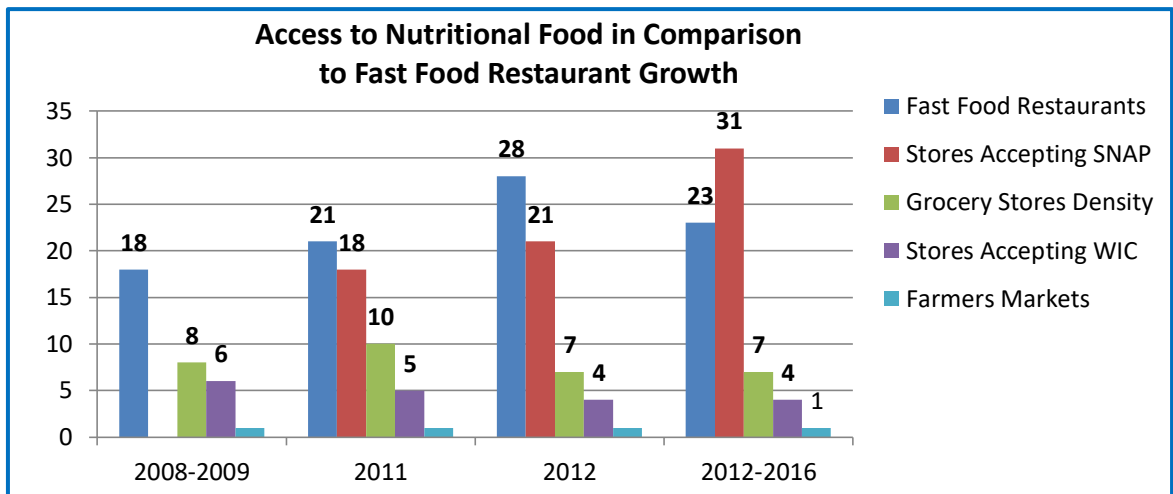
# DATA

## Health Disparity – Fast Food

### Why are Farmers Markets important to community health?

**Economy:** more food dollars, SNAP, WIC and Senior farmers market voucher redemptions go back into the local economy to the growers producing the food.

**Nutrition:** farmers markets are primary opportunities to purchase and learn how to prepare fresh fruits and vegetables directly from the producer. For those areas that are low-income, low-access to a grocery store, access to farmers markets is even more essential. **However, it is the fast-food restaurant that has become more accessible, not nutritious food.**



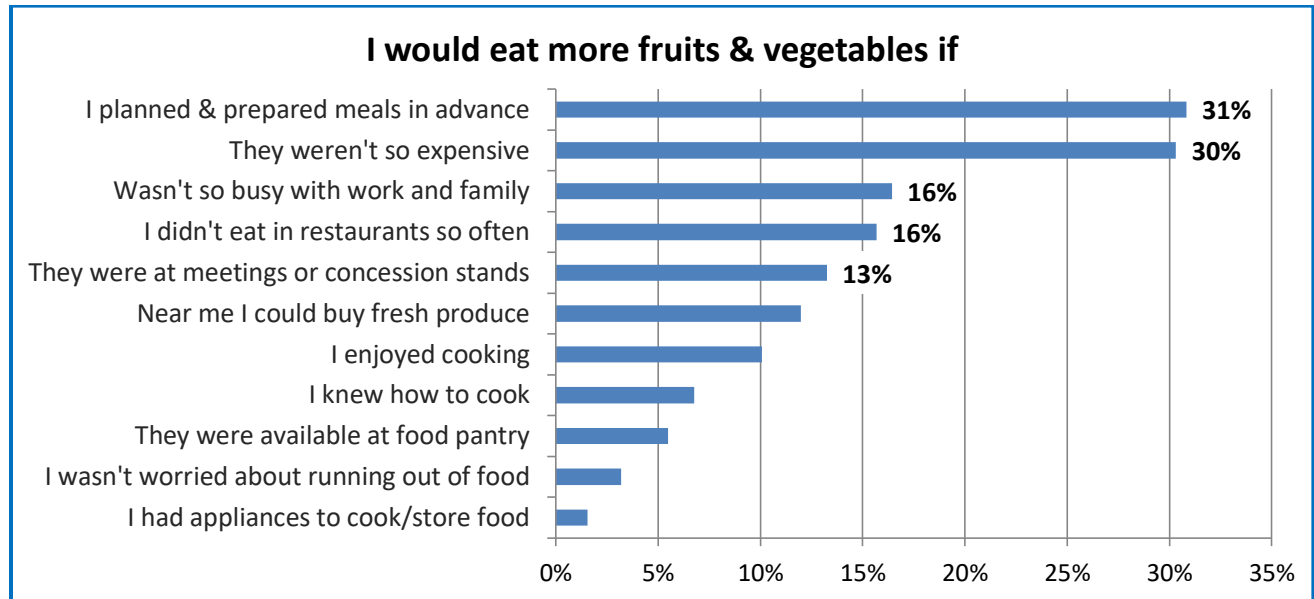
*United States Department of Agriculture*

**Fast food (food that is paid for in advance of eating) is often high in fat and calories and lacking in recommended nutrients. In 2012 the annual per capita fast food expenditure was \$611.29.** A diet high in fast food is typically low in consumption of fresh fruits and vegetables, increasing the risk of obesity and all its accompanying chronic health conditions. Convenience stores and fast food chain restaurants are typical fast food establishments. The number of fast food establishments is relevant because it measures environmental influences on people’s eating habits. Fast food restaurants often offer value meals that are nutritionally-poor and calorie-dense but inexpensive. They are also convenient for a culture that is busy and on-the-go.

# DATA

## Community Health Survey - Healthy Eating

**Top 2 barriers to eating more fruits and vegetables are lack of meal planning/preparation and expense.** (2019 Community Health Survey)



*Rules of rounding followed; percentages rounded to nearest whole number.*

### Considerations

- 40% of respondents report eating several servings of fruits and vegetables daily. Note: the survey did not define the average recommended daily servings of fruits and vegetables. Data from the Behavior Risk Factor Surveillance System for youth and adults reveals that over 37% of adults eat less than 1 serving of fruits and vegetables a day.
- Not surprisingly, 25–54 year old respondents want fruits and vegetables offered where they spend their time away from home, such as work and ball park concession stands. This working age group has children and grandchildren in sports and other activities.

### Disparities

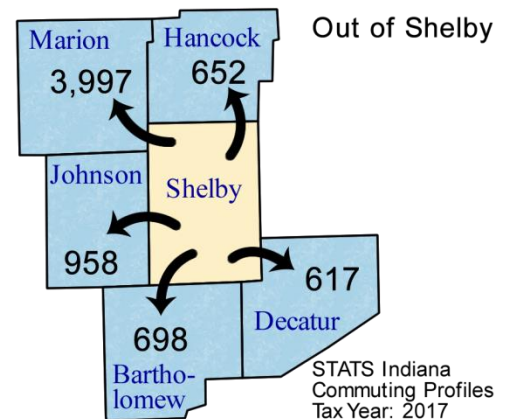
- 20% of adults 75 and older and persons making less than \$15,000 rely on food pantries and are dependent on the availability of fruits and vegetables at the pantry.
- 16% of 18-24 year old respondents cited not knowing how to cook as a barrier to eating fruits and vegetables.

# DATA

## Commute to Work

In 2017, the top 5 counties that Shelby County workers (age 16 and older) commuted-to for employment were Decatur, Bartholomew, Johnson, Marion and Hancock Counties (23.4% of Shelby County workforce).

IN County Comparison	Health Indicator: Commute to Work	Data Years	Value
	Average Travel Time to Work	2013-2017	23.5 Minutes
	Solo Drivers with a Long Commute	2013-2017	35.5%
	Workers Driving Alone to Work	2013-2017	85.2%
	Workers Commuting by Public Transportation	2013-2017	0.2%



**Why is commute time a health indicator?** Long commute times reduce the time available for family and friends, recreation, and civic involvement – all social determinants of well-being. Workers with long commutes may also experience health problems such as headaches, anxiety, and high blood pressure – not necessarily from the stress of traffic, but from air pollution. The pollution from increased use of fuel and traffic congestion has been associated with respiratory and cardiac-related health problems. Long drives are a sedentary habit and may be part of a lifestyle of little physical activity and obesity.

**ShelbyGo provides limited public transportation in Shelby County.** Regular routes run in Shelbyville. Outside the City limits, transportation must be scheduled in advance. *ShelbyGo* does connect riders with other counties’ transportation services at established connection points.

Initially transportation through Shelby Senior Services served adults age 60+. *ShelbyGo* has evolved into a primary ridership of people commuting to work in Shelbyville. Riding is free for those 60+ but there is a \$4.00 one way boarding fee for those younger.

*Commuter Connect* is a public transportation system for workers traveling into Johnson and Marion Counties – the top 2 commuter employment destinations. Only 2% of Shelby County workers use public transportation. **Healthy People 2020 goal: 5.5% of commuters use public transportation.**

# DATA

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## Air Safety



**The Annual Ozone Air Quality grade for 2015-2017 is 2.**

Ozone is an important shield against ultraviolet rays. It is also a pollutant that causes health problems at ground level. Ozone primarily affects the respiratory tract, causing breathing difficulties, aggravating existing lung diseases, and inflaming lung tissue. Children, people with lung disease, and older adults tend to be more sensitive to ozone.

The *American Lung Association* gives a grade to every county in the United States based on the number of high ozone days. The grade ranges from 2 – 5. The 2012-2014 Shelby County Air Quality Index was 5, putting the County in the lowest 25<sup>th</sup> percentile of Indiana counties.

### Recognized Carcinogens Released Into Air

Recognized carcinogens are compounds with strong scientific evidence that they can induce cancer. There are many potential exposures to carcinogens. Worksite exposures are typically considered to be at higher levels than public exposures. Recognized carcinogens released into the air are measured in pounds: 164,630 pounds were released into Shelby County's air in 2017. The *Environmental Protection Agency* identifies one of the top chemicals released into the air in Shelby County as Styrene, a known carcinogen. The amount of recognized carcinogens released into the air in the County has been increasing.

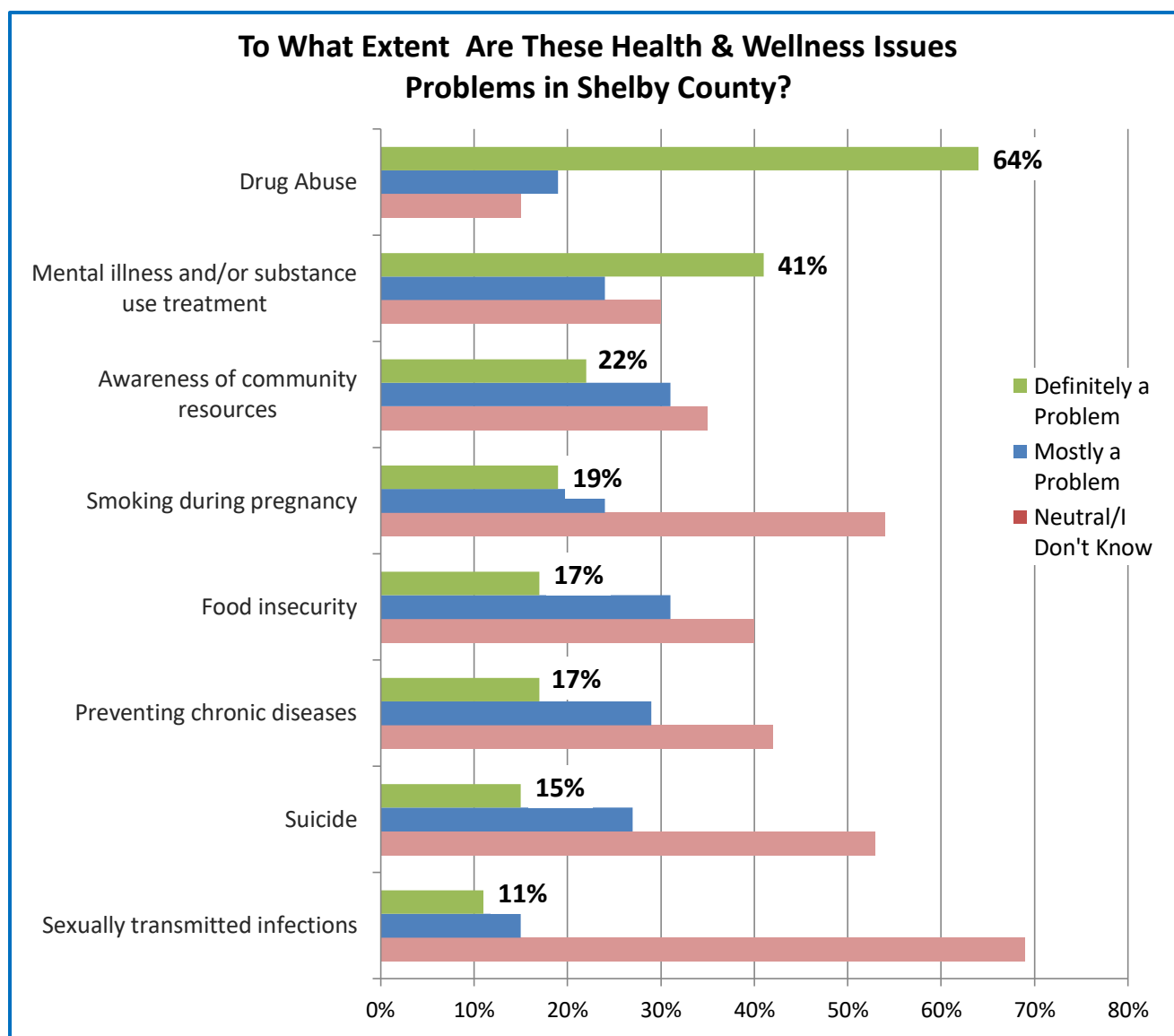
### PBT (Persistent, Bio-accumulative, and Toxic Chemicals) Released

PBT chemicals remain in the environment for long periods of time, are not readily destroyed and build up or accumulate in body tissue. As with other toxic chemicals, PBTs can negatively affect health, especially in children and people who work with the chemicals. 15 pounds were released in Shelby County in 2017. In Shelby County, Phenol is a PBT and is 2% of the top 5 chemicals released into Shelby County's air.

[https://enviro.epa.gov/triexplorer/tri\\_factsheet.factsheet?pstate=IN&pcounty=Shelby&pyear=2017&pParent=TRI&pDataSet=TRIQ1](https://enviro.epa.gov/triexplorer/tri_factsheet.factsheet?pstate=IN&pcounty=Shelby&pyear=2017&pParent=TRI&pDataSet=TRIQ1)

# DATA

## Community Health Survey: Health and Wellness Problems



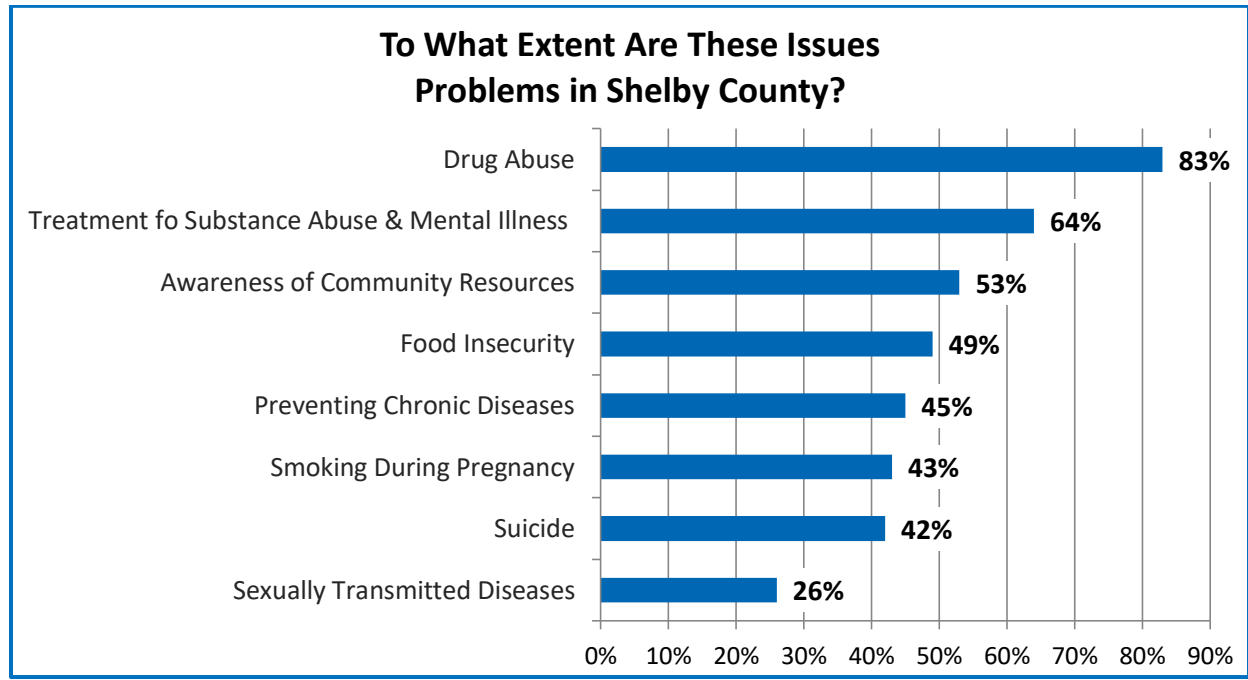
Respondents chose among the following options for rating the degree to which an issue was a problem in Shelby County: *Definitely a Problem*, *Mostly a Problem*, *Neutral/I Don't Know*, *Less of a Problem*, and *Definitely Not a Problem*. Rules of rounding followed; percentages rounded to nearest whole number.

Issues were rated 3% or less for *Less of a Problem* or *Definitely Not a Problem* with the exceptions of Awareness of Community Resources, Food Insecurity, and Preventing Chronic Disease. Around 10% of respondents rated these issues as *Less of a Problem*. The *Neutral/I Don't Know* category is included in the above chart in order to show how lower problem ratings correlate with neutrality/lack of information rather than with the issue not being a problem in the County.

# DATA

## Community Health Survey: Health and Wellness Problems

Substance use and treatment for mental illness and substance use are clearly seen as top health and wellness problems in Shelby County. By combining the *Definitely a Problem* and *More of a Problem* rating categories, problem issues becomes even clearer.



Rules of rounding followed: percentages rounded to the nearest whole number.

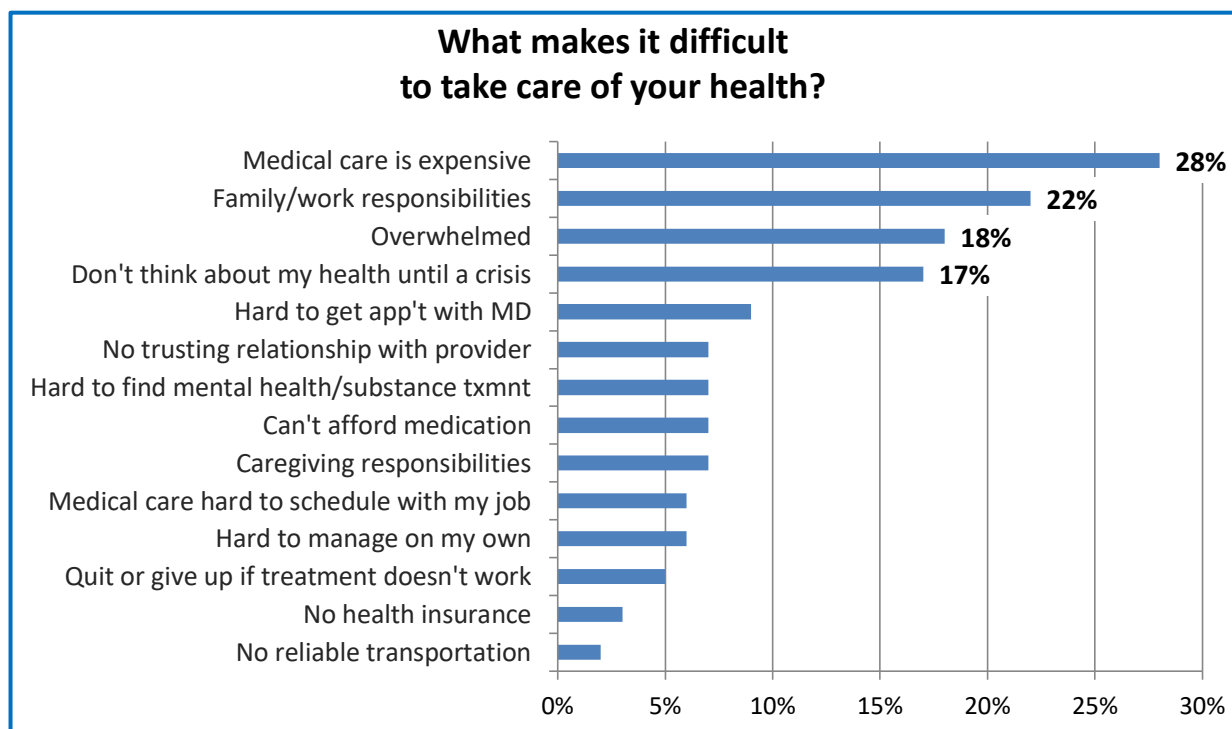
### Considerations:

- There were 35 comments. Four respondents acknowledged their lack of information as a hindrance to being able to make an informed rating decision.
- 31% of respondents' comments addressed the need for mental health and substance abuse treatment.
- Hispanic respondents had the highest problem ratings for awareness of community resources and prevention of chronic diseases.

