




## **ABSTRACT**

This Community Health Assessment is a systematic collection, assembly, analysis, and dissemination of information about the health of our community. It highlights major health and social issues affecting the health status and quality of life in Harrison County.

# **COMMUNITY HEALTH ASSESSMENT 2.0 2019**

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1.0	Draft Review	04/16/2018	L. Cline
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## **Acknowledgements**

A project of this scope would not have been possible without the support and meaningful participation of Harrison County residents.

Harrison County General Health District (HCGHD) conducted the county health assessment by using questions derived from members of the Harrison County Community Health Improvement Team following NACCHO's MAPP Process. HCGHD also played a key role in convening steering committee meetings. Funding for this assessment was provided by the Ohio Department of Health and the Harrison County General Health District.

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Harrison Hills City School District  
Harrison County Department of Job and Family Services  
Mental Health Recovery Board of Belmont, Harrison, and Monroe Counties  
Jefferson, Harrison, Carroll and Belmont Counties Help Me Grow  
Ohio State University Extension, Harrison County  
Harrison County Family and Children First  
Cross Roads Counseling Services  
Southeast Healthcare Services  
Harrison Community Hospital

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## Executive Summary

A Community Health Assessment (CHA) allows the local public health system to periodically evaluate the needs of the community and subsequently via a Community Health Improvement Plan, set goals to address identified opportunities to improve community health outcomes. In Harrison County, a CHA has been commissioned by local public health every four years since 1995. Moving forward, the CHA will be completed every three years to align with Ohio Department of Health (ODH) requirements.

Funding for this CHA was provided by the ODH through Accreditation funding and the Harrison County Health District (HCGHD). The HCGHD was charged with leading steering committee meetings, data collection and analysis, and completing a CHA report for the county.

A nationally recognized process known as MAPP (Mobilizing for Action through Planning and Partnerships) was used to complete the assessment. The first 4 steps of the MAPP process comprise the CHA and include: 1. Organize for Success, 2. Visioning, 3. Four MAPP Assessments and 4. Identifying Strategic Issues. From the completion of these four steps a steering committee was formed, a vision statement and values were selected, data was collected from existing sources and community surveying (paper, online, and focus groups), and all the information was reviewed to select strategic issues.

The strategic issues identified were:

1. Mental Health & Substance Abuse
2. Obesity
3. Chronic Diseases

## Introduction

### Purpose

The purpose of the Community Health Assessment (CHA) was conducted to fulfill several goals:

- To examine the current health status of Harrison County as compared to the state;
- To explore the disparities for sex, race, and age within current health statuses where available; and,
- To identify community strengths, forces of change, and gaps in information.

In Harrison County, a CHA has been commissioned by local public health every four years since 1995. Moving forward, the CHA will be completed every three years to align with Ohio Department of Health (ODH) requirements.

This CHA was developed through a collaborative process of collecting and analyzing data, highlighting areas for improvement, garnering resources and setting the stage for the community to adopt priorities, policies and develop plans to address community health outcomes.

### Report Structure

This report illustrates the key health issues faced by Harrison County residents along with relevant health disparities affecting community health. Data in this report are organized into topical areas, which can be located by referring to the table of contents. The structure of this report includes: this introduction and description of the process; a demographic discussion of the population; an analysis of the Social Determinants of Health; a community health status report based on 4 of the Foundational Public Health Areas (Communicable Disease, Chronic Disease, Maternal & Child Health, and Access to Care); summaries of focus group sessions; and a summary of the key findings and conclusions.

This report compiles primary (newly collected data) and secondary (existing) data to paint a detailed picture of Harrison County and compares the area's status to state and national data where possible, drawing out critical areas of concern. Narrative and graphics are used to highlight key findings. This research effort has included: a demographic analysis; a survey of 320 adult residents selected at random during May 1, 2019 through August 31, 2019; paper surveys provide to clients and customers at the health department; an online survey of Harrison County residents; as well as analysis of data from the Ohio Department of Health, Ohio Department of Job and Family Services, the Center for Disease Control and Prevention, the Bureau of the Census' American Community Survey, the Ohio Department of Public Safety, the Ohio Development Services Agency, the Institute for Health Metrics and Evaluation, the Health Resources and Services Association, the Ohio Mental Health and Addiction Services, and the Robert Wood Johnson Foundation. This report utilizes

secondary data for maternal and infant health, clinical and preventive services, diseases, and leading causes of death.

### Mobilizing for Action through Planning and Partnerships

The process selected to complete the CHA was Mobilizing for Action through Planning and Partnerships (MAPP). This is a community wide strategic planning process in which two companion documents are created, the first is the CHA which outlines the use of data to prioritize public health issues and the second is the Community Health Improvement Plan (CHIP) which is the plan to address the issues identified. This CHA report discusses the results of the first four steps in the MAPP process:

- Organize for Success
- Visioning
- Four MAPP Assessments
- Identify Strategic Issues

The framework provided by MAPP is a truly community-driven initiative. Broad community participation is essential because a wide range of organizations and individuals contribute to the public's health. Public, private, and voluntary organizations join community members and informal associations in the provision of local public health services. The MAPP process brings these diverse interests together to collaboratively determine the most effective way to conduct public health activities.



During the MAPP process, four assessments were conducted to provide critical insights on the challenges and opportunities affecting health throughout Harrison County. The four assessments were the:

- Forces of Change Assessment
- Local Public Health System Assessment
- Community Themes and Strengths Assessment
- Community Health Status Assessment



Following recommendations outlined in the MAPP model, the core team selected indicators specific to local conditions including, but not limited to: chronic diseases, access to care, tobacco use, substance abuse, mental health, oral health, environmental health hazards, poverty and inequity, and the built environment.

### Organize for Success

Community partners were brought together to form a steering committee (see committee list on page i) in 2017. Monthly meetings were held from March – October for the completion of the CHA.

### Visioning

A vision statement and values for the community were developed by the steering committee during the second steering committee meeting.

#### *Vision Statement*

We aspire to be the leader in population health improvement. Through the use of innovative, proactive, and collaborative approaches we will ensure conditions in which all people can be healthy.

#### *Values*

Collaboration, Inclusivity, Environment, Resiliency



### Forces of Change Assessment

Prior to the first steering committee meeting in March, committee members were asked to complete an online survey for this assessment. The purpose of this assessment was to dig deeper into how the community and the local public health system function. Questions asked on the survey gain insight on two main topics:

- What is occurring or might occur that affects the health of our community or the local public health system?
- What specific threats or opportunities are generated by these occurrences?

### Results

The responses provided are categorized into ten topical areas:

- |                              |                                    |
|------------------------------|------------------------------------|
| • Access to Health Care      | • Aging Population                 |
| • Funding Issues             | • Environmental                    |
| • Economic                   | • Food Deserts and Food Insecurity |
| • Substance Use and Abuse    | • Built Environment                |
| • Barriers to Healthy Living |                                    |
| • Community Collaboration    |                                    |

## **Local Public Health System Assessment**

An assessment presentation was conducted with the steering committee at the March meeting. During this presentation the steering committee was tasked with addressing how their agency contributes to the local public health system. The 10 essential public health services were written on post-it notes and placed on the walls around the room. Steering committee members then went around and took time to list whether they had a contribution in that service area and in some cases listed the specific contribution.

### *Results*

Based on the number of responses given for each essential service, the services were categorized into the top three areas where we are doing a lot of work (strengths) and areas where we could be doing more (opportunities).

### *Strengths*

- Investigate health problems and environmental public health hazards to protect the community
- Inform, educate, and empower people about health issues
- Enforce laws and regulations that protect health and ensure safety
- Promote strategies to improve access to health care

### *Opportunities*

- Conduct and disseminate assessments focused on population health status and public health issues facing the community
- Engage with the community to identify and address health problems
- Develop policies and plans that support individual and community health efforts
- Maintain a competent public health workforce
- Research for new insights and innovative solutions to health problems

## **Community Themes and Strengths Assessment**

This assessment allows the community to provide their feedback on what they feel is most important in achieving a healthy community. A 27-question online survey was developed to gain input from the adult (18 and older) community in Harrison County. This survey was distributed with an email link shared through the steering committee's networks. The online survey was utilized as an additional source of information to supplement the telephone survey (discussed in the next section) and allowed for the opportunity to include open ended questions. The answers to the open-ended questions address the themes and strengths. The demographic representation in this survey was limited but offers unique insights for the population that was predominately represented.

*Summary Demographics:*

Total Respondents: 309

Sex: 30.3% male, 69.7% female

Age: 21.1% (18 – 44), 42.9% (45 – 64), 17.2% (65 and older)

Race: 89.9% White/Caucasian

Education: 21.4% College 4 years or more (college graduate)

Marital Status: 69% Married

Employment: 75.6% Employed for Wages

Housing: 64.1% Own their home

Household Income: 40.2%, \$50,000 or more

*Results Themes*

Most important trait of healthy community: access to affordable healthcare, physical activity options and healthy foods.

Name one thing that stops people from being healthy: poverty, access to affordable healthcare and self-motivation/motivating people

One way we can improve people's health in Harrison County: more affordable/accessible health care, educate the community/wellness promotion and consider physical environment (clean and safe).

*Strengths (Assets)*

State and County budget surpluses

State's support of Medicaid/Medicare federal funding

Harrison County Health Levy

Ohio Means Jobs employment and training center

Local job fairs

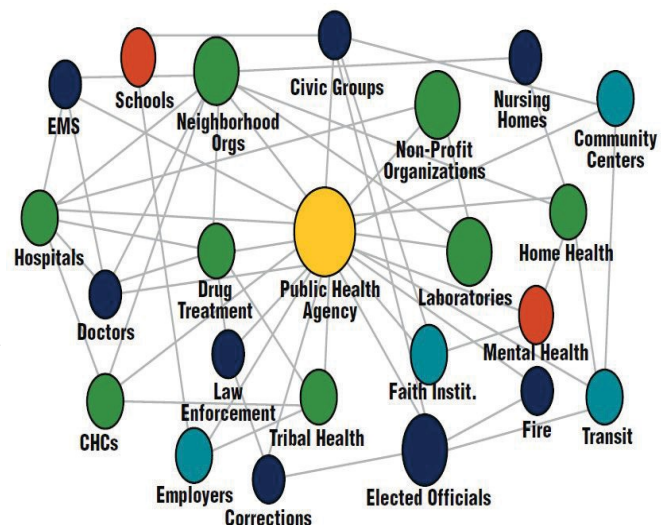
Local colleges and universities

Collaboration in Harrison County

Recreation and exercise opportunities

**Social Determinants of Health**

The World Health Organization (WHO) defines the social determinants of health as, "the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries."<sup>1</sup> This report will outline several indicators of community health in the Community Health Status Assessment section. Although indicators such as rates of



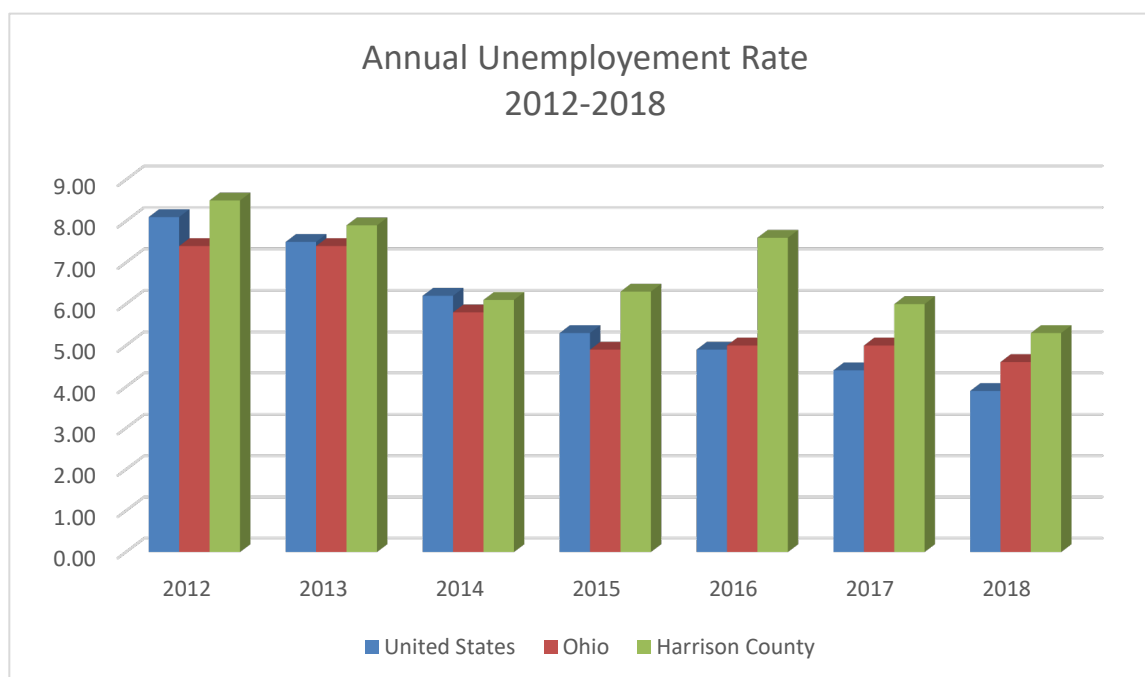
chronic disease or injury can tell us about the health of our community these types of indicators are not the only factors impacting health outcomes. As stated by WHO, there are inequalities in our communities that are shaped by the availability of resources. Some of the social determinants that have a particularly disproportionate impact on the Harrison County community include economic stability, education and the built environment (safe and affordable housing, parks and recreational opportunities, transportation, and access to nutritious and affordable food).

## Economic Stability

### *Employment and Sustainable Wages*

“The association between unemployment and poor physical and mental health is well established. Unemployed persons tend to have higher annual illness rates, lack health insurance and access to health care and have an increased risk for death.”<sup>2</sup> Of the 6,900 individuals available for the labor force, one out of eight Harrison County residents 16 years of age or older (94.2% or 6,500 people)<sup>3</sup> participate in the civilian labor force. The unemployment rate has decreased from 14.7% in 2010 to 5.3% in 2018.<sup>4</sup> The median household income (\$46,223) and per capita income (\$22,965) in Harrison County are lower than both Ohio and national incomes, refer to figure 1.

