



Community Health Network

A photograph of an elderly couple smiling and embracing outdoors. The man is on the left, wearing a blue and white checkered shirt, and the woman is on the right, wearing a green jacket over an orange top. They are both looking towards the right. The background is a soft-focus outdoor scene with trees and sunlight. A large, faint, stylized geometric logo is visible in the background on the right side.


# 2021 Community Health Needs Assessment

**ANDERSON REGION**

# Contents

A MESSAGE FROM COMMUNITY’S LEADERSHIP .....	V
EXECUTIVE SUMMARY .....	1
Introduction.....	1
Community Assessed.....	1
Significant Community Health Needs.....	3
Significant Community Health Needs: Discussion.....	3
COVID-19 Pandemic.....	3
Maternal, Infant, and Child Health .....	4
Mental Health Status and Access to Mental Health Services.....	4
Obesity, Physical Inactivity, and Chronic Disease .....	5
Social Determinants of Health .....	5
Smoking and Tobacco Use .....	6
Substance Use Disorders and Overdoses .....	7
DATA AND ANALYSIS.....	8
Community Definition .....	8
Secondary Data Summary .....	10
Demographics .....	10
Socioeconomic Indicators .....	10
Other Local Health Status and Access Indicators .....	11
Food Deserts .....	14
Medically Underserved Areas and Populations.....	14
Health Professional Shortage Areas .....	14
CDC COVID-19 Prevalence and Mortality Findings .....	14
Findings of Other CHNAs.....	15
Primary Data Summary .....	16
Community Meetings .....	16
Key Stakeholder Interviews .....	17
OTHER FACILITIES AND RESOURCES IN THE COMMUNITY .....	19
Hospitals .....	19
Federally Qualified Health Centers .....	19
Other Community Resources .....	21

APPENDIX.....	22
APPENDIX A – OBJECTIVES AND METHODOLOGY .....	22
Regulatory Requirements.....	22
Methodology .....	23
Collaborating Organizations .....	24
Data Sources .....	24
Consultant Qualifications.....	24
APPENDIX B – SECONDARY DATA ASSESSMENT .....	26
Demographics.....	26
Socioeconomic indicators.....	32
People in Poverty .....	32
Unemployment .....	35
Health Insurance Status .....	36
Crime Rates .....	37
Housing Affordability.....	38
Dignity Health Community Need Index™ .....	40
Centers for Disease Control and Prevention Social Vulnerability Index (SVI) .....	42
Other Health Status and Access Indicators .....	47
County Health Rankings .....	47
Community Health Status Indicators .....	53
COVID-19 Incidence and Mortality .....	55
Mortality Rates .....	56
Communicable Diseases .....	60
Maternal and Child Health.....	61
Indiana Data by Race and Ethnicity .....	63
Centers for Disease Control and Prevention PLACES.....	66
Food Deserts .....	67
Medically Underserved Areas and Populations.....	68
Health Professional Shortage Areas .....	70
Findings of Other Assessments .....	73
CDC COVID-19 Prevalence and Mortality Findings .....	73
Indiana State Health Assessment and Improvement Plan – 2018-2021 .....	75



APPENDIX C – COMMUNITY INPUT PARTICIPANTS .....	76
APPENDIX D – CHSI PEER COUNTIES.....	77
APPENDIX E – IMPACT EVALUATION .....	78
Social Determinants Of Health .....	78
Mental Health & Substance Use Disorder.....	80
Obesity & Chronic Disease Management.....	81
Tobacco Use .....	82
Access to Health Services .....	83

## A MESSAGE FROM COMMUNITY'S LEADERSHIP

Community Health Network was brought to life by the community in the 1950s, through a door-to-door fundraising campaign with the goal of bringing much-needed healthcare services closer to the community. That powerful connection to the needs of the community is why we are named “Community.”

We fulfill our primary mission through the delivery of healthcare services, and we also pay close attention to the broad needs of our neighbors and the neighborhoods we serve. Every three years, we conduct a Community Health Needs Assessment to help us understand those needs and how we can address them.

As the pages of this report explain in great detail, we identified ongoing opportunities to improve the health of newborns and children, as well as their mothers. We gathered information about the mental health challenges facing our neighbors, and the difficulty some of them have finding help.

We tracked the challenges of obesity and the chronic diseases that are associated with it, and learned how many of our local citizens struggle to achieve the levels of physical activity needed to be healthier. We gained new insights into substance abuse disorders and how they impact our communities. We learned more about how the COVID-19 pandemic has affected the people we serve.

We also gathered valuable data about social determinants of health—those social and economic factors that aren't directly related to health care but have a powerful impact on health and well-being. Poverty, food insecurity and the lack of affordable housing and health insurance all play a role. And we intentionally focused on disparities linked to systemic racism, which exacerbate all of these challenges.

This Community Health Needs Assessment outlines the challenges facing the communities we serve. And we're committed to finding solutions. Our plans to address these needs through the next three years are outlined in a companion report known as our Implementation Strategy.

We're grateful for your support of Community Health Network. Together, we can serve the needs of our communities, and truly enhance health and well-being!



**Bryan Mills**  
*President & CEO*  
*Community Health Network*

# Executive Summary

## INTRODUCTION

This Community Health Needs Assessment (“CHNA”) was conducted by Community Hospital Anderson (“CHA” or “the hospital”) to identify significant community health needs and to inform development of an Implementation Strategy to address current needs.

Community Hospital Anderson is an acute care hospital known for providing exceptional care for the residents of Madison and surrounding counties. Community Hospital Anderson provides a full range of medical services including award winning maternity services, comprehensive cardiac care, cancer services affiliated with MD Anderson Cancer Network®, neuro surgical care, and a level three trauma center. Additional information about CHA is available at:

<https://www.ecommunity.com/locations/community-hospital-anderson>.

CHA is part of Community Health Network, an integrated health delivery system based in Indianapolis. As a non-profit health system with more than 200 sites of care and affiliates throughout Central Indiana, Community Health Network’s full continuum of care integrates hundreds of physicians, eight specialty and acute care hospitals, surgery centers, home care services, Community MedCheck locations, behavioral health, and employer health services. Additional information is available at:

<https://www.ecommunity.com/about>.

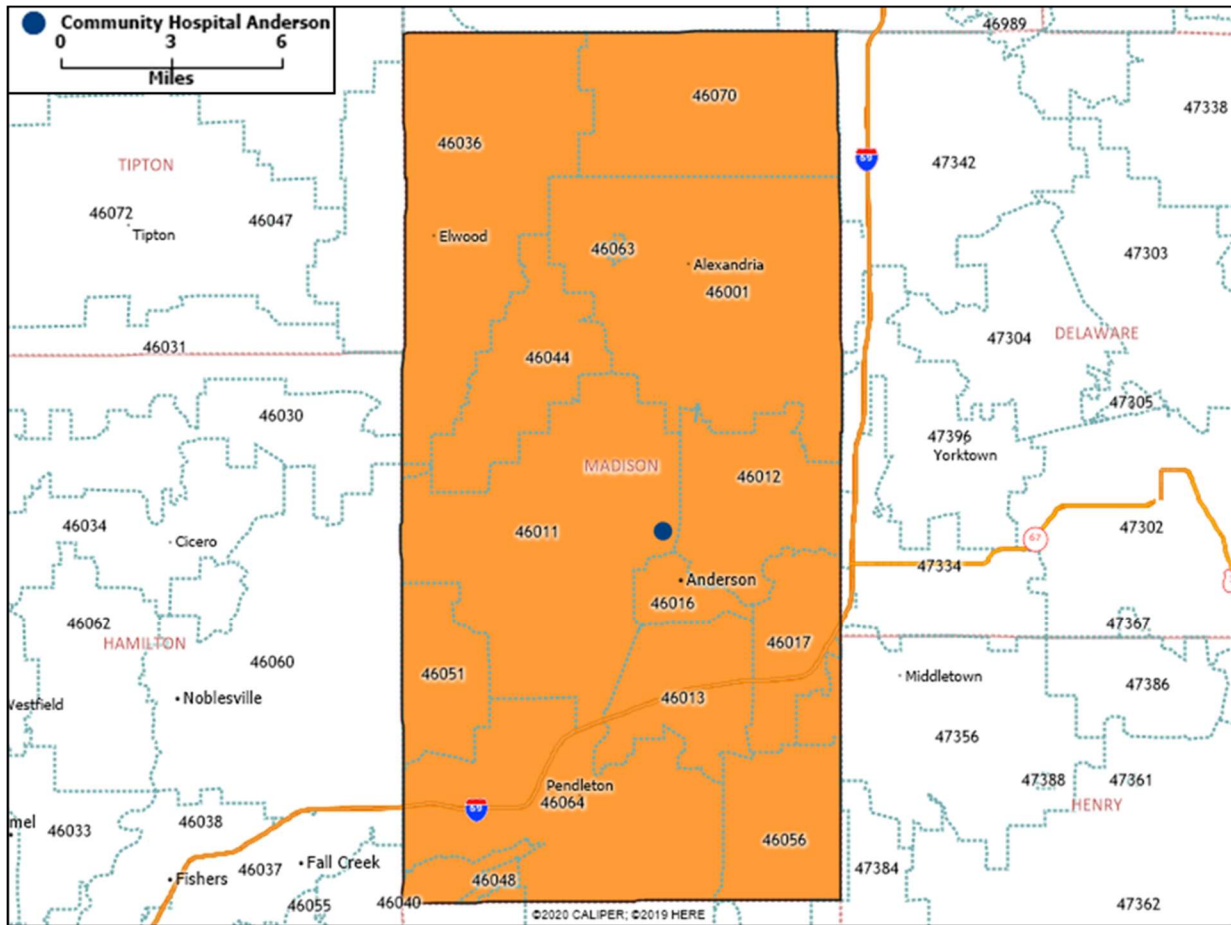
This CHNA has been conducted using widely accepted methodologies to identify the significant health needs of a specific community. The assessment also is designed to comply with federal and state laws and regulations.