# DATA

## Community Health Survey: Health Challenges

Among survey respondents, 46% reported no problems taking care of their health.



*Rules of rounding followed; percentages rounded to nearest whole number.*

### Considerations

- Regardless of income level, the expense of health care was recognized as a barrier.
- 25 – 34 and 45 – 54 year old respondents cited no trusting relationship with a medical provider.
- 45 – 54 and 75+ year old respondents reported a lack of local mental health and substance abuse treatment as barriers to taking care of their health.
- 35 – 44 year olds noted an inability to afford prescriptions.
- 65 – 74 year old respondents named caregiving as a barrier to taking care of their own health.

### Disparities

- 18 – 24 year old respondents identified lack of health insurance as a barrier.
- Hispanic respondents had the highest rankings for being overwhelmed and for the expense of medical care.

# DATA

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## Community Health Survey: Health Challenges

There were 41 comments to the question: *What makes it difficult to take care of your health?*

There were praises and frustrations with the healthcare and mental health systems.

### Prescriptions:

“One thing I notice because of taking multiple medications is a lack of prescription coordination, i.e. the ability of the pharmacist to align the scripts on a single schedule to minimize ordering and picking up meds [so often].”

“Prescriptions to treat symptoms, which cause side effects, which = more prescriptions and more side effects.”

### Medical Care:

“Doctors no longer take care of the “whole” person. They refer. . . I do not have time and money to go from one doctor/facility to another.”

“I am so exhausted that it can be difficult to find motivation to go to the doctor . . . I sometimes wait longer than I should.” [From many comments, “busy” could easily be substituted for “exhausted”.]

“Hard/difficult to get off work, especially time to get off when need to take children to doctor’s appointments.”

### Behavioral Health Care:

“One area that is not addressed here is behavioral pain management . . . people are living with chronic pain in the county and many of them do not understand the importance of [behavioral] techniques and their effectiveness for treating chronic pain.”

### Expense:

“Medical care is expensive for the middle class who don’t have a job with a group health plan.”

“We were told to go to a [disease education] class. . . [Cost of class] plus loss of pay [for missing work.] Couldn’t afford to go back for the other classes.”



# COMMUNITY HEALTH ~ NEEDS ASSESSMENT

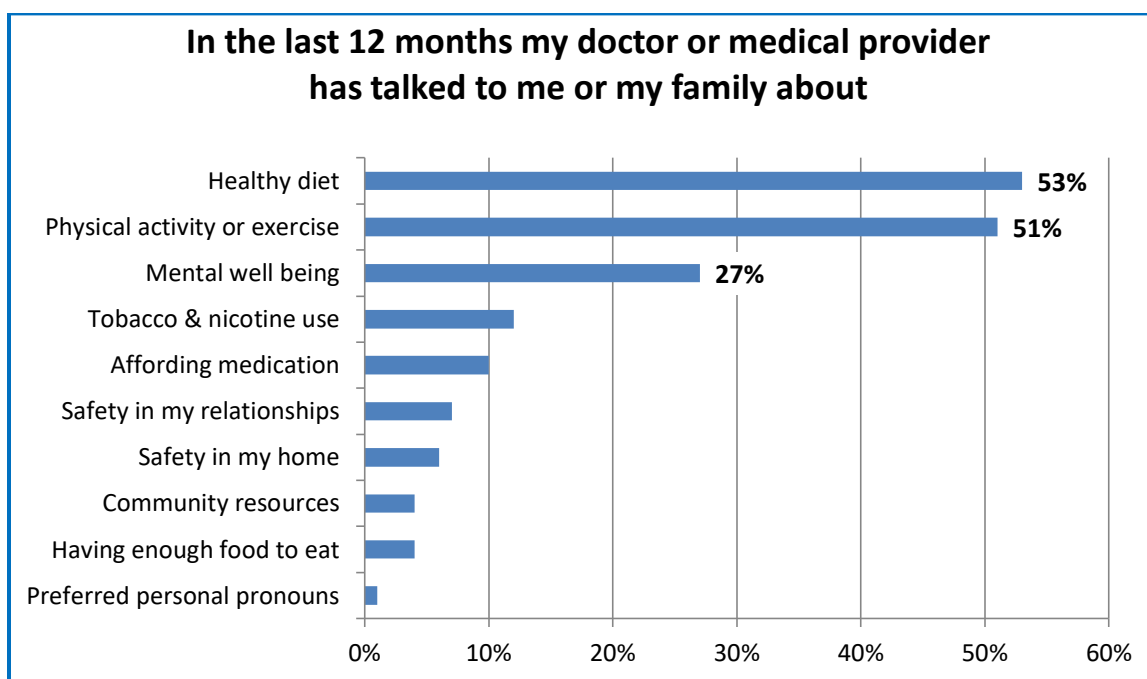
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**What are the social and economic barriers to health for Shelby County's people?**

DATA

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## Community Health Survey: Health Determinants



*Rules of rounding followed: percentages rounded to nearest whole number.*

### Considerations

- Providers are discussing diet and physical activity with patients.
- There were 89 comments for this question.
- **24% reported none of the wellness and social determinants of health had been discussed with them.**
- 46% shared general or specific health issues addressed with and by their providers.
- From age 65 and older, respondents reported providers addressed safety in the home.
- Community resources were shared with respondents 75+ years of age.
- Affording medications was addressed with respondents 18 – 34 years old. The 18 – 24 year old cohort was also more likely to not have health insurance. Three respondents also had their medical providers address food insecurity with them.
- Respondents 15 – 17 years old reported that safety in their relationships, tobacco use and vaping were addressed by their medical provider.

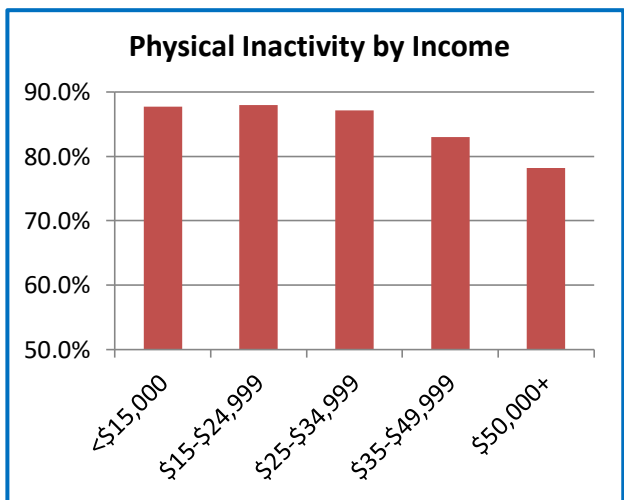
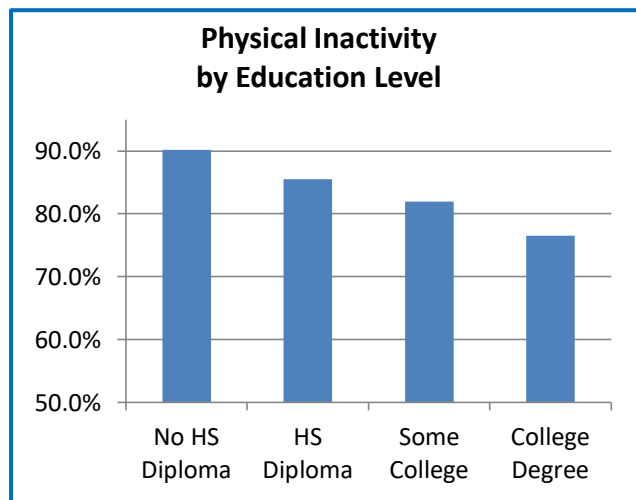
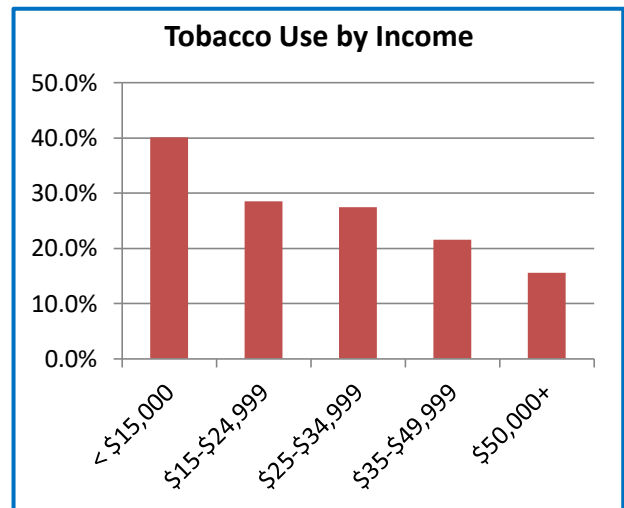
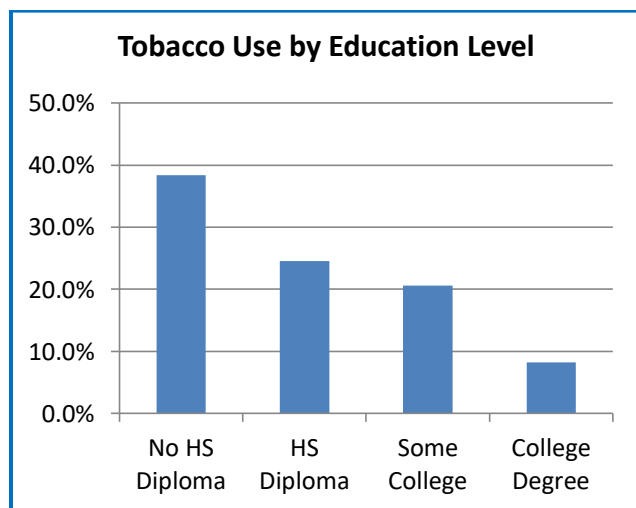


# Socio-Economic Determinants of Health

Health is more complex than disease and treatment. Not only do genetics and lifestyle choices impact health, but so too do social and economic factors. These factors may create barriers to healthy choices and well-being. They strongly influence the health of the individual and community. Studies repeatedly show a strong correlation between socio-economic status and health outcomes.

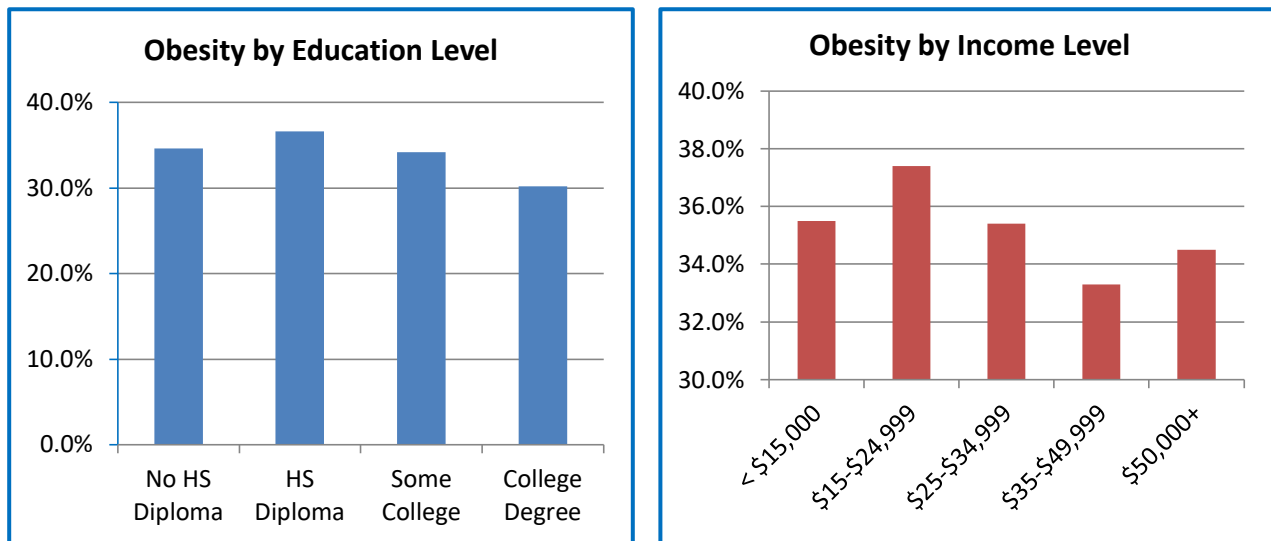
The following information looks at some of these challenges in Shelby County. While Shelby County as a whole may be making progress or doing well on a given health indicator, there are disparities throughout the various communities of Shelby County.

## Income and education impact health behaviors.



# DATA

## Socio-Economic Determinants of Health



Centers for Disease Control and Prevention, Behavior Risk Factor Surveillance System Prevalence and Trends Data

Unfortunately obesity doesn't follow the same trend as other key chronic disease indicators. Even so, obesity prevalence is less at \$50,000 than at less than \$25,000. Income impacts health and vice versa. Follows is data about the financial challenges of some of Shelby County's households.

The *Federal Poverty Level* (FPL) is set every year by the *Census Bureau*. The *Department of Health and Human Services* uses this information to determine eligibility guidelines for federal assistance programs. In January each year, the FPL and guidelines are adjusted to account for inflation.

For the federal insurance Marketplace, income between 100% and 400% qualifies consumers for premium tax credits to lower monthly insurance premiums. Income below 138% but above 100% of the FPL qualifies consumers for HIP 2.0.

Some of the most recent data in this CHNA is from 2016, so charts are included for 2016 and 2019.

# DATA

## Socio-Economic Determinants of Health: Income

### 2016 Federal Poverty Guideline Percentages

Family Size	100%	138%	150%	185%	200%	250%	300%	400%
1	\$11,770	\$16,242	\$17,655	\$21,775	\$23,540	\$29,425	\$35,310	\$47,080
2	\$15,930	\$21,983	\$23,895	\$29,471	\$31,860	\$39,825	\$47,490	\$63,720
3	\$20,090	\$27,724	\$30,135	\$37,167	\$40,180	\$50,225	\$60,270	\$80,360
4	\$24,250	\$33,456	\$36,375	\$44,863	\$48,500	\$60,625	\$72,750	\$97,000
5	\$28,410	\$39,205	\$42,615	\$52,559	\$56,820	\$71,025	\$85,230	\$113,640
6	\$32,570	\$44,946	\$48,855	\$60,255	\$65,140	\$81,425	\$97,710	\$130,280
Each add'l Member	\$4,160	\$5,741	\$6,240	\$7,696	\$8,320	\$10,400	\$12,480	\$16,640

### 2019 Federal Poverty Guideline Percentages

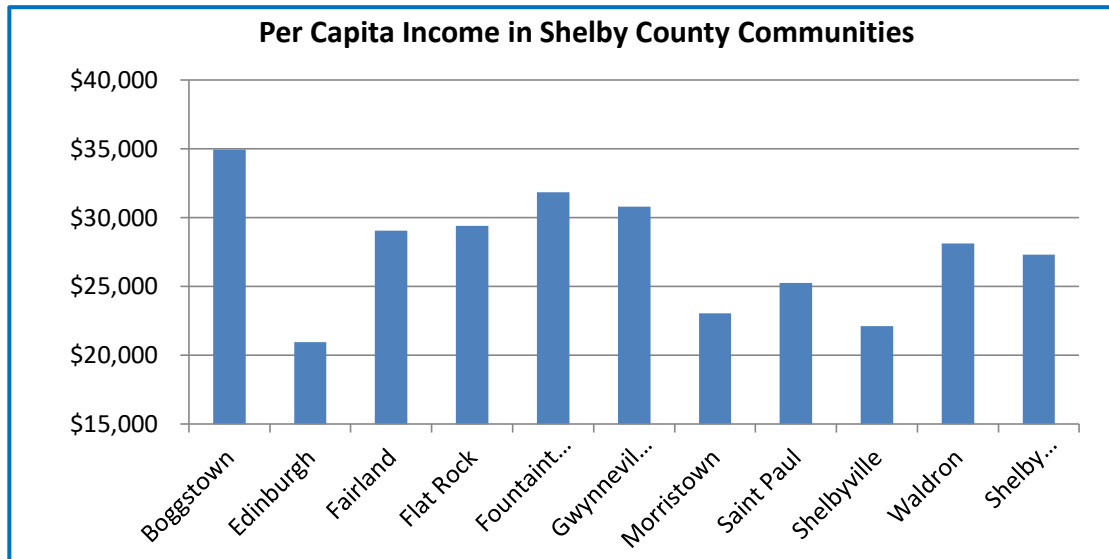
Family Size	100%	138%	150%	185%	200%	250%	300%	400%
1	\$12,490	\$17,236	\$18,735	\$23,107	\$24,980	\$31,225	\$37,470	\$49,960
2	\$16,910	\$23,335	\$25,365	\$31,284	\$33,820	\$42,275	\$50,730	\$67,640
3	\$21,330	\$29,435	\$31,995	\$39,461	\$42,660	\$53,325	\$63,990	\$85,320
4	\$25,750	\$35,535	\$38,625	\$47,638	\$51,500	\$64,375	\$77,250	\$103,000
5	\$30,170	\$41,634	\$45,255	\$55,815	\$60,340	\$75,425	\$90,510	\$120,680
6	\$34,590	\$47,734	\$51,885	\$63,991	\$69,180	\$86,475	\$103,770	\$138,360
Each add'l member	\$4,420	\$6,100	\$6,630	\$8,177	\$8,840	\$11,050	\$13,260	\$17,680

### Per Capita Income

Per Capita Income (individual income) is the total income of the region divided by the population. It is an indicator of economic well-being: an individual's capacity to participate in the economy of the area, including how well she is able to provide for basic needs and medical care. With the exception of Shelbyville, Morristown and Edinburgh, in 2017 the per capita income for the communities of Shelby County was between 200 and 250% of the *Federal Poverty Level*.

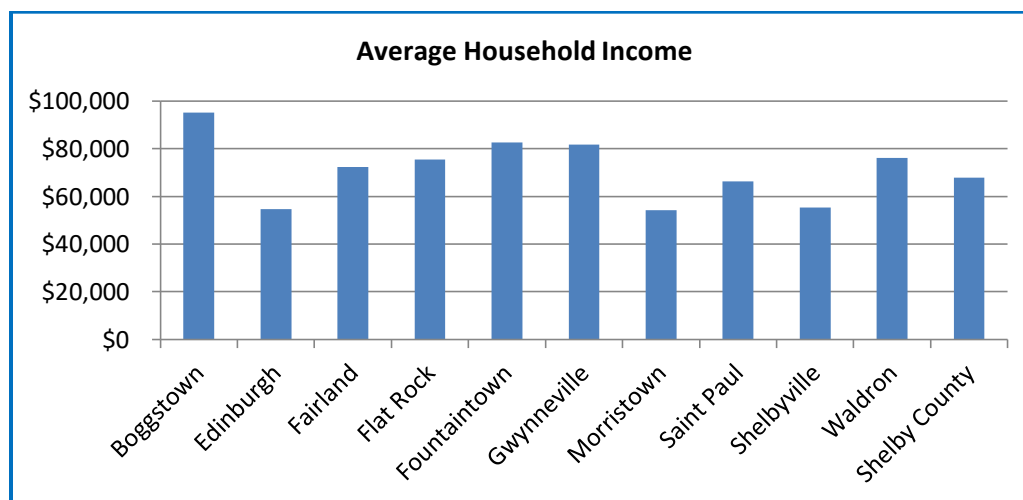
# DATA

## Socio-Economic Determinants of Health: Income



U.S. Census Bureau American Community 5 Year Estimates; City Data; Indiana Hometown Indicators; STATS Indiana Part of Edinburgh & Saint Paul are in Shelby County. Students attend Southwestern & Waldron schools.

**Average Household Income:** Elsewhere in this CHNA *Median Household Income* has been noted. When looking at the range of incomes in a given community, the *Median Household Income* is the amount that divides the income distribution into two equal groups, half having income above and half having income below the amount. The following graph looks at the average or *mean* income of Shelby County communities











U.S. Census Bureau American Community 5 Year Estimates; City Data; STATS Indiana; Indiana Hometown Indicators

Part of Edinburgh & Saint Paul are in Shelby County. Students attend Southwestern and Waldron schools respectively so are included here.

# DATA

## Socio-economic Determinants of Health: Income

IN County Comparison	Health Indicator: Poverty Level	Data Years	Value
	Children Living Below Poverty Level	2017	13.5% of Population under 18 years
	School Age Children Living Below Poverty Level	2017	12.5% of Population 5 – 17 years
	Persons Receiving SNAP	2018	8% of Population
	Households Receiving SNAP with Children	2013-2017	60.9% of Households with Children under 18 years
	Households Receiving TANF	2013-2017	2.2% of Households with Children under 18 years
	Students Eligible for Free and Reduced Lunch Program	2018, 2019	47% of School Age Children
	 People 65+ Living Below Poverty Level	2013-2017	7.0% of Population 65+
	People Living Below Poverty Level	2018	8.4% of Population

U.S. Census Bureau American Community Survey 5 Year Estimates; Indiana Family & Social Services Administration, Department of Family Resources data from Annie E Casey Foundation, Kids Count Data Center  = significant trend

## ALICE

Shelby County has had a poverty rate of 10-12% that has ranked it in the top 25-50% of Indiana Counties for its low rate. While the County's economy is expanding, there are areas and populations that are not benefitting. **Shelby County's challenges are less about persons living at and below the Federal Poverty Level and more about those individuals and families whose employment does not meet the basic cost of living in Shelby County.** These households are called ALICE households: Asset-Limited, Income-Constrained Employed.