**Table 1: Annual Unemployment Rate, 2012-2018**



(Source: Ohio Department of Job and Family Services, Ohio Labor Market Information, Current Civilian Labor Force Estimates)

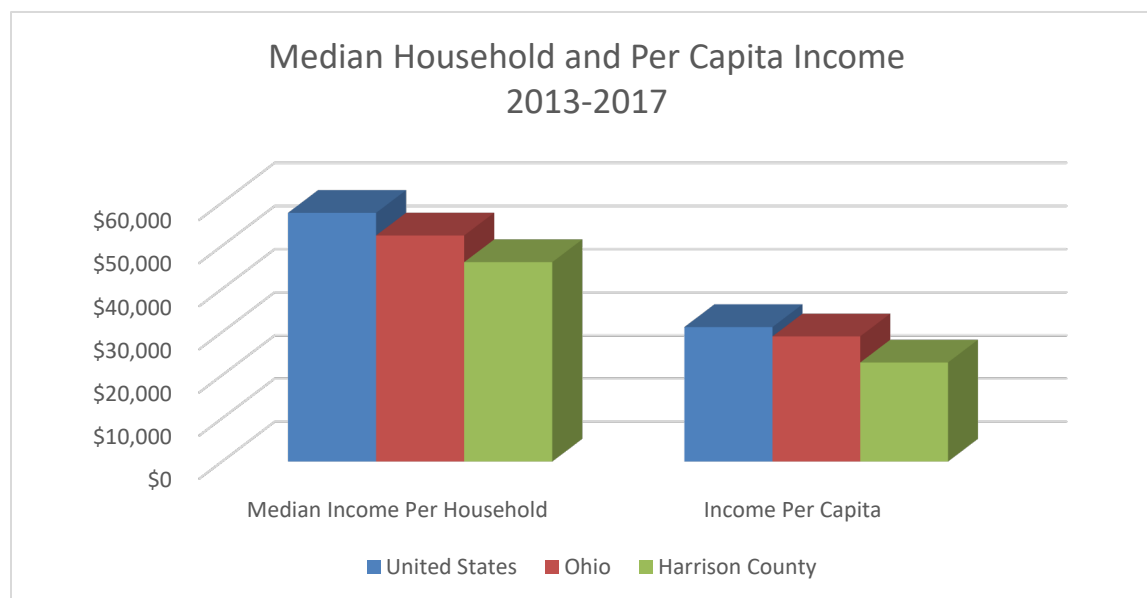
<sup>1</sup> (World Health Organization 2018)

<sup>2</sup> (U.S. Centers for Disease Control and Prevention 2013)

<sup>3</sup> (U.S. Census Bureau 2017)

<sup>4</sup> (Ohio Department of Job and Family Services 2018)

**Figure 1: Median Household and Per Capita Income, 2013-2017**



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

### *Poverty*

“Low-income and minority neighborhoods are less likely to have access to recreational facilities and full-service grocery stores and more likely to have higher concentrations of retail outlets for tobacco, alcohol, and fast foods.”<sup>5</sup> “Adolescents who grow up in neighborhoods characterized by concentrated poverty are more likely to be a victim of violence; use tobacco, alcohol, and other substances; become obese; and engage in risky sexual behavior.”<sup>6</sup>

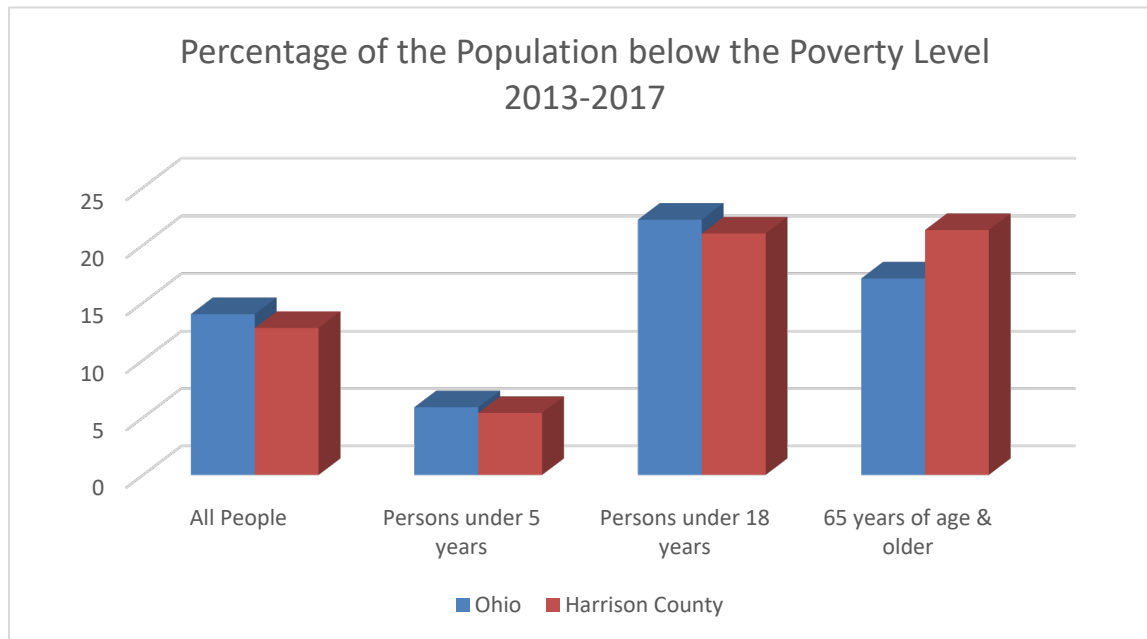
Examination of 2017 5-year American Community Survey data reveals that 2,371 Harrison County residents met guidelines to qualify for many federal low-income assistance programs (i.e., food and nutrition assistance programs, home energy assistance programs, and low-income Medicaid coverage, etc.). Income eligibility to qualify for these program benefits or entitlements is based around the 185% poverty rate. Using this metric, nearly one out of six (15.7%) Harrison County residents are considered low-income (below 185% of the poverty rate).

According to the American Community Survey, 15.7% of the population (2,371 people) in Harrison County lived below poverty in 2017. Twenty-six percent of Black/African Americans, 22% of Asians and 4.3% of Hispanics live below the poverty level compared to 15.5% of White/Caucasian individuals. Further disparities exist by age. As age increases, the percentage of individuals living below the poverty level decreases. Refer to the following figure.

<sup>5</sup> (U.S. Department of Health and Human Services, Administration for Children and Families 2010)

<sup>6</sup> (U.S. Centers for Disease Control and Prevention 2017)

**Figure 2: Percentage of the Population below the Poverty Level. 2013-2017**



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

**Table 2: Family Poverty, 2013-2017**

County	Families <sup>7,8</sup> with children below Poverty Level
U.S.	11.8%
Ohio	14.0%
Harrison County, Ohio	12.8%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

**Table 3: Challenges of the Population 5 years of Age and under**

County	Population 5 Years and under*	Poverty Rate*
Harrison	104	5.4%

\*U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

<sup>7</sup> In general, family consists of those related to each other by birth, marriage or adoption.

<sup>8</sup> (U.S. Census Bureau 2018)

<sup>9</sup> (National Prevention Council 2011)

## Education

“Education, employment, and health are linked. Without a good education, prospects for a stable and rewarding job with good earnings decrease. Education is associated with living longer, experiencing better health, and practicing health-promoting behaviors such as exercising regularly, refraining from smoking, and obtaining timely health checkups and screenings.”<sup>9</sup>

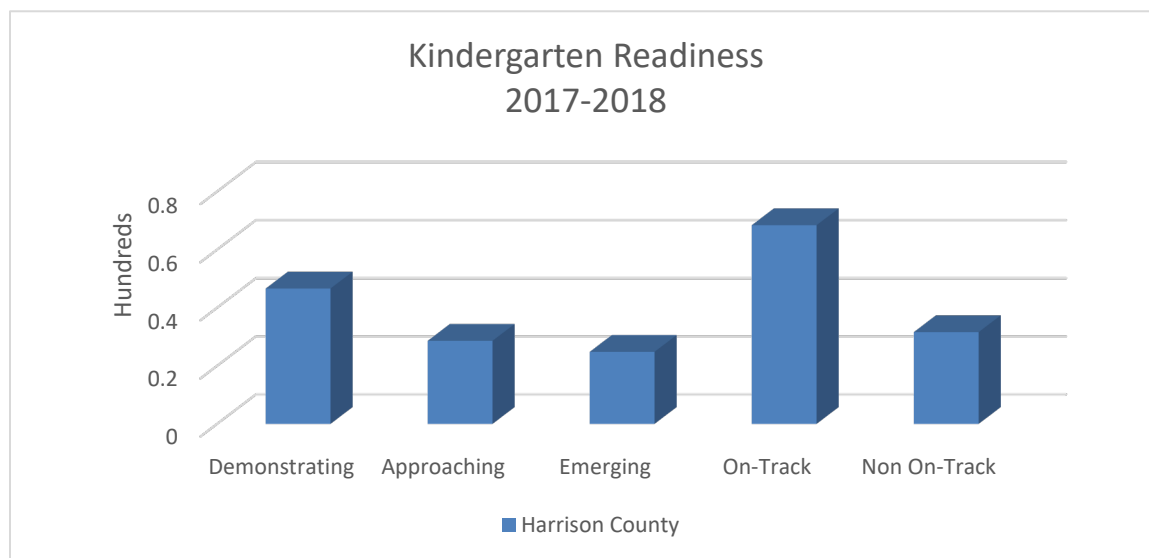
### *Early Childhood Education*

There are many data points relevant to measuring the adequacy of education. Among the most frequently identified protective factors for child neglect is universal early childhood education and development.<sup>10</sup> Therefore, researchers turned to the Kindergarten Readiness Assessment (KRA) to provide a snapshot of early childhood education and development in Harrison County.

At the beginning of each school year, children in public school kindergarten programs are assessed using Ohio’s KRA. This assessment includes ways for teachers to measure a child’s readiness for engaging with instruction aligned to the kindergarten standards.<sup>11</sup> Ohio’s Early Learning and Development Standards (birth to kindergarten entry) are the basis for the KRA.

On average in Harrison County, 53.4% of children assessed for Kindergarten are not demonstrating readiness in social foundations, math, language and literacy, and physical well-being and motor development – 24.8% show emerging (or the earliest signs) of readiness, and 28.6% are approaching readiness. Please refer to the following figure for more information.

**Figure 3: Kindergarten Readiness, 2017-2018**



Source: Kindergarten Readiness Assessment, Harrison County, 2017-2018

<sup>10</sup> (Center for the Study of Social Policy 2003)

<sup>11</sup> [http://earlychildhoodohio.org/county/pdf/HarrisonCounty\\_EarlyLearning\\_and\\_DevelopmentProfile.pdf](http://earlychildhoodohio.org/county/pdf/HarrisonCounty_EarlyLearning_and_DevelopmentProfile.pdf)

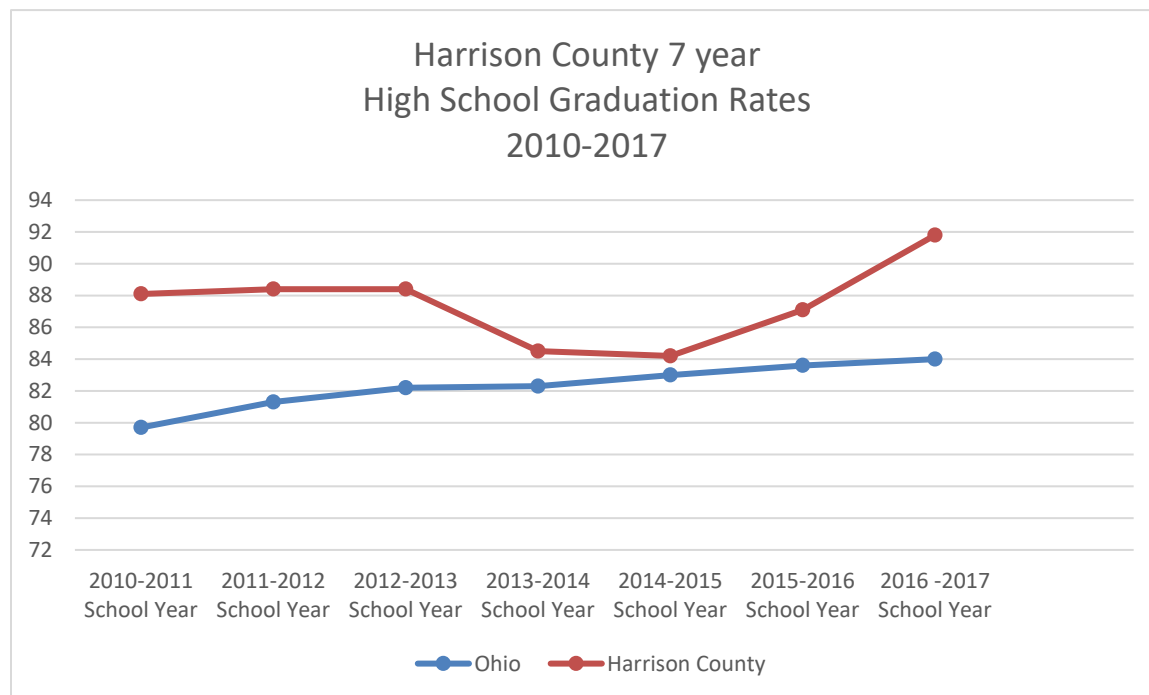
<sup>12</sup> (United Way Community Assessment, 2017)

### Educational Attainment

According to the 2014 United Way Community Needs Assessment, literacy scores for children entering kindergarten, high school graduation rates and school absenteeism are concerns for the community.<sup>12</sup>

At the county level, the public high school 4-year graduation rate ranged from 88.1% in SY2010 to 87.1% in SY2015-2016, higher than the state (please refer to figure 4 for more information).

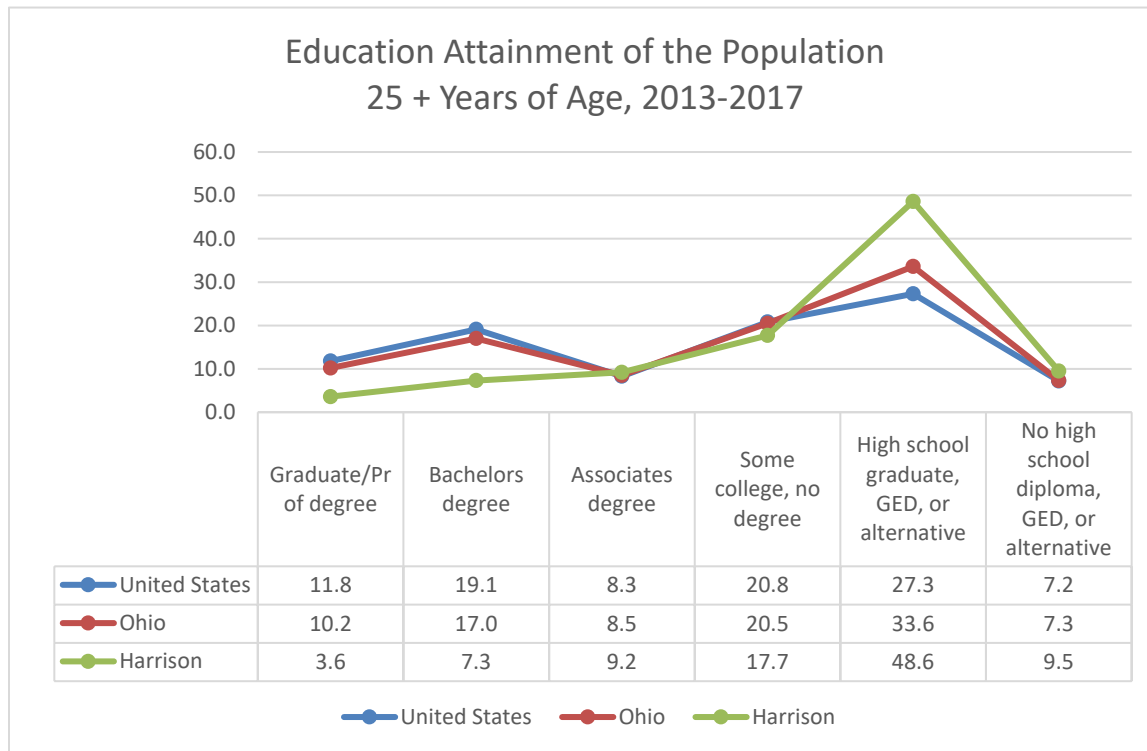
**Figure 4: Harrison County 7-year High School Graduation Rates, 2010-2017**



Source: Ohio Department of Education, Graduation Rates

Fourteen percent (9.5%) of Harrison County's population 25 years of age or older has no high school diploma. This is lower than both Ohio and the national percentage (12.5% and 12.1%, respectively). Lower educational attainment levels are directly associated with unemployment and lower pay.<sup>13</sup> A little over seven percent (7.3%) of Harrison County's population currently holds a bachelor degree or higher, which is 6.4% lower than Ohio and 8.2% lower than the nation. For a detailed look at the educational attainment of the population 25 years of age or older, refer to the following figure.



**Figure 5: Educational Attainment of the Population 25+ Years of Age, 2013-2017**

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

### Neighborhood and Built Environment

According to the Centers for Disease Control and Prevention (CDC), physical environment metrics not only include the natural environment (air, water, and soil) but also include the built environment.

#### *Access to Public Transportation*

In Harrison County, public transportation needs are met through the Harrison County Rural Transit. The system includes a demand-response system that is open to the public to and from any destination in Harrison County. The demand-response system also provides limited service into Jefferson and Belmont Counties.

Looking to the future, the Harrison County population is expected to grow 2.7% from 2010 to 2025 creating an increasing need for public transportation, according to poverty projections developed for the Ohio Department Services Agency. Cadiz will continue to exhibit higher levels of poverty than other Harrison County communities, thus requiring a higher level of service.<sup>14</sup>

<sup>13</sup> Bureau of Labor Statistics

<sup>14</sup> (Ohio Mid-Eastern Governments Association, Comprehensive Economic Development Strategy Report, 2017)

### *Land Use and Access to Green Space*

According to the Department of Health and Human Services, “Safe, accessible, and affordable places for physical activity (e.g., parks, playgrounds, community centers, schools, fitness centers, trails, and gardens) can increase activity levels.” There is an abundance of green space in Harrison County. However, most of the green space is dedicated to agriculture and is not necessarily accessible to the general population. In Harrison County, there are more than 100 miles of designated trails.