## COMMUNITY ASSESSED

For purposes of this CHNA, CHA’s community was defined as Madison County, Indiana. The community was defined by considering the geographic origins of the hospital’s inpatient discharges and emergency room visits in quarter four of calendar year 2020. Madison County accounted for approximately 84 percent of the hospital’s inpatient discharges and 86 percent of its emergency department visits.

The total population of Madison County in 2019 was 129,455.

The map below portrays the community served by CHA and the hospital's location.



Source: Caliper Maptitude, 2021.

## SIGNIFICANT COMMUNITY HEALTH NEEDS

Certain community health needs were determined to be “significant” if they were identified as problematic in at least two of the following three data sources: (1) the most recently available secondary data regarding the community’s health; (2) recent community health assessments developed by the state of Indiana and local organizations; and (3) input from community stakeholders and staff who participated in community meetings, interviews, and surveys.

As determined by analyses of quantitative and qualitative data, racial and ethnic health disparities emerged as a primary, cross-cutting health issue in the community served by Community Hospital Anderson. These disparities were observed within each of the following significant community health needs:

- COVID-19 Pandemic
- Maternal, Infant, and Child Health
- Mental Health Status and Access to Mental Health Services
- Obesity, Physical Inactivity, and Associated Chronic Disease
- Social Determinants of Health, including:
  - Poverty
  - Food Insecurity
  - Transportation
  - Smoking and Tobacco Use
  - Substance Use Disorders and Overdoses

## SIGNIFICANT COMMUNITY HEALTH NEEDS: DISCUSSION

### COVID-19 Pandemic

The COVID-19 pandemic represents a public health emergency for Indiana and the United States. In addition to contributing to severe illness and death, the pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues.

The Centers for Disease Control’s (CDC) work related to COVID-19 has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. Populations most at risk include older adults, people with certain underlying conditions, pregnant women, and members of racial and ethnic minority groups. According to the CDC, “long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting

COVID-19 or experiencing severe illness, regardless of age.” Men also are more likely to die from COVID-19 than women. Based on that work, many at-risk people live in Madison County.

Compared to the U.S., Madison County has experienced above average incidence and mortality rates for COVID-19. Vaccination rates have been lower and vaccine hesitancy rates have been higher than state and national averages.

Community members providing input into this CHNA indicated that the pandemic has highlighted problems associated with racial and ethnic health inequities. Disparities in vaccine coverage and uptake are evident, particularly for Black residents. Significant economic impacts on providers and businesses have occurred. Services from the Madison County Health Department and others were halted, and other entities closed entirely.

In 2020 and due to the pandemic, the number of people unemployed in Madison County, Indiana, and the United States increased substantially. This rise in unemployment has affected access to employer-based health insurance and to health services, and has increased housing and food insecurity.

## **Maternal, Infant, and Child Health**

Maternal, infant, and child health-related needs have been identified significant. Madison County compares unfavorably for several infant and maternal health indicators, including rates of low birthweight births and of breastfeeding. The proportion of mothers who smoked during pregnancy has been significantly above the Indiana average.

Child health and wellbeing also is problematic in Madison County. Madison County has comparatively high numbers of children in poverty and of single-parent households. Per-capita emergency room visits due to asthma for children aged 5-17 have been significantly above the state average. Childhood cancer incidence rates also are comparatively high.

Maternal, infant, and child health racial and ethnic disparities are present in Madison County and across Indiana. Indicators that measure access to prenatal care, the number of preterm births, and the number of infant deaths are more problematic for Black and Hispanic (or Latino) populations than for Whites. Community members stated that maternal and infant health needs are significant. Many mentioned the prevalence of low birthweight births, a lack of prenatal care, and higher mortality rates for Black infants.

The State Health Improvement Plan also identified the need to improve (and reduce racial and ethnic disparities for) birth outcomes across Indiana.

## **Mental Health Status and Access to Mental Health Services**

When asked to identify significant community health needs in Madison County, more community members mentioned mental health status, suicide, and access to mental health services than any other need.

Madison County compares unfavorably to peer county and national averages for the prevalence of mentally unhealthy days. The county's suicide rate has also been significantly above the Indiana average.

Interviewees stated that access to mental health care is difficult due to an inadequate number of providers, an incomplete continuum of care, and other issues. Madison County has fewer per-capita mental health providers than Indiana and the U.S.

The State Health Improvement Plan prioritized improved access to mental health services.

## **Obesity, Physical Inactivity, and Chronic Disease**

Obesity and contributing factors (including physical inactivity and improper nutrition) and associated chronic diseases (such as diabetes) are significant concerns in Madison County. Compared to national and state averages, Madison County ranks poorly for rates of obesity, physical inactivity, and access to exercise opportunities. The county also has ranked in the bottom quartile of Indiana counties for these issues.

Madison County's diabetes mortality rate has been above the state average. Across Indiana, mortality and incidence rates for diabetes have been significantly higher for Black populations.

Interviewees cited increasing rates of obesity as a significant concern and mentioned food insecurity and a lack of grocery stores as contributing factors. Food deserts are found throughout Madison County. The county has a comparatively low food environment index. Participants in community meetings prioritized access to healthy food, improving nutrition, and enhancing knowledge of healthy eating practices as significant needs.

The need to reduce the rate of chronic disease also was identified in the State Health Improvement Plan.

## **Social Determinants of Health**

Social determinants of health (SDOH) are the conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life outcomes and risks. People living in low-income households generally are less healthy than those living in more prosperous areas.

Madison County's poverty rate is above average. Poverty rates for Black and Hispanic (or Latino) residents are comparatively high. Madison County compares unfavorably for children in poverty. Low-income census tracts are present throughout Madison County, particularly in Anderson, Elwood, and Alexandria.

Poverty was identified as a significant community health need by community meeting participants and interviewees. They indicated that poverty impacts almost all areas of life, including access to health services, housing, healthy foods, and transportation.

Community health indices show that ZIP codes and census tracts throughout Anderson rank poorly for community need and vulnerability. These areas are also where the proportions of residents that are Black and Hispanic (or Latino) are highest.

Community meeting participants and interviewees identified racial and ethnic disparities in poverty rates and health as significant concerns. Differences in poverty rates and language and cultural barriers affect access to care (particularly prenatal care).

Consistent access to affordable, healthy food is important to health outcomes. In the 2020 County Health Rankings, Madison County ranked 85<sup>th</sup> out of 92 Indiana counties for food environment index, indicating that problems with food accessibility are present. Madison County's food environment index also is below average when compared to peer counties, Indiana, and the nation. Food deserts are prevalent throughout the county – particularly in Anderson and Elwood.

Participants in community meetings and interviewees identified access to healthy food as a significant need that contributes to obesity and to the prevalence of numerous chronic diseases. Poverty, a lack of grocery stores, and the high cost of healthy foods compared to unhealthy alternatives are contributing factors.

In recent years, unemployment rates in Madison County have been above Indiana averages. The county ranked in the bottom quartile of Indiana counties in 2020. Rates rose significantly in 2020 due to the COVID-19 pandemic. This negatively affected access to employer-based health insurance, increased housing and food insecurity, and worsened access to health services.

Transportation also is a significant need. Census tracts throughout Madison County ranked in the top quartile for transportation vulnerability. Community meeting participants and interviewees cited transportation as a significant barrier to health. Few public transportation options exist, particularly outside of the City of Anderson. Much of the county lacks sidewalks and pedestrian infrastructure, making walking a less feasible option.

The State Health Improvement Plan identified addressing Social Determinants of Health as a priority and clearly linked SDOH-related issues to unfavorable health outcomes and inequities.

## Smoking and Tobacco Use

Smoking and tobacco use, including use of e-cigarettes, is a significant community health need in Madison County. In the 2020 County Health Rankings, the county ranked 78<sup>th</sup> out of 92 Indiana counties for the rate of adult smoking. On average, more Madison County adults smoke than those living in peer counties, Indiana, and the United States. The percentage of mothers who smoked during pregnancy also has been well above the Indiana average. Mortality rates for chronic lower respiratory diseases and lung and bronchus cancer have been significantly higher in Madison County than in the state.

Interviewees identified smoking as a persistent issue, tied to culture, historical identity, and demographics of Madison County. More education on the health risks of smoking is needed, particularly for youth.

## Substance Use Disorders and Overdoses

Substance Use Disorders, including overuse of opioids and alcohol, have been identified as significant and growing community health needs.

Between 2015 and 2019, drug poisoning deaths per 100,000 Madison County residents increased from 28.1 to 39.6 (41 percent) and exceeded Indiana averages in each year. Madison County's mortality rates due to alcohol-related causes also have been above average.

Interviewees and community meeting participants identified Substance Use Disorders as a significant need. Stakeholders indicated that Substance Use Disorders are becoming more prevalent as people are self-medicating for untreated mental health conditions.

The Indiana State Health Improvement Plan also prioritized the need to reduce injury and death due to opioid usage.

# Data and Analysis

## COMMUNITY DEFINITION

This section identifies the community that was assessed by Community Hospital Anderson (CHA). The community was defined by considering the geographic origins of the hospital's discharges and emergency room visits in quarter four of calendar year 2020.

CHA's community was defined **Madison County, Indiana**. The ZIP codes within Madison County accounted for approximately 84 percent of the hospital's 2020 inpatient volumes and 87 percent of its emergency room visits (**Exhibit 1**).

**Exhibit 1: CHA Discharges and Emergency Room Visits, Quarter 4, 2020**

ZIP Code	County	Inpatient Discharges	Percent Discharges	ER Visits	Percent ER Visits
46012	Madison	310	17.4%	1,794	17.5%
46011	Madison	258	14.5%	1,607	15.7%
46016	Madison	241	13.5%	1,938	18.9%
46001	Madison	199	11.2%	1,002	9.8%
46013	Madison	197	11.1%	1,164	11.3%
46017	Madison	75	4.2%	446	4.3%
46036	Madison	58	3.3%	165	1.6%
46044	Madison	49	2.8%	207	2.0%
46064	Madison	47	2.6%	221	2.2%
46070	Madison	34	1.9%	158	1.5%
46056	Madison	13	0.7%	86	0.8%
46051	Madison	9	0.5%	55	0.5%
46048	Madison	5	0.3%	21	0.2%
46063	Madison	3	0.2%	20	0.2%
<b>From Community</b>		<b>1,498</b>	<b>84.1%</b>	<b>8,884</b>	<b>86.6%</b>
Other Areas		283	15.9%	1,375	13.4%
<b>Hospital Total</b>		<b>1,781</b>	<b>100.0%</b>	<b>10,259</b>	<b>100.0%</b>

Source: Analysis of Community Health Network's utilization data, 2021.