**"I work for the State of Indiana. I am a single parent and make under \$40,000 annually. I live in low-income housing and pay almost \$800 a month in rent. I am not offered medical insurance and am no longer eligible for food stamps once my teenage child started a part time job. My rent has gone up almost \$300 over the last 3 years."** (2019 Community Health Survey)

**"I am a single [parent]. I work 2 jobs with a [child] in my care."** (2019 Community Health Survey)

## Socio-Economic Determinants of Health: ALICE



In 2014 the *Association of United Ways* produced the first data-driven research about household income self-sufficiency in a given county. The survival and stability budgets were updated in 2016.

- The ALICE report identifies a bare minimum *Household Survival Budget* for an individual, couple, and several family configurations for a given county.
- ALICE households have incomes greater than the *Federal Poverty Level* but less than the basic cost of living in a given county.
- These households are typically ineligible for assistance such as SNAP benefits but may be eligible for some tax credits. Assistance is counted as a source of household income.
- ALICE household incomes render them ineligible for HIP 2.0. However, they are also unable to afford the Bronze level on the health insurance Marketplace.

In 2016 based on the ALICE research, the *Indiana Institute for Working Families* published a report identifying a self-sufficiency standard for multiple family configurations in each county in Indiana. Unlike the initial ALICE *Household Survival Budget*, their budget included health insurance and savings as indicators of self-sufficiency.

### Household self-sufficiency budgets include expenses for

- Housing
- Food
- Health Care
- Technology
- Child Care
- Emergency Savings
- Transportation
- Taxes: Medicare, Social Security, Federal, state, local
- Tax Credits for Child, Child Care, Earned Income
- Miscellaneous: diapers, work clothes, toiletries, cleaning supplies, etc.

IN County Comparison	Health Indicator: ALICE For 2016	Value
	Households above the ALICE Threshold	61.9%
	ALICE Households	26.8%

*ALICE Study of Financial Hardship in Indiana, 2016*

In 2016 combined ALICE and poverty percentages revealed 38% of Shelby County households were not bringing sufficient money into the household to meet the basic cost of living in Shelby County. The percentage in 2014 was 34%.



# DATA

## Socio-Economic Determinants of Health: ALICE

### Percentage of Households with Less Income than the Basic Survival Budget

From 2014 – 2016, nearly every Township experienced an increase in the number of households unable to meet the basic cost of living. Combined ALICE and poverty greater than 40% is in red.

Township, Town or City	Households	% ALICE and Poverty	Total ALICE & Poverty Households	Households above ALICE Threshold
Addison Township (Shelbyville) SC Schools	8,175	48%	↑3,924	52%
Brandywine Township (Fairland) (NW)Triton	765	29%	↑222	71%
Hanover Township SE Schools, Morristown	966	35%	↑338	65%
Hendricks Township SW Schools	432	41%	↑177	59%
Jackson Township SW Schools	696	31%	↑216	69%
Liberty Township (Waldron) SE Schools	632	28%	↑177	72%
Marion Township (Shelbyville) SC Schools	653	27%	↑176	73%
Moral Township NW Schools, Triton	1,741	22%	↑383	78%
Noble Township (St. Paul) SE Schools, Waldron	633	35%	↑222	65%
Shelby Township (Shelbyville) SCS School	714	19%	↑136	81%
Sugar Creek Township (Boggstown) NW Schools, Triton	432	54%	↑233	46%
Union Township SE Schools, Morristown	377	14%	↓53	86%
Van Buren Township (Fountaintown) SE Schools, Morristown	596	28%	↓167	72%
Washington Township (Flat Rock) SW Schools	497	32%	↑157	68%

# DATA

## Socio-Economic Determinants of Health: ALICE



One indicator of a community's economic well-being is the number of people whose incomes are 200% above the poverty level. For 2013 –2017, Shelby County's percentage was 70.5%, ranking the county in the top 25% of Indiana counties. **However, 200% of the FPL does not achieve self-sufficiency for individuals living in Shelby County.**

The following chart compares 2016 ALICE Survival and Stability Household Budgets for Shelby County in relationship to median household income and income eligibility for state and federal assistance. The 2019 per capita and median household income figures are conservative estimates based on the inflation rate tied to the *Consumer Price Index*. They are shared for the purpose of considering how household incomes compare with the basic cost of living in the County. From 2010 to 2016, the rate increase for the basic cost of living was greater than the inflation rate. During this period the basic household budget had to increase by 23% to have the same buying power of 2010's.

Indicator	2016 Individual	2016 Family of 4	2019 Individual	*2019 Family of 4
FPL	\$11,880	\$24,300	\$12,490	\$25,750
138% for HIP 2.0	\$16,105	\$32,913	\$17,236	\$35,535
185% for WIC, School Lunch	\$21,775	\$44,863	\$23,107	\$47,638
200% of FPL	\$23,760	\$48,600	\$24,980	\$51,500
ALICE Household Survival Budget	\$20,736	\$55,572	<sup>1</sup> \$22,234	<sup>1</sup> \$59,587
ALICE Household Stability Budget	\$32,868	\$102,132	<sup>1</sup> \$35,243	<sup>1</sup> \$109,510
Per Capita Income	\$25,478		<sup>2</sup> \$26,558	
Median Household Income		\$52,651		<sup>2</sup> \$54,636

*U.S. Census American Community Survey 5 Year Estimate; Federal Poverty Guidelines; ALICE A Study of Financial Hardship in Indiana, 2016 and 2018 reports.*

<sup>1</sup>2019 figures are estimates based on Consumer Price Index inflation data. "Inflation Calculator." U.S. Official Inflation Data, Alioth Finance, 8 Dec. 2019, <https://www.officialdata.org/us/inflation/2016>.

<sup>2</sup> STATS Indiana; Indiana Hometown Locator- Indiana Gazetteer

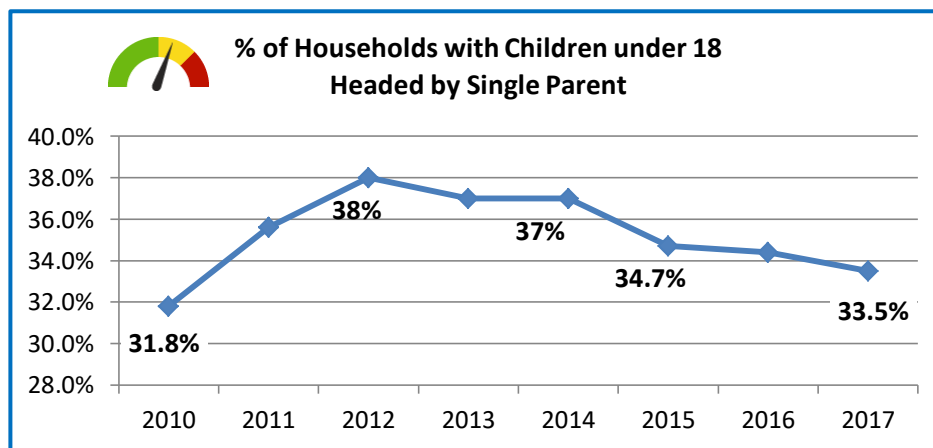
**\*For comparison: family of 4 is based on 2-parent family with preschooler and school age child.**

# DATA

## Socio-Economic Determinants of Health: Income

The basic cost of living is not equal for every family of four. The *Indiana Institute for Working Families* calculates how much household income is needed to make ends meet without public assistance for 472 different family types. ([www.indianaselvsufficiencystandard.org](http://www.indianaselvsufficiencystandard.org))

Single parent families predominantly have been headed by females. In Shelby County 10% of single parent households are headed by males. Single parent households headed by females, especially when the other parent is absent, frequently struggle to make ends meet.



U.S. Census American Communities Survey 5 Year Estimates

	Single Parent, Infant	Single Parent, Pre-schooler, School Age	Single Parent, Infant, Preschooler, School Age
<b>2016 Survival Budget</b>	\$34,788	\$32,988	\$49,131
<b>2019 Estimated Survival Budget</b>	\$36,722	\$35,371	\$52,680
<b>2016 Self-Sufficiency Budget</b>	\$66,204	\$45,245	\$62,273
<b>2019 Estimated Self-Sufficiency Budget</b>	\$69,885	\$48,514	\$66,771

ALICE A Study of Financial Hardship in Indiana, 2016 and 2018 reports.

2019 figures are estimates based on Consumer Price Index inflation data. "Inflation Calculator."

U.S. Official Inflation Data, Alioth Finance, 8 Dec. 2019, <https://www.officialdata.org/us/inflation/2016>

In 2016 annual child care expense for 1 preschooler and 1 school age child was \$13,236. Using inflation as tied to the *Consumer Price Index* as a means to consider household income related to childcare expense, 2019 annual childcare costs for the same family configuration is \$14,192.

# DATA

## Socio-Economic Determinants of Health: Poverty

From 2014 – 2016, the four largest communities in Shelby County all experienced an increase in the number of households whose incomes did not meet the basic cost of living in the County. Two towns had a decrease in poverty levels but an increase in ALICE households. ALICE households are typically ineligible for assistance programs.

Town or City	Households	% Poverty	% ALICE	% ALICE & Poverty	Total ALICE & Poverty Households	% Households above ALICE Threshold
Fairland	273	↓6.4%	↑27%	33%	↑90	67%
Morristown	480	↑14.3%	32%	46%	↑221	54%
Shelbyville	7,576	↑16.2%	↑33%	49%	↑3,712	51%
Waldron	225	↓4.7%	↑19%	24%	↑54	76%

*U.S. Census American Community Survey 5 Year Estimates; ALICE Study of Financial Hardship in Indiana, 2016*

### Who is impacted by poverty in these communities?

#### Morristown 14.3% Poverty Level:

- **85.2% are single mother households**
  - 14.8% are single father households
- 37.2% are **females** age 18 – 24
- 25.3% are under the age of 18
  - **74.5% are children under the age of 5** (mostly males)
  - 27.3% are 15 years
- **24.5% are adults 65years and older**
- 9.3% of households make less than half of FPL
  - **13.4% are children under the age of 5**

#### Waldron 4.7% Poverty Level:

- Nearly 100% 15 year old **females** within FPL
- 17% **females** age 24-34 living within FPL
- 36% **females** age 35-44 living within FPL

#### Waldron cont'd

- 3.7% of families make less than half of the FPL
  - **2.4% are children 0-5 years**
  - 4.7% are 16 and 17 year old youth

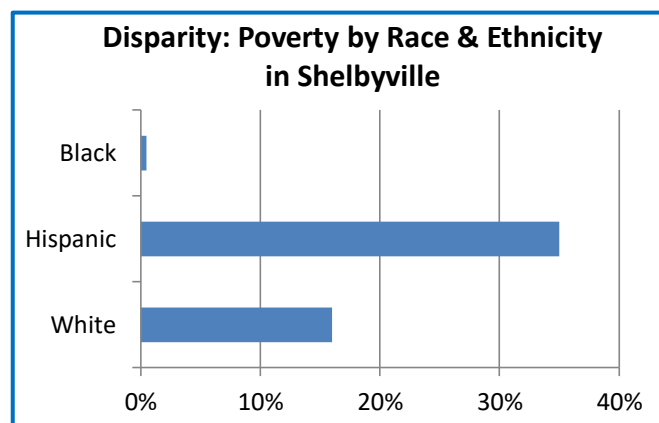
#### Fairland 6.4% Poverty Level:

- 66.7% are married households
  - **33.3% are single mother households**
- 7.7% are children age 6-11 (mostly males)
- 19.4% are 18-24 year **females**
- 30% are 45-54 year **females**
- **10% are 75+ year old males**
- 50% of households make less than half of the FPL
  - 19.3% are 18 -24 year olds

## Socio-Economic Determinants of Health: Poverty

### Shelbyville 18.1% Poverty Level:

- **54% are single mother households**
  - 28.4% are married households
- 28.9% are **female**
- 18.7% are under the age of 18 years
  - 37.3% are 16 and 17 year old youth
    - 28.9% are **female**
  - 31.3% are 15 years
    - 36.6% are **female**
  - **27.9% are children under 5 years**
  - 15.9% are children 6-11 years
- 18.9% are 45 – 54 years
- **16% are 75+ years**
  - **12.6% are 65-74 years**
- 12.3% are 18 – 24 years
- 9.1% have incomes less than 50% of the FPL



U.S. Census American Community Survey 5 Year Estimates

### In Shelby County, several vulnerable populations emerge in relationship to poverty:

- Females
- 15-17 year old youth
- Children under 5
- Older adults

## Adverse Childhood Experiences (ACEs)

The *Centers for Disease Control and Prevention* identifies family financial instability as a risk factor for *Adverse Childhood Experiences*. ACEs are potentially traumatizing events experienced by children from birth to 17 years. They may be direct experiences such as physical abuse; witnessed experiences such as domestic violence; or pervasive issues such as financial instability, hunger, or unstable housing. Chronic stress and subsequent release of stress hormones such as cortisol may impact brain development and the neurochemistry of the body for a lifetime with increased risk of chronic disease and premature death. Protective factors such as loving and reliable adults, a safe place to live, consistent access to healthy food, skill-building, and appropriate behavioral and medical health care can mitigate the impact of ACEs.

(<https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html>)

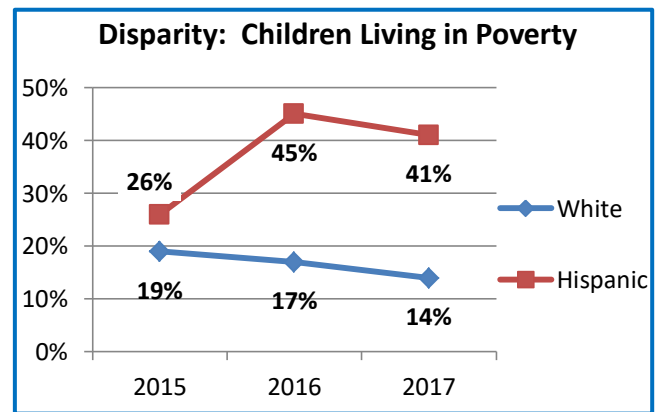
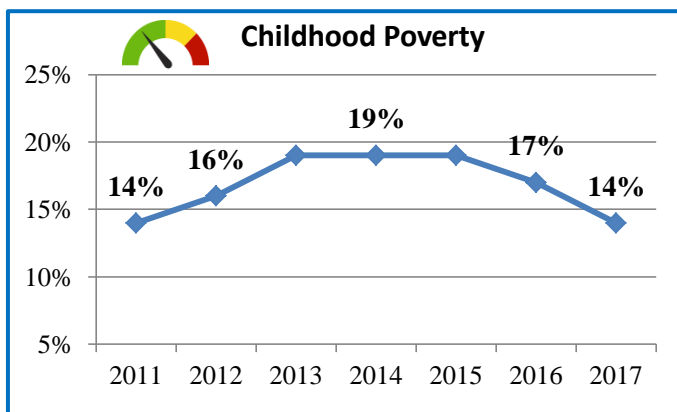
# DATA

## Socio-Economic Determinants of Health: ACEs

**“The threat of suicide is much higher than it has ever been due to Adverse Childhood Experiences that children have gone through . . . no counseling has taken place to assist them in coping with what they have experienced which increases the threat or attempt of suicide and drug use.”**

*(2019 Community Health Survey)*

### ACE: Poverty



*Small Area Income and Poverty Estimates pulled from County Health Rankings & Roadmaps*

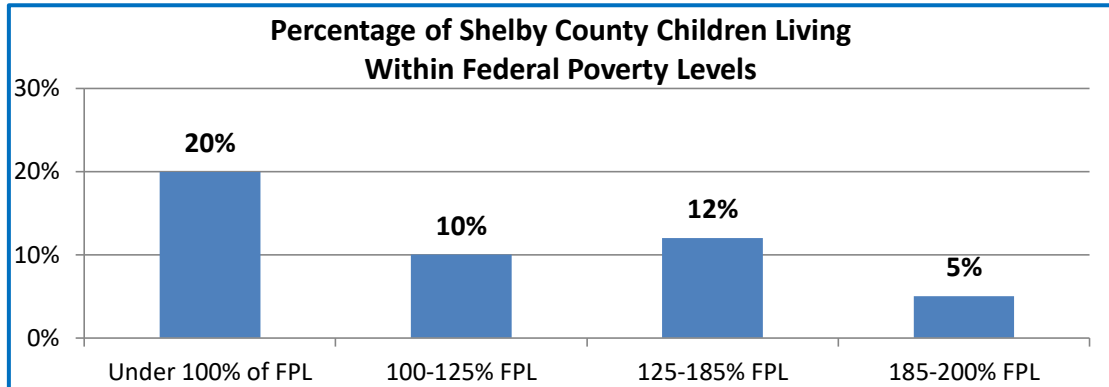
**Children living in poverty are at risk for having current and future health problems.** They are more prone to asthma, obesity, anxiety, injuries and behavior problems.

*(Hair NL, Hanson JL, Wolfe BL, Pollak SD. Association of child poverty, brain development, and academic achievement. JAMA Pediatr. 2015;169(9):822-829. Pulled from County Health Rankings and Roadmaps, 2019.)*

**During the critical years of birth to age 5 years, 90% of brain development occurs.** This is a crucial period for good nutrition, safety, protection from chronic stress, and ample opportunities for playing and exploring. Brain development from birth to age 5 sets the stage for a child’s ability to learn and future ability to succeed in school, work, relationships and life. Living in poverty or in a low-income family struggling to manage the basics may compromise this crucial period of brain development. (<https://www.cdc.gov/ncbddd/childdevelopment/early-brain-development.html>)

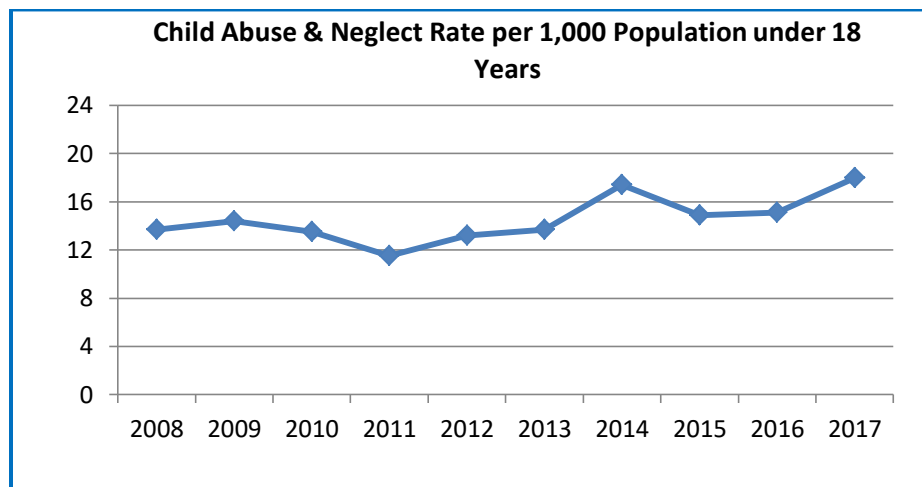
# DATA

## Socio-Economic Determinants of Health: Abuse



*U.S. Census American Communities Survey 5 Year Estimates*

### ACE: Abuse

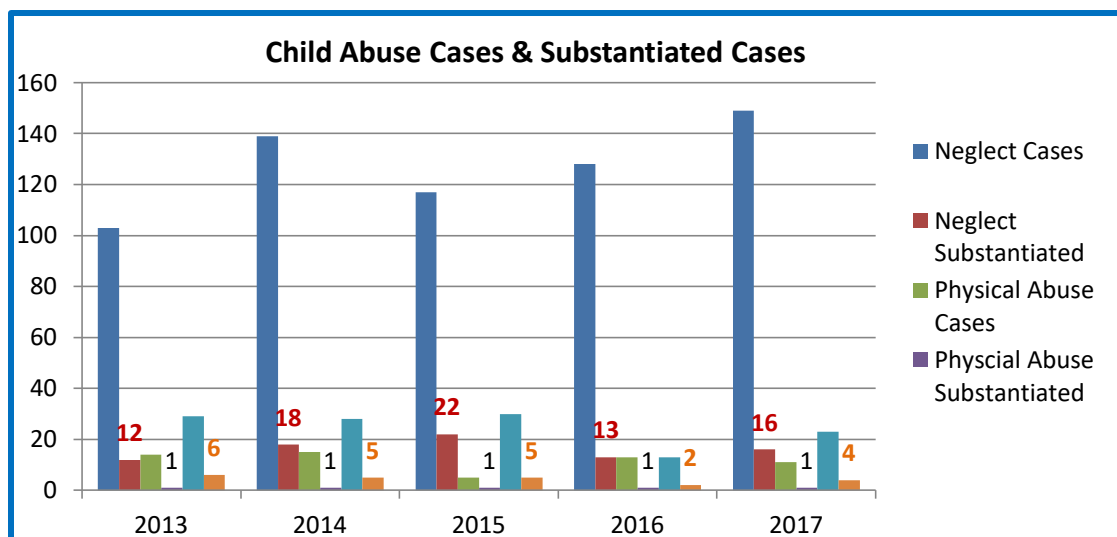


*Indiana Department of Child Services pulled from Annie E Casey Foundation Kids Count Data Center*

At a basic level, child abuse is an action or lack of action by the parent, guardian or custodian that seriously endangers a child’s physical or mental health. Sexual abuse, physical abuse, illegal manufacturing of a drug or controlled substance where a child lives, or allowing a child to commit a sex offense are all examples of child abuse. Child neglect is the inability, refusal, or neglect of parent, guardian, or custodian to supply a child with necessary food, clothing, shelter, medical care, education or supervision.