The Buckeye Trail is a 1,440 mile trail, primarily used for hiking, which makes a large loop around the State of Ohio. Nearly 42 miles of the trail are located in western Harrison County. The Buckeye Trail enters the county from the north at Bowerston and follows a route which crosses the dam at Tappan Lake and connects Tappan Lake, Clendening Lake, and Piedmont Lake before entering Guernsey County southwest of Freeport. Portions of the trail are open to horses on Muskingum Watershed Skull Fork Bridge Conservancy District property at Tappan Lake. In the Freeport area the Buckeye Trail crosses the Skull Fork Covered Bridge and is a short hike on Skull Fork Road from what is believed to be the only 16 sided barn in Ohio. Much of the trail in southeastern Ohio is located on rural roads, and the Buckeye Trail Association is working to relocate these portions off road.<sup>15</sup>

The Harrison State Forest, located in Archer Township, is a 1,344 acre recreational area which includes 24 miles of trails open to hikers and horseback riders. The property includes campsites, numerous fishing and hunting opportunities, and a shooting range. The property is managed by the Ohio Department of Natural Resources, Division of Forestry.

Sally Buffalo Park in Cadiz offers nearly a mile of trail for walking and bicycling for those in search of a quick "walk in the park." The trail circles the lake, passing Wallace Lodge and picnic areas.

Located at Deersville is Tappan Lake Park, operated by the Muskingum Watershed Conservancy District, which offers eight miles of hiking trails. Approximately six miles of the trails in the park form two loops that begin and end at the campgrounds. Additionally, there is a trail that begins near the beach area and travels east, incorporating some interesting wetland habitat.

The Ohio Department of Transportation has established a number of on road bicycle routes throughout the state. One of these routes, designated as the "J Route" connects Marietta and Conneaut, with approximately 25 miles of the route in Harrison County. This route enters the county on Route 149 south of New Athens and travels north on Route 9 from New Athens to Cadiz. From Cadiz it travels north on Route 9 to Lower Clearfork Road, to Dodson Road, to Hanover Ridge Road, to Scio. From Scio it continues north on Kilgore Ridge Road to Germantown Road, to McCue Road, and then north to Carrollton. (This is a hilly on road route which should be attempted only by well-trained cyclists, and not by recreational riders.)

In addition to these public recreational trails, Harrison County has two private facilities that offer the public recreational trail opportunities. These are Faith Ranch, located south of Germano, with miles of bridle and hiking trails and Mickey's Mountain Bike course, which provides mountain biking events throughout the riding season.

<sup>15</sup> (Harrison County Parks and Trails n.d.)

There are 11,000 miles of rail trails across the nation, and the next focal point of development of these trails is connecting them to form trail systems. One of these efforts incorporates Harrison County. For more than a year there has been an effort ongoing which eventually will establish connectors that will unite developing trail systems in Ohio with trails in West Virginia and Pennsylvania. Key to the success of this effort is connecting the canal corridor which terminates at Zoarville to the Ohio River. There currently are two proposals on the drawing board, and they both include on road and off-road routes through Harrison County. When completed, hopefully within the next several years, this trail system will provide a designated route connecting Cincinnati with Washington, DC, via Harrison County.<sup>16</sup>

The Harrison County Conotton Creek Trail connects Jewett, Scio, Conotton, and Bowerston. This 11.4-mile county owned facility is known as a "rail trail", since it is located on the former Wheeling and Lake Erie railroad bed. The trail has been paved from Jewett to Scio and paving of the balance of the trail is expected to begin in a few weeks, once final government approvals are obtained. The trail is available for bicycling, hiking, and rollerblading, although the pavement surface is said to be a bit rough for rollerblading. If you have not visited the trail in a while, a new feature is the covered bridge being constructed by the Scio American Legion at the Eastport Road crossing in Scio.<sup>17</sup>

### *Outdoor Air Quality*

According to HP2020, poor air quality is linked to premature death, cancer, and long-term damage to respiratory and cardiovascular systems, but approximately 127 million people lived in U.S. counties that exceeded national air quality standards in 2008. Decreasing air pollution is an important step in creating a healthy environment.<sup>18</sup>

The Environmental Protection Agency (EPA) calculates the Air Quality Index (AQI) for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, the EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country.

“An AQI value of 100 generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. AQI values below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is considered unhealthy-at first for certain sensitive groups of people, then for everyone as AQI values get higher. Each category corresponds to a different level of health concern. A "Good" AQI is 0 to 50 meaning Air quality is considered satisfactory, and air pollution poses little or no risk.

Due to the low percentage of AQI data available in Harrison County, there is no reportable data to share.

<sup>16</sup> (Harrison County Parks and Trails n.d.)

<sup>17</sup> (Harrison County Parks and Trails n.d.)

<sup>18</sup> (U.S. Department of Health and Human Services 2017)

### *Crime and Violence*

In Ohio, each year 65,000 women are physically assaulted by a current or former partner, and 32,000 15-19-year old's experience physical dating violence, 29,000 (90.6%) of whom are forced to do sexual acts by someone they are dating. In Ohio, 48,000 children live in homes where an adult reports intimate partner violence.<sup>19</sup>

The following tables present a snapshot of intimate partner violence and child abuse and neglect in Harrison County and Ohio.

**Table 4: Domestic Violence 6-year Average Rate per 100,000, 2013-2018**

County	Adults 18-64 years of age per 100,000
Ohio	722.9
Harrison	0.2

Source: The Ohio Family Violence Prevention Project & the Ohio Department of Public Safety, Office of Criminal Justice, Domestic Violence in Ohio, 2018

**Table 5: Reports of Child Abuse and Neglect, 2018**

County	Reports of Child Abuse or Neglect	Number of Children Victims	Rate per 1,000 Children	Substantiated Reports of Neglect	Substantiated Reports Physical Abuse
Ohio	83,750	24,987	9.6	38.9%	41.2%
Harrison	422	137	1.4	40.0%	43.3%

Source: The Ohio Family Violence Prevention Project & the Ohio Department of Public Safety, Office of Criminal Justice, Domestic Violence in Ohio, 2017; U.S. Department of Health and Human Services, Administration for Children and Families, Child Maltreatment 2017; Harrison County Department of Jobs and Family, 2018

**Table 6: Violent Crime, 5-year Average Rate per 100,000, 2013-2017**

County	Violent Crime
U.S.	382.9
Ohio	159.6
Harrison	8.8

Source: Ohio Department of Public Safety Office of Criminal Justice Services Crime Statistics and Crime Reports from the FBI's Ohio Master File for the Uniform Crime Reporting Program, 5-year Average, 2013-2017

### *Summary Social Determinants of Health*

Among the social determinants of economic stability, education and the built environment, a general conclusion can be drawn. The community has low unemployment, a high median income, high educational attainment, a great system of biking and hiking trails, good air quality and low violent crime. However, there is also low kindergarten readiness, a higher percentage of young people and children living in poverty, a growing need for more public transportation routes to meet the need among people living in poverty and the aging population and issues with domestic violence and child abuse.

<sup>19</sup> <http://grcapps.osu.edu/OFVPP/>

## Community Health Status Assessment

The following sections explain the status of the community based on data from various sources. Data included represents 77 health indicators and data from 20 organizational reports provided by steering committee members. Some of the data is secondary, meaning that it already existed prior to this report and was collected by another agency or organization. The other data is primary, meaning that we collected the data specifically for this report. Our primary data was collected through a community wide survey, that was available in paper copy form and as an online survey through SurveyMonkey.

The survey, the majority of the questions came from the core team. Survey summaries are provided in Appendix A.

### Definition of the Community Served

Harrison County is a predominantly rural area encompassing 402.34 miles in southeast Ohio and is one of Ohio's 32 Appalachian counties. While it is still largely agricultural, with 95,387 square acres of farmland, its position above the Marcellus shale formation has brought new industry to the region in recent years.<sup>20</sup>

According to the United States Census bureau, the population of Harrison County in July of 2018 is estimated at 15,174 persons, a decrease of 4.3% from 15,860 in 2010. The largest population center is the village of Cadiz, which is the county seat with an estimated 3,353 persons. Its population is estimated at Harrison County had approximately 6,192 households residing in 8,081 housing units with 89.8% of those persons residing in the same house as the previous year in 2017. A little over twenty one percent (21.3%) of Harrison County's population are 65 years and over, which is significantly higher than the State of Ohio's population of 15.8%.<sup>21</sup>

When looking at the estimated population statistics listed in the US Census Bureau it is noted that Harrison County's population is predominantly White, with 95.8% of its residents reporting as White/Caucasian. It has little racial diversity since only 2.2% of its population reports as Black, 1.6% report as two or more races, 1.3 % report as Hispanic, 0.2% are Native American and 0.2% are Asian.<sup>22</sup>

Economically, Harrison County lags behind more prosperous counties even with the economic development occurring due to the gas and oil exploration taking place within its borders. The per capita income for Harrison County Residents in 2017 was \$22,965 compared to the State of Ohio's \$29,011, while the median income in 2017 was \$46,223 compared to the state's median income of \$52,407.<sup>23</sup>

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<sup>20</sup> (U.S. Census Bureau 2019)

<sup>21</sup> (U.S. Census Bureau, 2019)

<sup>22</sup> (U.S. Census Bureau 2019)

<sup>23</sup> (Ohio Development Services Agency 2019)

The Black/African American population is more heavily concentrated in areas of Cadiz. The Hispanic population is largely transient due to the oil and gas exploration.

The following figure presents life expectancy at birth (age in years) from 1980-2014. Life expectancy has increased for both males and females since 1980 – females to their late 70s and males to their mid-70s.

**Figure 6: Life Expectancy at Birth, 1980-2017**

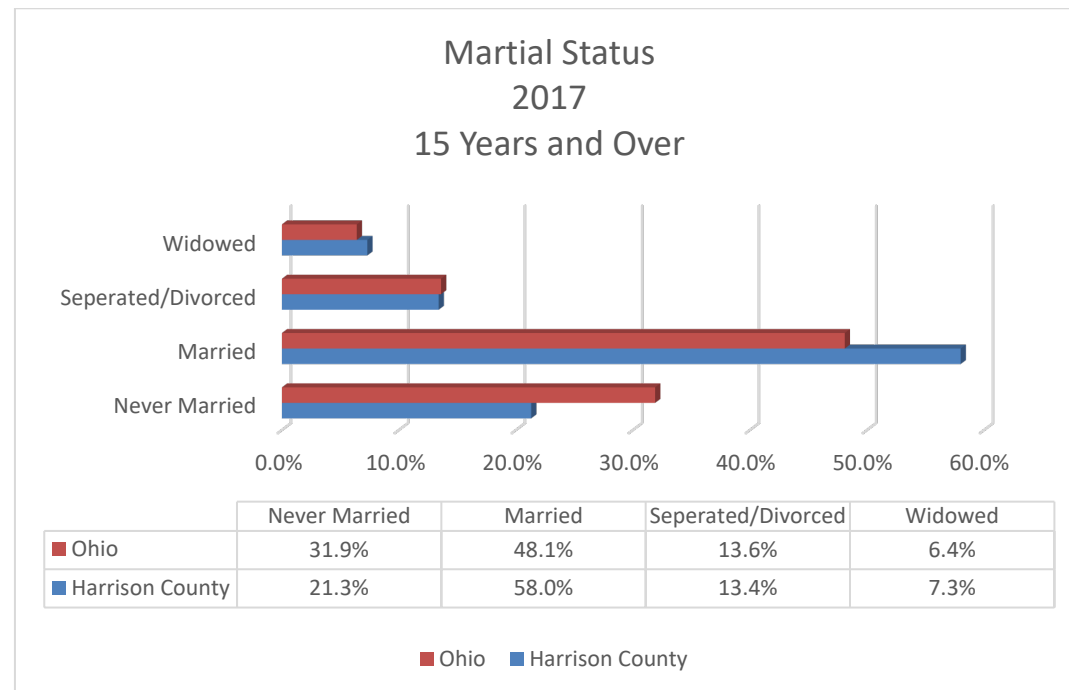
Sex	Harrison County	Ohio	National	National Rank	% change 1980-2014
Female	79.3	80.1	81.5	2133	+3.5
Male	73.6	75.6	76.7	2337	+5.3

Source: The Institute for Health Metrics and Evaluation, Harrison County, Ohio (1980-2014)

#### *Marital Status and Household Type*

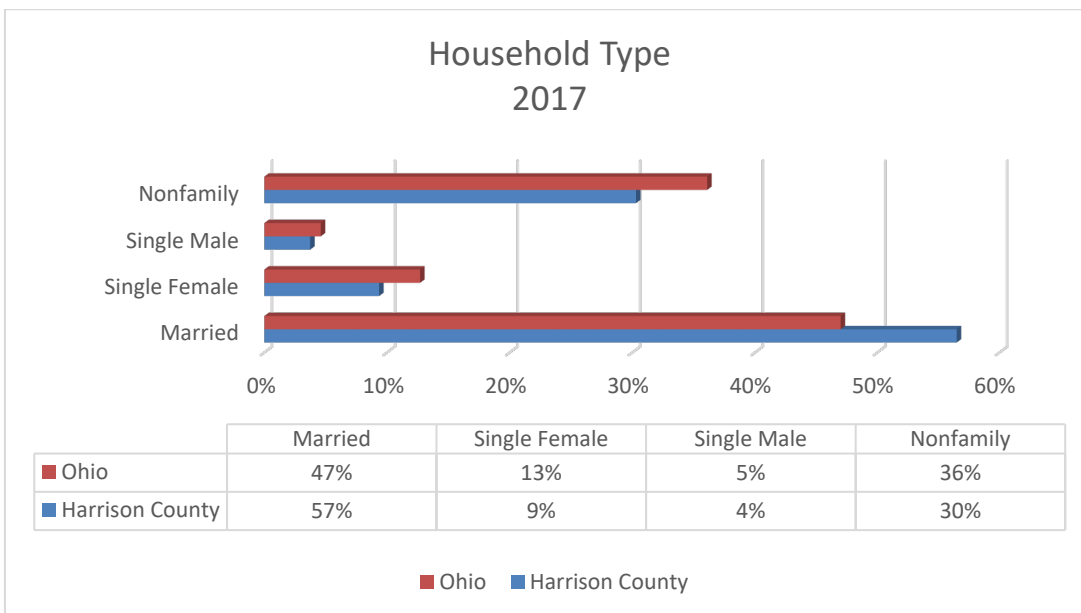
According to the American Community Survey, over half of the population in Harrison County was married in 2017 and nearly a quarter of the population has never married. Households with no children made up 68.2% of households in Harrison County in 2017. Married couples with children account for 71.8% of households, and single-parent families accounted for 28.2% of households in Harrison County, totaling 1,572 families. Families consisting of two married adults who are the biological or adoptive parents of all children in the family were generally healthier, more likely to have access to health care, and less likely to have definite or severe emotional or behavioral difficulties than children living in nonnuclear families.<sup>24</sup> Refer to the following figures for a more detailed look at marital status and household type.