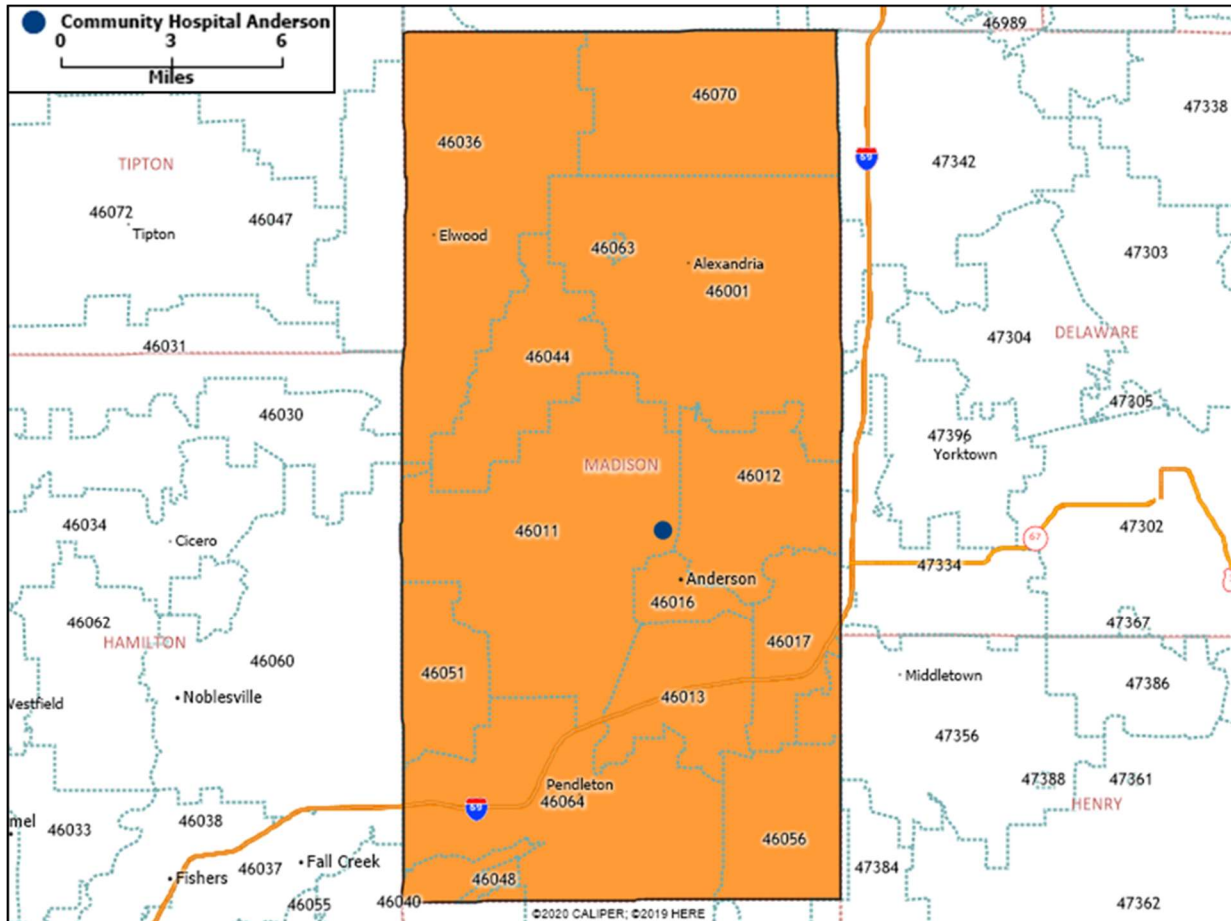
The total population of Madison County in 2019 was approximately 129,500 persons (**Exhibit 2**).

**Exhibit 2: Community Population by County, 2019**

County	Total Population 2019	Percent of Total Population
Madison	129,455	100.0%
<b>Community Total</b>	<b>129,455</b>	<b>100.0%</b>

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

The hospital is located in Anderson, IN (ZIP Code 46011). **Exhibit 3** portrays CHA's community and ZIP code boundaries with Madison County.

**Exhibit 3: Community Hospital Anderson**

Source: Caliper Maptitude, 2021.

## SECONDARY DATA SUMMARY

The following section summarizes principal observations from the secondary data analysis. See Appendix B for more detailed information.

### Demographics

Demographic characteristics and trends directly influence community health needs. The total population in Madison County is expected to decrease by 0.3 percent between 2019 and 2025, or approximately 400 people. While the total community is expected to slightly decrease, the population age 65 years and older is expected to increase by 11.7 percent over the same time period. This change should contribute to greater demand for health services, as older individuals typically need and use more services than younger persons. ZIP codes 46012, 46001, 46011, and 46013 had the highest proportion of population aged 65 and older, each above 21 percent.

Madison County has substantial variation in demographic characteristics across community ZIP codes. Across the county, 7.8 percent of residents were Black. Anderson ZIP codes 46016 (20.5 percent) and 46011 (13.4 percent) had the highest proportion of Black residents. The percent of the population that was Hispanic (or Latino) was 4.1 percent in the county, with ZIP codes 46016 (9.7 percent) and 46063 (6.7 percent) having the highest proportion.

Across Madison County, a higher proportion of adults were without a high school diploma than in Indiana overall. A higher proportion of the population was disabled compared to Indiana and the United States. Compared to the United States and Indiana, proportionately fewer people in Madison County are linguistically isolated.

### Socioeconomic Indicators

People living in low-income households generally are less healthy than those living in more prosperous areas. In 2015-2019, approximately 16.5 percent of Madison County residents lived in poverty – above Indiana and United States averages of 13.4 percent. Low-income census tracts can be found throughout Madison County, particularly in areas around Anderson, Elwood, and Alexandria. These areas correlate to ZIP codes categorized as “higher need” by the Dignity Health/CommonSpirit Community Need Index™.

Poverty rates for Black (33 percent) and for Hispanic (or Latino) residents (28 percent) are substantially higher than rates for White residents (15 percent) in Madison County. Poverty rates for Black and Hispanic (or Latino) populations are approximately double the rates of White populations in Madison County, Indiana, and the United States.

Between 2016 and early 2020, unemployment rates in Madison County, Indiana, and the United States fell significantly. However, due to the COVID-19 pandemic, unemployment rose substantially in 2020 in all areas. The rise in unemployment contributed to numerous health-related factors, such as access to

employer-based health insurance, housing and food insecurity, and access to health services. From 2016 through 2020, unemployment rates in Madison County were above Indiana averages and near national averages.

The proportion of the population that did not have health insurance was lower in Madison County than in Indiana and the United States. However, unemployment related to COVID-19 likely resulted in an increase in uninsured community members and a corresponding reduction in access to health services.

Compared to Indiana averages, crime rates in Anderson are significantly higher, while rates in Madison County as a whole are below state averages.

Across Madison County, the percent of households that spent more than 30 percent of income on housing, a measure of housing burdened, was above the Indiana average, but below the national average. The rate of households experiencing housing burden was significantly higher than state and national rates in Anderson ZIP code 46016. This same area correlates to areas in the bottom quartile nationally for social vulnerability, including for socioeconomic, household composition and disability, and housing type and transportation vulnerability.

## Other Local Health Status and Access Indicators

In the 2020 *County Health Rankings*, Madison County ranked 83<sup>rd</sup> for health outcomes and 81<sup>st</sup> for health factors, both in the bottom quartile of 92 Indiana counties. Madison County ranked in the bottom 50<sup>th</sup> percentile among Indiana counties for 26 of the 41 indicators assessed. Of those, 21 were in the bottom quartile, including for low birthweight births, smoking, obesity, food environment index, unemployment, income inequality, and severe housing problems.

The per capita supply of primary care physicians and mental health providers in Madison County are significantly below national averages. The teen births rate is also significantly above the state and national rates.

*Community Health Status Indicators* (“CHSI”) compares indicators for each county with those for peer counties across the United States. Each county is compared to 30 to 35 of its peers, which are selected based on socioeconomic characteristics such as population size, population density, percent elderly, per-capita income, and poverty rates. Among peer counties, Madison County ranks in the bottom quartile for 13 of the 34 indicators assessed, including physically and mentally unhealthy days, smoking, obesity, food environment index, teen births, and children in poverty.

This assessment was conducted throughout 2021 during the ongoing COVID-19 pandemic. Based on data available, Madison County had a higher rate of COVID-19 cases and deaths compared to rates in the United States. The county also had a lower proportion of the population vaccinated against COVID-19, and a higher percentage of adults hesitant about receiving the vaccine.

Sources of other secondary data assessed include the Indiana Department of Health, the Centers for Disease Control and Prevention, America’s Health Rankings, the Health Resources and Services

Administration, and the United States Department of Agriculture. Based on an assessment of available secondary data, the indicators presented in **Exhibit 4** appear to be most significant in Madison County.

An indicator is considered *significant* if it was found to vary materially from a benchmark statistic (e.g., an average value for Indiana, for peer counties, or for the United States). For example, 38.8 percent of Madison County's adults are obese; the average for the United States is 29.0 percent. The last column of the exhibit identifies where more information regarding the data sources can be found in this report.