## Socio-Economic Determinants of Health: Abuse

### Shelby County Child Abuse Cases



Indiana Department of Child Services pulled from the Annie E Casey Foundation Kids Count Data Center  
 Cases = allegations investigated    Substantiated = investigations finding evidence of neglect or abuse

### ACE: Domestic Violence – Intimate Partner Violence

The *Centers for Disease Control and Prevention* reports that children who witness domestic violence have both immediate and long term challenges to their health and well-being. Young children may regress developmentally and become anxious. School age children may mistakenly believe they are to blame and have difficulty socially and academically in school. Teenagers may act out by engaging in risky behaviors.

Children who witness or are victims of emotional, physical, or sexual abuse are at higher risk for health problems as adults such as diabetes, obesity and heart disease. They may suffer from low self-esteem, depression, anxiety or other mental illness. Plus children who witness domestic violence are at high risk for repeating the cycle in their intimate partner relationships as teens and adults.

(Monnat, S.M., Chandler, R.F. (2015), *Long Term Physical Health Consequences of Adverse Childhood Experiences*. *The Sociologist Quarterly*; 56(4): 723-752. Pulled from "Effects of Domestic Violence on Children." Office on Women's Health in the U.S. Department of Health and Human Services. 2019. <https://www.womenshealth.gov/relationships-and-safety/domestic-violence/effects-domestic-violence-children>)



# DATA

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## Socio-Economic Determinants of Health: Abuse

### Cost of Intimate Partner Violence

In 2019 the *CDC* estimated the lifetime cost of intimate partner rape, physical assault and stalking in the United States at \$3.6 trillion annually for direct medical and mental health care; criminal justice services; and lost productivity. <sup>1</sup>A study of over 3,000 women enrolled in a health insurance plan found medical costs were 42% higher for women who had experienced IPV than for enrolled women who had not experienced IPV. These costs were not necessarily because of physical or psychological injury, but also from gynecological, heart, gastrointestinal, and other chronic health problems.

<https://www.cdc.gov/violenceprevention/pdf/ipv-factsheet508.pdf>

<sup>1</sup>Bonomi et al., “Health Care Utilization and Costs Associated with Physical and Nonphysical-Only Intimate Partner Violence,” *Health Services Research* vol. 44, no. 3 (2009): 1052–67. Pulled from “McClellan & Bocinski, “The Economic Cost of Intimate Partner Violence, Sexual Assault, and Stalking,” *Institute for Women’s Policy Research*. **ID:** IWPR #B367. August 14, 2017.)

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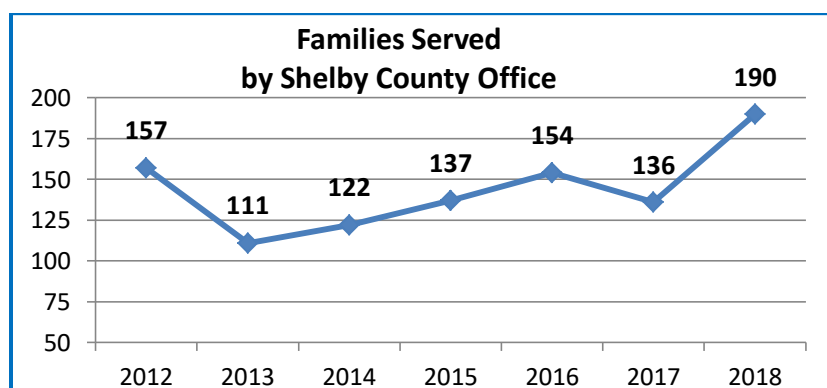
**One in 5 women will experience IPV in her lifetime.** The next closest health risk for women is that 1 in 8 will experience breast cancer. Patients at *Major Health Partners* are screened for IPV and provided information about safety planning and support services. When women talk with their medical providers about domestic violence, they are 4 times more likely to receive needed services and end the abusive relationship.

Domestic Violence or Intimate Partner Violence (IPV) not only has immediate consequences but also long term ramifications for health, employment, education, financial stability and the ability to direct one’s life freely and safely. IPV may involve physical abuse but can also involve threats of harm to self, children, friends and pets. The psychological impact is profound. The financial abuse may make leaving a relationship overwhelming when credit, job, unauthorized debt, and housing have been compromised or ruined.

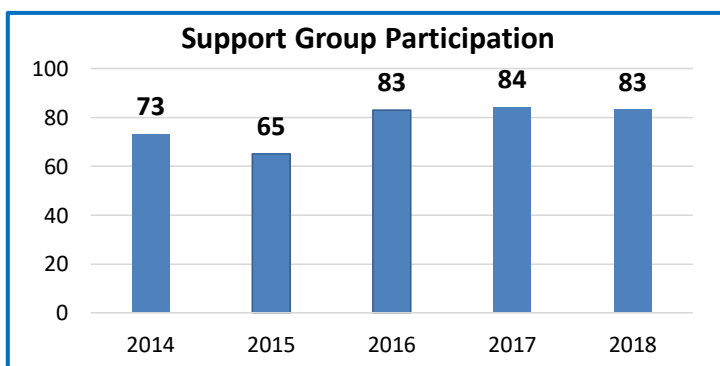
# DATA

## Socio-Economic Determinants of Health: IPV

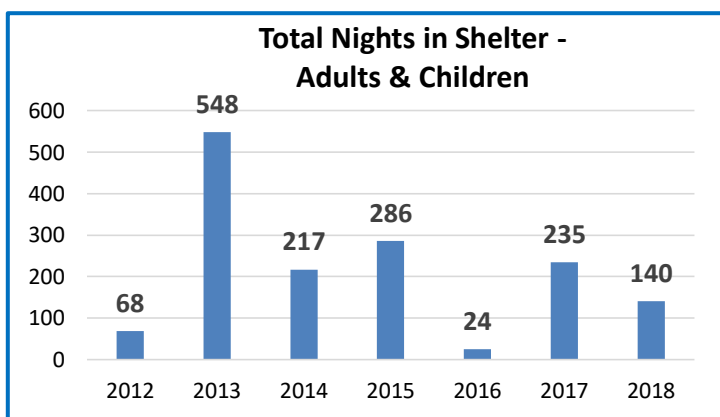
*Turning Point Domestic Violence Services* provides prevention, support and advocacy services to victims of intimate partner violence, sexual assault and stalking. The Shelby County office is a satellite office of the parent organization in Columbus, Indiana. Over the years the local office has grown in its capacity to address victim assistance services, youth education, and advocacy for the residents of Shelby County.



*Turning Point Domestic Violence Services* assists both men and women, though the majority is women. This is congruent with national statistics.



Support groups are available in the Shelby County Jail as well as in the community. Many women in jail for drug-related charges are victims of domestic violence.



Shelter services are available in a central location. Someone who is in danger and in need of safety may stay at the shelter for a night or several weeks. The shelter accommodates children as well. Safety planning, legal support, therapeutic services, education, advocacy and other practical support are available at the shelter and the local office.

# DATA

## Socio-Economic Determinants of Health: Dating Violence

### Prevention is essential to decreasing Intimate Partner Violence.

*Turning Point Domestic Violence Services* uses evidence-based programming in the county's schools to address healthy dating relationships and intimate partner violence. They also present to youth groups and youth-serving organizations, churches, businesses and other community organizations to increase awareness of IPV, resources, and healthy relationships.

In 2015 and 2016, *Shelbyville High School* Students participated in the national *Youth Risk Behavior Surveillance System (YRBSS)* Survey. The 2015 data below is Indiana-specific. In 2015 among Indiana students, 41% were sexually active. Dating violence occurred at every grade level, though predominantly among 11<sup>th</sup> and 12<sup>th</sup> grade students.

Health Indicator: Dating Violence	2013	2015	2017
Forced to have sexual intercourse <b>Predominantly female students have been forced to have sexual intercourse.</b>	7.3%	10%	7.4%
Physical Dating Violence in the previous 12 months including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with <b>Predominantly black and female students experienced physical dating violence. However, physical dating violence has decreased significantly among female students.</b>	10.3%	10%	8%
Sexual Dating Violence in the previous 12 months: including kissing, touching, or being physically forced to have sexual intercourse when they did not want to by someone they were dating or going out with <b>Predominantly white females and Hispanic students experienced sexual dating violence. Overall sexual dating violence has decreased significantly.</b>	10.4%	12.6%	6.9%

*Centers for Disease Control and Prevention Youth Risk Behavior Surveillance System*

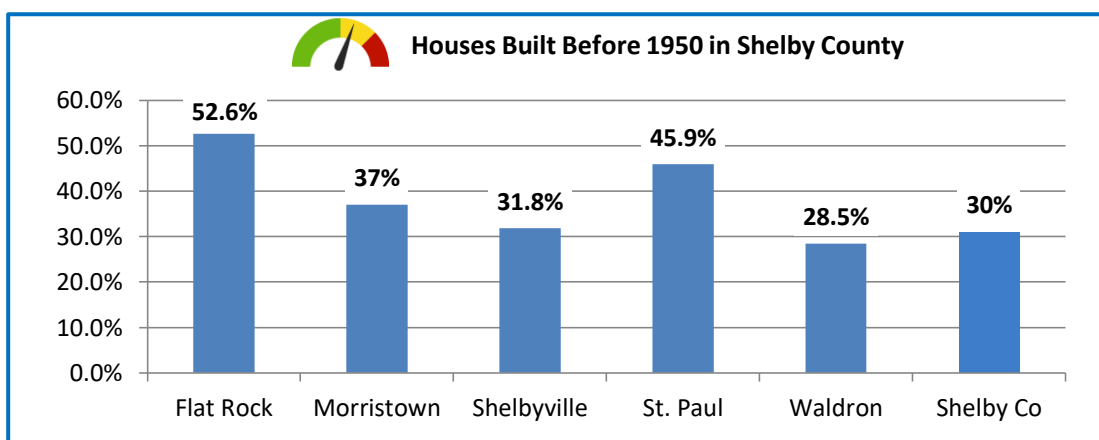
# DATA

## Socio-Economic Determinants of Health: Housing

### ACE: Inadequate Housing

Health and wellness is impacted by the neighborhood, town, or census tract where we live as well as the home in which we live. Children are especially vulnerable to housing where the environment contributes to health problems such as asthma, infectious diseases, injuries, and impaired childhood development from exposure to lead paint or mold from inadequate ventilation, heating and cooling systems.

**In Shelby County 30% of houses were built prior to 1950.** Houses built prior to 1950 pose health risks if they have not have been up-dated with modern heating, ventilation and air-conditioning systems and professional removal or containment of lead-based paint and asbestos insulation. Lead poisoning from paint chips and from the dust of deteriorating paint is especially harmful to children under the age of 6, causing neurological problems and developmental delays. For all ages, inhaled dust from deteriorating paint and insulation leads to respiratory illnesses.





**Severe Housing Problems are defined as a housing unit that lacks one of the following:**

- Complete kitchen with working refrigerator, stove, oven, sink with running water
- Complete plumbing for bathroom and kitchen
- Adequate space – housing unit is overcrowded
- Affordable rent – housing unit has a high cost

# DATA

## Socio-Economic Determinants of Health: Housing

Indiana County Comparison	Health Indicator: Housing	Data Years	Value
	Renters Spending 30% or More of Household Income on Rent	2013-2017	43.5%
	Households Spending 50% or More of Household Income on Housing Costs	2013-2017	9%
	Severe Housing Problems	2011-2015	11.6%

*U.S. Department of Housing and Urban Development pulled from County Health Rankings & Roadmaps; U.S. Census American Community Survey 5 Year Estimates*

A rule of thumb is 30% of gross monthly household income is a reasonable amount to pay for housing. For a renter, 30% includes utilities. Home owners include property taxes, mortgage interest and maintenance costs in the 30%. When 50% or more of the household income is spent on rent or mortgage, then there is less money for healthcare, dependable transportation, school and community clubs and sports, and even food.

### Why quality housing at all price points matters

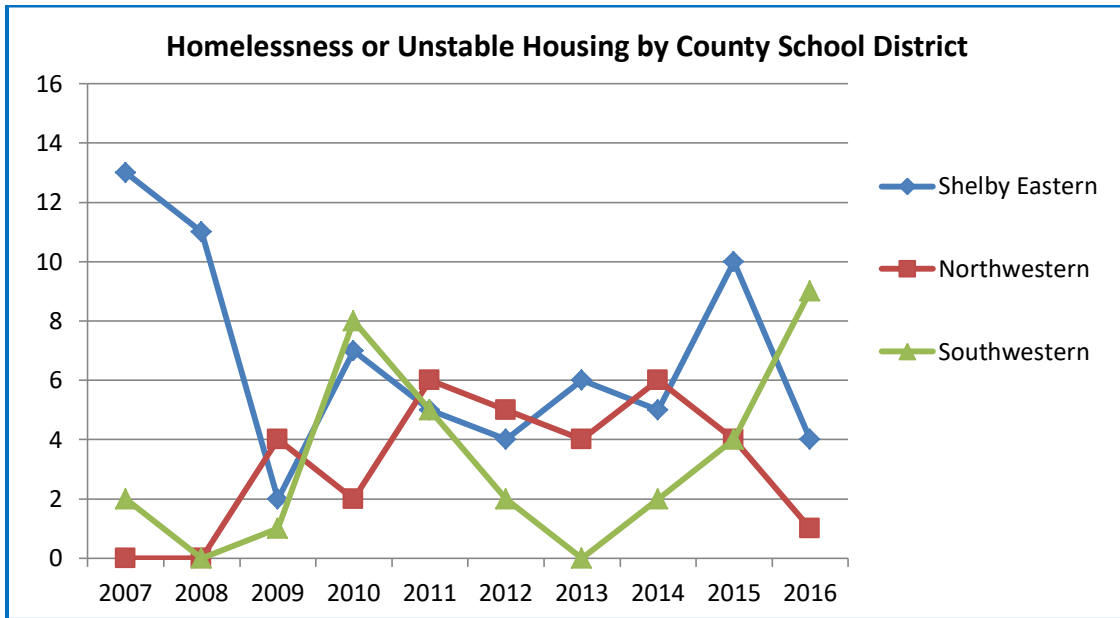
First along the coasts of the United States, and then inland in larger cities, communities designed to maintain higher price point homes and lifestyles have found themselves without desired and necessary services. Wait staff, teachers, home health aids, mechanics, EMS personnel and other mid to lower paying jobs go unfilled as employees are priced out of housing. Driving a distance to work at a minimum wage or a lower salary job is not affordable in terms of time or money. Quality, affordable housing at all price points is fundamental to community health for not only stability, well-being and quality of life but also as an economic driver.

### ACE: Homelessness or Unstable Housing

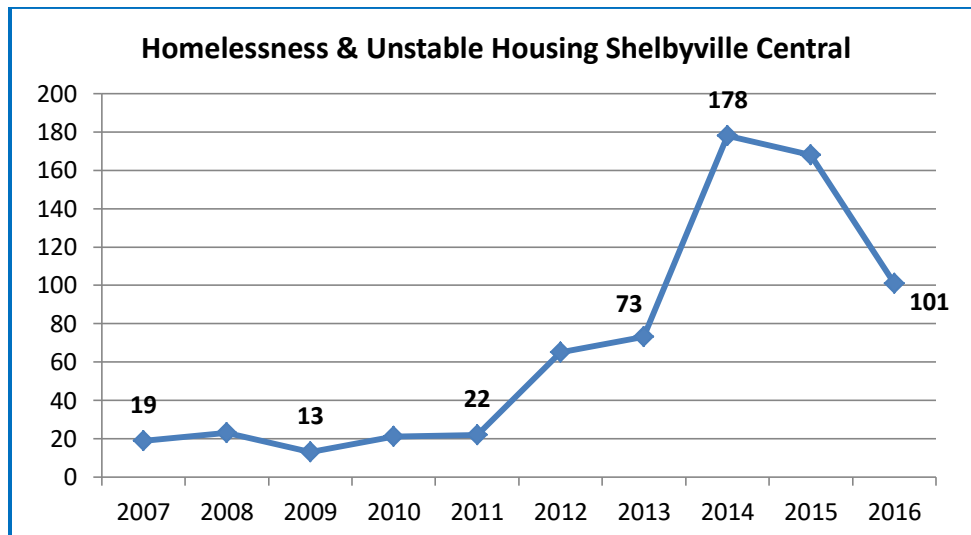
Chronically elevated stress hormones negatively impact every function of the body and mind. The younger the child, the less control the child has in the face of chronic stress. The chronic stress of homelessness or unstable housing has been found to not only impact health over time, but to also increase the risks of more adverse experiences and of homelessness as an adult.

[\(https://developingchild.harvard.edu/resources/aces-and-toxic-stress-frequently-asked-questions/\)](https://developingchild.harvard.edu/resources/aces-and-toxic-stress-frequently-asked-questions/)

## Socio-Economic Determinants of Health: Housing



Indiana Department of Education pulled from Annie E Casey Foundation Kids Count Data Center



Indiana Department of Education pulled from Annie E Casey Foundation Kids Count Data Center

# DATA

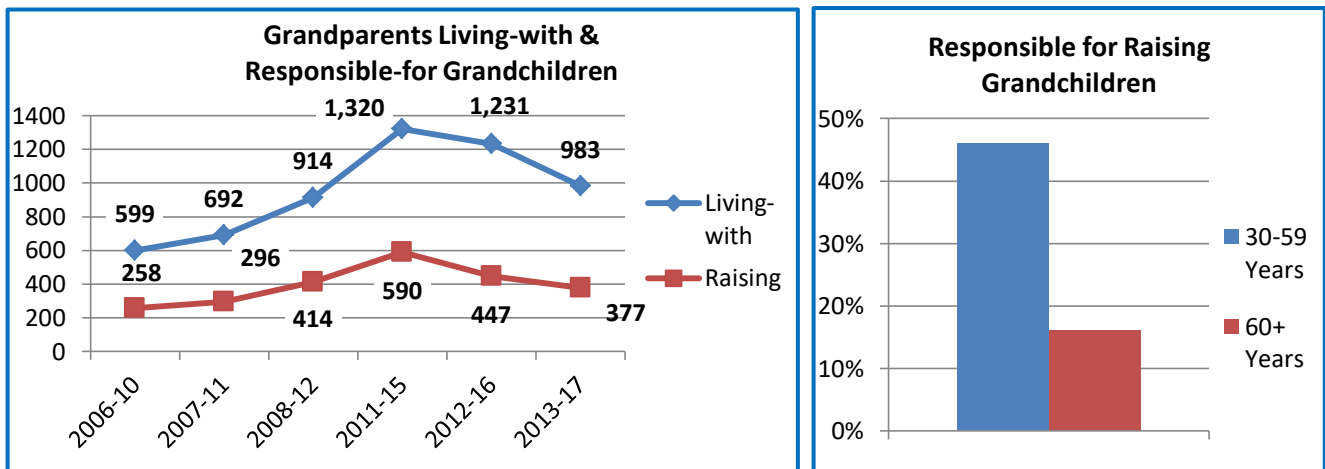
## Socio-Economic Determinants of Health: Grandparents Raising Grandchildren

### Grandparents Raising Grandchildren

In Indiana, 1.6% of households are those of grandparents raising grandchildren. **In Shelby County, 1.9% of all households are grandparents responsible for grandchildren (325 households).** In 2017 there were nearly 1,000 children under the age of 18 living with grandparents. Grandparents younger than 60 years old are more likely to live in poverty with their grandchildren: 24% versus 14%. Social Security and retirement income may be mitigating factors for older grandparents.

The absence of a parent due to incarceration, death, or any number of other reasons is often an adverse experience for a child. One of the ways such trauma may be mitigated is by grandparents or other relatives providing a loving and stable home for the child.

Since 2008 the longest period of time grandparents have been responsible for raising grandchildren has been 5+ years, suggesting that they became the forever family. In 2016 and 2017, the greatest length of time was 1-2 years. Future census data will reveal if this decrease was only the first couple of years of a longer period of responsibility or if it was the beginning of a downward trend.