**Figure 7: Marital Status, 2017**



Source: U.S. Census Bureau, 2017 American Community Survey 2017 Estimates

<sup>24</sup>(U.S. Centers for Disease Control and Prevention 2017)

**Figure 8: Household Type, 2017**

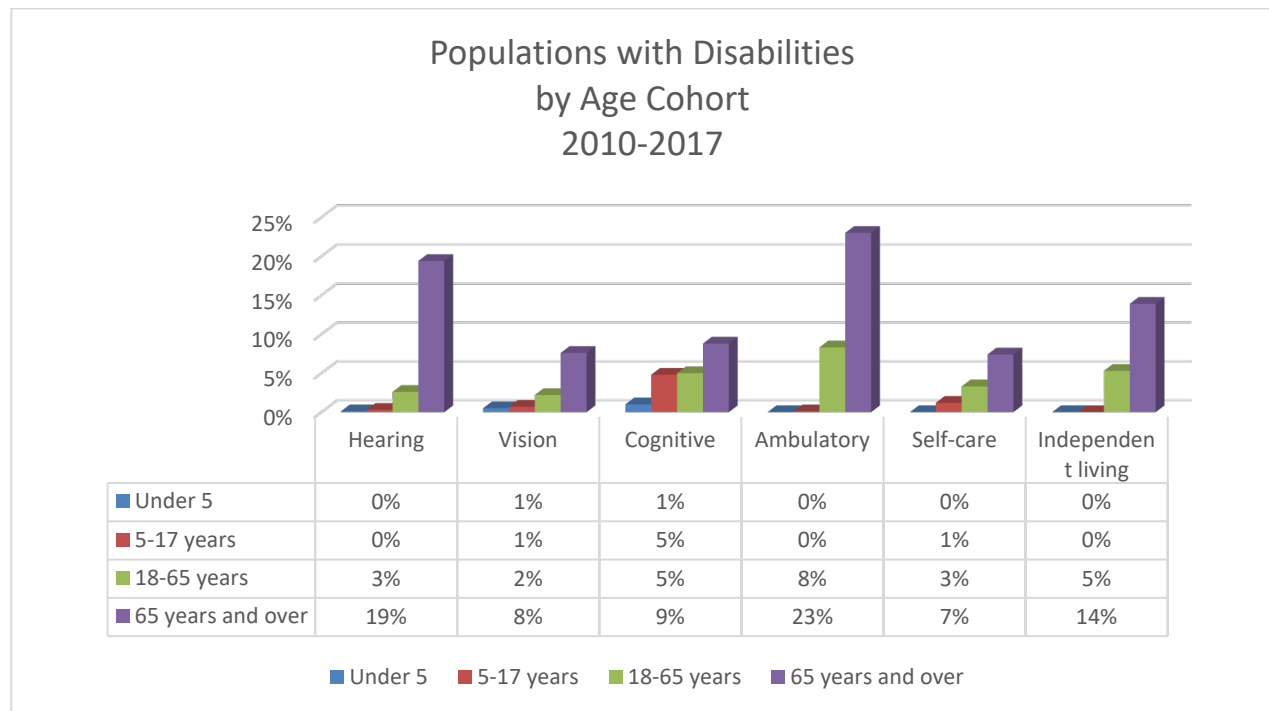
Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

### *Disabled Population*

According to the American Community Survey 2015 5-year estimates, approximately 2,537 individuals (or 16.8% of the population) in Harrison County reported at least one disability. Healthy People (2020 reports “that individuals with disabilities, as a group, experience health disparities in routine public health arenas such as health behaviors, clinical preventive services, and chronic conditions. Compared with individuals without disabilities, individuals with disabilities are:

- Less likely to receive recommended preventive health care services, such as routine teeth cleanings and cancer screenings
- At a high risk for poor health outcomes such as obesity, hypertension, falls-related injuries, and mood disorders such as depression
- More likely to engage in unhealthy behaviors that put their health at risk, such as cigarette smoking and inadequate physical activity”

Approximately 23.4% of the population ages 18 to 64 years of age were disabled and 9.9% of individuals between the ages of 18 and 64 years of age report ambulatory difficulties, while 5.7% individuals ages 18-64 reported cognitive disabilities. Seniors (adults 65 years of age and older) reported the highest rate of disability –36.0% reported one or more total disabilities. Forty-Eight percent (48.8%) of the population over the age of 65 reported an ambulatory difficulty, which is nearly five times that of individuals, ages 18-64. For a detailed look of disability status by age cohort, refer to figure 17.

**Figure 9: Population with Disabilities by Age Cohort, 2010-2017**

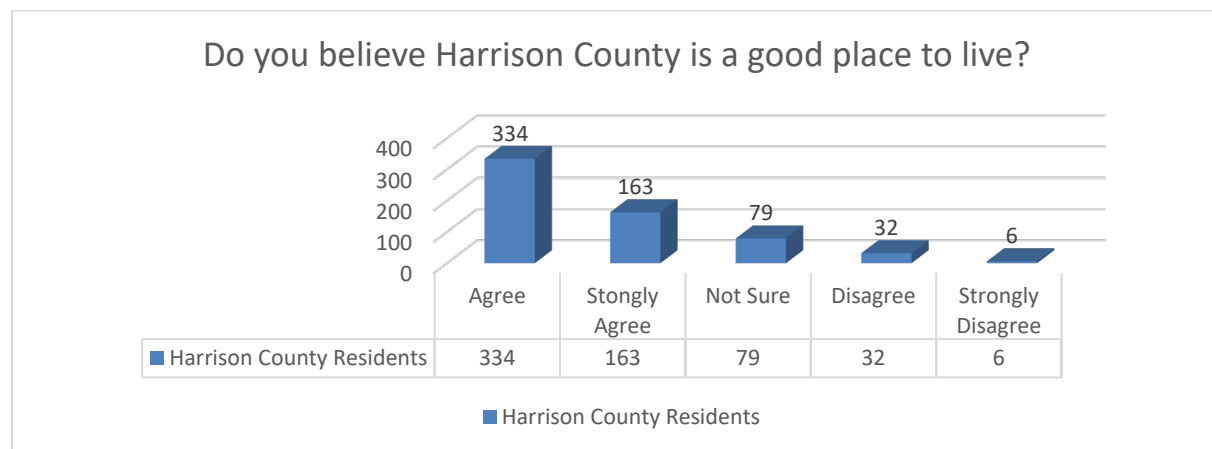
Source: U.S. Census Bureau, 2011-2017 American Community Survey 5-Year Estimates

## Adult Health

### General Health

The general health status of respondents is a self-reported gauge of an individual's overall health condition. The first question of survey asked respondents to rate if they believed Harrison County is a good place to live?

In 2017, three hundred and thirty-four of the respondents (54.3%) indicated that in general, they agreed, strongly agree (26.5%), not sure (12.8%), disagree (5.2%), or strongly disagree (0.9%).

**Figure 10: Do you believe Harrison County is a Good place to live?:**

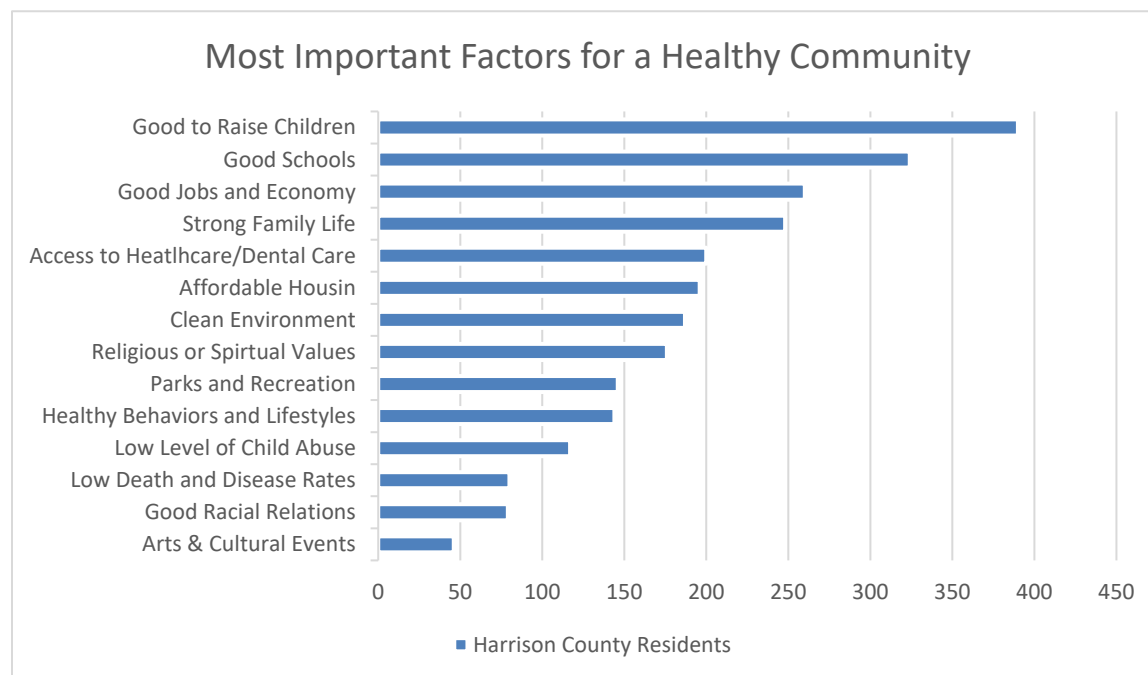
Source: 2017 Harrison County Health Assessment Household Survey



The County Health Rankings provides estimates of overall health status over time. The graph below provides this trend from 2011-2015. The percentage of adults reporting fair or poor health has remained relatively consistent over the study period.

Respondents were asked about what they felt were the most important factors for a healthy community? Respondents felt that a good place to raise children (63.5%), good schools (52.7%), while arts and culture was least important.

**Figure 11: What do you feel are the most important factors for a healthy community**



Source: 2017 Harrison County Health Assessment Household Survey

### Communicable Disease

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 20 million new sexually transmitted disease (STD) infections each year—almost half of them among young people ages 15 to 24. The cost of STDs to the U.S. health care system is estimated to be as much as \$16 billion annually.<sup>27</sup> Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the United States.

Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. The CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile.<sup>25</sup>

According to the CDC, many social, economic, and behavioral factors affect the spread of STDs. Certain racial or ethnic groups have higher rates of STDs, including Black/African Americans, Hispanics, and American Indian/Alaskan Natives. Substance abuse and poverty also affect the spread of STDs. STD rates are higher among people who are economically disadvantaged.

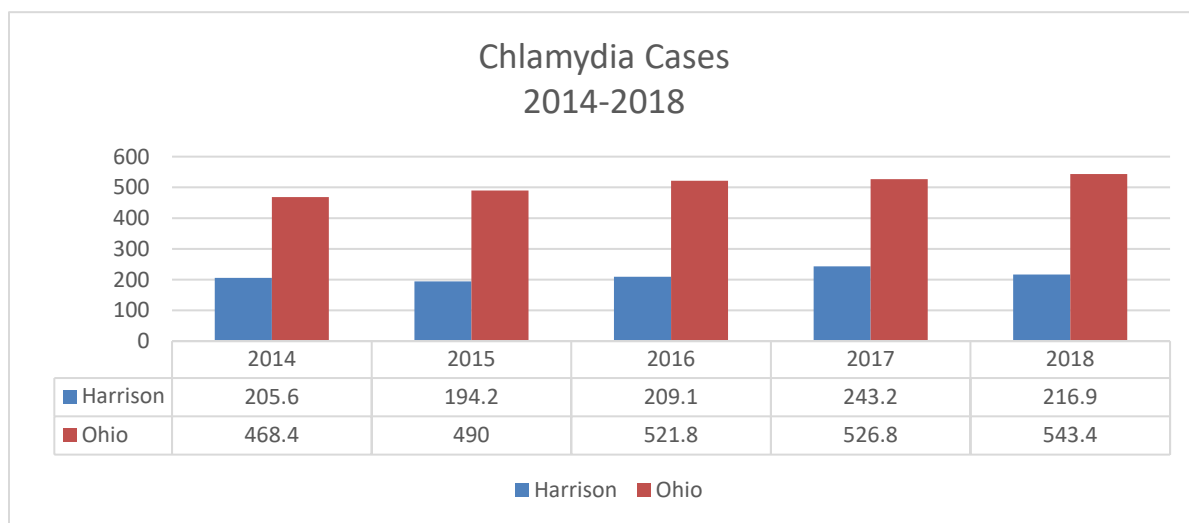
### *Sexually Transmitted Diseases*

The rate per 100,000 in population of all STD cases has increased since 2014 among Harrison County residents. The rate per 100,000 is lower in Harrison County than Ohio.

However, while chlamydia cases in Ohio and Harrison County continue to increase, the rate of gonorrhea cases shows a leveling out in the Ohio rate but an uptick for Harrison County.

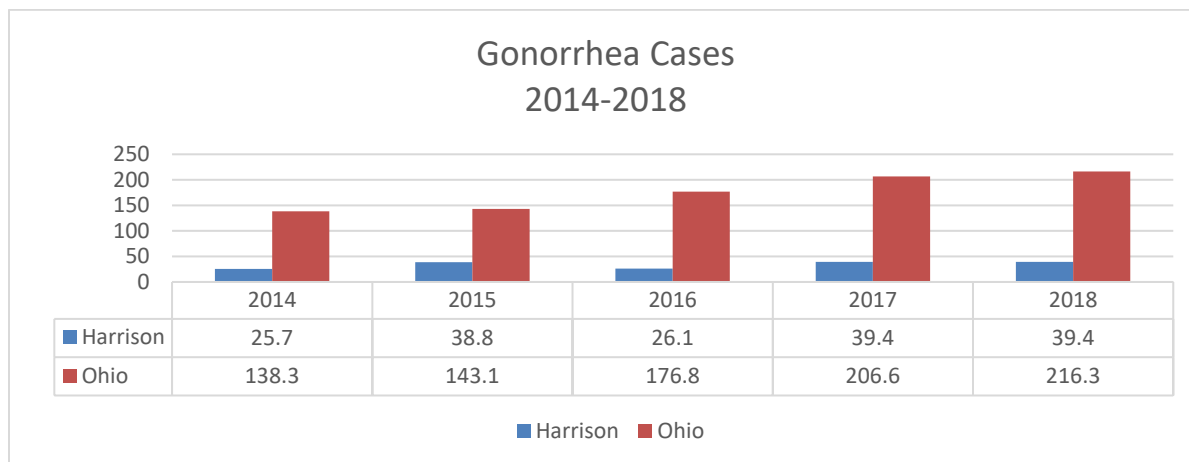
Among Ohio residents, disparities by race and age are also apparent. STDs are of higher prevalence among Black/African Americans when compared to the White population. STDs are also more prevalent among young adults between the ages of 20-24 than other age cohorts. Chlamydia cases are higher among women, while syphilis cases are higher among men.

**Figure 12: Chlamydia Cases, 2014-2018**



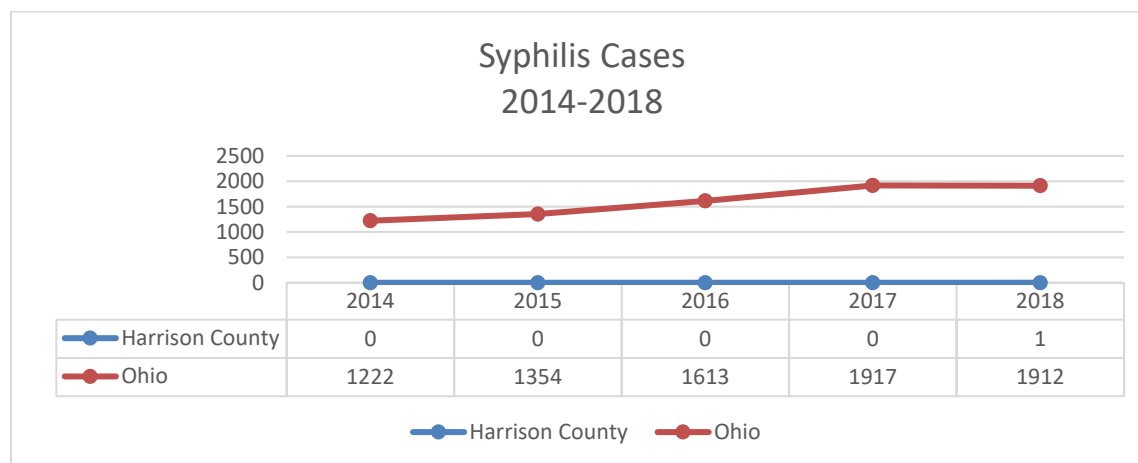
Source: Ohio Department of Health, STD Surveillance Program.

**Figure 13: Gonorrhea Cases, 2014-2018**



Source: Ohio Department of Health, STD Surveillance Program.

<sup>25</sup> Owusu-Edusei K, et al. The estimated direct medical cost of selected sexually transmitted infections in the United States, 2008. Sex Transm Dis 2013; 40(3): pp. 197-201.

**Figure 14: Syphilis Cases, 2014-2018**

Source: Ohio Department of Health, STD Surveillance Program.