**Exhibit 4: Significant Indicators**

Indicator	Area	Value	Benchmark		Exhibit
			Value	Area	
65+ Population change, 2019-2025	Madison County	11.7%	0.7%	Madison County, Total	8
Percent disabled, 2015-2019	Madison County	18.5%	13.7%	Indiana	12
Poverty rate, 2015-2019	Madison County	16.5%	13.4%	Indiana	13
Poverty rate, Black, 2015-2019	Madison County	32.7%	14.5%	Madison County, White	14
Poverty rate, Hispanic (or Latino), 2015-2019	Madison County	27.6%	14.5%	Madison County, White	14
Percent children in poverty	Madison County	24.7%	17.5%	Indiana	28
Percent children in single-parent households	Madison County	39.3%	33.0%	United States	28
Unemployment rates, 2020	Madison County	7.9%	7.1%	Indiana	16
Percent adults with some college	Madison County	55.6%	66.0%	United States	28
Average number mentally unhealth days	Madison County	5.0	4.0	United States	28
Suicide mortality per 100,000	Madison County	22.7	14.1	Indiana	31
Drug poisoning mortality per 100,000	Madison County	39.6	26.6	Indiana	34
Alcohol-related mortality per 100,000	Madison County	15.1	10.4	Indiana	31
Percent adults obese	Madison County	38.8%	29.0%	United States	28
Percent physically unactive	Madison County	32.5%	23.0%	United States	28
Food environment index	Madison County	7.1	7.8	Peer counties	29
Diabetes mortality per 100,000	Madison County	34.2	25.0	Indiana	31
Ratio of population to primary care physicians	Madison County	2,023:1	1,330:1	United States	28
Ratio of population to mental health providers	Madison County	776:1	400:1	United States	28
Injury deaths per 100,000	Madison County	93.2	70.0	United States	28
Alzheimer's disease mortality per 100,000	Madison County	51.4	31.7	Indiana	31
Preventable hospital stays for ACSC conditions per 100,000 Medicare enrollees	Madison County	5,325	4,535	United States	28
Percent adults who smoke	Madison County	21.6%	19.8%	Peer counties	29
Chronic lower respiratory diseases mortality per 100,000	Madison County	74.2	56.1	Indiana	31
Mothers smoked during pregnancy	Madison County	19.0%	11.8%	Indiana	36
Preterm births	Madison County	10.6%	10.1%	Indiana	36
Mothers receiving prenatal care, Hispanic	Madison County	69.9%	81.6%	Madison County, White	37
Teen births per 1,000 females ages 15-19	Madison County	34.6	23.0	United States	28
ER visits due to asthma (age 5-17, per 10,000)	Madison County	69.9	49.7	Indiana	36
COVID-19 mortality per 100,000 population	Madison County	307.0	207.5	United States	30
COVID-19 vaccination among adults	Madison County	56.7%	59.1%	Indiana	30

Source: Verité Analysis.

Indiana data were also assessed across racial and ethnic cohorts to identify potential disparities in mortality, health conditions, and Social Determinants of Health.

Black populations had particularly high mortality rates for numerous causes, including diabetes, high blood pressure, and heart disease, and compared unfavorably for rates of low birthweight births, preventable hospitalizations, severe housing problems, teen births, children in poverty, and chlamydia.

Hispanic or Latino populations compared unfavorably for a variety of indicators, including chronic liver disease mortality, avoiding healthcare due to cost, children in poverty, crowded housing, high school graduation, non-medical drug use, and severe housing problems.

White populations compared unfavorably for mortality due to chronic lower respiratory disease, Alzheimer’s disease, and suicide, as well as incidence rates of arthritis, cancer, depression, and high cholesterol.

These and other differences indicate the presence of racial and ethnic health inequities and disparities throughout Indiana and in Madison County.

## Food Deserts

The U.S. Department of Agriculture’s Economic Research Service identifies census tracts that are considered “food deserts” because they include lower-income persons without supermarkets or large grocery stores nearby. Food deserts are found throughout Madison County, particularly in areas surrounding Anderson and near Elwood.

## Medically Underserved Areas and Populations

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration based on an “Index of Medical Underservice.” No areas or populations have been designated as medically underserved in Madison County.

## Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is present. The low-income population of Madison County has been designated a Primary Care HPSA.

## CDC COVID-19 Prevalence and Mortality Findings

The Centers for Disease Control and Prevention (CDC) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic represents a public health emergency for Indiana and the United States. The pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues.

Part of the CDC’s work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. Based on that work, many at-risk people live Madison County. Populations most at risk include:

- Older adults;
- People with certain underlying medical conditions, including cancer, chronic kidney disease, COPD, obesity, serious heart conditions, diabetes, sickle cell disease, asthma, hypertension, immunocompromised state, and liver disease;
- People who are obese and who smoke;

- Pregnant women; and,
- Black, Hispanic (or Latino), and American Indian or Alaska Native persons.

According to the CDC, “long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age.”

## Findings of Other CHNAs

In 2018, the Indiana State Department of Health published State Health Assessment (SHA) and State Health Improvement Plan (SHIP). The Department of Health staff produced the SHA with support from partners from Indiana, available epidemiological data, and key informant interviews. From this process, below are key issues identified for Indiana.

- Social Determinants of Health and health equity - “conditions in the environment that affect a broad range of health and quality of life outcomes;”
- Improving public health infrastructure (funding and culture/quality of public health practice); and
- Improving health and reducing health disparities, specifically chronic disease, birth outcomes/infant mortality, reduced injury, and death due to opioid exposure, and improved access to mental health services.

## PRIMARY DATA SUMMARY

Primary data were gathered through an online community meeting and a key stakeholder interview. One community meeting relevant to CHA was conducted. Interviews were conducted by phone or online video conferences, and meetings were conducted by online video conferences.

See Appendix C for information regarding those who participated in the community input process.

### Community Meetings

A community meeting was held in June 2021 to receive input from stakeholders regarding the health needs in Madison County. This meeting was conducted in collaboration with Ascension St. Vincent's Indiana, an Indiana health system with locations in Madison County.

Fifty-two (52) stakeholders were asked to participate in the Madison County community meeting. These individuals represented organizations such as local health departments, non-profit organizations, faith-based organizations, health care providers, and local policymakers.

The meeting began with a presentation that discussed the goals and status of the CHNA process and the purpose of the community meeting. Next, secondary data were presented, along with a summary of the most unfavorable community health indicators from this data. Each group was then asked questions about the preliminary list, including their reactions, additions to the proposed needs, thoughts regarding the causes of the needs, impacts of the COVID-19 pandemic, and others.

After discussing the needs identified through secondary data and adding others to the list, participants were asked through an online survey process to identify “three to five” they consider the most significant. From this process, participants identified the following needs as most significant for Madison County:

- Mental health and suicide;
- Access to healthy food, nutrition, and knowledge of healthy eating practices;
- Substance Use Disorders;
- Transportation and walkability;
- Poverty; and
- Racial and ethnic health disparities.

Preliminary needs identified include several topics, including the COVID-19 pandemic, food insecurity, maternal and child health, mental health and suicide, elderly needs, obesity and physical inactivity, tobacco use, poverty, educational opportunities, housing, racial and ethnic health disparities statewide, air pollution, and Substance Use Disorders.

In addition to these topics, participants focused discussion around access to affordable healthy foods and nutrition knowledge, access to behavioral health providers (including those who treat mental health and Substance Use Disorders), vaping, homelessness, child abuse and trauma, transportation, walkability, childcare, chronic disease, and health education needs.

## Key Stakeholder Interviews

An additional interview was conducted with a representative of a local public health department to obtain subject-matter expertise into the health needs in Madison County.

Questions focused first on identifying and discussing health issues in the community before the COVID-19 pandemic began. Interviews then focused on the pandemic's impacts and on what has been learned about the community's health given those impacts. Stakeholders also were asked to describe the types of initiatives, programs, and investments that should be implemented to address the community's health issues and to be better prepared for future risks.

Stakeholders most frequently identified the following issues as significant before the COVID-19 pandemic began.

- Obesity is a significant issue, with food insecurity and a lack of grocery stores contributing.
- Smoking is an issue, largely tied into Madison County's culture, historical identity, and demographics.
- Low birthweight births are also a significant issue. While a problem for all mothers, clear racial disparities exist for Black infants. Relatedly, prenatal care is an issue.
- More health education is needed, particularly for youth.
- Providers and social service organizations need better collaboration, as coordination is often lacking. Services providers also need increased efforts to provide services at a local level, rather than expect residents to travel to them.
- Transportation is a significant barrier, with few public transportation options outside of Anderson.
- Health inequities and disparities are prevalent, particularly for Black and Hispanic (or Latino) residents. Cultural and language barriers are present for Hispanic populations.
- Access to mental health care is difficult despite an adequate number of providers due to numerous barriers, including financial, insurance, transportation, and others. A lack of a continuum of care that integrates mental health checks into other health engagements contributes.
- Navigation of resources is difficult, with residents often unsure of where to go to meet needs.
- Interviewees were also asked to discuss the impacts of the COVID-19 pandemic.

The following impacts were discussed:

- Disparities in vaccine coverage and uptake are clear, particularly among Black residents.
- All services from the health department needed to focus on the pandemic, meaning a temporary halting of others was necessary.
- Some business closures and issues with unemployment resulted.
- More focus is needed on public information dissemination as many look to the local health departments for guidance. Departments need to make sure they are seen in the community and maintain communication with all partners.

# Other Facilities and Resources in the Community

This section identifies other facilities, clinics, and resources available in Madison County that are available to address community health needs.

## HOSPITALS

**Exhibit 5** presents information on hospital facilities located in Madison County.

**Exhibit 5: Hospitals Located in Community, 2021**

Hospital	Address	City	ZIP Code	County
Ascension St Vincent Anderson	2015 Jackson St	Anderson	46016	Madison
Ascension St Vincent Mercy	1331 S A St	Elwood	46036	Madison
Community Hospital Anderson	1515 N Madison Ave	Anderson	46011	Madison

Source: Indiana Department of Health, 2021.

## FEDERALLY QUALIFIED HEALTH CENTERS

Federally Qualified Health Centers (FQHCs) are established to promote access to ambulatory care in areas designated as “medically underserved.” These clinics provide primary care, mental health, and dental services for lower-income members of the community. FQHCs receive enhanced reimbursement for Medicaid and Medicare services and most also receive federal grant funds under Section 330 of the Public Health Service Act. There currently are 21 FQHC site operating in the community (**Exhibit 6**).