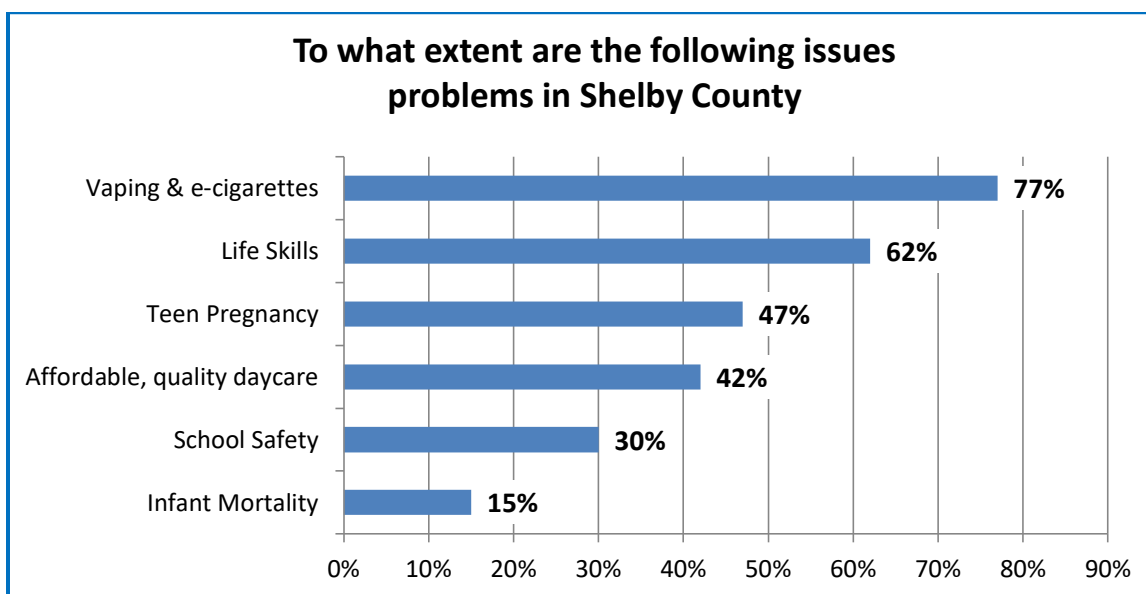
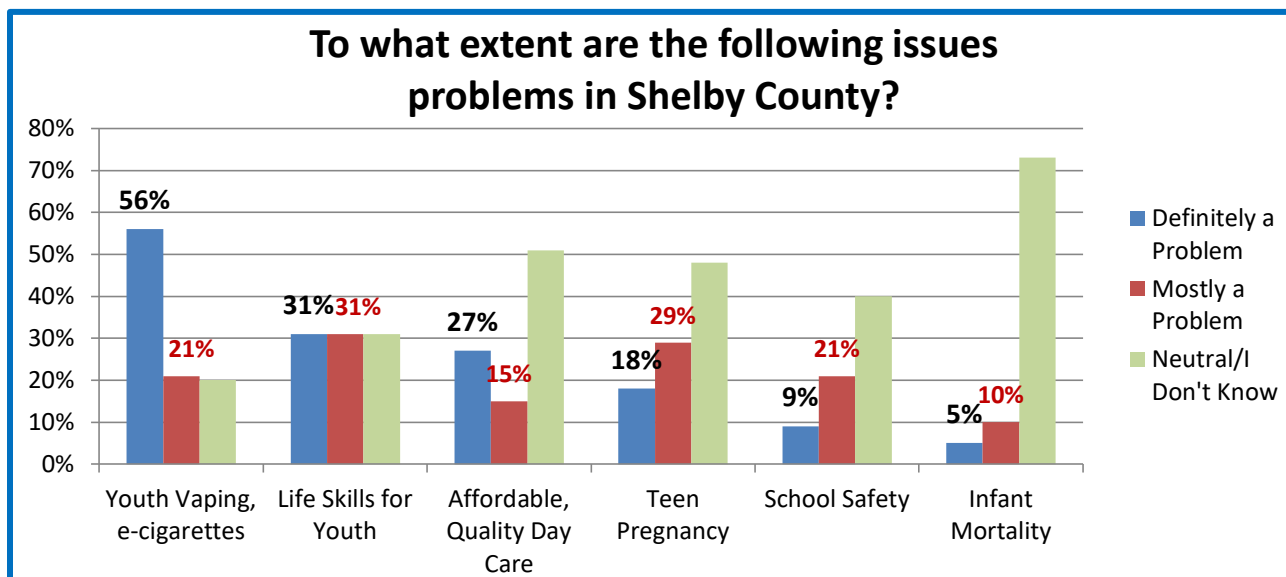


U.S. Census American Community Survey 5 Year Estimates

# DATA

## Community Health Survey: Wellness Issues Birth to Age 17

**Top social issues for youth are vaping/e-cigarettes and practical life skills training for youth.** If the rating categories of *Definitely a Problem* and *Mostly a Problem* are combined, a clearer picture of the perceived top social concerns emerges.



*Respondents chose among the following options for rating the degree to which an issue was a problem in Shelby County: Definitely a Problem, Mostly a Problem, Neutral/I Don't Know, Less of a Problem, and Definitely Not a Problem. Rules of rounding followed; percentages rounded to nearest whole number.*



# DATA

## Community Health Survey: Wellness Issues Birth to Age 17

### Considerations

- A low problem rating did not correlate with rating an issue as not being a problem but rather as an indication of insufficient knowledge to make an informed decision.
- Respondents rated issues an average of less than 3% for *Less of a Problem* and *Definitely Not a Problem*. However, 25% of respondents rated School Safety as *Less of a Problem*. 9% rated Infant Mortality as *Less of a Problem*.
- 15- 17 year old respondents had high ratings for vaping, life skills and teen pregnancy.
- During the survey, vaping was in the news secondary to deaths from vaping in Indiana and across the nation. Youth and young adults were reported to be the primary victims.
- Media coverage may have influenced the rating of vaping as a significant problem.

need Shelby  
County community big kids seems know problem  
vaping people schools high  
school issue safety work many see students school  
safety Shelbyville

**Survey respondents left 42 comments.** 19% acknowledged that they lacked information in order to be able to assess significance of issues. Most comments had similar messages. A sampling follows:

- **Vaping**
  - “I am a teacher in the community and see that vaping is a HUGE issue!”
  - “Vaping is a huge problem in our schools. Kids . . . [who] do not Vape do not go to the bathroom all day because they know . . . there will be kids vaping in the stalls. The schools need to get control of the vaping.”

## Community Health Survey: Wellness Issues

### Survey comments continued

- **Adulthood**

- “I see . . . students who can't work on their own, students who can't take responsibility for their actions.”
- “. . . young people say that they wish there was a class in high school on how to write checks and keep a checkbook and how to do taxes.”

- **Daycare**

- “Daycare is so expensive it doesn't pay to work.”
- “The daycare situation in Shelbyville is alarming. After searching for a year and a half, I finally got in with a private daycare provider that I feel comfortable leaving my child with. However, I had to have my child in a daycare facility that had questionable practices until I found his new provider. I wish the parents of Shelbyville had more quality daycare options to choose from.”

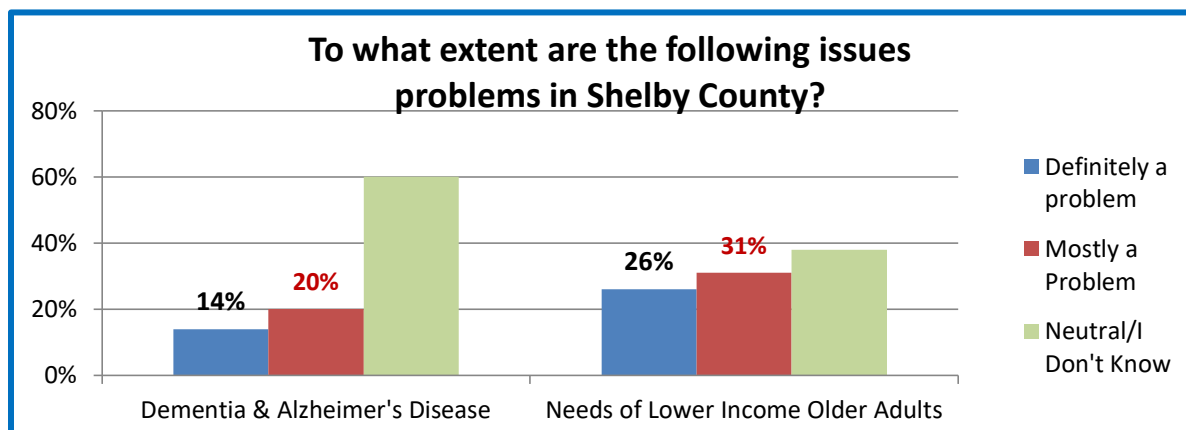
- **Safety**

- “Schools are doing a great job in working for safety of students and staff.”
- “. . . you should spend money on therapists for these young people in school. . . . These kids have mental health issues that are not being addressed at home or school.”
- “I see many students who could be a safety problem because they are isolated and bullied.”
- “All schools . . . whether they serve children, teens or adults, should have . . . security officers on duty for the entire school day, including after-school activities or evening classes.”

- **Other issues**

- “Too much screen time is our biggest issue! Our students are on iPads all day long at school and then come home and use them for homework and keeping their social lives.”

## Socio-Economic Determinants of Health: Older Adults



Respondents chose from the following options for rating the degree to which an issue was a problem in Shelby County: Definitely a Problem, Mostly a Problem, Neutral/I Don't Know, Less of a Problem, & Definitely Not a Problem. Fewer than 3% rated issues as not being a problem. Rules of rounding followed; percentages rounded to nearest whole number.

### Considerations

- The *Community Health Survey* question on issues for vulnerable populations encompassed birth to older adults. For clarity, the 2 populations are separated in this CHNA. The issues were not ranked against each other.

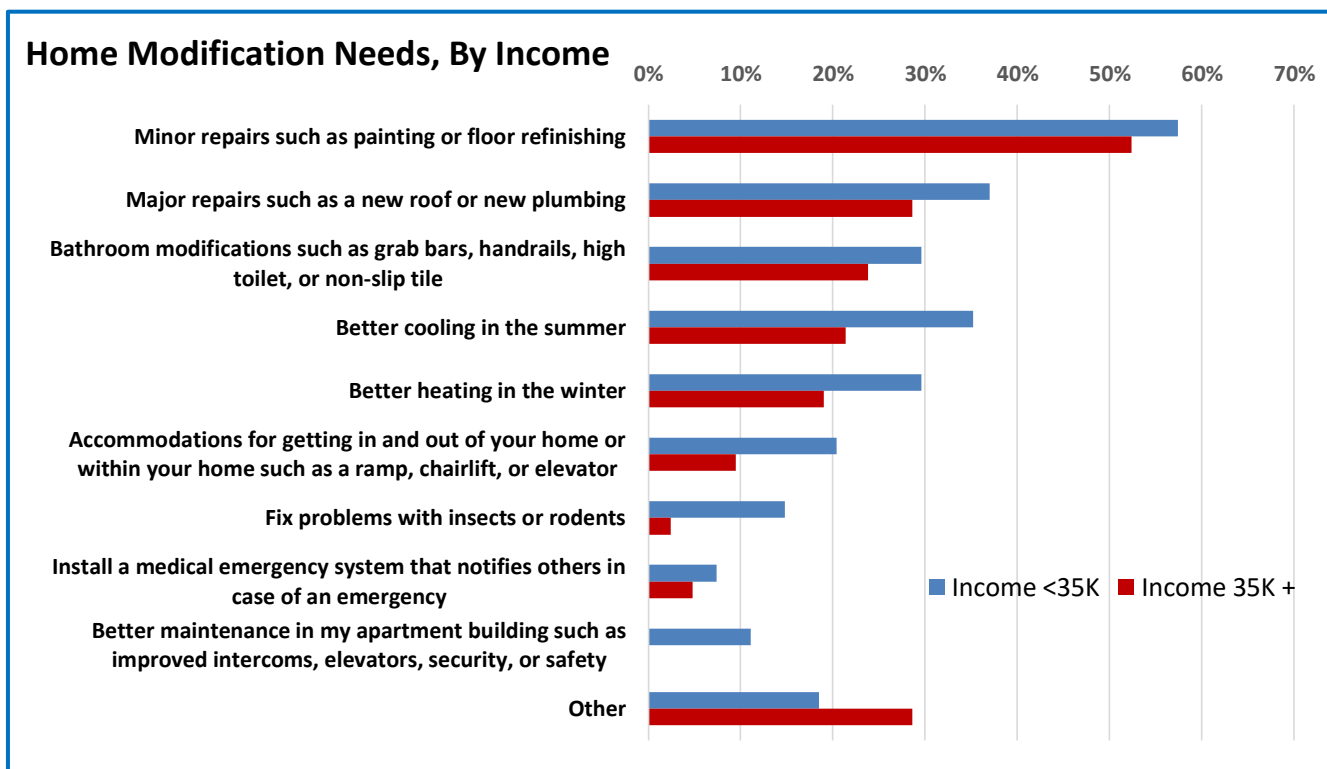
### Survey respondents also commented on the older adult issues:

- “And if there is help for the elderly with low income, we aren't aware of it.”
- “A big issue I have seen is medication safety for our elderly. An elderly patient may have three different med lists . . . PCP list, pharmacy list and home health list. Inconsistency definitely there.”
- “People who have Medicare or Medicaid that reside in Shelby County, do not have access to 1:1 mental counseling and therapy.”
- “Resources for older adults with no family is an issue.”
- “Older adults and people who can't afford the internet are definitely left in the dark.”
- “When my elder mother was sick, I did not know who to turn to for advice. . . I ended up talking with the Senior Services Center and they were a huge help. They should be supported more and more people should be made aware of their services.”

## Socio-Economic Determinants of Health: Older Adults

The 2015 *AdvantAge Initiative Survey* found for Shelby County adults 55+ years, a \$35,000 annual household income was the dividing line between those who were able to meet their basic needs and have quality of life and those who were not. <sup>1</sup>“Those with annual incomes under \$35,000 [were] more likely to have poor health status; insecurity about housing; neighborhood safety concerns; less access to community activities; and difficulties getting transportation to places they need to go.” <sup>2</sup>Per the *Bureau of Labor Statistics Consumer Price Index*, \$35,000 in 2015 has the purchasing power of \$38,002 in 2019. This annual household income is around 225% of the *FPL*.

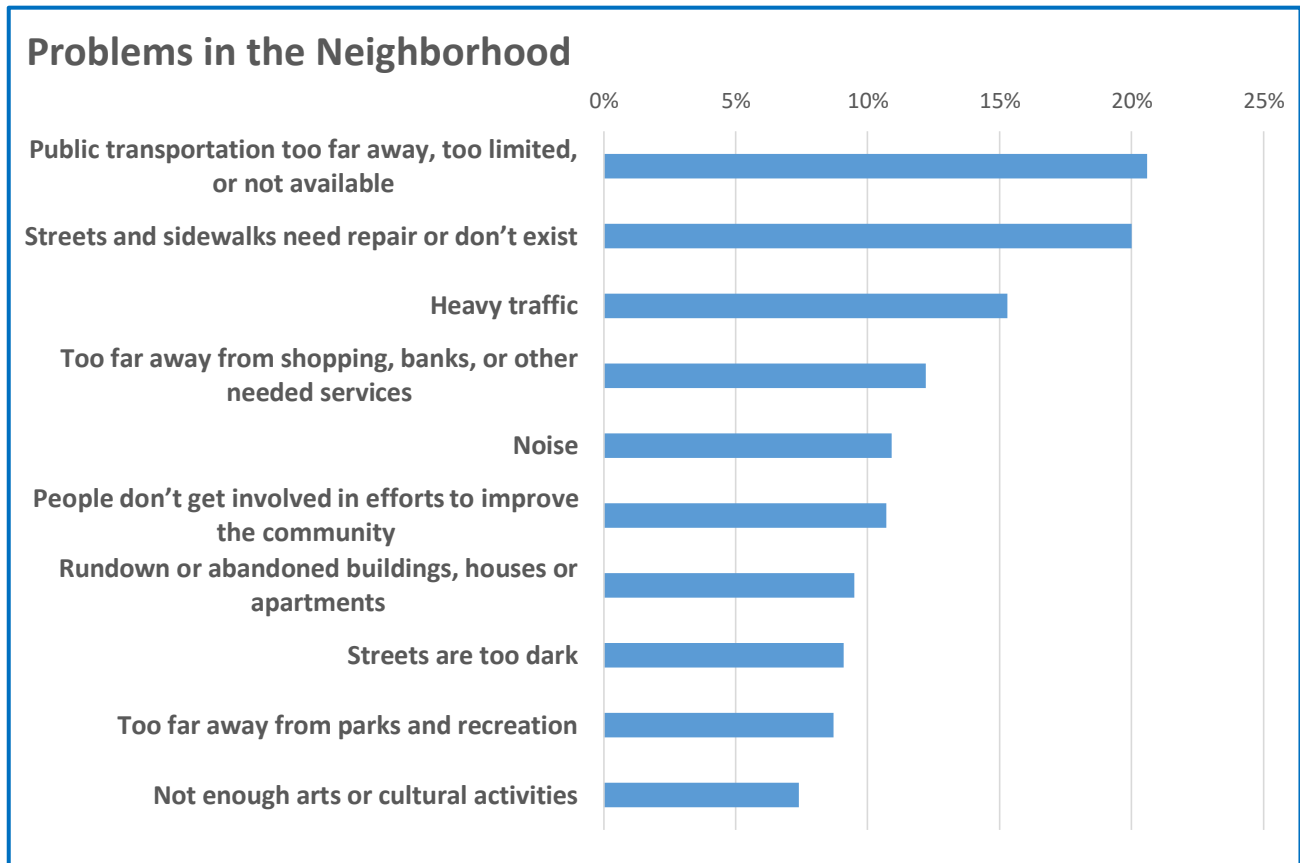
The following 2015 *AdvantAge Survey* chart highlights challenges for improving the “aging friendliness” of Shelby County. These home improvements and modifications benefit not only aging residents, but also residents with disabilities as well as families with young children who need many of the same safety and accessibility features. The income disparity is clear.



<sup>1</sup>*AdvantAge Initiative Survey*. <sup>2</sup>“\$35,000 in 2015 → 2019 | *Inflation Calculator*.” U.S. Official Inflation Data, *Alioth Finance*, 5 Dec. 2019, <https://www.officialdata.org/us/inflation/2015?amount=35000>

# DATA

## Community Health Survey: Social Determinants of Health

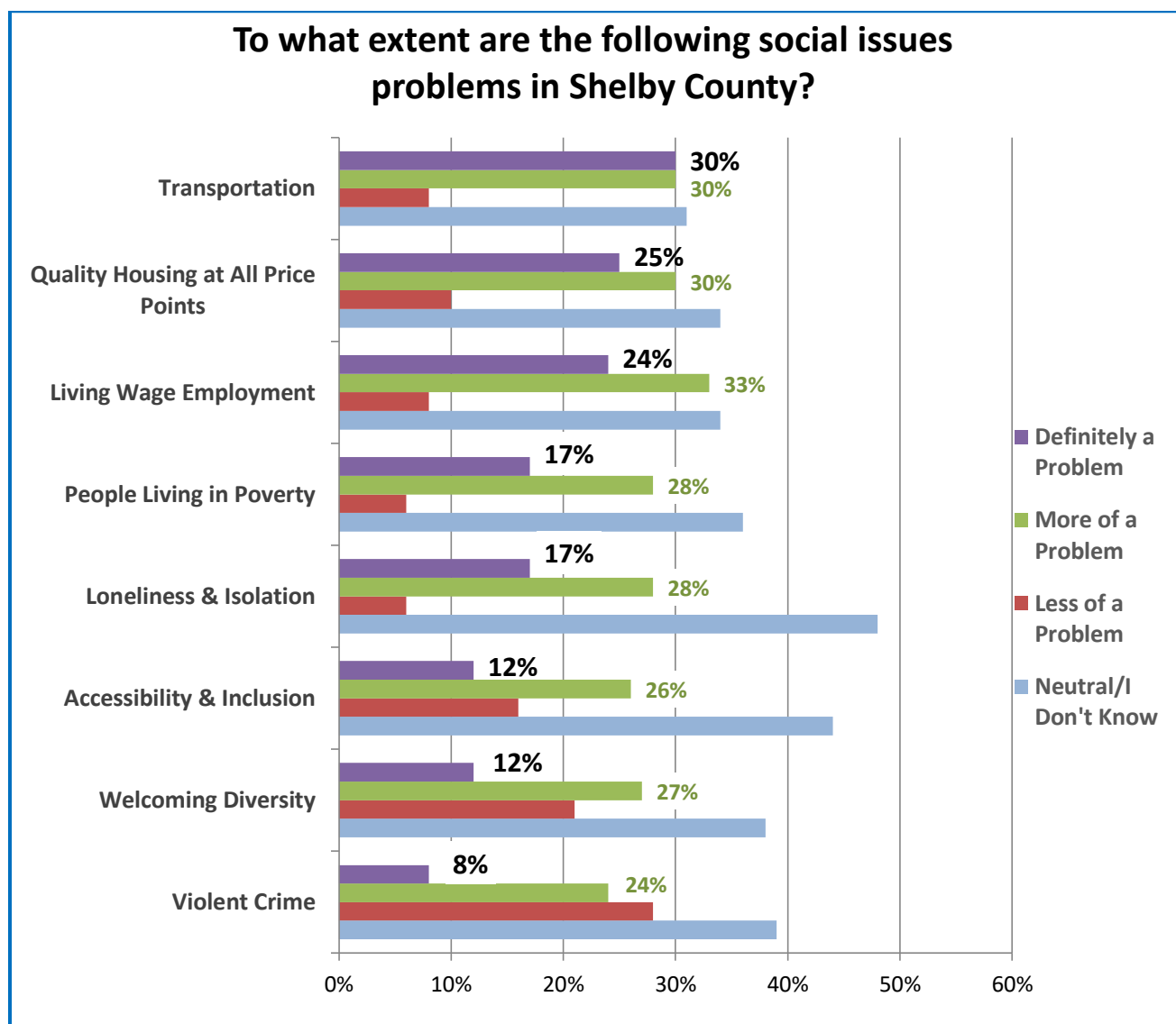


*Shelby County AdvantAge Initiative Survey, 2015; Center for Home Care Policy & Research Service of the Visiting Nurse Service of New York*

Responses to the 2019 *Community Health Survey* echo problems identified in 2015 by respondents to the *AdvantAge Initiative Survey*. Progress has been made in some of the identified issues:

- **A Master Bike~Pedestrian Plan** now guides methodical rehabilitation and creation of accessible sidewalks in the City of Shelbyville.
- **The City of Shelbyville has a Complete Streets Policy in its strategic plan** for consideration of all forms of pedestrian and vehicle use when a new street is created or one is rehabilitated.
- **A downtown Shelbyville re-development plan** will reduce noise and traffic.
- **Several blighted buildings have been torn down** and community gardens developed in their Place until that time Habitat for Humanity is ready to build on a lot or a lot sells.
- **The Blue River Trail** places more homes within a quarter mile of the trail which increases use.
- **Increased culture and social activities** with enhanced Farmers Market and First Fridays.