### *HIV*

According to the CDC, an estimated 1.2 million individuals in the U.S. are living with the human immunodeficiency virus (HIV – the virus that causes acquired immunodeficiency syndrome (AIDS)), and approximately 40,000 new HIV infections occur each year in the U.S. with 38,739 people being diagnosed in 2017. The annual number of new diagnoses declined by 9% from 2010 to 2014 (CDC). HIV transmission can be prevented by eliminating risky behaviors, like having unprotected sex with a partner whose HIV status is unknown or who is infected, or having contact with infected blood and sharing drug needles with someone who may be infected with the virus. HIV transmission cannot be eliminated if individuals do not know their HIV status.<sup>26</sup>

## **Chronic Disease and Injury**

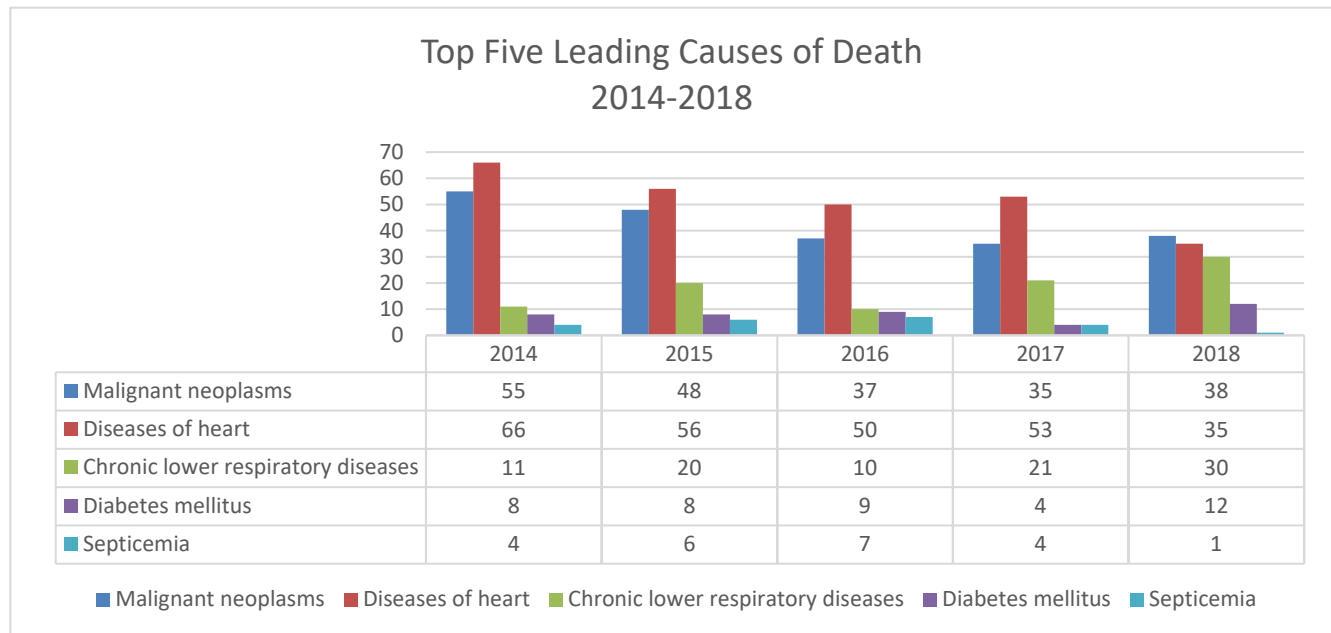
### *Adult Mortality*

#### *Leading Causes of Death*

The top two leading causes of death—cancer and heart disease--have rates that are 3 to 6 times greater than the other specified leading causes of death presented in the chart below for all Harrison County adult residents. While death rates due to diseases of the heart had shown stabilization and even decline from 2007 to 2011, the rate slightly increased in 2016 through 2018. Refer to the following figure for a complete breakdown by cause over time.

<sup>26</sup> Centers for Disease Control and Prevention, HIV statistical information

**Figure 15: Top Five Leading Causes of Death for the Adult Population, 2014-2018**  
*(crude rate per 100,000)*

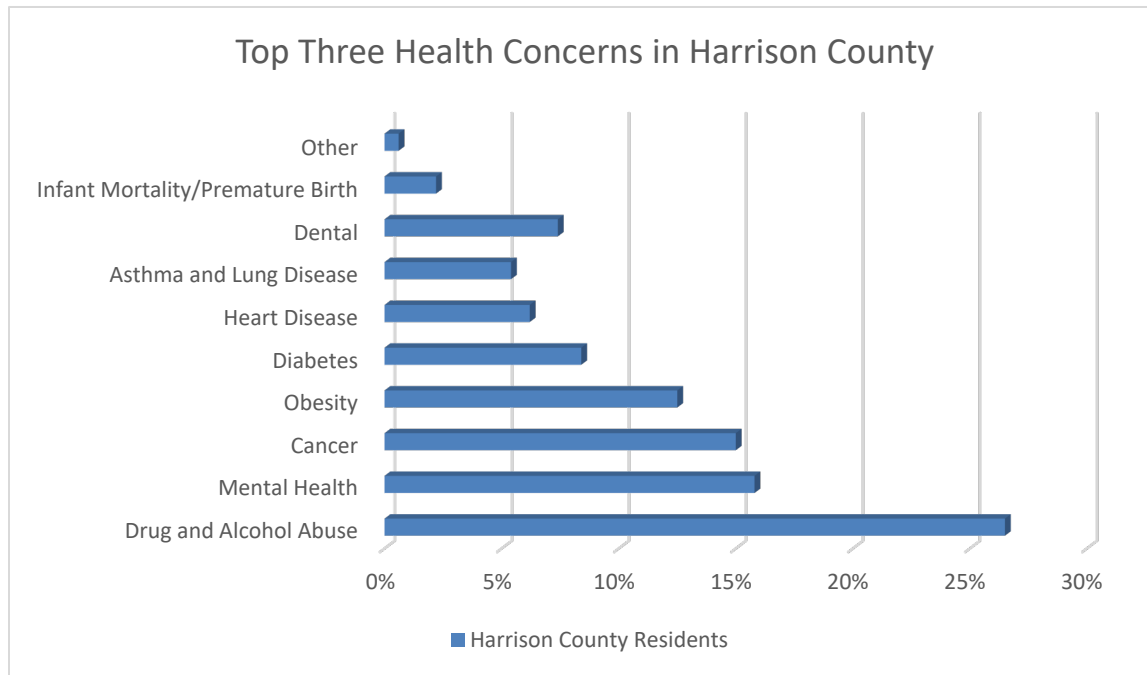


Source: Ohio Department of Health, Ohio Resident Mortality Data

According to the Centers for Disease Control and Prevention (CDC), about half of all adults had one or more chronic health conditions and one in four adults had two or more chronic health conditions.<sup>27</sup> Two of the top ten causes of death account for almost half (48 percent) of the deaths in the United States – heart disease and cancer. The CDC also reports that arthritis is the most common cause of disabilities limiting adults' usual activities, while diabetes is the leading cause of limb amputations (not caused by accidental causes), and new cases of blindness among adults. This chapter discusses the prevalence of chronic health conditions in Harrison County, including asthma, cardiovascular diseases, diabetes, and cancer. The section also provides some details on attitudes, behaviors and actions toward these diseases as well as disease prevention and early detection.

The three most frequently cited conditions are high blood pressure (28.2%), high blood cholesterol (22.3%), and diabetes (13.3%).

<sup>27</sup> Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. *Prev Chronic Dis.* 2014; 11:130389. DOI: <http://dx.doi.org/10.5888/pcd11.130389>

**Figure 16: What are the Top Three Harrison County health concerns?**

Source: 2019 Harrison County Health Assessment Survey

### *Cardiovascular Conditions*

#### *High Blood Pressure*

Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure, or kidney failure. There are no symptoms, and according to the American Heart Association, 85 million adults have been diagnosed with high blood pressure and one in five adults are unaware of that they have high blood pressure. Therefore, high blood pressure is often called the "silent killer."

Harrison County residents were asked what do you feel are the three greatest/most critical health problems in our community and 13.1% said that they are most concern with high blood pressure, which is significantly lower than either Ohio (34.3%) or the nation (30.9%). As age increases, so does the likelihood of being told one has high blood pressure and this finding is significant. Many people with high blood pressure rely on several different methods to help control their blood pressure, but the method most relied on is through medication. Nine out of ten Harrison County adults (92.9%) with high blood pressure control their blood pressure with medication.

#### *High Cholesterol*

Cholesterol is a fat-like molecule found in all cells of the body that is essential for body functions, including the production of hormones. Too much cholesterol in the blood can be serious, causing plaque to build up in the walls of the arteries leading to narrowing of the arteries over time, or atherosclerosis.

Lowering blood cholesterol levels decreases the chance of having a plaque burst and causing a heart attack and may also prevent plaque from building up. People with high blood cholesterol are at greater risk for heart attacks and heart disease.

*Coronary Heart Disease, Heart Attack and Stroke*

Coronary heart disease (CHD) is still the number one cause of death in the United States, outweighing cancer, stroke, and chronic lower respiratory disease. CHD is caused by a narrowing of the walls of the arteries, and often results in a heart attack. According to the Centers for Disease Control and Prevention (CDC), about 735,000 Americans suffer a heart attack each year and about 370,000 of those heart attacks are fatal.<sup>27</sup>

*Respiratory Conditions**COPD*

Chronic Obstructive Pulmonary Disease (COPD) refers to a group of diseases that cause airflow blockage and breathing-related problems, which includes emphysema, chronic bronchitis, and in some cases asthma. 15.7 million Americans report that they have been diagnosed with COPD and it was the nation's 3<sup>rd</sup> leading cause of death in 2014.<sup>28</sup>

According to the American Lung Association:

- COPD is a condition caused by prolonged exposure to irritants that damage the lungs and eventually obstruct the airways. Cigarette smoke is the most common culprit (firsthand and secondhand smoke), but long-term exposure to air pollution, dust, and chemicals or fumes are also contributors. Breathing difficulties and persistent shortness of breath while doing everyday activities, frequent respiratory infections, and chronic cough and wheezing are classic COPD symptoms.
- Emphysema involves the gradual damage of lung tissue, specifically thinning and destruction of the alveoli or air sacs, making it more difficult to breathe as the disease progresses. Cigarette smoke is the most common cause of the damaged lung tissue. Once the damage is done, it is not curable, but there are treatments and lifestyle changes that can help manage the disease.
- Bronchitis is a form of lower respiratory tract inflammation affecting the air tubes (bronchi) of the lungs. Chronic bronchitis is a chronic inflammation of the medium-sized airways, also known as bronchi, in the lungs. A clinical definition of chronic bronchitis is a persistent cough that produces sputum, also known as phlegm, and mucus, for at least three months per year in two consecutive years.

*Asthma*

Asthma is a chronic respiratory disease in which the airways of the lungs become temporarily blocked due to inflammation. Symptoms associated with asthma include labored breathing, chest constriction, and coughing.

The Centers for Disease Control and Prevention (CDC) reports that nearly 25 million Americans have asthma – 8.4% of children and 7.6% of adults. Black children and adults have a higher prevalence of asthma than do other races – 13.4% of children and 9.1% of adults. Females are also more likely to report that they have asthma.

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<sup>27</sup> (U.S. Centers for Disease Control and Prevention 2016)

<sup>28</sup> National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. September 16, 2016.

Asthma is also higher among obese adults compared to adults with a normal weight or those who are overweight – 11.7% vs. 7.1% and 7.8%, respectively.<sup>29</sup> The CDC also reports that asthma self-management education is essential to reducing asthma-related effects and improves quality of life for asthma sufferers by reducing urgent care visits, emergency department visits, hospitalizations, and healthcare costs. Less than half of people with asthma reported being taught how to avoid triggers and 48 percent of adults taught to avoid triggers did not follow most of this advice.<sup>30</sup>

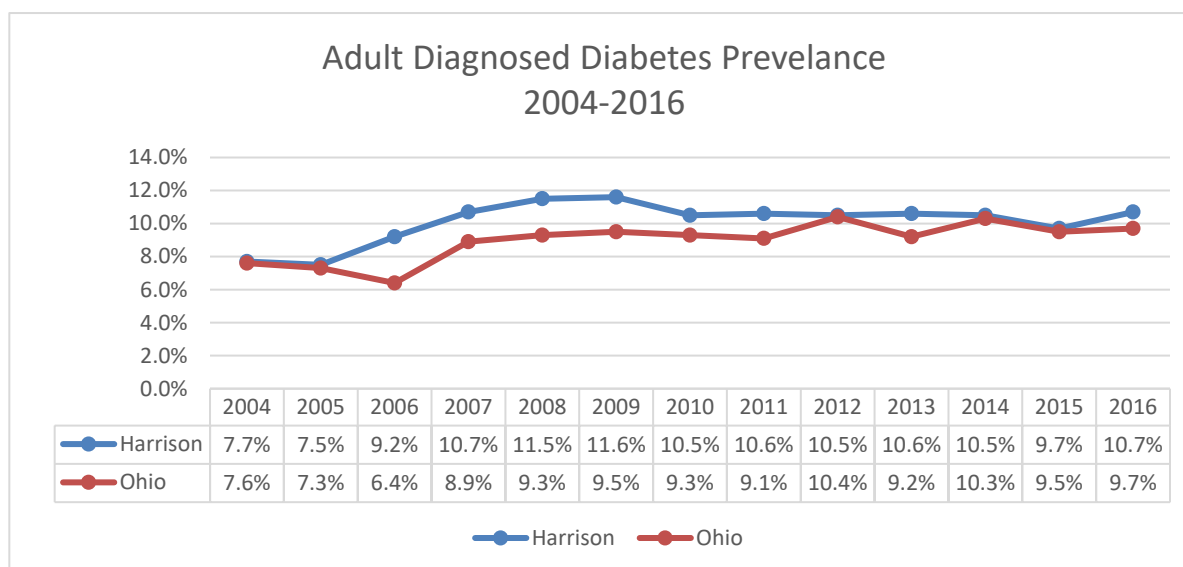
### Diabetes

Diabetes is a disease in which the pancreas is unable to produce insulin or cannot properly use the insulin that it does produce. According to the CDC, an estimated 29.1 million people in the United States have diabetes, although approximately 8.1 million are undiagnosed.<sup>31</sup> 1.4 million new cases of diabetes are diagnosed every year. There is a higher prevalence witnessed among Black/African Americans (13.2%) and Hispanics (12.8%) than White/Caucasians (7.6%) and Asian Americans (9.0%).<sup>32</sup>

There are two main types of diabetes (although others do exist), Type 1 and Type 2. Only about 5 – 10 percent of people with diabetes have Type 1 diabetes, where the body fails to produce insulin. More common is Type 2 diabetes, where the cells are resistant to insulin and cells may also not produce enough insulin. Having diabetes increases the risk of heart attack and stroke.<sup>33</sup>

The rate of adult diagnosed diabetes has increased since 2004, as witnessed in the following figure. In 2016, the CDC reports that the percentage of Harrison County residents diagnosed with diabetes is 10.7% and this rate is higher than Ohio (9.7%). Refer to the following figure for trend from 2004-2016.

**Figure 17: Adult Diagnosed Diabetes Prevalence, 2004-2016**



Source: Centers for Disease Control and Prevention, United States Diabetes Surveillance System, Diabetes Data and Statistics

<sup>29</sup> (U.S. Centers for Disease Control and Prevention 2017)

<sup>30</sup> Centers for Disease Control and Prevention, Vital Signs, May 2011.

<sup>31</sup> (U.S. Centers for Disease Control and Prevention 2015)

<sup>32</sup> (U.S. Centers for Disease Control and Prevention 2015)

<sup>33</sup> (American Diabetes Association 2017)

### *Kidney Disease*

According to the Kidney Foundation, as many as 26 million adults in the United States have kidney disease, most of whom are unaware. Kidney disease often goes undetected until it is in the late stages of the disease.<sup>33</sup> One in three American adults are at risk for developing kidney disease.<sup>34</sup> The three leading causes of kidney failure are diabetes, high blood pressure, and glomerulonephritis.<sup>35</sup> Some of the other diseases that may affect the kidneys include infections, kidney stones, and polycystic kidney disease. Over use of over-the-counter pain killers and illegal drugs are also causes of kidney disease.<sup>36</sup>

### *Cancer*

Diseases can be prevented through healthy lifestyle choices like refraining from smoking, engaging in regular physical activity, making healthy food choices, and maintaining a healthy weight. However, not all diseases are preventable, making early detection through screenings and regular check-ups vital to health and longevity. The following section delves into cancer rates and the preventive actions Harrison County residents have undertaken to remain healthy and cancer free.