**Exhibit 6: Federally Qualified Health Centers Located in Community, 2021**

Name	Address	City	ZIP Code	County
Aspire Indiana Health - Bolin	2009 Brown St	Anderson	46016	Madison
Aspire Indiana Health - DeHaven	2020 Brown St	Anderson	46016	Madison
Aspire Indiana Health - Mobile Clinic	215 W 19th St	Anderson	46016	Madison
Aspire Indiana Health - Mockingbird Hill	4038 Ridgeview Rd Ste 1	Anderson	46013	Madison
Aspire May House	6775 W State Road 32	Anderson	46011	Madison
Jane Pauley Community Health Center at Alexandria	121 W Washington St	Alexandria	46001	Madison
Jane Pauley Community Health Center at Alexandria-Monroe Intermediate School	308 W 11th St Rm G-1	Alexandria	46001	Madison
Jane Pauley Community Health Center at Alexandria-Monroe Junior-Senior High School	1 Burden Ct Rm 16	Alexandria	46001	Madison
Jane Pauley Community Health Center at Anderson	1210 Medical Arts Blvd Ste 300	Anderson	46011	Madison
Jane Pauley Community Health Center at Ebberth	325 W 38th St	Anderson	46013	Madison
Jane Pauley Community Health Center at Holy Cross North Campus School	1115 Pearl St Rm 209	Anderson	46016	Madison
Jane Pauley Community Health Center at Holy Cross South Campus School	2825 Lincoln St	Anderson	46016	Madison
Jane Pauley Community Health Center at St. Mary School	820 W Madison St	Alexandria	46001	Madison
Jane Pauley Community Health Center at the Wigwam	1229 Lincoln St	Anderson	46016	Madison
Madison County Jail	720 Central Ave	Anderson	46016	Madison
Meridian Health Services Corp	1518 Main St	Elwood	46036	Madison
Meridian Health Services Corp	1547 Ohio Ave	Anderson	46016	Madison
Meridian Health Services Corp	2010 Brentwood Dr Ste 1	Anderson	46011	Madison
Meridian Health Services Corp	101 N Harrison St	Alexandria	46001	Madison
Open Door Family Planning Clinic	2525 E 10th St	Anderson	46012	Madison
Open Door Health Services - Anderson Primary Care	2101 Jackson St Ste 8	Anderson	46016	Madison

Source: HRSA, 2021.

According to data published by HRSA, FQHCs in the CHA community served 27 percent of uninsured persons and 26 percent of Medicaid recipients. Nationally, FQHCs served 22 percent of uninsured patients and 19 percent of the nation's Medicaid recipients.<sup>1</sup>

<sup>1</sup> See: <http://www.nachc.org/research-and-data/research-fact-sheets-and-infographics/chartbook-2020-final/> and <https://www.udsmapper.org/>.

## OTHER COMMUNITY RESOURCES

Many social services and resources are available throughout Indiana to assist residents. The State of Indiana Family and Social Services Administration maintains the IN211 database, a free service that connects Hoosiers with help and answers from thousands of health and human service agencies and resources. 211 services are available 24/7 and maintain information of resources for the following categories:

- Children and family
- Education and employment
- Food and clothing
- Health care
- Housing and utility assistance
- Mental health and addiction
- Tax assistance

Additional information about these resources and participating providers can be found at:  
<https://in211.communityos.org/>.

# Appendix

## Appendix A – Objectives and Methodology

### REGULATORY REQUIREMENTS

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.<sup>2</sup> In conducting a CHNA, each tax-exempt hospital facility must:

- Define the community it serves;
- Assess the health needs of that community;
- Solicit and take into account input from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is adopted for the hospital facility by an authorized body of the facility; and,
- Make the CHNA report widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined,
- A description of the methodology used to determine the health needs of the community, and
- A prioritized list of the community's health needs.

---

<sup>2</sup> Internal Revenue Code, Section 501(r).

## METHODOLOGY

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?
- **What** are the unique health status and/or access needs for these populations?
- **Where** do these people live in the community?
- **Why** are these problems present?

The focus on **who** is most vulnerable and **where** they live is important to identifying groups experiencing health inequities and disparities. Understanding **why** these issues are present is challenging but is important to designing effective community health improvement initiatives. The question of **how** each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

Federal regulations allow hospital facilities to define the community they serve based on “all of the relevant facts and circumstances,” including the “geographic location” served by the hospital facility, “target populations served” (e.g., children, women, or the aged), and/or the hospital facility’s principal functions (e.g., focus on a particular specialty area or targeted disease).<sup>3</sup> Accordingly, the community definition considered the geographic origins of the hospital’s patients and also the hospital’s mission, target populations, principal functions, and strategies.

Data from multiple sources were gathered and assessed, including secondary data<sup>4</sup> published by others and primary data obtained through community input. Input from the community was received through key stakeholder interviews and online community meetings. Stakeholders and community meeting participants represented the broad interests of the community and included individuals with special knowledge of or expertise in public health. See Appendix C. Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.

Certain community health needs were determined to be “significant” if they were identified as problematic in at least two of the following three data sources: (1) the most recently available secondary data regarding the community’s health, (2) recent assessments developed by the state and local organizations, and (3) input from community stakeholders who participated in the community meeting, interview process, and staff surveys.

---

<sup>3</sup> 501(r) Final Rule, 2014.

<sup>4</sup> “Secondary data” refers to data published by others, for example the U.S. Census and the Indiana Department of Health. “Primary data” refers to data observed or collected from first-hand experience, for example by conducting interviews.

In addition, data were gathered to evaluate the impact of various services and programs identified in Community Health Network's previous CHNA process. See Appendix E.

## Collaborating Organizations

For this community health assessment, Community Hospital Anderson collaborated with the following Community Health Network hospitals: Community Fairbanks Recovery Center, Community Hospital East, Community Hospital North, Community Hospital South, and Community Howard Regional Health. These facilities collaborated through gathering and assessing secondary data together, conducting community meetings and key stakeholder interviews, and relying on shared methodologies, report formats, and staff to manage the CHNA process.

Community Health Network also collaborated with other Indiana health systems to collect primary data through online community meetings and key stakeholder interviews. These health systems include Ascension St. Vincent's Indiana, IU Health, and Riverview Health.

## Data Sources

Community health needs were identified by collecting and analyzing data from multiple sources. Statistics for numerous community health status, health care access, and related indicators were analyzed, including data provided by local, state, and federal government agencies, local community service organizations, and Community Health Network. Comparisons to benchmarks were made where possible. Findings from recent assessments of the community's health needs conducted by other organizations (e.g., local health departments) were reviewed as well.

Input from persons representing the broad interests of the community was taken into account through a key informant interview (1 participant) and community meetings (52 participants). Stakeholders included: individuals with special knowledge of or expertise in public health; local public health departments; hospital staff and providers; representatives of social service organizations; representatives of faith-based organizations; representatives of local universities and schools; and leaders, representatives, and members of medically underserved, low-income, and minority populations.

Community Health Network posts CHNA reports and Implementation Plans online at <https://www.ecommunity.com/community-benefit/archived-reports>.

## Consultant Qualifications

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Arlington, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 100 needs assessments for hospitals, health systems, and community partnerships nationally since 2012.

The firm also helps hospitals, hospital associations, and policy makers with community benefit reporting, program infrastructure, compliance, and community benefit-related policy and guidelines development. Verité is a recognized national thought leader in community benefit, 501(r) compliance, and Community Health Needs Assessments.

## Appendix B – Secondary Data Assessment

This section presents an assessment of secondary data regarding health needs in the Community Hospital Anderson (CHA) community. The CHA community is defined as Madison County, IN.

### DEMOGRAPHICS

**Exhibit 7: Change in Community Population by County, 2019 to 2025**

County	Total Population 2019	Projected Population 2025	Percent Change 2019 - 2025
Madison	129,455	129,042	-0.3%
<b>Community Total</b>	<b>129,455</b>	<b>129,042</b>	<b>-0.3%</b>

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

### DESCRIPTION

**Exhibit 7** portrays the estimated population by county in 2019 and projected to 2025.

### OBSERVATIONS

- Between 2019 and 2025, the population of Madison County is expected to decrease by 0.3 percent, or approximately 400 persons.

**Exhibit 8: Change in Community Population by Age Cohort, 2019 to 2025**

Age Cohort	Total Population 2019	Projected Population 2025	Percent Change 2019 - 2025
Age 0 - 19	31,437	30,176	-4.2%
Age 20 - 44	40,221	37,404	-7.5%
Age 45 - 64	34,571	36,545	5.4%
Age 65 and Older	23,226	26,303	11.7%
<b>Community Total</b>	<b>129,455</b>	<b>130,428</b>	<b>0.7%</b>

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

\*Note: Difference in projected total population from Exhibit 7 due to age projection methodology differing than total population methodology.