## Community Health Survey: Social Determinants of Health



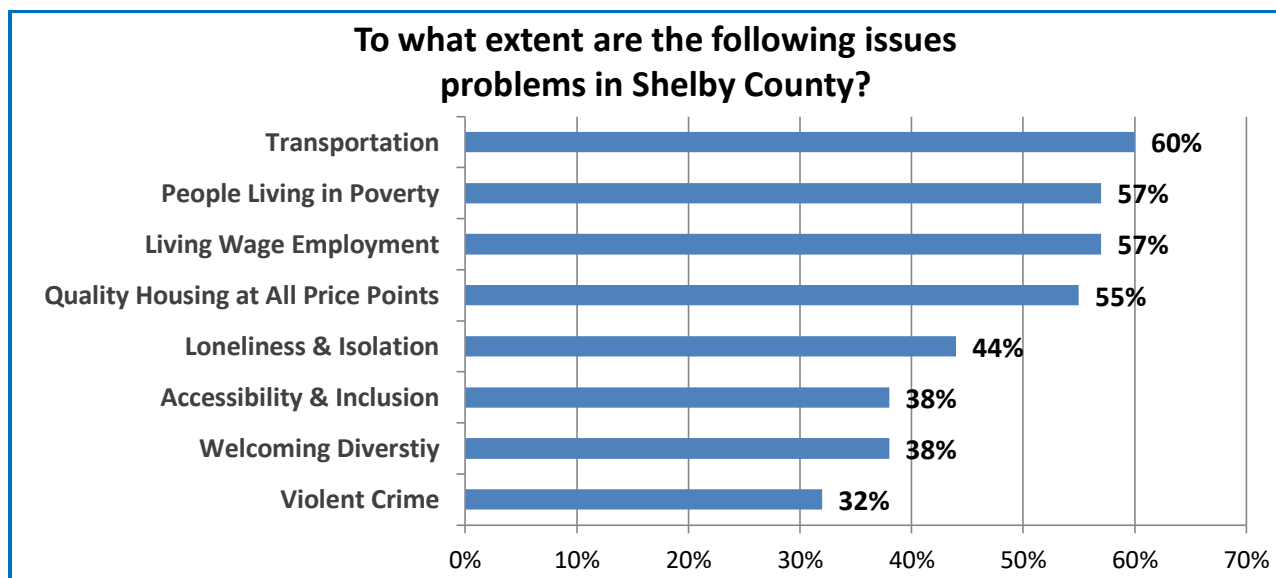
Respondents chose among the following options for rating the degree to which an issue was a problem in Shelby County: *Definitely a Problem*, *More of a Problem*, *Neutral/I Don't Know*, *Less of a Problem*, and *Definitely Not a Problem*. Rules of rounding followed; percentages rounded to nearest whole number.

The majority of respondents chose *Neutral/I Don't Know* in response to rating these social issues. Respondents were more nuanced in their ratings, resulting in no outstanding agreed-upon problem. On issues of diversity and crime; however, respondents were clearer about seeing these issues as less of a problem in Shelby County. Less than 3% of respondents rated these issues as not being problems.

# DATA

## Community Health Survey: Social Determinants of Health

By combining *Definitely a Problem* and *More of a Problem* categories, perceived significance of these social issues becomes clearer with a division between the top and bottom 4 social problems.



Rules of rounding followed: percentages rounded to nearest whole number.

### Considerations

- There were 35 comments of similar themes. A sample is shared on the next page.
- Issues were rated similarly across age groups and income levels.
- Respondents making less than \$50,000 rated violent crime as *definitely or more of a problem*.
- Transportation and poverty were not rated as problems by those 75 years and older.
- Loneliness and isolation had high problem ratings by respondents aged 35-44 and 55-64 and those with incomes between \$15 and \$25,000.
- Respondents age 25-34 years rated diversity as *Definitely a Problem*. While a third of minority respondents fell in this age group, White Caucasian respondents out-numbered their responses 19 to 1.

### Disparities

- Black respondents had the highest problem rating for employment that pays a living wage.

# DATA

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## Community Health Survey: Social Determinants of Health

nice<sup>help</sup> transportation<sup>go</sup> housing<sup>much</sup> live<sup>many</sup>  
problems<sup>need</sup> Shelby County<sup>people</sup> low

### Transportation:

- “Lack of easily accessible and 24/7 availability of transportation that doesn’t need scheduled in advance is a problem.”
- “Especially now that the docs offices and hospital are so far removed from the other side of town, I feel many people struggle to get to appointments. MHP should look into creating its own "Shelby Go" type transportation for patients to get to and from appointments.”

### Isolation:

- “I feel isolated because of my work load; my inability to separate home and work time . . . my family has isolated itself from many others.”

### Living Wage:

- “Living wage: Our wages have come up, that is awesome, What I hear people say is “I would like to afford to live on my own.”

### Quality Housing:

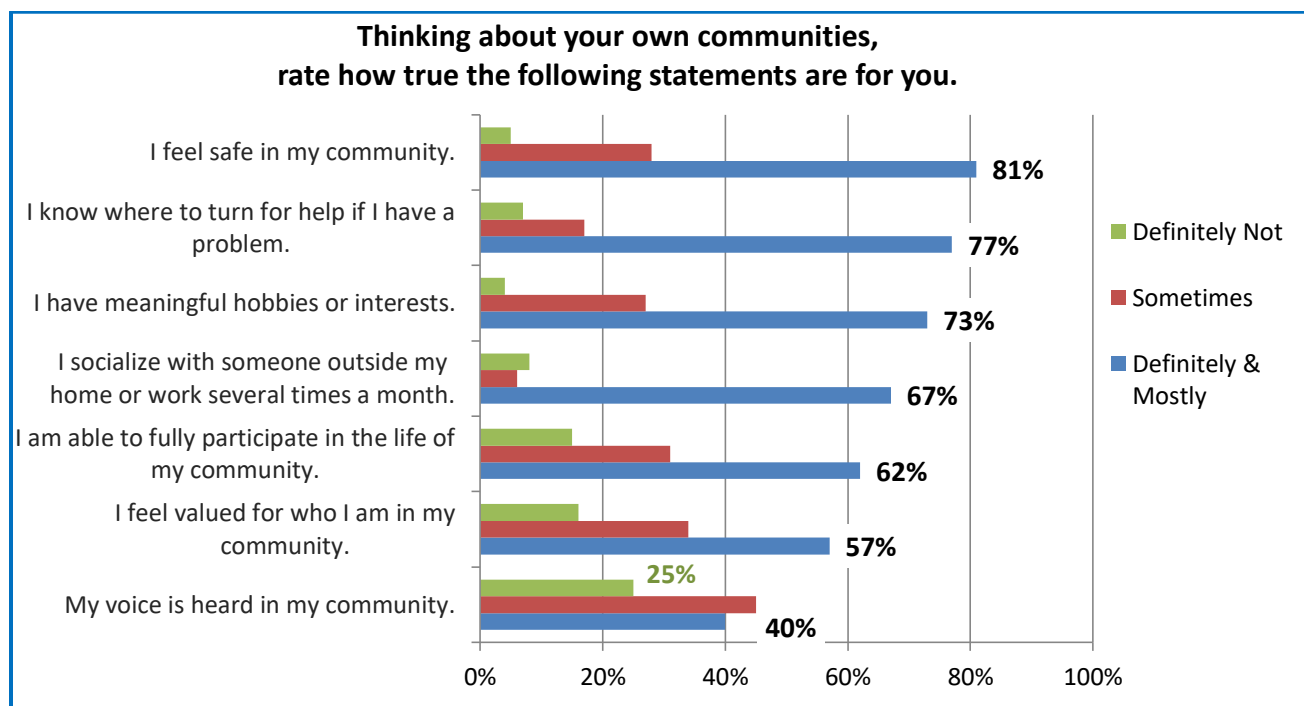
- “Nice, affordable low-rent housing – not dumps”
- “Quality Housing: If the house is of quality it is expensive.”

### Other comments:

- “You are asking perception problems and we are too hung up on letting false, uninformed, and general complaining perceptions guide our actions. The questions highlight the negatives . . . How about asking what you like?”
- “We have too many programs that help in the wrong way. . . We need to empower people to help themselves and stop giving so much away . . .”



## Community Health Survey: Social Determinants of Health



Rules of rounding followed; percentages rounded to nearest whole number. Different numbers of people answered each question; percentage sums for each statement do not equal 100%.

### Considerations

- For every age group except 45-64 years old and 75+ years old respondents, socializing outside the home was a top priority.
- *Mostly* feeling safe in their communities received top ratings by 35 – 54 years old and 65 – 74 years old respondents.
- Hobbies and meaningful interests were rated highly by 55 - 64 and 75 – 84 year old respondents.
- Respondents with incomes of \$75,000+ felt they could fully participate in their communities. Below that level respondents *Sometimes* participated or definitely did not participate.
- Income of \$125,000 was the dividing line between respondents who definitely perceived their voices were heard and those who sometimes felt they were.
- Black respondents appeared to have the greatest sense of value and community connection with high *Definitely* and *Mostly* ratings for every indicator.

# DATA

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## Community Health Survey: Social Determinants of Health

Shelbyville<sub>work</sub> good<sub>people</sub> needs<sub>live</sub>  
community<sub>family</sub> care

There were 23 comments with similar themes to the question about community wellness and protective factors. A sample of these themes follows.

### **Social Connections:**

“Work is exhausting . . . and demanding, the pay is lousy and I have to bring work home. I have a house to clean, 2 special needs children . . . and a husband with [health problems]. I have little time for myself . . . I have little time to socialize or be active in my community.”

### **Feeling Safe:**

“Shelbyville is becoming less safe. There are many rude, downright mean, dangerous, aggressive people.”

### **Community Involvement:**

“There seems to be a lot of things that are trying to be improved upon within the community which is great. However, there is a lack of involvement by the majority. I don’t think people don’t want to be involved but more the information isn’t spread well.”

“My family has always worked in local factories which don’t have schedules that allow for consistent community involvement.”

### **Value:**

“Sometimes the weight of living is very heavy and you need help. Perhaps improving on overall kindness and compassion in the community . . . would do wonders for the drug, depression and suicide problems in our community.”

# DATA

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## Community Health and Wellness Partners

### Clarity

Formerly Pregnancy Care Center, *Clarity* is a faith-based center providing limited pre-natal services, counseling, education and newborn support services.

### CVS

CVS is a full-service pharmacy. Their pharmacists provide flu and pneumonia vaccinations. They also provide tobacco cessation counseling.

### Goodwill Nurse-Family Partnership

This is an evidence-based early intervention, home-based program for young mothers with their first pregnancy through a child's 2<sup>nd</sup> birthday. Nurses work with moms for a healthy pregnancy, a healthy baby and a stable future.

### Hancock Virtual Care

This is an on-demand telemedicine clinic in Morristown.

### Healthy Families

This is a state program that does home-based healthy pregnancy and childhood development up to 3 years of age for first time mothers.

### Healthy Partners

This clinic operates one day a through Family Services and Prevention Programs to provide confidential testing and treatment for Chlamydia and Gonorrhea.

### Indiana Immediate Care

This is an urgent care clinic located on East Highway 44. They provide acute care services without an appointment as well as a range of vaccines. They also provide sports physicals.

### Jane Pauley Community Health Center

This is a Federally Qualified Health Center. They provide preventive and acute care, psychiatric care, disease management, behavioral health and medication assisted treatment for substance dependency. They accept all state, federal, and commercial insurance and have a sliding fee scale and payment plans for income-eligible patients. They provide a therapist at the Shelbyville Middle School.

# DATA

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## Community Health and Wellness Resources

### Kroger Pharmacy

This is a full-service pharmacy whose pharmacists provide flu and pneumonia vaccines.

### Morristown Pharmacy

The Morristown Pharmacy is a Medicaid full service tele-pharmacy staffed locally by a technician. Questions are answered by a pharmacist via video chat. Prescriptions are delivered to the pharmacy for pick-up. They also provide some delivery of prescriptions and supplies.

### Prompt Med

This is an urgent care clinic in Edinburgh. They provide acute care services without an appointment as well as a range of vaccines.

### Shelby County Public Health Department

The health department promotes and enforces public health laws, investigates environmental concerns/complaints, and oversees residential/commercial sewage disposal systems in the county. They provide immunizations, track communicable diseases, and serve as an educator and coordinator for health emergencies. They also provide home-based flu shots to shut-in older adults.

### VA Clinic

Veteran's outpatient health clinic provides medical care in the county versus in Indianapolis at the VA hospital.

### Walgreens

Walgreens is a full-service pharmacy whose pharmacists provide flu and pneumonia vaccinations.

### Women, Infants and Children (WIC)

The WIC clinic provides vouchers for nutritious food and formula for income-eligible and nutritionally at risk women, infants and children. They also provide breast-feeding education and support.

# DATA

## Community Health and Wellness Resources

### Allied Health

- Alcoholics Anonymous and Alanon
- 4 Assisted Living Facilities
- Beyond the Label Autism services
- Cancer Association of Shelby County
- 6 Chiropractic Offices
- 1 Community Mental Health Center
- 3 County EMS/Firefighter Stations
- 5 County Volunteer Fire Stations
- County Coroner
- 13 Dental Practices
- 1 Pediatric dental practice
- 1 Dermatology Practice
- 3 Dialysis Centers
- 5 Extended Care Facilities
- First Steps Early Intervention Program
  - Shelby County served via Columbus Point of Entry Office
- 1 General surgery practice
- 5 Gyms/Athletic Clubs
- 2 home-based pregnancy through preschool support programs
- 38+ Home Health and Hospice providers have asked to be on the Major Hospital Choice List
  - 2 General Inpatient Hospice Providers Contracted with Major Hospital
  - Inpatient hospice centers: Our Hospice (Columbus) and Franciscan Health (Indianapolis)
- 4 Massage Therapy Businesses
- Medicaid Medical Transportation
- 3 Medical Alert Companies actively serve Shelby County
- 9 Mental Health and/or Substance Abuse Practices
- Narcotics Anonymous
- 5 Non-medical home care providers contracted with CICOA for Shelby County
  - 2 non-medical home care providers have offices in Shelby County
- 1 Occupational Health Center

- 7 Optometry Practices
- 1 Oral Surgery, Limited Scope
- 1 Orthodontic Practice
- 7 Pharmacies
- 2 Physical Therapy Offices
- 1 Private Ambulance Services
- Rock Steady Boxing
- SART (Sexual Abuse Response Team)
- Shelby Senior Services

### Arts, Entertainment and Recreation

- Blue River Bowl
- Blue River Memorial Park Cross Country Course
- Blue River Trail
- Community Band and Community Choir
- First Fridays – Mainstreet Shelbyville
- Grover Museum
- Harker Family Farm & Orchard
- Meltzer Woods
- Meridian Aquatic Park and Family Center
- Morristown, Boggstown, Fairland and Flatrock Parks
- National Bike Route 35
- Pleasant View Orchard
- Rivers Edge Golf Course
- Shelbyville Parks and Recreation: 6 Parks
- Shelby County Arts Alliance
- Shelby County Fair Grounds
- Shelby County Farmers Market
- Shelby County Players
- Shelby County Special Olympics
- Shelby County Tourism
- Strand Theatre
- Studio 10 Cinemas
- Symbiosis
- Timbergate Golf Course

### Economic and Community Development

- City and County Councils
- City and County Government
- County Commissioners
- Mainstreet Shelbyville
- Shelby County Chamber of Commerce
- Shelby County Economic Development Corporation
- Shelby County Purdue Extension Service
- USDA Rural Development
- WorkOne Workforce Development

# DATA

## Community Health and Wellness Resources

### Education and Youth Development

- Advantage Shelby County
- Blue River Adult Education
- Blue River Career Programs
- Blue River Community Foundation
- Blue River Soccer
- Boys and Girls Club, Shelbyville & Morristown
- Boy Scouts/Cub Scouts
- Church youth programs
- 2 Christian schools
- 4-H
- Girls, Incorporated
- Girl Scouts
- Grover Museum
- Excel Center
- Head Start & Early Head Start
- Ivy Tech
- Landing Zone (Shelbyville Community Church)
- Opportunity Zone (1<sup>st</sup> Presbyterian Church)
- Per the FSSA Child Care Locator, in Shelby County there are
  - 3 registered ministries;
  - licensed homes;
  - 4 certified preschools
  - 2 On My Way Pre-K providers
  - 12 are Paths of Quality providers
  - 15 accept Child Care Vouchers
- Rose Hulman Emerge
- Shelby County Arts Alliance
- Shelby County Drug Free Coalition/Drug Free Shelby County
- Shelby County Public Library
- 4 Shelby County School systems
- Shelby County Special Olympics
- Youth Assistance Program
- Youth Baseball Programs

### Environmental Resources

- Master Gardeners
- Shelby County Solid Waste Management
- Shelby County Water Treatment
- Shelbyville Street Department

### Faith Based Communities

- There are at least 40 churches in Shelby County
- Many have youth programs, support programs, and food pantries
- 2 Ministerial Associations
- Church Secretaries Group

### Media

- Addison Times
- Shelbyville News
- Shelbyville Today
- WSVX

### Public Assistance and Advocacy

- Aktion Club
- Arc of Shelby County
- CASA
- CICOA
- Domestic Violence Task Force
- Food Pantries: Gleaners and Pantry Pals
- FUSE (Families United for Support and Encouragement)
- Giving Tree
- Healthy Shelby County
- Human Services, Incorporated
- Livable Communities Coalition
- Mario Hayes Bilingual Services
- Master Gardeners
- Meals on Wheels
- Red Cross
- Rupert's Kids
- Saint Vincent de Paul
- Salvation Army
- Senses (Sensory gym for young children)
- Shares, Incorporated
- Shelby County Council on Aging
- Shelby County Division of FSSA
- Shelby County Legal Aid
- Shelby County Trustees
- ShelbyGo
- Shelby Senior Services
- Turning Point Domestic Violence Wheels on the Ground

# DATA

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## Community Health and Wellness Resources

### Philanthropic

- Blue River Community Foundation
- City and County Racino Funds
- Habitat for Humanity
- Indiana Downs and Indiana Live Casino
- Major Foundation
- Rush-Shelby Energy
- SCUFFY
- Walmart

### Public Safety

- Community Corrections
- Department of Child Services
- Shelby County Bar Association
- Shelby County Emergency Management
- Shelby County Fire Department
- Shelby County Probation
- Shelby County Sheriff's Department
- Shelbyville Police Department
- Victims Assistance

### Other Civic Organizations

- Blue River SHRM
- Business and Professional Women
- Fraternal Order of Police-Lodge #84 and the FOP Auxiliary
- Helping Hands for Freedom
- Kiwanis Club of Shelbyville, Inc.
- Knights of Columbus #822
- Morristown Chamber of Commerce
- Psi Iota Xi, Beta Phi Chapter
- Rotary Club of Shelbyville
- Shelby County Builders Association
- Shelby County Farm Bureau
- Shelbyville Lions Club
- U.S. Marine Corp. Reserves Toys for Tots
- Veterans of Foreign War Post #2695

**Undoubtedly, there are more organizations that are investing in the well-being of Shelby County residents. A hallmark of Shelby County is how people come together around an idea or passion and work to give their vision life.**

# DATA

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## Information Gaps

While the *Community Health Survey* had broad representation throughout the county, there were fewer responses from the county's smaller communities and from persons of different races and ethnicities. While 96% of Shelby County identifies as Caucasian/White, nearly 10% identify as being of another race and/or ethnic group. There were also fewer respondents age 75+. Given that this is a growing population, efforts must be made to be certain they are heard and their strengths and needs understood. Concerted efforts were made to engage residents in all 4 quadrants of the county along with Shelbyville but deep representation was not achieved.

The most current health data for our county was considered in this Community Health Needs Assessment; however, published data lags behind subsequent to when data was last reported and analyzed. Ongoing review of data as it is published may precipitate course adjustment as more current data becomes available.



# DATA

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## Areas Documented, Not Targeted For Focus by Major Hospital

There are many areas of concern in our community as identified by the Community Health Survey, the secondary data, and the science-based objectives of Healthy People 2020. However, part of the process of this assessment is determining health improvement priorities over the next three years. Certainly, many of the issues are interrelated. Fortunately, these challenges are not without initiatives in the community and at Major Health Partners.