The CDC reports that nationwide in 2016, the most common cancers (age adjusted rates expressed per 100,000) for adults are:

- Breast cancer (124.2 – 1<sup>st</sup> among women of all races and Hispanic origin populations)
- Prostate cancer (101.4 – 1<sup>st</sup> among men of all races and Hispanic origin populations)
- Lung cancer (56.0 – 2<sup>nd</sup> among White, Black, American Indian/Alaska Native, and Asian/Pacific Islander men and women, but 3<sup>rd</sup> among Hispanic men and women)
- Colorectal Cancer (37.4 – 2<sup>nd</sup> among Hispanic men and 3<sup>rd</sup> among White, Black, American Indian/Alaska Native, and Asian/Pacific Islander men)
- Melanoma of the Skin (22.3)
- Uterine Cancer (19.2)
- Non-Hodgkin Lymphoma (18.3)

### *Children*

- Leukemias (29 – 1<sup>st</sup> among children 1-4 years of age)
- Brain and central nervous system cancer (26 – 2<sup>nd</sup> among children 1-4 years of age)
- Neuroblastoma (6)

The most common form of cancer among the Harrison County population is Lung and Bronchus and the 2<sup>nd</sup> most common form of cancer is prostate cancer (crude rate calculated for men only). Refer to the following figure for the leading crude rates in cancer incidence in 2017.

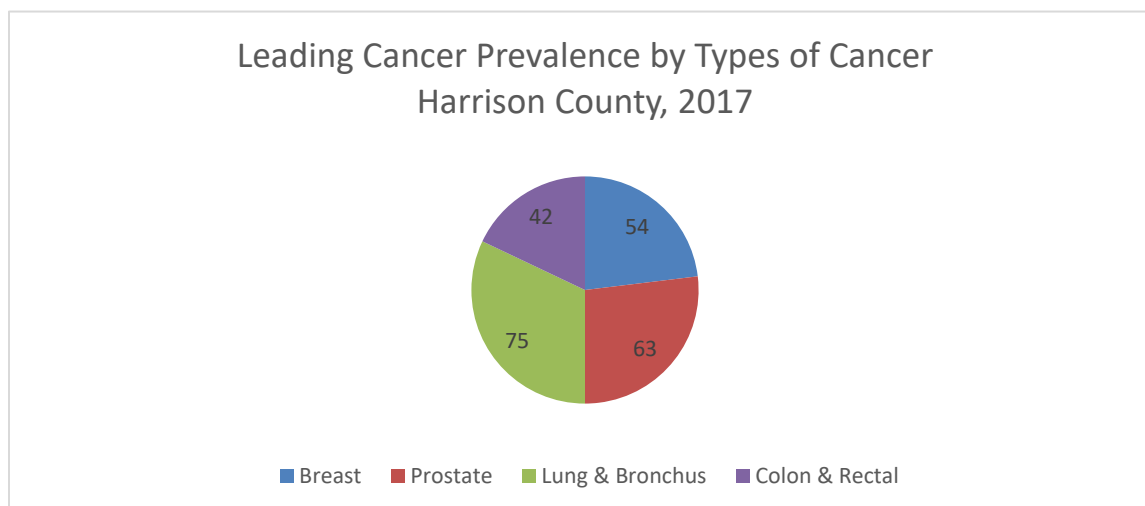
<sup>33</sup> National Kidney Foundation, 2015. <https://www.kidney.org/kidneydisease/aboutckd>

<sup>34</sup> National Kidney Foundation, 2015. <https://www.kidney.org/kidneydisease/aboutckd>

<sup>35</sup> National Kidney Foundation, 2015. <https://www.kidney.org/atoz/content/kidneydiscauses>

<sup>36</sup> National Kidney Foundation, 2015. <https://www.kidney.org/atoz/content/kidneydiscauses>



**Figure 18: Leading Cancer Prevalence by Types of Cancer (crude rate per 100,000), 2017**

Source: Ohio Department of Health, Cancer Incidence Data

Screenings are important in the early detection and treatment of cancer. The stage of a cancer case refers to the degree to which the cancer has spread. The stage at diagnosis of cancer is an important determinant of survival, with the earliest stages often leading to better prognoses. Early detection through screening is useful in determining the most beneficial treatment and is a good predictor of long-term survival.<sup>37</sup>

The Ohio Department of Health defines the five stages at which cancer is diagnosed as:

**Un-staged/Unknown:** Insufficient information is available to determine the stage of cancer at the time of diagnosis, or the case was reported with missing stage data

#### Early Stage

- **in situ:** A tumor that has not invaded or penetrated surrounding tissue
- **Localized:** An invasive malignant tumor that is confined to the organ in which it originated

#### Late Stage

- **Regional:** An invasive malignant tumor that has spread by direct extension to adjacent organs or tissues and/or has spread to regional lymph nodes
- **Distant:** An invasive malignant tumor that has spread by direct extension beyond adjacent organs or tissues and/or metastasized to distant lymph nodes or tissues

#### *Early Detection for Breast Cancer*

Some risk factors that may increase a woman's risk for breast cancer include: a personal history of a prior breast cancer; evidence of a specific genetic change that increases susceptibility to breast cancer (BRCA1/BRCA2 mutations); a mother, sister, daughter, or two or more close relatives, such as cousins, with a history of breast cancer (especially if diagnosed at a young

<sup>37</sup> (Ohio Department of Health 2015)

age); a diagnosis of a breast condition (i.e., atypical hyperplasia) that may predispose a woman to breast cancer; or a history of two or more breast biopsies for benign breast disease.

Two important screenings in the early detection of breast cancer are the clinical breast exam and the mammogram. The American Cancer Society (ACS) recommends that women 40 or older have a mammogram annually. However, women who have a family history of breast cancer should consult their doctor as to how often they should receive a mammogram.

Eight out of ten (81.4%) women in Harrison County report that they have had a clinical breast exam and 74.7% have had one within the last two-years. Two-thirds (65.9%) of all Harrison County women surveyed have had a mammogram and three out of five women who have had a mammogram (61.8%) had this procedure less than one year ago. Three-quarters (77.4%) of women ages 40 and older have had a mammogram performed within the past two years in Harrison County and this finding is significantly higher than Ohio (72.2%) and the nation (73.0%). One Healthy People 2020 objective is to reduce the rate of late-stage breast cancer diagnoses. As witnessed in the following figure, 73.4% of breast cancer diagnoses among Harrison County women were diagnosed in the early stages.

#### *Early Detection for Cervical Cancer*

Cervical cancer is often preventable and curable if it is detected early. More women aged 40 years and older are diagnosed with cervical cancer, but younger women are at risk for the precursor to cervical cancer. The most effective tool for early detection is the Papanicolaou test (Pap test), which can detect lesions before they become cancer. Most physicians recommend a Pap test every 1 to 3 years. Nearly ninety percent of all female respondents (86.6%) in Harrison County have had a Pap test. Three-fourths of respondents (76.2%) have had the exam within the past 3 years and this percentage is like Ohio (73.7%) and the nation (75.2%).

The Healthy People 2020 target is to increase the percentage of women who received a cervical cancer screening based on the most recent guidelines to 93.0% and to reduce the rate of new late-stage cervical cancer cases to 7.2 per 100,000. Between 2011 and 2015, over half of the cervical cancer cases among women in Harrison County were of late stage diagnoses – 42.9% regional and 9.5% distant.

#### *Early Detection for Lung Cancer*

Lung cancer is the leading cause of cancer death and the second most common cancer among both men and women in the United States.<sup>38</sup> According to the CDC, cigarette smoking is the number one risk factor for lung cancer and is linked to about 80% to 90% of lung cancers. The more years a person smokes and the more cigarettes smoked each day, the more this risk increases. People who smoke cigarettes are 15 to 30 times more likely to get lung cancer or die from lung cancer than people who do not smoke.<sup>39</sup>

The only recommended screening test for lung cancer is low-dose computed tomography (also called a low-dose CT scan, or LDCT). In this test, an X-ray machine scans the body and uses low doses of radiation to make detailed pictures of the lungs. The U.S. Preventive Services Task Force recommends yearly lung cancer screening with LDCT for people who have a

<sup>38</sup> (U.S. Centers for Disease Control and Prevention 2017)

<sup>39</sup> (U.S. Centers for Disease Control and Prevention 2017)

history of heavy smoking, and smoke now or have quit within the past 15 years and are between 55 and 80 years old.

#### *Early Detection for Colorectal Cancer*

Colorectal cancer is the third most common cancer in both men and women and is most common in people over age 50. More than 90 percent of people with this disease are diagnosed after age 50. Risk factors include having colorectal polyps; having a family history of colorectal cancer; having a personal history of colon cancer; having colitis or Crohn's disease; having a diet high in fat and low in calcium, folate, and fiber; or being a cigarette smoker.

There are several methods used to screen for colon cancer, and early detection is the very best form of defense against the disease. One method of screening for colorectal cancer is the digital rectal exam. Other screenings include the fecal occult blood test (FOBT), a sigmoidoscopy, and a colonoscopy. Looking only at Harrison County residents 50 years of age and older, 24.0% of residents 50 and older have not had a sigmoidoscopy or colonoscopy, which is lower than both Ohio (32.4%) and the United States (30.7%). Of Harrison County residents 50 years of age and older who indicated they have had a sigmoidoscopy or colonoscopy, 41.1% have done so in the last 2 years. Three-quarters of respondents (75.1%) have not used an at home blood stool kit, either. Of those individuals indicating they have used a blood stool kit at home, 32.3% have done so in the past year.

The HP 2020 target is to increase the percentage of adults, ages 50-75, who received a colorectal cancer screening based on the most recent guidelines to 70.5% and to reduce the rate of new late-stage colorectal cancer cases to 39.9 per 100,000. Between 2011 and 2015, nearly half of the colorectal cancer cases among adults in Harrison County were of late stage diagnoses – 26.7% regional and 21.3% distant.

#### *Early Detection for Prostate Cancer*

Men over age 55 are most at risk for prostate cancer, and the risk for developing prostate cancer is higher if a father or brother has had the disease. Prostate cancer is also more common in Black/African American men than in White/Caucasian men. Another risk factor may be a diet high in animal fat.

There are two detection tests for prostate cancer: the digital rectal exam, and a blood test for prostate-specific antigen (PSA). In general, experts suggest men should have annual screenings for prostate cancer, beginning at age 50. Most men in Harrison County (80.8%) have been advised by a doctor or other health care professional about the advantages of the PSA test, which is a blood test to measure protein produced by both cancerous and noncancerous tissue in the prostate and are following this advice. Eighty percent (78.9%) of men ages 50 years of age or older have had a PSA test, and 63.2% have had one within the past year.

## Maternal and Child Health

The HP2020 goal is to improve the health and well-being of women, infants, children, and families, because improving the well-being of mothers, infants, and children affects the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy), prenatal (during pregnancy), and inter-conception (between pregnancies) care.<sup>40</sup>

Other factors can affect a healthy pregnancy and childbirth, including age, race, poverty, and the mental health of the parents and/or caregivers. For example, *the social determinants that influence maternal health also affect pregnancy outcomes and infant health. Racial and ethnic disparities in infant mortality exist, particularly for African American infants and a child's health status varies by both race and ethnicity. Family income and related factors, including educational attainment among household members and health insurance coverage also affect prenatal and infant health outcomes.*<sup>40</sup>

In addition, environmental factors can shape a woman's overall health status before pregnancy, and her and the child's health during, and after pregnancy. Common barriers affecting her health directly and her ability to engage in healthy behaviors, like exercise and eat healthy foods, can be influenced by the neighborhood, community, and other environmental factors.

### Maternal Health

#### *Births to Mothers Who Smoke*

Ohio has one of the worst infant mortality rates in the US, with overall infant mortality of 7.9 deaths per 1,000 live births (2011, Ohio Vital Statistics), compared with the US infant mortality rate of 6.1 deaths per 1,000 live births (Hoyert & Xu, 2012). Leading causes of infant deaths in Ohio include preterm birth, SIDS, birth defects, and injuries (Ohio Department of Health and Ohio Children's Trust Fund, 2013). Perinatal smoking is associated with many of the causes of infant death that contribute to Ohio's high infant mortality rate.<sup>41</sup>

Smoking during pregnancy can increase the risk that the infant is born prematurely and/or born with low birth weight, which creates additional dangers. The percentage of mothers who smoke while pregnant is decreasing over time, and the rate for mothers in Harrison County is lower than the national rate of 10.9% in 2014 and consistently lower than the rate for Ohio from 2010 to 2014. However, in 2014, the percentage of women who did not abstain from smoking during pregnancy remains higher (9.7%) than the HP2020 goal to reduce the percentage to 1.4%.

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<sup>40</sup> (U.S. Department of Health and Human Services 2017)

<sup>41</sup> Quinn, et. al. Rapid Assessment of the implementation of a smoking cessation intervention in public health clinics that serve low-income pregnant women – Ohio (2013)

### *Preterm Births*

Preterm birth is when a baby is born too early – before the 37th complete week of pregnancy. Preterm birth is also a leading cause of long-term neurological disabilities in children and preterm-related causes of death account for approximately 35% of all infant deaths.<sup>42</sup> The percentage of U.S. births delivered prematurely rose more than 20 percent between 1990 and 2006. This rise has been tied to several interrelated trends, including an increase in multiple births, greater reliance on Caesarean deliveries and induced labor to manage risky pregnancies, and an increase in births to older mothers.<sup>43</sup> Other maternal factors are also associated with premature births, including behavioral and socioeconomic characteristics such as smoking, teenage pregnancy, obesity, poverty, and inadequate prenatal care.<sup>44</sup>

According to the Centers for Disease Control and Prevention (CDC), preterm birth affected about 1 of every 10 infants born in the United States in 2015. Preterm birth rates decreased from 2007 to 2014, and CDC research shows that this decline is due, in part, to declines in the number of births to teens and young mothers. The CDC also reports that the rate of preterm birth among Black/African American women (16.0%) was about 50 percent higher than the rate of preterm birth among White/Caucasian women (10.5%). This is also true for Ohio where the rate of preterm birth among Black/African American women was 14.1% in 2015 compared to 9.4% for White/Caucasian women. The HP 2020 target for reduction is 11.4% annually and both Harrison County and Ohio outperformed the HP 2020 target for preterm births.

When looking at the maternal age cohorts, the percentage of preterm births was highest among mothers who were 35 years of age or older in Harrison County, which is like Ohio (12.6% of mothers).

### *Low Birth Weight Rate*

Being an older mother (aged 35 years or older) is associated with low birth weight (LBW) in the United States.<sup>45</sup> Furthermore, a clear graded association between education and LBW is apparent, with a significant difference between mothers who have not completed high school and those with a high school education. There is also a clear and significant income gradient in LBW. According to the author, “If you are a low-income woman and you grew up low-income and had poor nutrition and more stress, all these factors have accumulated throughout the life course to culminate in low birth weights.”

According to the National Vital Statistics Reports released in January 2017, LBW levels were essentially stable from 2014 to 2015 among births to non-Hispanic White mothers at 6.93%, but rose among births to non-Hispanic Black (from 13.17% to 13.35%) and Hispanic (from 7.05% to 7.21%) mothers.

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<sup>42</sup> (U.S. Centers for Disease Control and Prevention 2013)

<sup>43</sup> Kent, M. “Premature Births Help Explain Higher U.S. Infant Mortality Rate,” Population Reference Bureau, 2009

<sup>44</sup> Heron, M., et al. “Preterm Labor and Birth”; “Deaths: Final Data for 2006,” National Vital Statistics Reports 57, no. 14 (2009): table D. (cited in Kent, M.)

<sup>45</sup> Martinson, M. “Socioeconomic Inequalities in Low Birth Weight in the United States, the United Kingdom, Canada, and Australia,” American Journal of Public Health, 2016

### *Teen Birth Rates*

“Teen pregnancy and childbearing bring substantial social and economic costs through immediate and long-term impacts on teen parents and their children.

- In 2011, teen pregnancy and childbirth accounted for at least \$9.4 billion in costs to U.S. taxpayers for increased health care and foster care, increased incarceration rates among children of teen parents, and lost tax revenue because of lower educational attainment and income among teen mothers.
- Pregnancy and birth are significant contributors to high school dropout rates among girls. Only about 50% of teen mothers receive a high school diploma by 22 years of age, versus approximately 90% of women who had not given birth during adolescence.
- The children of teenage mothers are more likely to have lower school achievement and drop out of high school, have more health problems, be incarcerated at some time during adolescence, give birth as a teenager, and face unemployment as a young adult.