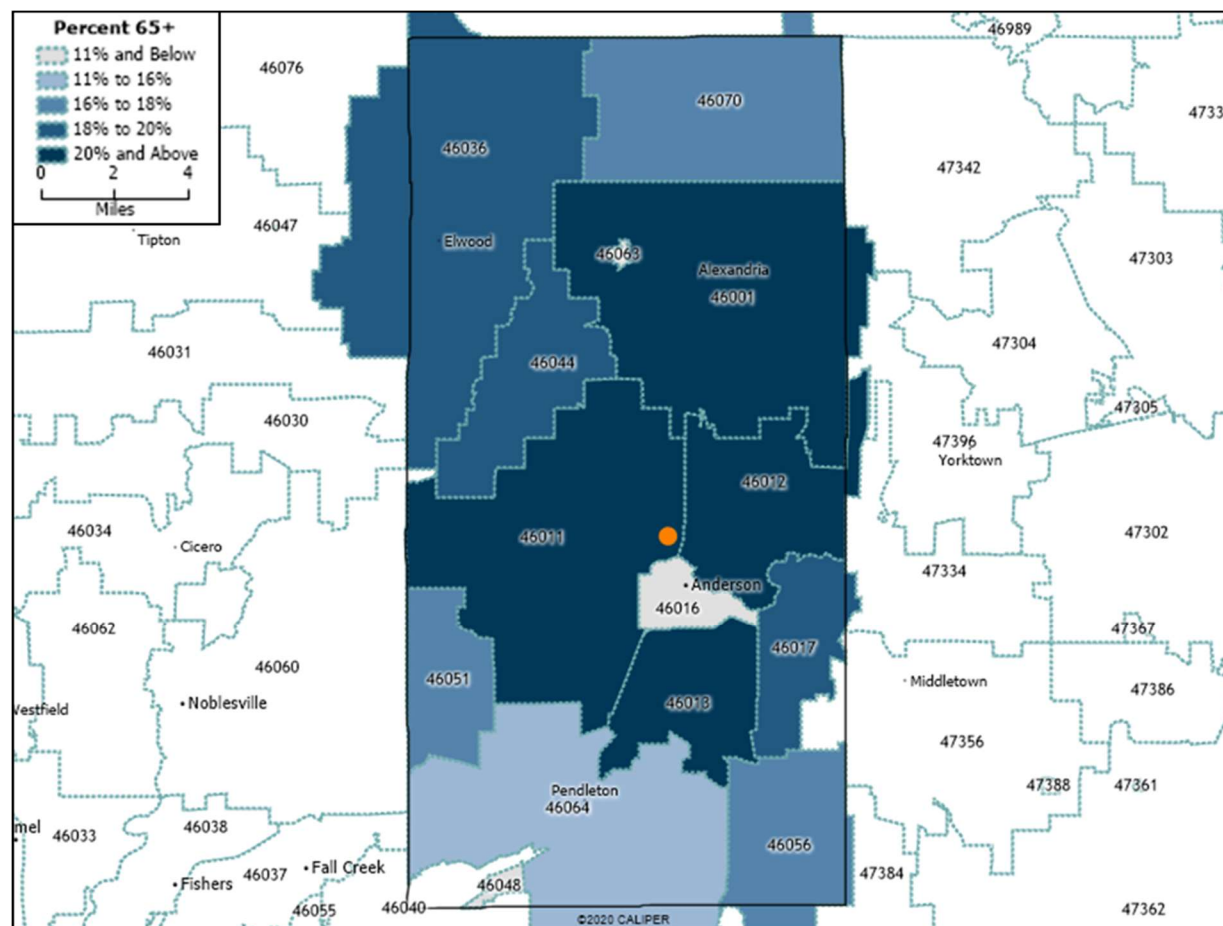
**DESCRIPTION**

**Exhibit 8** shows Madison County's population for certain age cohorts in 2019, with projections to 2025.

**OBSERVATIONS**

- While the total population is expected to increase by 0.7 percent, the population aged 65 and older is expected to increase by 11.7 percent during the time period.
- The growth of older populations is likely to lead to greater demand for health services, since older individuals typically need and use more services than younger persons.

Exhibit 9: Percent of Population – Aged 65+, 2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

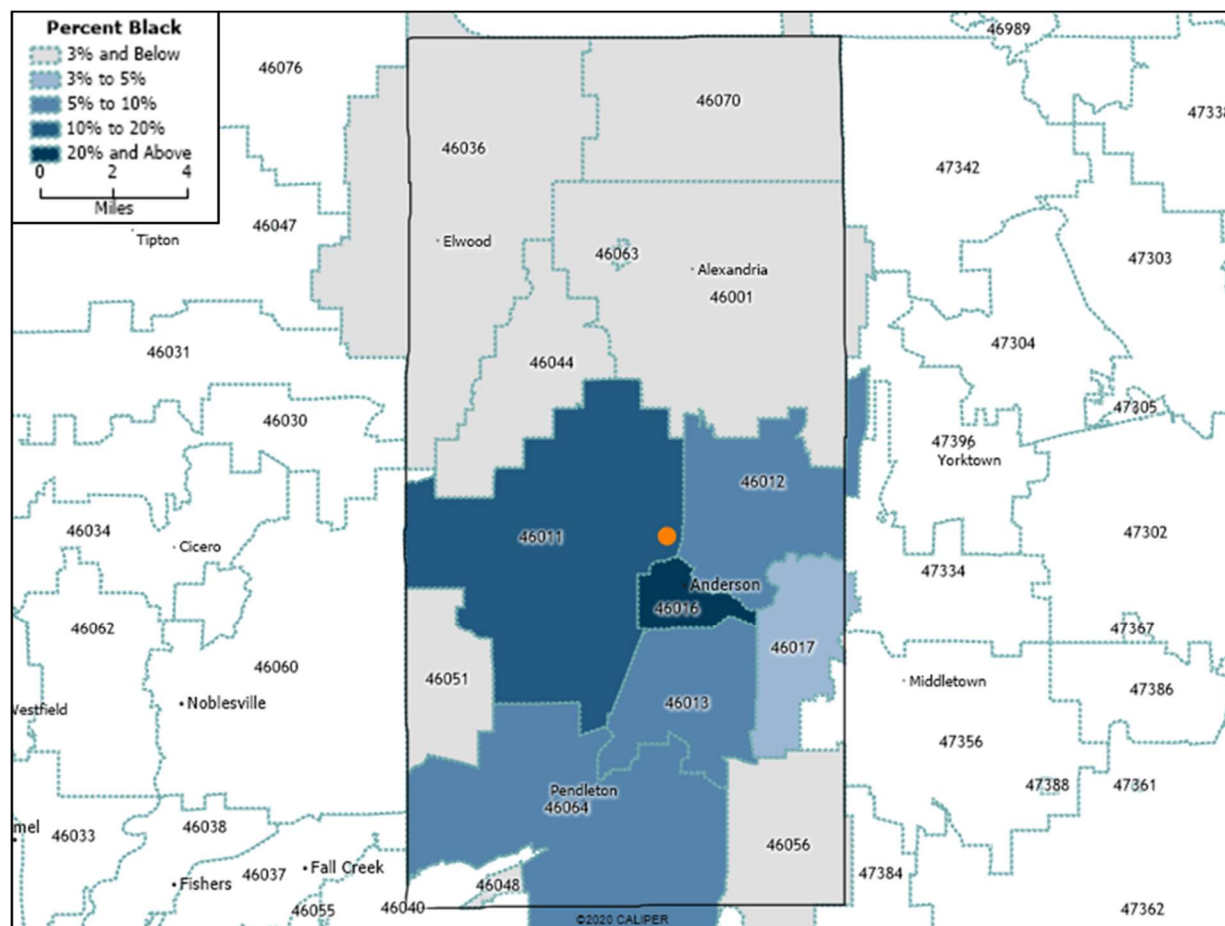
## DESCRIPTION

**Exhibit 9** portrays the percent of the population 65 years of age and older by ZIP code.

## OBSERVATIONS

- Four ZIP codes (46012, 46001, 46011, and 46013) had a proportion of population aged 65 and older above 21 percent.
- ZIP codes 46016, 46063, and 46048 had the lowest proportions, each below 11 percent.

### Exhibit 10: Percent of Population – Black, 2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

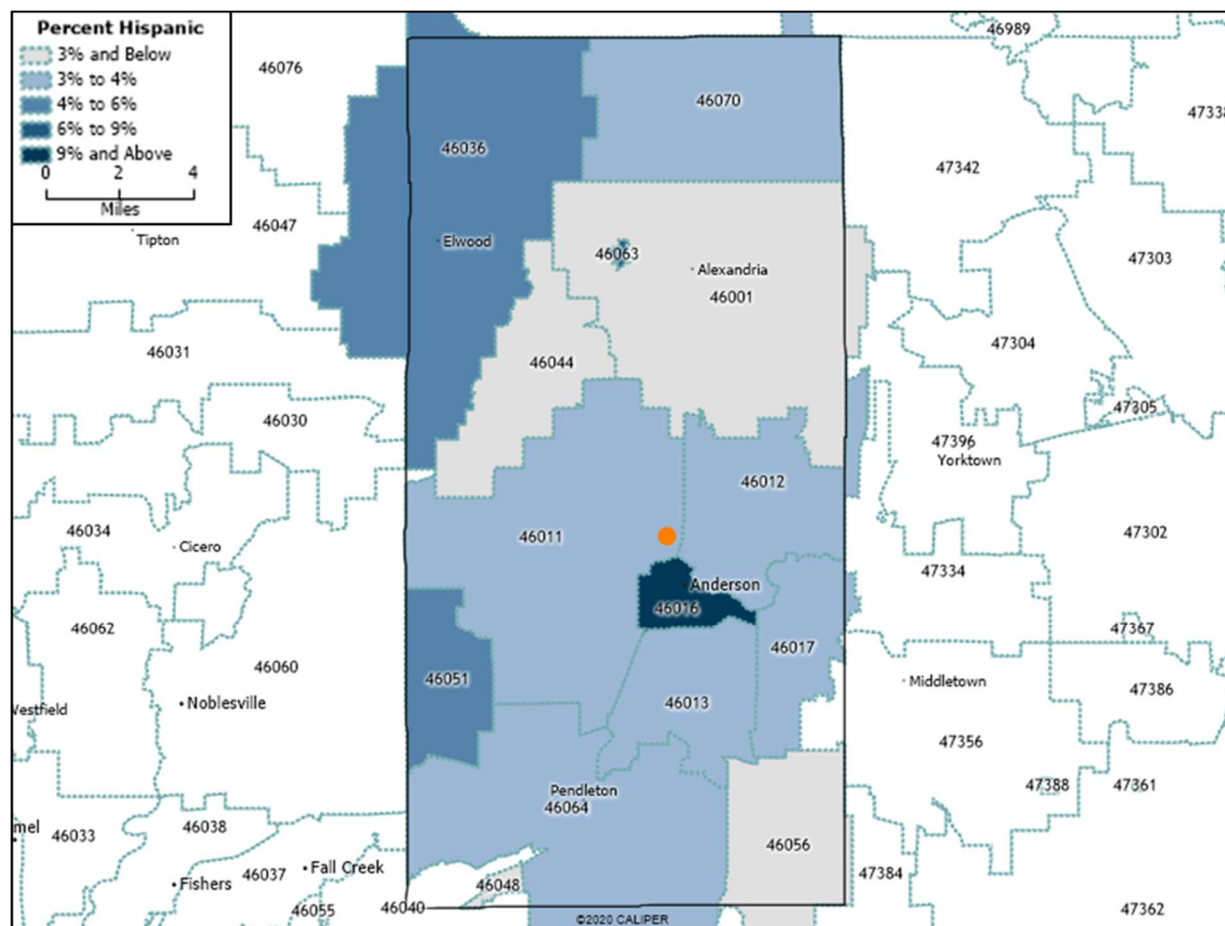
## DESCRIPTION

**Exhibit 10** portrays the percent of the population – Black by ZIP code.

## OBSERVATIONS

- ZIP code 46016 has the highest proportion of Black residents at 20.5 percent. ZIP code 46011 is the only other ZIP code with a proportion above 10 percent (13.4 percent).
- For all community ZIP codes, the proportion of Black residents is 7.8 percent.