### Issues that are not the *direct focus* of the Community Health Improvement Plan (CHIP) include:

- Commuters' use of public transportation
- Motor Vehicle Collision Deaths
- Asset-Limited, Income-Constrained, Employed (ALICE) and Poverty
- Unintentional Injury Deaths
- Sexually Transmitted Infections
- Suicide
- Teen Pregnancy
- Teen Vaping and e-Cigarette Use

### Commuters' Use of Public Transportation

Commuter Connect (carpooling program) and Central Indiana Transit Authority (commuter parking at key locations) provide services into Johnson and Marion Counties – the top 2 commuter employment destinations from Shelby County. They will be promoted but will not be a focus of the CHIP.

### Motor Vehicle Collision Deaths

This is the domain of law-enforcement which has programs in addition to routine policing. There are also youth programs focused on not driving while under the influence of alcohol or other mind/mood altering substances.

### ALICE and Poverty

ALICE and Poverty are over-determined challenges that require concerted public will and effort in order to improve the self-sufficiency of these households. The CHIP addresses issues that impact the nutrition and health of these households. *Major Health Partners* has assistance programs for patients in need, ranging from prescription assistance to financial assistance for medical care. The literature emphasizes quality, affordable housing, education, skills, employment opportunities, and a livable wage as foundational to tackling this challenge.

# DATA

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## Areas Documented, Not Targeted For Focus by Major Hospital

Several organizations in Shelby County bring supports and opportunities to these low-income households. Major Health partners will gladly consider opportunities where collaboration or resources can take something to the next level for these community partners.

- **Adult Education:** Adult learners may pursue a high school diploma or equivalency, high quality industry certificates, Associate's Degree, English as a second language, or preparation for a Bachelor's Degree.
  - **Advantage Shelby County** as funding of last resort, assures any Shelby County high school graduate who meets criteria to obtain a free Associate's Degree or high quality industry certificate. <https://www.ivytech.edu/shelby-advantage>
  - **Blue River Adult Education** receives funding through Workforce Development that allows it to offer many training programs free of charge. <https://blueriveradulthood.com/>
  - **Excel Program of Goodwill Education Initiatives, Inc.** is free to students. They also provide free drop-in childcare, life coaches, and other supports to remove barriers to education. <http://www.excelcenter.org/campus/shelbyville>
  - **Ivy Tech** collaborates with the above programs in order to optimize their resources in bringing high quality training to Shelby County. <https://www.ivytech.edu/central-indiana/14612.html>
- **Food Pantries:** Ivy Tech and the Excel Center have food/toiletry pantries for their students. A list of Shelby County food pantries may be found at <https://www.shelbycountypantrypals.com/pantries/>
- **Human Services:** This is the social services hub for state and federal assistance programs such as childcare vouchers, Section 8 housing, energy assistance, etc.
- **Saint Vincent DePaul:** provides resources and a retail store for secondhand furniture, etc.
- **Salvation Army:** Free public lunches Sunday – Friday, food pantry, various social service programs and case management.

# DATA

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## Areas Documented, Not Targeted For Focus by Major Hospital

### **Unintentional Injury Deaths:**

These are not motor vehicle related deaths but rather accidental deaths, often as a result of poor decision-making. It does include accidental firearm discharge as well as falls, explosions, fires, electrocution, choking, drowning, poisoning and severe weather events. Youth enrolled in Scouts or 4-H have access to safety training. Substance misuse also results in accidental overdoses or engagement in high-risk activities. While not a direct focus of this CHIP, the MHP Emergency Department is on the receiving end of non-fatal unintentional injuries and provides education and referral to services.

### **Sexually Transmitted Infections (STI)**

Healthy Partners, Clarity, Jane Pauley Community Health Clinic and Major Health Partners physician practices offer testing, treatment and education. Healthy Partners and Clarity offer free, confidential testing to men and women.

### **Suicide**

*Major Health Partners* takes seriously its charge to provide safety for her patients. This includes safety for patients who have attempted suicide or who have suicidal ideation. The hospital provides tele-psychiatric assessments for psychiatric emergencies through the *Community Health Network* and uses the Open Bed program to access inpatient services for patients in need. *Major Hospital* has also invested in mental health services through Major Psychology. The Community Health Survey found that mental health is one of the top 3 issues medical providers discuss with their patients.

The Jane Pauley Community Health Clinic has made a major investment in behavioral health with the addition of a psychiatric nurse practitioner who also prescribes medication assisted treatment for persons with substance dependencies. They have both licensed therapists on staff and doctoral interns to provide behavioral health counseling.

Different community organizations also provide public training opportunities on suicide prevention. Major Health Partners previously has partnered to provide these trainings and will gladly consider any future opportunities to do so again.

# DATA

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## Areas Documented, Not Targeted For Focus by Major Hospital

### Teen Pregnancy

Teen pregnancy has been slowly declining in Shelby County, though it remains high. The majority of teen pregnancies has shifted to 18-19 year old women. Several community organizations provide education and services to prevent an unwanted pregnancy and for services during a pregnancy.

- *Turning Point Domestic Violence Services* continues to work toward providing education in all the county schools on healthy relationships and dating violence.
- *Clarity* (formerly *Pregnancy Care Center*) also provides healthy relationship and abstinence education in churches and some schools as well.
- *Girls, Inc.* has expanded their programming into the county's elementary schools, thus reaching more young girls with foundational empowering messages and experiences to equip girls with a strong sense of self and assertiveness skills.

Major Health Partners touches teens through Major Pediatrics and Major OB/GYN practices. Safe sexual practices and pregnancy prevention are discussed. The Community Health Assessment confirmed that youth ages 15-17 are indeed having those discussions with their medical providers.

### Teen Vaping and e-Cigarette Use

Vaping and electronic device use has increased among teens. 2019 revealed vaping to be a serious and deadly health problem for young adults. In 2019 two Major Pediatrics providers spoke to parents and teachers about the danger of the devices. The *Community Health Survey* revealed medical providers talk with young patients about the dangers of tobacco and e-cigarette use per meaningful use EHR mandate. These efforts will continue but there are also several groups who are tackling this issue.

Shelbyville Central Schools received a grant for evidence-based curriculum on alcohol, drugs, and tobacco products. Shelby County Drug Free Coalition works with the schools on prevention. They also host community forums and awareness events on a range of substance use. Through the Indiana Tobacco Prevention and Control grant, retail promotion of tobacco products, including electronic devices is assessed and reported to the public. MHP will partner and support these efforts.

# Community Health Improvement Plan

# Community Health Improvement Plan

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## Determining Focus

### **The CHIP is congruent with the mission of Major Health Partners:**

*Major Hospital's* mission is to create and deliver superior healthcare solutions by providing patients and other customers with optimal clinical and economic outcomes.

### **The guiding principles in determining the focus and implementing the CHIP include**

- Focus on environmental, systems, policy and infrastructure change strategies where possible.
- Engage in mutually strengthening activities.
- Rely on data and experts at every level to understand problems and determine course.
- Measure progress and communicate regularly with stakeholders.
- Pursue grants or leverage investments where possible.
- Embrace emergent opportunities that advance goals.

### **Borrowing from Healthy People 2020, follows are the over-arching goals of the CHIP:**

- Shelby County residents will attain high quality lives free of preventable disease, disability, injury and premature death.
- Disparities are eliminated in order to improve the health of all groups who live, learn, work, play and gather in Shelby County.
- Social and physical environments are created that promote good health for everyone.

### **What does the data tell us about Shelby County?**

#### **CHRONIC DISEASE:**

- Obesity rate continues to rise among adults and youth. As it rises, so too does Type 2 Diabetes
- Top 2 causes of death and 5 of the top 10 causes of death are weight-, diet-, and physical inactivity- sensitive: cardiovascular disease, cancer, Alzheimer's, diabetes and kidney disease.
- Top 3 causes of death and 5 of the top 10 causes of death correlate with tobacco use: cardiovascular disease, cancer, chronic lower respiratory disease, Alzheimer's, diabetes and kidney disease.
- Increase in cancer and chronic disease: Type 2 Diabetes; increased hospitalizations for heart disease and stroke. For Medicare recipients: bottom quartile of the state for COPD, Cancer, kidney disease, arthritis, stroke, osteoporosis, high cholesterol and depression.

# Community Health Improvement Plan

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## Determining Focus

### HEALTH BEHAVIORS:

- Adult smoking has been decreasing but given the County's chronic diseases – all correlated with tobacco use, continued prevention and cessation work is necessary.
- High rate of women smoking during pregnancy, low birth weight, infant mortality.
- MHP Emergency Department has experienced increase in number of alcohol poisonings, positive drug screens, and non-fatal overdoses.
- While Shelby County has exceeded the Healthy People 2020 goal for physical inactivity, given the county's top causes of death, increasing physical activity is vital.
- Per Community Health Survey, those with incomes under \$50,000 have the most barriers to being physically active.
- 40% of adults and high school age youth do not eat even one serving of fruit a day. Adults do better with eating at least some vegetables. 19% eat less than one serving daily. However, 42% of youth do not eat even one serving of vegetables a day. 80% of adults eat less than the recommended daily amounts of fruits and vegetables.

### SOCIAL DETERMINENTS:

- 27% of children under age of 18 live in food insecure households; likely ineligible for SNAP
- Food deserts in Shelbyville and Morristown. 3 high poverty census tracts in Shelbyville . 2 low-access to food census tracts that also have low access to a vehicle.
- 38% of households do not bring in enough money to meet basic cost of living in the County.
- Chronic stress and risks to children in these households. 47% of children under 6 live within the FPL percentages

### COMMUNITY HEALTH SURVEY:

- Drug abuse; mental health and substance abuse treatment
- Youth vaping; life skills for youth
- Transportation; poverty/low-income older adults
- Lack of awareness of issues and resources in Shelby County

# Community Health Improvement Plan

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The Community Health Improvement Plan for the next three years will build on work from previous years' improvement plans:

## **Objective 1: Promote and support access to healthy food, in particular fruits and vegetables.**

Aligned with national and state goals:

### **Healthy People 2020 goals:**

- Increase fruit consumption by 1/2 cup daily for every 1,000 calories; vegetables by 1 cup daily per every 1,000 calories
- Eliminate child and household food insecurity
- Increase access to retail establishments selling a variety of nutritional food.
- Increase prevention behaviors for persons with Pre-diabetes and Type 2 Diabetes (diet and exercise)
- New Breast Cancer cases: 41 per 100,000 adult population (14 or fewer new cases in Shelby County)
- Colorectal Cancer: 46 cases or fewer per 100,000 adult population (15 or fewer cases in Shelby County)

### **Indiana State Health Assessment and Improvement Plan**

- Reduce diabetes mortality from 26 per 100,000 in 2016 to 25 per 100,000 in 2021
- Increase the number of SNAP participants utilizing vouchers at Farmers Markets
- Increase the number of WIC participants who redeem fruit and vegetable vouchers [at farmers markets, road side stands]
- Increase the number of fresh food options in Indiana

### **Indiana's Comprehensive Nutrition and Physical Activity Plan 2010 – 2020 goals.**

(2009 data used for following goals)

- Increase number of farmers markets in low income – low access to food areas
- Increase number of farmers markets that accept SNAP
- Increase the percentage of adults who eat the recommended amounts of fruits and vegetables per day from 21% to 24% by 2020.
- Increase the percentage of high school students who eat the recommended amounts of fruits and vegetables per day from 16% to 21% by 2020.
- Decrease the percentage of adults who are obese from 30% to 25% by 2020.
- Decrease the percentage of high school students who are obese from 13% to 10% by 2020.



# Community Health Improvement Plan

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- **Support and promote access to healthy food, especially fruits and vegetables**
  - Community/raised bed gardens
  - Mobile farmers market
  - Shelby County farmers market
  - Healthy menu options in locally owned restaurants
  - Blue River Café food rescue
  - Pilot food insecurity assessment at health clinic
  - Healthy options at food pantries
  - Targeted pantry at Excel Center
  - Assess pantry needs at Blue River Adult Ed
  - Pursue fresh produce with Dollar General on west side
  - Pursue fresh produce market at MHP during growing season
  - Develop Local Food Council by end of 2022
  - Emergent opportunities that advance this objective
  - Support work of HSC/HSC Healthy Eating Action Team

## Community Partners:

- |                                       |                                |
|---------------------------------------|--------------------------------|
| ○ Blue Ridge Heritage Farm            | Harker Family Farm             |
| ○ Shelby County Farmers Market        | Mainstreet Shelbyville         |
| ○ Master Gardeners                    | FSSA                           |
| ○ Shelby Senior Services              | WIC                            |
| ○ CICOA                               | SCCOA                          |
| ○ Cow Palace                          | Grandma's Pancake House        |
| ○ Pantry Pals                         | Gleaners                       |
| ○ Human Services, Inc.                | Churches with food pantries    |
| ○ Excel Center                        | Blue River Adult Education     |
| ○ Salvation Army                      | MHP Blue River Cafe            |
| ○ Jane Pauley Community Health Clinic | Shelbyville Parks Department   |
| ○ Charles Major Manor                 | First Presbyterian Church      |
| ○ Builders Lumber                     | HSC Healthy Eating Action Team |

# Community Health Improvement Plan

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## Objective 2: Promote and support physical activity across the lifespan

Aligned with national and state goals:

### Healthy People 2020

- Physical Inactivity: 32.6% or fewer per 100,000 population (*11,194 or fewer adults in Shelby County*)
- Obesity: 30.5% or fewer of the adult population (*10,091 or fewer adults in Shelby County*)
- New Breast Cancer cases: 41 per 100,000 adult population (*14 or fewer new cases in Shelby County*)
- Colorectal Cancer: 46 cases or fewer per 100,000 adult population (*15 or fewer cases in Shelby County*)

### Indiana State Health Assessment and Improvement Plan

- Decrease the percentage of adults who report not meeting the aerobic recommendations of 150 minutes per week of moderate activity from 44.1% in 2015 to 43.3% in 2021
- Increase the number of built environment plans and policies adopted to encourage physical activity
- Reduce diseases of the heart from 180.6 (2016) per 100,000 to 178 per 100,000 by 2021
- Reduce diabetes mortality from 26 per 100,000 in 2016 to 25 per 100,000 in 2021

**Indiana's Comprehensive Nutrition and Physical Activity Plan 2010 – 2020 goals.** (used 2009 data for the following goals)

- Decrease the percentage of adults who are obese from 30% to 25% by 2020.
- Decrease the percentage of high school students who are obese from 13% to 10% by 2020.
- Increase the percentage of adults who meet the recommended amounts of physical activity per day from 64% to 68% by 2020.
- Increase the percentage of high school students who meet the recommended amounts of physical activity per day from 41% to 55% by 2020.
- **Support and promote physical activity across the life span**
  - Benches installed along major pedestrian pathways in conjunction with City of Shelbyville (national standard)
  - Landscaping along benches on Intelliplex & Progress Pkwy
  - Distance markers on Progress Pkwy/Lee Blvd in conjunction with City of Shelbyville
  - Nine13 Kids Riding Bikes in elementary & middle schools – leveraging BRCF Benefactor for Kids Building Bikes
  - Nine13 Kids Riding Bikes at community events
  -

# Community Health Improvement Plan

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## Physical Activity Across the Lifespan Continued

- Bicycle safety classes at SC elementary schools & St. Joseph elementary school; coordinated with SPD & schools
- Task force in coordination with the City to develop & implement campaign for bike/pedestrian/vehicle safety in conjunction with NBR 35 and future bike lanes in City
- Bike/pedestrian/vehicle safety campaign
- Completion of public art along Lee Blvd (grant funded)
- Complete bicycle sculpture installation at NBR 35 comfort station on Miller Ave
- Survey to assess awareness of free or low-cost physical activity opportunities in Shelby County
- Support runs/walks/cycling & other physical activity opportunities
- Pilot provider walking prescription through Disease Management and Jane Pauley Community Health
- Buddy or neighborhood walking program
- Embrace emergent opportunities that advance this objectives
- Support work of HSC/HSC Active Living Action Team

## Community Partners

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| ○ Shelbyville Parks Dept.       | City of Shelbyville                 |
| ○ Shelbyville Street Dept.      | Master Gardeners                    |
| ○ Nine13 Sports                 | Blue River Community Foundation     |
| ○ Shelbyville Police Dept.      | Shares, Inc.                        |
| ○ MHP                           | Jane Pauley Community Health Center |
| ○ HSC Active Living Action Team |                                     |

# Community Health Improvement Plan

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## Objective 3: Promote and support tobacco use prevention, reduction and cessation

Aligned with national and state goals:

### Healthy People 2020

- Lung Cancer Deaths: 45.5 deaths or fewer per 100,000 adult population annually (*15 deaths in Shelby County*)
  - Smoking: 12% or less of the adult population (*3,970 or fewer Shelby County adults*)
  - Exposure to Secondhand Smoke: Children age 3 – 11 by 47%; Children age 12 – 17 by 41%; Adults by 33.8% (state establishing baseline)
  - Increase tobacco screening and counseling in healthcare settings
  - Women Smoking During Pregnancy: 1.4% of pregnant women \*(*around 7 or fewer women*)
  - Low Birth Weight: 7.8% or fewer live births weighing less than 5lbs. 8 oz. per 1,000 live births annually (*around 35 or fewer births in Shelby County*)
  - Infant Mortality: 6.0 deaths per 1,000 live births. \*(*around 3 or fewer deaths*)
  - Pre-term Births: 9.4% per 1,000 live births. \*(*around 5 or fewer pre-term births*)
- \*Estimate based on the number of live births in 2017, assuming 1 live birth per pregnant woman: 499 births*

### Indiana State Health Assessment and Improvement Plan

- Reduce infant mortality from 7.5 per 1,000 live births in 2016 to 7.0 per 1,000 live births by 2020 (*4 or fewer deaths for Shelby County based on 2017 births*)
- Reduce the number of women who smoke during child bearing years from 19.6% in 2016 to 15.0% in 2021 (*23% decrease*)
  - Partner with primary care, maternal and child health providers and organizations statewide, such as WIC, OB/Gyn providers, and FSSA family outlets to provide and promote tobacco treatment resources for women of child-bearing age
- Decrease percentage of mothers receiving Medicaid who smoke during pregnancy from 23.4% in 2016 to 20.0% by 2021 (*15% decrease*)
  - Partner with primary care, maternal and child health providers and organizations statewide, such as WIC, OB/Gyn providers, and FSSA family outlets to provide and promote tobacco treatment resources for women of child-bearing age
- Decrease smoking among all Indiana adults aged 18 years and older from 21.1% in 2016 to 17.0% in 2021 (*19% decrease*)
- Educate stakeholders on the need for comprehensive smoke-free air protections, including e-cigarettes and devices, that covers workplaces and workers
- Increase collaboration with chronic disease health care providers to raise awareness of secondhand smoke exposure within chronic disease management

# Community Health Improvement Plan

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## Indiana Tobacco Control Strategic Plan 2020

- Adult smoking: 18% of adult population or less by 2020
- Women Smoking during Pregnancy: 8% of pregnant or less women by 2020
- Increase reach of Indiana Tobacco Quitline among adults using tobacco products: 2% by 2020
- Increase the number of health care systems that have integrated the Indiana Tobacco Quitline referral into Electronic Medical Records or Electronic Health Records: 32 systems by 2020
- Increase the proportion of the population that is protected from secondhand smoke indoors by law that covers all workplaces, restaurants, bars, membership clubs and entertainment venues (comprehensive)
- Decrease youth e-cigarette and vaping: High school youth by 18%
  
- **Support and promote tobacco use prevention, reduction and cessation**
  - Smoking cessation at Excel Center
  - Comprehensive Smoke Free Air Ordinance to make worksites smoke-free
  - Vaping and e-cigarettes included in smoke free policies at worksites, government, schools, etc.
  - Fulfill deliverables of ITPC grant
  - Smoke free signs where children gather: bus stops, playgrounds, park
  - Baby and Me Smoke Free
  - Messaging & programming through schools to reduce youth e-cigarette and vaping
  - Enroll all MHP providers as preferred providers for Indiana Tobacco Quitline
  - Expand community stakeholders trained in tobacco cessation
  - Support work of HSC/HSC Tobacco-free Action Team
  - Embrace emergent opportunities that advance this objective

## Community Partners

- |                           |                              |
|---------------------------|------------------------------|
| ○ City of Shelbyville     | ITPC                         |
| ○ MHP – RTs               | MHP Baby and Me Tobacco Free |
| ○ ER Counseling           | Clarity                      |
| ○ MHP – Smoking Cessation | Excel Center                 |

# Community Health Improvement Plan

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## Community Partners continued

- Goodwill Nurse-Family Partnership Healthy Families
- Shelby County Drug Free Coalition – Drug Free Shelby County
- Shelby County schools Shelbyville Parks Department

## Objective 4: Promote and support engagement of minority diverse populations in Shelby County

**“Of all forms of inequality, injustice in health care is the most shocking joined by inhuman.” Rev. Dr. Martin Luther King, Jr.**

Health and well-being disparities exist in Shelby County. Some of these disparities are noted in the CHNA. Healthy People 2020 and the Indiana State Health Improvement Plan note disparities and goals for improving the health of diverse populations. In Shelby County, the first step is to build a coalition in an environment of safety, sensitivity, and support. Only when there is increased awareness, visibility, and voice can specific health disparities or sensitivities be addressed

- **Support and promote engagement of minority diverse populations**
  - Capacity building
  - Community awareness events
  - Logo adopted
  - Using Age-Friendly or other model adopted by MHP, annually and methodically develop system approach to enhance care for a diverse patient Pop.
  - Support work of HSC Diversity Action Team as an operational arm of the Community Health Improvement Plan.
  - Embrace emergent opportunities that advance this objective

# Community Health Improvement Plan

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## Community Partners continued

- Currently, partners are primarily individual citizens
- Mainstreet Shelbyville – First Fridays
- Healthy Shelby County
- MHP
- Ivy Tech
- Saint Joseph Catholic Church

## Objective 5: Promote and support efforts to expand mental health and substance abuse services

Aligned with national and state goals

### Healthy People 2020

- Suicide: 10.2 deaths or fewer per 100,000 total population annually (*5 or fewer persons in Shelby County*)

### Indiana State Health Assessment and Improvement Plan

- Increase the number of persons who were treated in an emergency department for an opioid overdose who then access treatment
- Decrease stigma of substance use disorder by spreading awareness with the Next Level Recovery Know the “O” Facts website and resources
- Increase the availability of supportive community services such as access to food and housing
- Partner with Local Coordinating Councils for county and community level solutions
- Promote the use of Recovery Support Specialists and peer recovery coaches as part of treatment teams and on-call response to overdoses in emergency departments (EDs)

# Community Health Improvement Plan

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- **Support and promote expanded mental health and substance use services**
  - Project POINT
  - Systems of Care
  - Support efforts to develop & sustain comprehensive list of community resources
  - Equip MHP Referral Center and other points of entry with current resource list
  - Embrace emerging opportunities that advance this objective
  - Promote positive & practical mental wellness and brain health messages in social media

## Community Partners

- Community Networking group    Healthy Shelby County
- Jane Pauley Community Health    MHP Referral Center
- (The aforementioned groups collectively have over 200 community stakeholders.)