These effects remain for the teen mother and her child even after adjusting for those factors that increased the teenager’s risk for pregnancy, such as growing up in poverty, having parents with low levels of education, growing up in a single-parent family, and having poor performance in school.”<sup>46</sup>

### *Neonatal Abstinence Syndrome*

Risky health behaviors of mothers can affect the health of newborns in a variety of ways, which can lead to risk of harm to the infant or child later due to the difficulties that arise in the infant’s or child’s behavior. For example, Neonatal Abstinence Syndrome (NAS), also known as neonatal withdrawal syndrome, is a set of symptoms associated with the abrupt withdrawal of opioids and other drugs when infants are born to mothers who were taking these substances.

In childhood, infants with NAS were more likely to be re-hospitalized (1.6 times more likely than other children), die during hospitalization (3.3 times), and be hospitalized for assaults (15.2), maltreatment (21 times), poisoning (3.6 times), and mental/behavioral (2.6 times) and visual (2.9 times) disorders.<sup>47</sup>

Between 2006 and 2015 in Ohio, 11,283 hospitalizations resulted from Neonatal Abstinence Syndrome (NAS) in inpatient settings. In 2015 alone, there were 2,174 admissions, which equates to nearly six admissions per day. The rate of NAS grew nearly eight times from 2.0 per 1,000 live births in 2006 to 15.5 per 1,000 live births in 2015.<sup>48</sup> Health outcomes for NAS infants (feeding difficulties, low birth weight, respiratory distress, and seizures/convulsions) are all significantly worse than for all Ohio infants.<sup>49</sup>

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<sup>46</sup>(U.S. Centers for Disease Control and Prevention 2017)

<sup>47</sup>Uebel, H., et al., “Reasons for Re-hospitalization in Children Who Had Neonatal Abstinence Syndrome,” *Pediatrics*, Vol. 136, Issue 4, October 2015.

<sup>48</sup>Ohio Department of Health, Neonatal Abstinence Syndrome (NAS) Hospital Reporting in Ohio

<sup>49</sup>(Ohio Department of Health 2016)

### *Infant Mortality*

The infant mortality rate is a "indicator to measure the health and well-being of a nation, because factors affecting the health of entire populations can also impact the mortality rate of infants."<sup>50</sup>

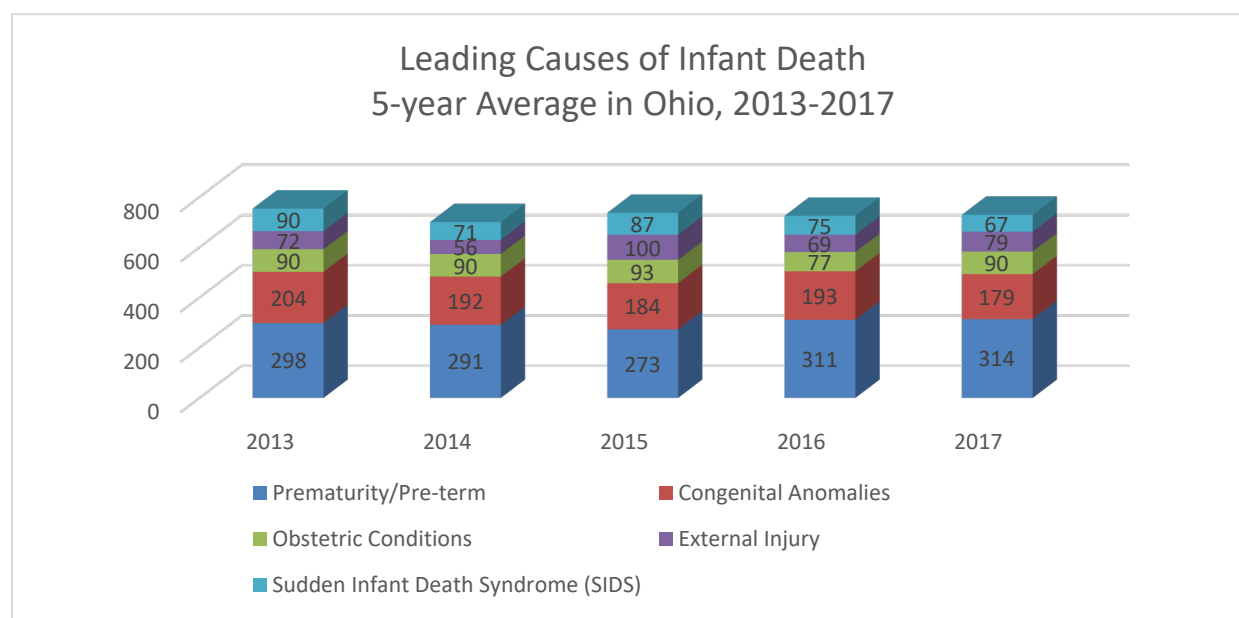
Infant mortality refers to the number of deaths among children under one year of age and is calculated as a rate per 1,000 live births. Infant mortality is an important measure to inform communities about child health and well-being. According to the CDC, there are significant differences in infant mortality by race – the mortality rate for Black infants is more than twice that of White infants.

The number of infant deaths in any given year is below the threshold for reporting (<20 reported cases); therefore, specific numbers are considered unstable and should be interpreted with caution, but the impression indicates a substantially lower rate in Harrison County from 2013-2017 than in Ohio. The HP 2020 national target for reduction is 6.0% and Harrison County's rate has achieved or outperformed the HP2020 target over each of the ten-year average periods.

The CDC reports that the top five leading causes of infant mortality together account for over half (57%) of all infant deaths that happened in the United States in 2017. The top five causes of infant death are birth defects, preterm and low birth weight complications, maternal complications of pregnancy, sleep disorders (i.e., Sudden Infant Death Syndrome (SIDS)), and injuries.

The CDC also reports that 36% of infant deaths nationally were due to preterm-related causes in 2013. Ohio reports that just over 46% of infant deaths are due to preterm/low birth weight complications. Sleep-related causes account for approximately 16% of infant related deaths over the 7-year period, while birth defects account for just over 14% of infant related deaths in Ohio.

**Figure 19: Leading Cause of Infant Death, 5-year Average in Ohio, 2013-2017**



Source: Ohio Department of Health, Ohio Resident Live Births

<sup>50</sup> (U.S. Centers for Disease Control and Prevention 2016)



### *Child Health*

#### *Childhood Asthma*

Obtaining data pertaining to child physical health, beyond the pre-and post-natal stages, is a challenge. One measure of child health is asthma. Asthma remains one of the most prevalent chronic diseases facing American youth today. An estimated 14% of children and adolescents under the age of 18 are diagnosed with asthma at some point in their lives.

Asthma prevalence in Harrison County is difficult to come by. The current national rate for children diagnosed with asthma is 8.6% (2014) which is roughly the same percentage as in 2010. Children between 5-11 years old have the greatest prevalence; prevalence is much greater for Black/African American children (13.4%). Impacts include: youth's psychological well-being, academic performance, and missed school days. Beyond physical pollutants, social "pollutants" such as childhood poverty, neighborhood violence, and familial stress, independently contribute to pediatric asthma outcomes.

#### *3<sup>rd</sup> Grade Oral Health*

Access to dental care means getting the dental care you need when you need it. According to the 2015 Ohio Medicaid Assessment Survey, getting dental care remains the number one unmet health care need among Ohio's children. The following figure presents these results.

**Table 7: 3rd Grade Oral Health Screening, 2013-2015**

	<b>Toothache in the Last Six Months</b>	<b>Untreated Cavities</b>	<b>History of Tooth Decay</b>	<b>One or More Sealants</b>
<b>Ohio</b>	10%	17%	51%	49%
<b>Harrison</b>	9.2%*	21.9%	52.9%	45.1%

\*Percentages have a relative standard error greater than or equal to 30% and have been deemed unreliable.

Source: Ohio Department of Health, Third Grade Oral Health Survey

#### *Kindergarten Immunizations*

In Ohio, students must be immunized at the time of initial entry or at the beginning of each school year by a method of immunization approved by the department of health against mumps, poliomyelitis, diphtheria, pertussis, tetanus, rubeola, and rubella or are in the process of being immunized. In Harrison County, 96.7%<sup>51</sup> of kindergarten students were fully immunized (SY2016-2017).

**Table 8: Harrison County Kindergarten Immunization Rates, SY2017-18**

<b>Kindergarten Immunization</b>	<b>Total Enrolled</b>	<b>Total Immunized</b>	<b>Percent fully Immunized</b>	<b>Total Exempt Religious / Philosophical</b>	<b>Percent Exempt</b>
<b>Harrison</b>	119	90	75.6%	3	2.5%

Source: Harrison Hills City School District, 2019

<sup>51</sup>(Harrison Hills City School District)



## **Mental Health**

Providing for and supporting good mental health is a public health issue just like assuring the quality of drinking water or preventing and managing infectious diseases. Communities prosper when the mental health needs of community members are met. Unaddressed mental health issues can have a negative influence on homelessness, poverty, employment, safety, and the local economy.<sup>52</sup>

When asked how you would rate your overall health, 51.6% of respondents indicated they were healthy. Thirty one percent indicated that they are somewhat healthy. While, less than one percent said they were very unhealthy.

When asked if you have used any of the following in the past 60 days, 36.0% responded that they had used alcohol. Eighteen percent have used Cigars/Cigarettes. Less than 0.4% responded using an illicit drug.

Three percent (n=12) of respondents indicated that someone in their household have needed, but could not get, mental health services or care in the past 12 months. The main reasons they could not access the service was cost or lack of any kind of health insurance coverage for one or more members of the household. One respondent further explained that services for mental health in Harrison County is inadequate – there are too many patients, not enough doctors, and there is no care in treatment.

### *Alcohol Consumption and Substance Abuse*

According to the CDC, we know that addiction is a disease that affects both the brain and behavior. Scientists have identified many of the biological and environmental factors that affect drug use and dependence and are beginning to search for the genetic variations that contribute to the development and progression of the disease. Despite these advances, it is still unknown why people become addicted to drugs or how drugs change the brain to foster compulsive drug use. The National Institute on Drug Abuse (NIDA) also reports that most drugs of abuse can alter a person's thinking and judgment, leading to health risks, including addiction, drugged driving, pregnancy risks, and infectious disease. Commonly abused drugs include alcohol, cocaine, heroin, marijuana, opioids, steroids, and nicotine.

According to NIDA, fentanyl-laced heroin has been linked to a surge of overdoses in Ohio. Fentanyl and related compounds are also being found in counterfeit pills made to look like prescription pain relievers and sedatives and those who use heroin or prescription drugs laced with fentanyl are at much higher risk of overdose and death. Emerging drug use trends in Ohio also include the use of the potent animal opioid sedative carfentanil, which has been linked to a significant number of overdose deaths.

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<sup>52</sup> (Substance Abuse and Mental Health Services Administration 2013)

## Dental Health

Respondents to the 2017 survey were asked how long it had been since they last visited a dentist or dental clinic for any reason. Eight out of ten (78.4%) report that they last visited a dentist or dental clinic within the past year, which is significantly higher than both Ohio (65.3%) and the nation (65.3%). Sixty percent (61.5%) of respondents' report that none of their permanent teeth have been removed because of tooth decay or gum disease, while 38.5% have – 26.9% have lost 1-5 teeth, 7.1% have lost at least 6 teeth, but not all their teeth, and 4.5% have lost all their teeth due to tooth decay or gum disease. As previously mentioned, 38.5% of Harrison County residents report that permanent teeth have been removed because of tooth decay or gum disease, which is significantly lower than both Ohio (46.5%) and the nation (56.6%).

When asked if the respondent or anyone else in their household needed but could not get dental care in the past 12 months, 8.6% of respondents indicated that someone in their household could not get these services. Seven out of ten (69.1%) of respondents indicated that the reason someone in their household could not get dental services was because of cost. One respondent indicated that they could not find a dentist who accepted their insurance and another indicated that the dentist no longer accepted Medicaid.

### Dental Health Data Highlights

**Table 18: State and National Comparison of Adult Dental Health Indicators**

Key Variable	Harrison County 2017		Ohio 2016				Nationwide (States & DC) 2014		HP 2020
	Percent	Sample Size	Percent	Sample Size	N	Sample- N	Median	Balance	Target
<b>Health Status</b>									
<b>Visited the dentist or dental clinic within the past year for any reason</b>	78.4%	385	67.9%^	8,403	3,866	12,269	65.7%^	34.3%	49.0%
<b>Adults that have had any permanent teeth removed</b>	38.5%	379	83.0%^	740	3,764	4,504	14.4%*	85.6%	N/A

## Health Challenges

While heart disease and cancer make up the two leading causes of death in the United States, lifestyle choices and behaviors that contribute to these diseases, modifiable behaviors like tobacco use, poor diet, physical inactivity, and excessive alcohol consumption cause much of the illness and early death related to chronic diseases and conditions.<sup>53</sup> This chapter profiles the lifestyle choices of Harrison County residents.

<sup>53</sup>National Center for Chronic Disease Prevention and Health Promotion, 2016.  
<http://www.cdc.gov/chronicdisease/overview/>

### *Vaccinations*

According to the CDC, influenza is a serious disease that can lead to hospitalization and sometimes even death. Millions of people get the flu every year, while hundreds of thousands of people are hospitalized and thousands or tens of thousands of people die from flu-related causes every year. The annual seasonal flu vaccine is the best way to reduce your risk of getting sick with seasonal flu and spreading it to others.

The CDC also reports that the pneumococcal disease is common in young children, but older adults are at greatest risk of serious pneumococcal infections and even death. CDC recommends vaccination with the pneumococcal conjugate vaccine for all babies and children younger than 2 years old, all adults 65 years or older.

According to the CDC, shingles is a painful rash that usually develops on one side of the body, which forms a blister that typically scab over in 7 to 10 days and clears up within 2 to 4 weeks. Your risk of shingles increases as you get older and the shingles vaccine reduces the risk of developing shingles by 51%.

According to the CDC, deaths due to influenza are generally most common among senior adults or those 65 years old and over. In addition, the pneumococcal polysaccharide vaccine is recommended for all adults 65 years or older. Seven out of ten Harrison County senior adults have had flu vaccine within the last year (73.8%), which is significantly higher than Ohio (57.7%) and nation (61.3%) or has ever had a pneumonia or pneumococcal vaccine (73.1%), which is significantly higher than Ohio (72.2%) and like the nation (72.7%).

### *Physical Activity*

Exercise is an essential part of a well-balanced lifestyle and increasing attention has been placed on the link between exercise and disease prevention. The Centers for Disease Control and Prevention (CDC) recommends two types of physical activity to improve adult health – moderate-intensity aerobic activity for at least 150 minutes per week and muscle-strengthening activities at least 2 days per week.

Moderate-intensity aerobic activities involve increasing your heart rate and possibly breaking a sweat for at least 10 minutes at a time to get health benefits from the activity. Three out of ten Harrison County adults (39%) have participated in any sort of moderate aerobic activity in the past month, such as running, calisthenics, golf, gardening, or walking for exercise, according to the 2017 survey. Lower income respondents (household incomes under \$15,000/year) are more likely to report a lack of physical activity than residents from higher income households.

Women in Harrison County are also more likely to indicate that they do not participate in regular exercise. As age increases, so does the likelihood that the respondent does not participate in any regular physical activity.

The percentage of adults **not** participating in physical activity (32%) is significantly higher than the percentage reporting no regular physical activity in Ohio (27.0%) or at the national level (26.2%).

The walkability index score measures walkability on a scale from 0 - 100 based on walking routes to destinations such as grocery stores, schools, parks, restaurants, and retail.<sup>54</sup> The walkability of a community may contribute to the level of exercise in which residents participate. In Harrison County, the walkability score is 0, which means almost all errands require a car or is car-dependent. Walkability index scores provided by Walk Score for Harrison County jurisdictions include:

- Cadiz – average walk score of 15 with 3,353 residents (most errands require a car) There are about 8 restaurants, bars and coffee shops in Cadiz.
- Jewett– average Walk Score of 10 with 692 residents. (most errands require a car) There are about 5 restaurants, bars and coffee shops in Jewett.
- Hopedale – average Walk Score of 5 with 952 residents (most errands require a car) The closest park is Hopedale Park.

### *Weight*

In the 2017 survey, Harrison County respondents were asked how many servings of vegetables do they have at meals daily? Respondents shared that 16.7% had two, while only 13.6% responded zero to one.