### Exhibit 11: Percent of Population – Hispanic (or Latino), 2019



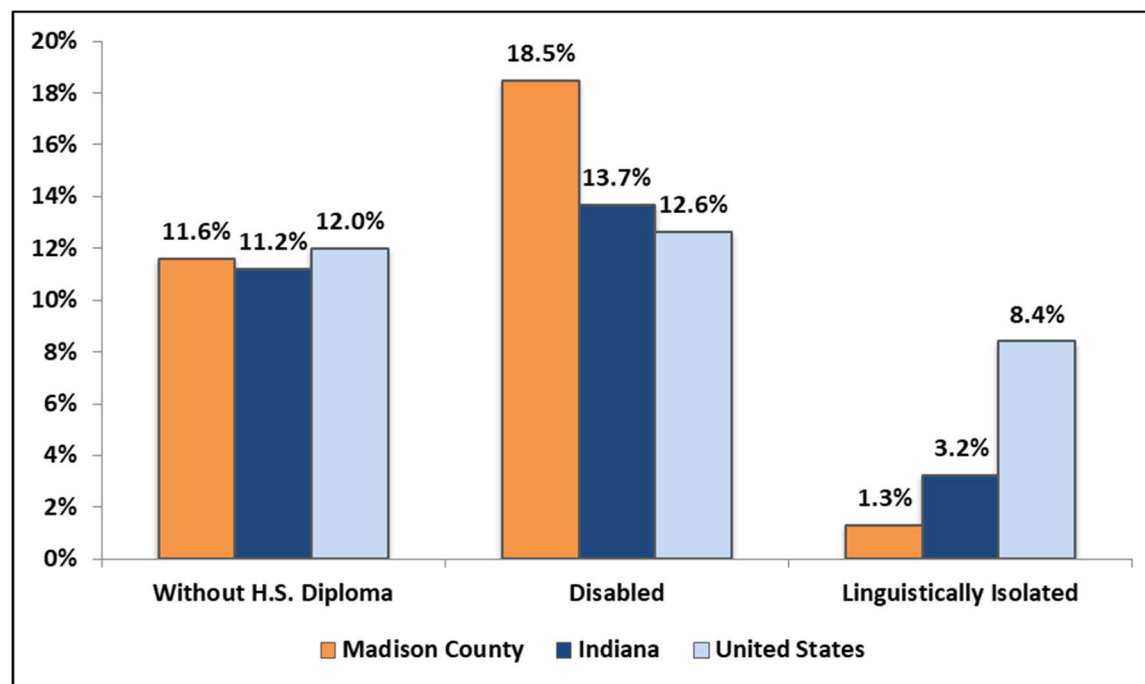
Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

## DESCRIPTION

**Exhibit 11** portrays the percent of the population – Hispanic (or Latino) by ZIP code.

## OBSERVATIONS

- ZIP codes 46016 (9.7 percent) and 46063 (6.7 percent) had the highest proportions of Hispanic (or Latino) residents.
- For all community ZIP codes, the proportion of Hispanic residents is 4.1 percent.

**Exhibit 12: Selected Socioeconomic Indicators, 2015-2019**

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

## DESCRIPTION

**Exhibit 12** portrays the percent of the population (aged 25 years and above) without a high school diploma, with a disability, and linguistically isolated in Madison County, Indiana, and the United States. Linguistic isolation is defined as residents who speak a language other than English and speak English less than “very well.”

## OBSERVATIONS

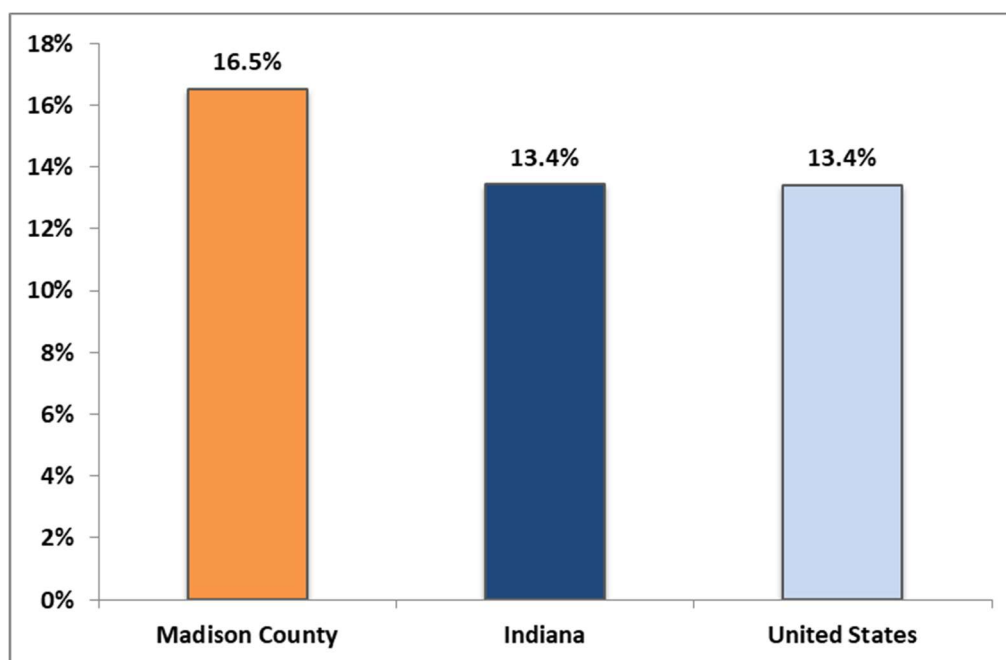
- In 2015-2019, a higher percentage of Madison County residents aged 25 and older were without a high school diploma than residents of Indiana.
- Proportionately more people were disabled in Madison County than in Indiana and the United States.
- Compared to the United States, proportionately fewer people in Madison County and Indiana are linguistically isolated.

## SOCIOECONOMIC INDICATORS

This section includes indicators for poverty, unemployment, health insurance status, crime, housing affordability, and “social vulnerability.” All have been associated with health status.

### People in Poverty

**Exhibit 13: Percent of People in Poverty, 2015-2019**



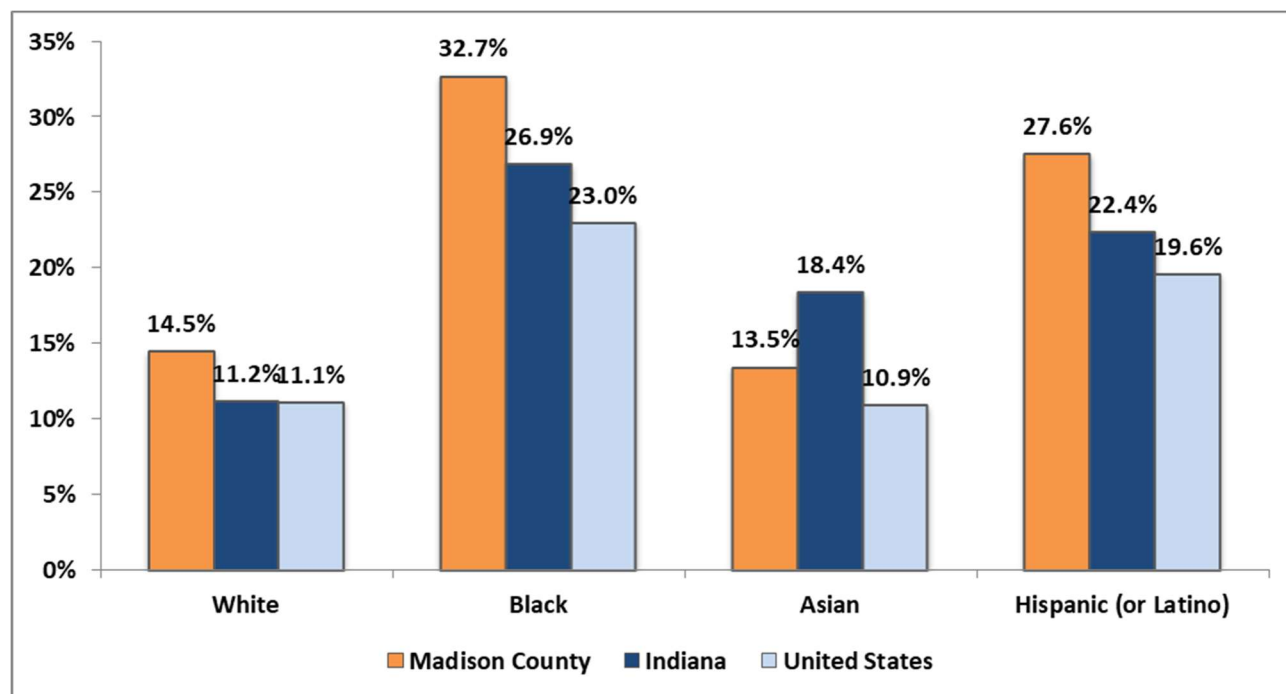
Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

#### DESCRIPTION

**Exhibit 13** portrays poverty rates in Madison County, Indiana, and the United States.

#### OBSERVATIONS

- In 2015-2019, the overall poverty rate in Madison County was above Indiana and United States averages.