## Objective 6: Promote and support targeted community health improvement

### Indiana State Health Assessment and Improvement Plan

- Reduce emergency department visits for Indiana residents with the primary discharge diagnosis of asthma from 47.3 per 10,000 in 2015 to 44 per 10,000 by 2021 (*per 2018 census estimate, 196 visits or fewer annually in Shelby County*)
- Increase the number of females 50-75 years old who have had a mammogram in the past two years from 72.5% to 81.1% in 2021
- Increase the number of 50-75 years old who have had a colonoscopy, flexible sigmoidoscopy, or blood stool test within the appropriate time frame from 64.65% to 80%
- Increase the number of adults 55 to 80 years old who have a 30-pack-per-year smoking history and currently smoke or have quit within the past 15 years who are screened for lung cancer
- Encourage the use of motivational interviewing and brief action planning in clinical settings



# Community Health Improvement Plan

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- **Support and promote targeted community health improvement**
  - Share the CHNA and CHIP broadly to inform the work of community partners, government, organizations, and decision makers.
  - Explore ways of communicating opportunities for engagement in community health work
  - Age-friendly or similar system wide model for sensitive and informed care of older adult patients at MHP
  - Community Dementia-Friendly designation
  - Targeted health promotion at Excel Center
  - Annual Get Healthy Here Farmers Market event
  - HSC School wellness committee representation
  - Targeted health promotion for consumers at Shares, Inc.
  - MHP community health promotion
  - Community training opportunities such as for Motivational Interviewing, ACE and other topics
  - Asthma task force
  - Consider applying for Robert Wood Johnson Culture of Health Prize in 2021
  - Supporting and promoting community groups who are advancing the objectives of improved community health
  - Embracing emergent opportunities that advance this objective

# Community Health Improvement Plan

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## Written Comments

No written comments were received on the 2016-2019 CHNA and CHIP.

## Accomplishments of 2016-2019 CHNA and CHIP

**Over-arching Focus:** Improving community health by impacting key areas correlated with chronic disease prevention, reduction, optimal management:

- 1) Healthy Eating
- 2) Active Living
- 3) Tobacco Prevention and Cessation
- 4) Community Building

**Over-arching Approach:** Engage multi-sector community partners in the collective work of

- 1) Increasing awareness of healthy living opportunities and
- 2) Working on policy, systems, infrastructure, and environmental change strategies rather than programs
- 3) Connecting the work of multiple sectors and groups

**Focus Area: HEALTHY EATING – Foundational to Chronic Disease Prevention and Optimal Management**

### Community Gardens:

- 5 - 9 handicap-accessible gardens since 2015
- Serving older adults, persons with Intellectual and Developmental Disabilities, youth and families associated with the programming of a downtown church, Southwestern food pantry, and neighborhoods in food desert
- Hundred of pounds of produce donated to area pantries
- Residents beyond the Shelbyville neighborhoods also picked produce
- Partnership: 2017 Leadership Shelby County, Blue Ridge Heritage Farm, Shelby County Drug Free Coalition, MHP, Habitat for Humanity, City of Shelbyville, Healthy Shelby County, Master Gardeners

### Farmers Market:

- Promoting & subsidizing Shelby County Farmers Market through Market Bucks and doubling SNAP (food stamp) buying power up to \$20
  - 2018 – 19: Doubling SNAP up to \$20
  - \$525 Double Dollar investment for \$1050 spent at market
- Market located in food desert with low access to vehicle
- \$7,300 MHP investment over the last 5 years
  - Leveraging additional \$1,900 from Mainstreet Shelbyville & downtown businesses

## Healthy Eating Continued

- 2019: WIC distributed Farmers Market vouchers at the market, thereby increasing use of this resource
- Partnership: MHP, Mainstreet Shelbyville, Shelby County Farmers Market, City of Shelbyville, Healthy Shelby County, Purdue Extension, WIC, FSSA

### Mobile Farmers Market:

- **2018 Pilot with Brandywine Creek Farms:**
  - 5 locations in 2 census tracts of downtown food desert, senior low-income apartments, and Morristown
  - Subsidized to make food accessible and affordable
    - MHP Disease Management, Pediatrics & Jane Pauley distributed 75 vouchers to persons assessed as low-income, challenged with health & food access issues.
    - Recipients able to purchase for \$1 the pounds of produce per week recommended for their household size by the USDA.
  - Well-received, especially by older adults; neighborhood residents increasingly shopped at the market
  - Primary complaint: lack of variety.
  - Ongoing challenge: Vendor persisted in not providing promised data regarding pounds of food sold
  - Partnership: MHP, Shelbyville Parks Department, City of Shelbyville, Charles Major Manor Senior Apartments, Blue Ridge Terrace Senior Apartments, Jane Pauley Community Health Center, Shelby Senior Services, Hancock Regional Health
- **2019 with Harker Family Farms and Orchards**
  - Local grower with experience in markets
    - Variety but not the volume of last year's vendor
    - Additional produce purchased through another grower
    - 95 Vouchers distributed
    - 3,000 lbs vegetables distributed
  - New location added on west side of Shelbyville
  - Accepted WIC and Senior Farmers Market vouchers
  - Partnership: MHP, Shelbyville Parks Department, First Presbyterian Church, Builders Lumber, Charles Major Manor, Blue Ridge Terrace, Jane Pauley Community Health, Family Social Services Association, Healthy Families, Shelby Senior Services, Human Services, Healthy Shelby County, community service providers

## Healthy Eating Continued

### Healthy Menu Options

- **Menu in non-chain, locally-owned restaurant identifying healthy options per dietitian**
  - Senior meal voucher recipients *and* public have selection of nutritionally balanced meals
    - Wellbeing Meals – modeled after Blue River Café
    - Blue River Café – current senior meal voucher location
    - Get Healthy Here icon on menu
  - Discussions happening with a second restaurant expand to more restaurants with the Get Healthy here icon noting healthier menu options
  - Partnerships: Grandma’s Pancake House, SCCOA, Shelby Senior Services, CICOA, MHP, Healthy Shelby County
- **Nutrislice App** provides nutrition information about food
  - Blue River Café’
  - Available through Chartwell’s food service contracted by all county schools except Southwestern & private schools

### Food Pantries

- Laid ground work for providing resources at pantries such as smoking cessation, nutrition and food preparation, other community resources
- Working on promoting healthy food donations/food drives – using Shelby Senior Services as a model
  - Identifying healthy options in pantries
- Challenges: data collection for better understanding of needs
  - Anecdotally, primary users are situational vs. relying on the pantry for food
  - Identifying food options for homeless persons & others without infrastructure to prepare food
- Launched 2019 Food pantry at Excel Center modeled after Ivy Tech’s
  - Arranged for hot meals to be acquired from Salvation Army for children in drop-off day care and their parents
  - Arranged for preschool children of student parents to participate in Discovery Preschool
- Partnerships: Pantry Pals, Gleaners, area food pantries, Healthy Shelby County, Shelby Senior Services, Shelby County Drug Free Coalition, HSC Healthy Eating Action Team, Purdue Extension, MHP, Anthem

### Healthy Shelby County Healthy Eating Action Team (HEAT)

- Action Team’s Mission: connect and advance efforts to improve healthy eating opportunities and food security in Shelby County
- Meets monthly; 20 members

### Food Rescue and Meal Distribution

- 2019: Leg work for packaging left-over MHP cafeteria food that has met Indiana State Health Department standards for properly maintained temperature, storage and expiration date
  - Bulk for congregant meal site of Salvation Army
- Champion: Dr. Andaya

## Healthy Eating Continued

### Seniors and Vulnerable Populations

- 2018: Mom's Meals provided for discharging patients for whom accessing food is a barrier during their initial recovery.
- 2018: SSS meal delivery to seniors in Fairland area: 11 households, 40 miles, 2 hours to deliver
- 2019: Senior food boxes for the winter when weather prohibits meal delivery in this rural area
- Expanding knowledge and availability of food retailers that accept SNAP and WIC

### Focus Area: PHYSICAL ACTIVITY - Foundational to Chronic Disease Prevention and Optimal Management

#### Walking Infrastructure and Promotion:

- **National Standard: sheltered benches along pedestrian paths**
  - 2018: 8 accessible benches installed – Progress Pkwy and Intelliplex Drive
  - 2019 installment delayed. Will be completed in 2020: 6 more on Lee Blvd and Intelliplex
    - BRCF grant for benches not on Intelliplex
- **2016-17 National Walking Days**
  - 25 – 41 school, business, organization, government, private group walks
  - Average of 4, 600 participants each walk
- **2017-2019 Walking Wednesdays**
- Partnership: MHP, Ashford Place Health Campus, Walker Place Senior Living
  - 52 different walkers 2017 - 2019
  - 2019: Dr. Howard leads walk on 1<sup>st</sup> Wednesdays
  - 2019: Partnership with MHP employee health to incentivize walking
  - Spawned walking groups: Loper Commons and Harrison St. Apartments
- **BRCF Investment: New parks with walking paths for Morristown, Flat Rock, and Fairland**
- **Healthy Shelby County Active Living Action Team**
  - Mission: make physical activity accessible, affordable, appealing, and attainable for all in Shelby County
    - Meets monthly; 12 members
  - Focus: Infrastructure and Information
    - Brochure – walking opportunities throughout Shelby County
    - Active Living Toolkit
    - Pop-up Chalk Art Competition for Blue River Trail
    - Quarter mile markers installed on 3 Intelliplex Trails
    - Pop-up Chalk Art Competition for new markers
      - Champion: Dr. Howard

## Biking Support and Promotion

- **Nine13 Sports**
  - *Kids Riding Bikes*: Digital bicycles – same equipment used by professional cyclists
    - Rotating annually through county elementary and middle schools
  - 2016 – 19: MHP investment of \$37,500
    - Leveraged an additional \$22,500 through Nine13 Sports’ grants and corporate sponsors, increasing number of schools hosting Kids Riding Bikes annually
    - 2019 Leveraging an additional \$10,000 via a donor advised fund at BRCF for Kids Building Bikes
  - *Kids Building Bikes*: piloted in April at Girls, Inc. and Boys and Girls Club
    - Youth learn how to build a bike, maintain/repair a bike and then keep the new bike at the end of the program
    - Predicated on *Kids Riding Bikes* in the schools
  - Nine13 Sports’ goal: \$50,000 annual investment in Shelby County by 2020 through MHP, BRCF, and other corporate investors
  - Partnership: MHP; BRCF; county elementary and middle schools; Girls, Inc. and Shelbyville Boys and Girls Club
  
- **Complete Streets Policy** became part of City of Shelbyville updated Comprehensive Plan
  
- **Public Art:**
  - A role of public art is to call attention to something else: pedestrian paths and Blue River Trail
  - 2019: Bicycle Sculpture – Blue River Trail
    - Installation in 2020
    - BRCF grant – partnership with Shares/Healthy Shelby County/Shelbyville Central Schools
  - 2019: Pop-Up Chalk Art:
    - County high schools competition for wings installed in long-lasting chalk on Blue River Trail and Intelliplex Trails
    - Partnership: Healthy Shelby County Active Living Action Team, Ashford Place Health Campus, Shelby County Arts Alliance
  - 2018: Functional Art: Outdoor musical instruments at Blue River Memorial Park
    - BRCF grant: Partnership - City of Shelbyville, Shelbyville Parks Department, Healthy Shelby County

## Focus: TOBACCO FREE

### Grants:

- **Baby and Me Tobacco Free- Foundational to Chronic Disease Prevention and Optimal Management**
  - OB Maternal Child Navigator runs program which incentivizes smoking cessation among pregnant women and through the first year of the baby's life
    - Provides smoking cessation counseling for household members, too
    - Partnership with Goodwill Nurse-Family Partnership provided cessation training necessary to run the program
  - MHP Foundation: fund-raising campaign to support the program beyond the grant – requirement of the grant to show community support
  - Partnership: MHP, Healthy Shelby County Tobacco Free Action Team, Goodwill Nurse-Family Partnership, Clarity, Healthy Families, WIC
  
- **Indiana Tobacco Prevention and Cessation**
  - Partnership of Shelby County Drug Free Coalition/Drug Free Shelby County and Healthy Shelby County
  - Awarded 2<sup>nd</sup> ITPC grant in 2 years.
    - 2017 – 2019: \$50,000
    - 2019 – 2021: \$90,000
  - Drug Free manages the grant and the Healthy Shelby County Tobacco Free Action Team's goals are aligned with the deliverables of the grant
  
- **Shelby County Drug Free**
  - CoVita CO2 smokerlyzers: gives data on smoke in lungs and in unborn child
  - Healthy Shelby County purchased 2 with grant
    - One used by MHP Respiratory therapy – smoking cessation in Family and Internal Medicine
    - One for community use

### Healthy Shelby County Tobacco –Free Action Team

- Mission: to mobilize diverse resources in order to change tobacco related behaviors, perceptions and policies in Shelby County.
  - Action Team meets monthly; 17 members
- 2016-2018: 5 multi-sector community meetings to educate and engage
- 2019: City Ordinance strengthened smoking ban at bus stops and at city parks
  - Partnership: Citizen champion, Mayor of Shelbyville, Healthy Shelby County Tobacco-Free Action Team, Shelbyville City Council, American Lung Association, and Shelbyville Central Schools
- 2018 and 2019: Tobacco retail surveys re: location of and marketing strategies for tobacco and e-cigarettes
- Discussions with multi-unit housing units for going smoke-free
- Worked with workplace, government and school tobacco policies include e-cigarettes
- Worked with physician practices to increase Quitline use

## Tobacco Continued

- Laid ground work with Excel Center for:
  - Smoking cessation counseling and support
  - Free Nicotine Replacement Therapy as needed
  - Students and instructors
  - Partnership: MHP, Healthy Shelby County, Excel Center, Goodwill Nurse-Family Partnership

## Community Tobacco Prevention and Cessation

- Beginning 2019-2020 term: Shelbyville Central Schools new grant for Drug Awareness and Prevention curriculum that includes tobacco and vaping

## Focus: BEHAVIORAL HEALTH (Mental Health and Substance Abuse)

- 2018 implemented Guide Med at MHP – Increased oversight of patients prescribed narcotic, opioid, stimulant medications
- 2019 Psychiatric Nurse Practitioner joined Jane Pauley Community Health Center
  - Patients do not have to be a Jane Pauley medical patient to access psychiatric care
  - Also began providing Medication Assisted Treatment for substance use disorders
- Suburban Hospital Association partnership for psychiatric NPs to serve MHP, primarily pediatric patients
- 2019 Faith based recovery program launched at Cornerstone Christian Fellowship
- Addition of a women’s half-way house to the already established men’s halfway house

## Focus: COMMUNITY BUILDING

### City of Shelbyville – Health and Wellness Infrastructure

- Blue River Trail ongoing expansion
- Sidewalks in key areas:
  - Street Department prioritize sidewalk rehabilitation in low income/low food access/low access to personal vehicle census tract that runs north along river road, east along Vine St., west along Hale Rd. and south along west Taylor St.
  - Sidewalk for west side of Shelbyville for safe access to Dollar General
  - Livable Communities revolving loan program for sidewalk rehabilitation now part of annual Street Department budget: street resurfacing now includes sidewalk rehabilitation in impact neighborhoods
  - Prioritization and methodical implementation of Master Pedestrian and Bike Plan
- Comprehensive Plan Up-date includes
  - Complete Streets Policy
  - Inclusion of STARS/LEEDS Sustainability Criteria that includes determinants of health:
    - Housing Affordability
    - Environment
    - Livable Wages
    - Local Economy



## City of Shelbyville Continued

- Aging
- Diversity
- Poverty Prevention & Alleviation
- Human Services
- Equity
- Health Systems
- Active Living
- Community Health
- Food Access & Nutrition

### **Collective Impact – Excel Center**

- Current Investors:
  - MHP currently partners in CMA program
  - Early Learning Shelby County – coordinates early childhood internships at drop-off child care
- Model in Indianapolis of Goodwill Nurse –Family Partnership having “office hours” monthly
- Groundwork laid to bring this model to Shelbyville Excel Center
  - Bring wrap-around services to a population that is demonstrating motivation to improve their lives and have demonstrated need – possibility of generational impact
  - Tobacco cessation
  - Targeted health fairs for 18 – 25 year olds
  - Partnership: Excel Center, Goodwill Nurse-Family Partnership, MHP, Jane Pauley Community Health, Shelby Senior Services, Community services/resources

### **MHP Community Health Promotion**

- 2017 – 2019 Get Healthy Here Farmers Market Event – Reach: 2150
- 2017 – 2019 Health Screenings – Reach 834
- 2017 – 2019 Relay for Life – Reach 600
- 2017 – 2018 Women’s Health Event – Reach: 430
- 2017 – 2019 Go Red Event – Reach 356
- 2019 Colonoscopy Promotion – Reach: 355 persons
- 2018 – 2019 Bump to Baby – Reach 228 adults
- 2017 - 2019 – Skin Cancer Screening – Reach 294
- 2017 and 2019 GHH Hemocult Screenings – Reach 117; 14 completed test
- 2017 – 2018 Bone Health Event – Reach 80
- 2017 -2019 Healthcare Decision Day – Reach 75
- 2017 – 2019 Healthy Living, Healthy You – Reach 55
- 2017 – 2019 Pre-Diabetes – Reach 68
- 2017 – 2019 Lung Cancer Screening – Reach 41 (Awaiting updated 2019 numbers)
- 2017 – 2019 Life Steps – Reach 35
- 2017 – 2019 Breast Imaging Seminar – Reach 30
- 2017 – 2019 Life Steps – Reach 34
- 2018 Men’s Health Madness – Reach 28

# CHNA Implementation Plan

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## Conclusion

**The priorities and strategies of the CHNA Implementation Plan address**

### **Reach and Prevalence:**

- The entire county of Shelby County and targeted neighborhoods and communities
- Community needs identified in the survey, interviews and through the health data
- Community health needs that are congruent with state and national initiatives
- Vulnerable populations and serious disease and chronic health conditions

### **Effectiveness of Interventions:**

- Targeted needs that have a high likelihood of improving health for populations experiencing health disparity
- Partnerships and processes for sustainability of health promotion and health management programs
- Short-term benefit and capacity building for long-term outcomes

### **Major Hospital and Partners Capacity:**

- Demonstrated commitment
- Champions for new initiatives
- Necessary leadership and resources available to launch new initiatives
- Ability to pursue grants and additional funding

**A primary partner in the CHNA Implementation Plan is the *Healthy Shelby County Coalition*, the county's CDC Healthy Communities initiative. Alongside Major Hospital, the *Healthy Shelby County Coalition* is organized to take action on the objectives of the Community Health Improvement Plan. The implementation of this plan is reliant on much collaboration. The health of Shelby County depends on multi-sector partnerships in the work of improving the health and wellness of the county's residents. Health is everyone's business.**

The objectives and strategies in the plan address prevention, reduction, and optimal management of chronic disease and access to health promotion and care.

Each year there will be a general review of processes and activities and a report made to the *Major Hospital Board of Directors*. Thoughtful assessment of success and failures, additional IRS definitions, emerging health data, and emergent opportunities may necessitate course redirection.

# Comments and Inquiries

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The Community Health Needs Assessment and Implementation Plan will be available on-line at <http://www.mymhp.org>.

Please address written comments on the CHNA and Implementation Plan and requests for a paper copy of the CHNA to

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