### *Tobacco Use*

According to the Journal of the American Medical Association, tobacco use is the leading cause of preventable death in the United States. More than half of adults in the 2017 Harrison County study (57.2%) have smoked cigarettes, cigars, or an electronic vapor product at some point in their life, and 24.3% of those residents still currently smoke cigarettes or cigars and 17.4% smoke a vapor product. This finding is significant by age and level of educational attainment – as age or education increases so does the likelihood that the respondent has never smoked. This finding is also significant by household income as lower income households (household income below \$15,000) are significantly more likely to have ever smoked.

Seven out of eight Harrison County adults (74.0%) report that they do not currently smoke cigarettes, which is lower than Ohio (78.2%) and the United States (82.5%).

<sup>54</sup> (Walk Score Professional 2017)

Respondents who indicated having smoked a cigarette in their life, but currently do not smoke were asked how long it has been since they last smoked on a regular basis. Nearly half (48.6%) of respondents indicated they have not smoked for over ten years, while an additional 7.9% have not smoked for five to ten years. Two-thirds (62.9%) of the individuals who currently smoke have tried to quit smoking in the past year.

Harrison County residents were also asked how many days out of the previous 7 days had someone (other than the respondent) smoked tobacco inside their home. Nine out of ten respondents (91.0%) indicated that no one smoked tobacco inside their home while they were home. Similarly, 91.2% also reported that they did not ride in car when someone else was smoking tobacco.

### **Access to Health Care**

The US Census Bureau's Small Area Health Insurance Estimates (SAHIE) program produces estimates of health insurance coverage for all states and counties. The percent of Harrison County residents over the age of 18 that do not have health insurance coverage is 8.0% versus 11.1% for the Ohio and 15.0% for the U.S. The percent of Harrison County residents over the age of 18 without medical insurance coverage is presented below along with Ohio and national comparisons.

Three percent of Harrison County's children have no insurance coverage according to the 2011- 2015 American Community Survey, which is 2% lower than the Ohio and 3.5% lower than the nation. Refer to the following figure for more detail about insurance coverage for children.

#### *Health Care Coverage*

Harrison County residents were asked if they had health care coverage. Almost all respondents (95.3%) indicated they have some health care coverage, including health insurance, prepaid plans such as HMO's, or government plans such as Medicare or Indian Health Services and 87.0% feel that their health care coverage is affordable.

Five percent (4.7%) of participants indicated that they did not have health care coverage. This percentage is significantly lower than both Ohio (8.4%) and the nation (10.8 %), but still fails to meet the HP 2020 target of 100% health care coverage. Despite these findings, 9.7% of Harrison County respondents

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<sup>55</sup> (Ohio Department of Public Safety 2013, 2014, 2015, 2016)

<sup>56</sup> (Ohio Department of Public Safety 2013, 2014, 2015, 2016)

<sup>57</sup> (Pickrell 2016) Source: Institute for Health Metrics and Evaluation

indicated that they could not see a doctor at some point in the past 12 months because of the cost, which is lower than both Ohio (10.7%) and nation (12.1%).

### *Health Care Utilization*

“Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Having a usual PCP is associated with greater patient trust in the provider, good patient-provider communication, and increased likelihood that patients will receive appropriate care.”<sup>59</sup> In the 2018 community survey, respondents were also asked questions pertaining to access to health care providers. Questions were designed to assess whether respondents have a regular health care provider, the frequency of regular check-ups, as well as whether respondents without a health care provider are impacted by lack of health care coverage.

Nearly three-quarters of respondents (73.8%) say they have a single person who they think of as their doctor or health care provider and 9% say they have more than one person they think of as their doctor or health care provider. The remaining 18.8% say they do not have a regular person(s) they think of as their doctor or health care provider, which is like Ohio (18.6%), but significantly lower than the U.S. median (21.2%). As age increases, so does the likelihood that the respondent has one or more individuals they consider their personal doctor or health care provider. Male and minority respondents are also more likely to indicate that they do **not** have a person(s) they consider their personal physician or provider.

When participants were asked about how long it had been since they had last visited a doctor for a routine checkup, 80.1% indicated they visited the doctor for a routine check-up in the past year. Significant differences are witnessed by age — adults ages 55 or older are significantly more likely to have visited a doctor for a routine checkup in the last year than adults under the age of 55. Significant differences are also witnessed among minorities. Minorities are less likely to have visited the doctor in the past year for a routine checkup than are White/Caucasians.

<sup>59</sup> (U.S. Department of Health and Human Services 2018)

## Identify Strategic Issues

The fourth step in the MAPP process is identifying strategic issues. The Steering Committee worked independently and as a group through several activities to identify the most pressing health issues facing the community. The initial activity came via email prior to the fifth Steering Committee meeting. This was a health issues worksheet which asked each committee member to review a draft of the Community Health Assessment (CHA), the CHA vision and values, and the preliminary findings to determine the top 3 health issues and the associated data points to support the selection of health issues. Committee members brought the health issues worksheet to the meeting for review with the larger group.

During the meeting on September 11, 2017, a health issues worksheet was used to create a list that was tallied from everyone's responses. A list of 3 health issues came from this list to represent the group.

The strategic issues identified were:

- ☐ Mental Health & Substance Abuse
- ☐ Chronic Disease
- ☐ Obesity

The 2019 Community Health Assessment also yielded the same top three health focus topics.

### Moving into Planning

The steering committee members were asked to complete a resource worksheet to help in the identification of assets and resources that can be utilized in addressing the health issues identified as the four strategic issues. The assets identified for chronic disease include various physical activity opportunities (park programming and exercise classes) and medical professionals (kidney disease and heart disease specialists); for mental health and substance abuse the Mental Health and Recovery Board, Crossroads and Southeast were identified; maternal and child health included programming structured to support families such as WIC, home visiting programs and children services; for injury prevention the commonly mentioned asset was the Harrison County Council on Aging. Although other resources were provided they are not listed here, the complete resource list will be utilized in the CHIP when determining the strategies to address the identified strategic issues.

The next steps in the MAPP process comprise the Community Health Improvement Plan (CHIP). These steps include:

5. Formulate Goals & Strategies
6. Action Cycle (Plan, Implement & Evaluate)

The CHIP will be a report that addresses steps 5 & 6. It is the plan to address the strategic issues identified during the CHA process.

Because the 2019 Community Health Survey resulted in the same three main health issues, the three taskforce groups were reconvinced to review the 2017 goals and objectives and develop new goals and objectives based on those plans. The taskforce groups will evaluate those efforts in a year after implementing strategies.



## **Non-profit, local, state, and federal agencies referenced**

### *Non-profit Agencies*

- IHME – Institute for Health Metrics and Evaluation
- PHAB – Public Health Accreditation Board
- RWJF – Robert Wood Johnson Foundation
  - CHR – County Health Rankings

### *Local Agencies and Departments*

- GCPH – Harrison County Public Health
- WSU – Wright State University
  - APRI – Applied Policy Research Institute

### *Ohio Agencies and Departments*

- OCJS – Ohio Criminal Justice Services
- ODH – Ohio Department of Health
- ODJFS – Ohio Department of Job and Family Services
- ODM – Ohio Department of Medicaid
- ODPS – Ohio Department of Public Safety
- ODSA – Ohio Development Services Agency
- OFCF – Ohio Family and Children First
- OLMi – Ohio Labor Market Information
- OMHAS – Ohio Department of Mental Health and Addiction Services

### *Federal Agencies and Departments*

- DOC – Department of Commerce
  - BEA – Bureau of Economic Analysis
  - Census – U.S. Census Bureau
    - ACS – American Community Survey
- HHS – U.S. Department of Health & Human Services
  - ACF – Administration for Children & Families
  - AHRQ – Agency for Healthcare Research and Quality
  - ATSDR – Agency for Toxic Substances and Disease Registry
  - CMS – Centers for Medicare & Medicaid Services
  - Office of Disease Prevention and Health Promotion
    - Healthy People 2020
  - U.S. Public Health Service
    - CDC – Centers for Disease Control and Prevention
    - FDA – Food and Drug Administration
    - HRSA – Health Resources and Services Administration
    - NIH – National Institutes of Health
    - SAMHSA – Substance Abuse and Mental Health Services Administration
- USDA – U.S. Department of Agriculture

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## Appendix A: Health Needs Assessment Findings

As part of the Harrison County Health Improvement Committee and Harrison County General Health District's Community Health Needs Assessment a 27-question survey was distributed to residents of Harrison County.

The responses from the 309 responses to the questions regarding residents' health and environmental concerns are as follows:

1. Are you a Harrison County Resident?
  - ☐ Yes (96.5%)
  - ☐ No (3.4%)
2. What is your Ethnicity?
  - ☐ White (89.9%)
  - ☐ Hispanic or Latino (0.9%)
  - ☐ Black or African American (8.0%)
  - ☐ Native American or American Indian (1.2%)
  - ☐ Asian or Pacific Islander (0%)
3. What is your Gender?
  - ☐ Male (30.3%)
  - ☐ Female (69.7%)
4. What is your age group?
  - ☐ 18-25 (9.2%)
  - ☐ 26-35 (11.9%)
  - ☐ 36-45 (18.8%)
  - ☐ 46-55 (23.4%)
  - ☐ 56-65 (19.5%)
  - ☐ 66-75 (13.2%)
  - ☐ 76-85 (3.3%)
  - ☐ 86 and older (0.7%)
5. What township do you reside?
  - ☐ Archer (5.0%)
  - ☐ Athens (5.2%)
  - ☐ Cadiz (28.7%)
  - ☐ Franklin (2.6%)
  - ☐ Freeport (4.3%)
  - ☐ German (3.6%)
  - ☐ Green (14.2%)
  - ☐ Monroe (5.9%)
  - ☐ Moorefield (3.3%)
  - ☐ North (4.3%)
  - ☐ Nottingham (2.3%)
  - ☐ Rumley (5.6%)
  - ☐ Short Creek (6.6%)
  - ☐ Stock (2.6%)
  - ☐ Washington (5.6%)

6. What is your Marital Status?
  - ☐ Married/co-habiting (69%)
  - ☐ Not married/Single (31%)
7. What is your Household Income?
  - ☐ Less than \$20,000 (22.8%)
  - ☐ \$20,000 - \$29,000 (23.8%)
  - ☐ \$30,000 - \$49,000 (13.2%)
  - ☐ Over \$50,000 (40.2%)
8. Do you believe that Harrison County is a good place to live?
  - ☐ Strongly Agree (22.1%)
  - ☐ Agree (51.5%)
  - ☐ Undecided (17.2%)
  - ☐ Disagree (6.9%)
  - ☐ Strongly Disagree (2.3%)
9. What are your housing arrangements?
  - ☐ Own (64.1%)
  - ☐ Rent (23.4%)
  - ☐ Living with friends or family (12.5%)
10. Do you feel that the housing is affordable?
  - ☐ Yes (62%)
  - ☐ No (38%)
11. What is your highest education level?
  - ☐ Some High School/GED (14.2%)
  - ☐ High School Diploma (24.1%)
  - ☐ Some College/No Degree (22.8%)
  - ☐ Associates Degree (17.5%)
  - ☐ Bachelor's Degree (16.2%)
  - ☐ Master's Degree (3.7%)
  - ☐ Doctoral Degree (0.6%)
  - ☐ Professional Degree (0.9%)
12. Are there higher education opportunities in the community?
  - ☐ Yes (52.8%)
  - ☐ No (47.2%)
13. Is job training provided by your employer?
  - ☐ Yes (45.5%)
  - ☐ No (32.3%)
  - ☐ Retired (22.2%)
14. Are there jobs with career growth?
  - ☐ Yes (55.4%)
  - ☐ No (44.6%)
15. Do you have a reasonable commute to work?
  - ☐ Yes (61.1%)

- ☐ No (15.5%)
  - ☐ Retired (23.4%)
16. Are there public transportation opportunities?
- ☐ Yes (57.1%)
  - ☐ No (42.9%)
17. Are you employed within Harrison County?
- ☐ No – Other County (24.4%)
  - ☐ No – Retired (24.4%)
  - ☐ Yes – Locally owned/operated business (18.9%)
  - ☐ Yes – Nationally owned/operated business (7.9%)
  - ☐ Yes – Government/School (24.4%)
18. Top three Harrison County health concerns:
- ☐ **Drug & Alcohol Abuse (26.5%)**
  - ☐ **Mental Health (15.8%)**
  - ☐ **Cancer (15%)**
  - ☐ Obesity (12.5%)
  - ☐ Diabetes (8.4%)
  - ☐ Heart Disease (6.2%)
  - ☐ Asthma & Lung Disease (5.4%)
  - ☐ Dental (7.4%)
  - ☐ Infant Mortality/Premature Birth (2.2%)
  - ☐ Other (0.6%)
19. Top three things impacting health the most:
- ☐ **Poverty (22.6%)**
  - ☐ **Smoking/Other Tobacco Use (19.5%)**
  - ☐ **Physical Activity (18.3%)**
  - ☐ Education (12.8%)
  - ☐ Access to Healthy Foods (10.8%)
  - ☐ Preventive Medical Care (10.6%)
  - ☐ Prenatal Care (5%)
  - ☐ Other (0.4%)
20. Top three major barriers to good health:
- ☐ **Drug & Alcohol Abuse (27.8%)**
  - ☐ **Unemployment (17.8%)**
  - ☐ **Afraid to seek help (9.6%)**
  - ☐ Transportation (9%)
  - ☐ Can't afford medication/out of pocket expense/No insurance (7.4%)
  - ☐ Thought it would get better (6.4%)
  - ☐ Access to Health Services (5.5%)
  - ☐ Family (5.2%)
  - ☐ Lack of substance abuse facilities (4%) Work (4%)
  - ☐ Embarrassed/shame/stigma (3.4%)
  - ☐ Don't know where to go for help (2.5%)
  - ☐ Access to true emergency care (1.3%)
  - ☐ Other (0.2%)

21. Have you considered suicide?
- ☐ No (85.1%)
  - ☐ 1-2 times (6.3%)
  - ☐ 3-4 times (6.6%)
  - ☐ 5 or more times (2%)
22. How physically active are you?
- ☐ Don't exercise (24.1%)
  - ☐ 1-2 times per week (29.7%)
  - ☐ 3-4 times per week (31.7%)
  - ☐ 5-6 times per week (10.2%)
  - ☐ 6 times or more (4.3%)
23. What do you feel are barriers to good mental health?
- ☐ Money (26.1%)
  - ☐ Embarrassed/shame/stigma (20%)
  - ☐ Work (16.6%)
  - ☐ Not enough providers in Harrison County (15%)
  - ☐ Thought it would get better (11.1%)
  - ☐ Family (6%)
  - ☐ Afraid to seek help (3.6%)
  - ☐ Other (1.7%)
24. Would you be willing to participate in exercise opportunities for a small fee or free?
- ☐ Yes (71.6%)
  - ☐ No (28.4%)
25. Have you or someone you know used any of the following within the past 30 days?
- ☐ Cigarettes (25.4%)
  - ☐ Alcohol (24.8%)
  - ☐ Chewing tobacco, snuff, dip (12.1%)
  - ☐ Marijuana (8.7%)
  - ☐ Electronic vapor product (8.4%)
  - ☐ Used a prescription drug without a doctor's prescription (6.8%)
  - ☐ Hallucinogenic drugs (5.3%)
  - ☐ IV drugs (1.4%)
  - ☐ Heroin (1.2%)
  - ☐ Ecstasy (1%)
  - ☐ Sniffed glue (0.6%)
  - ☐ Methamphetamines (0.6%)
  - ☐ Inhaled paints/sprays (0.4%)
26. Top three Harrison County Environmental Concerns?
- ☐ **Ticks/Lyme Disease (22.3%)**
  - ☐ **Water Contamination (21.1%)**
  - ☐ **Oil & Gas Exploration and Development (17.5%)**
  - ☐ Open Dumping (11.3%)
  - ☐ Failing Septic Systems (9.4%)
  - ☐ Air Pollution (7.4%)
  - ☐ Fracking (7.4%)
  - ☐ Coal mines (1.8%)



- ☐ Radon (0.6%)
- ☐ Open Burning (0.6%)
- ☐ Water wells not enclosed (0.6%)
- ☐ Other (0.6%)

27. Where and how did you get this survey?

- ☐ Church (3.1%)
- ☐ Community meeting (22.1%)
- ☐ Business (16.2%)
- ☐ Mail (0%)
- ☐ Newspaper (0%)
- ☐ Personal Contact (3.4%)
- ☐ Workplace (3.1%)
- ☐ Other (52.1%)