**Exhibit 14: Poverty Rates by Race and Ethnicity, 2015-2019**

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

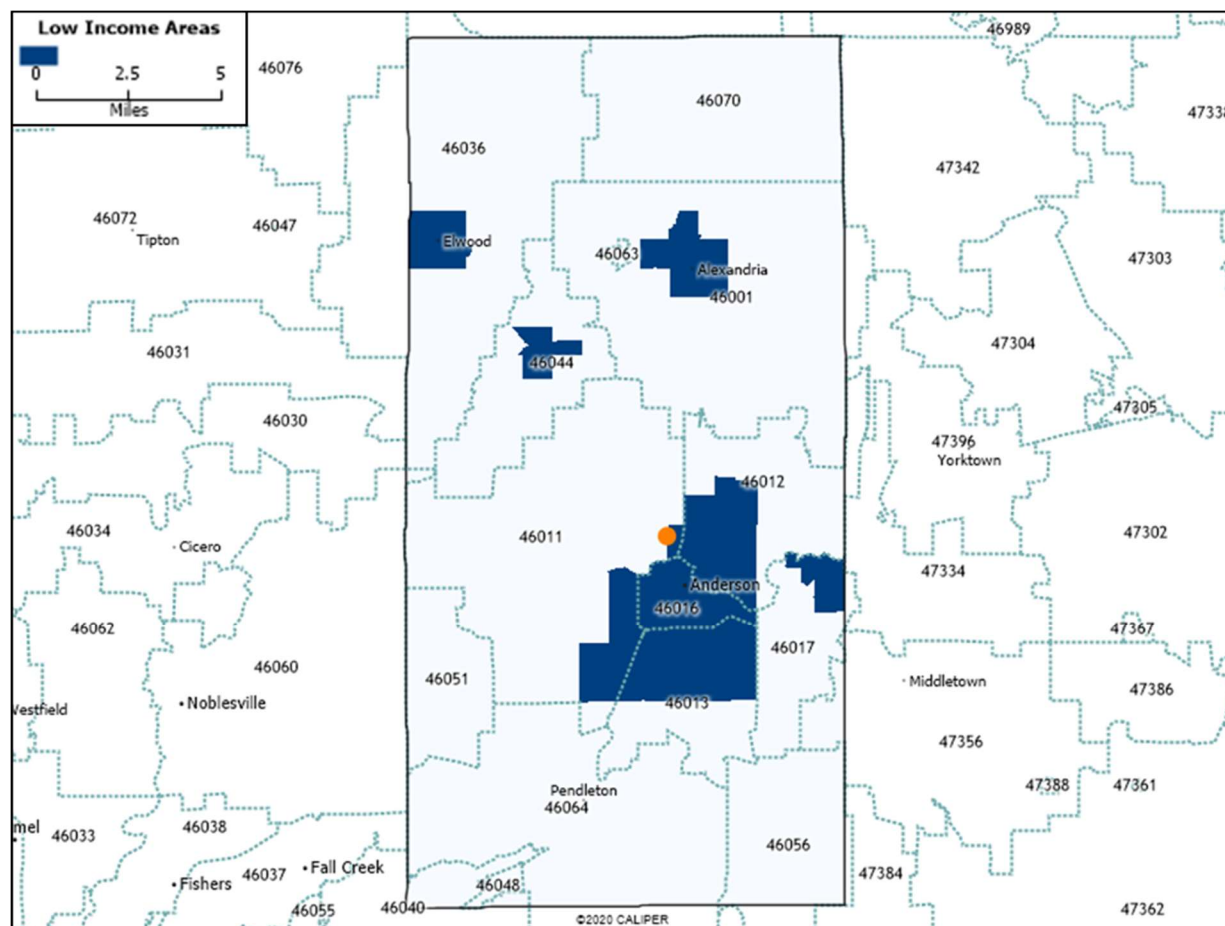
## DESCRIPTION

**Exhibit 14** portrays poverty rates by race and ethnicity.

## OBSERVATIONS

- In Madison County, poverty rates for Black and Hispanic (or Latino) populations were nearly double the average for White populations.
- Compared to Indiana averages, proportionately more White, Black, and Hispanic (or Latino) residents were in poverty.

### Exhibit 15: Low Income Census Tracts, 2019



Source: US Department of Agriculture Economic Research Service, ESRI, 2021.

### DESCRIPTION

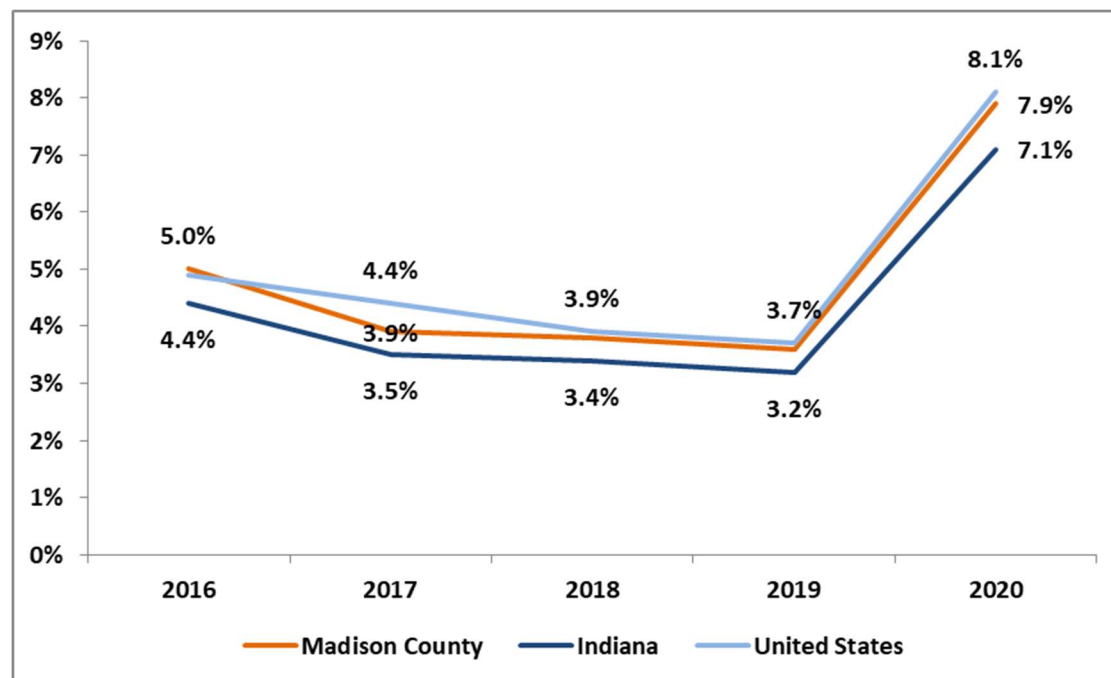
**Exhibit 15** portrays the location of federally designated low-income census tracts.

## OBSERVATIONS

- In 2019, low-income census tracts were present throughout Madison County, particularly in areas near the hospital in Anderson.

## Unemployment

Exhibit 16: Annual Unemployment Rates, 2016 to 2020



Source: Bureau of Labor Statistics, 2021.

### DESCRIPTION

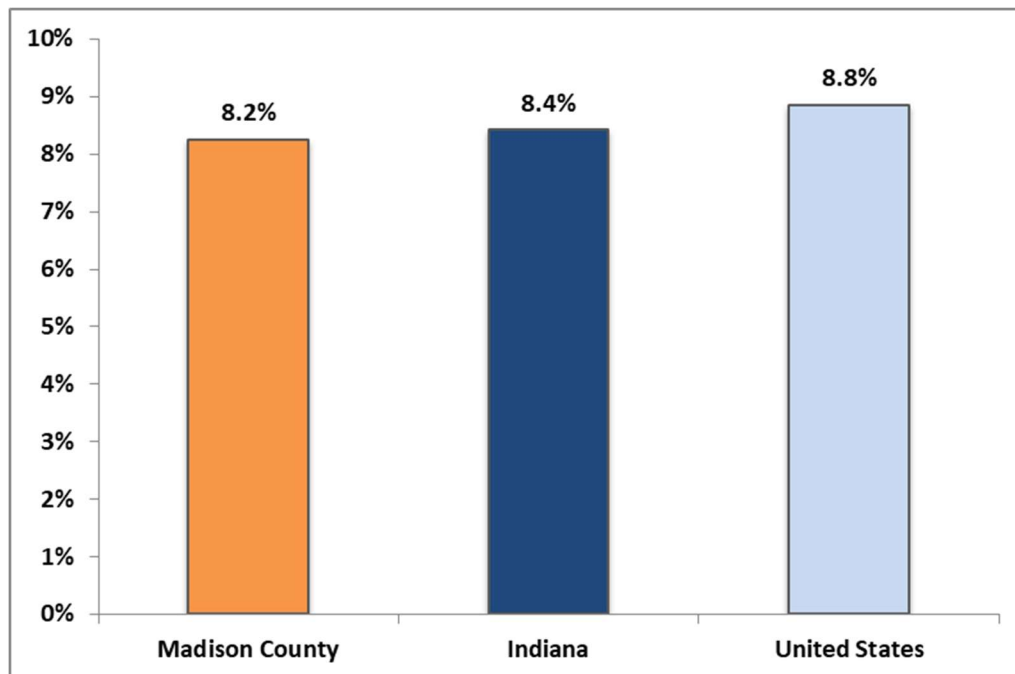
Exhibit 16 shows annual unemployment rates compared to Indiana and the United States for 2016 through 2020.

### OBSERVATIONS

- Unemployment rates declined steadily from 2016 through 2019. Due to the COVID-19 pandemic, unemployment rates rose substantially in 2020.
- In 2020, the unemployment rate in Madison County was above the Indiana average, but below the national average. From 2016 through 2019, the Madison County rate was above the state rate.
- The rise in unemployment contributed to numerous health-related factors, such as access to employer-based health insurance, housing and food insecurity, and access to health services.

## Health Insurance Status

**Exhibit 17: Percent of Population without Health Insurance, 2015-2019**



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

### DESCRIPTION

**Exhibit 17** presents the estimated percent of population without health insurance.

### OBSERVATIONS

- Madison County has had a lower percentage of the population without health insurance than Indiana and the United States.
- Recent spikes in unemployment likely are leading to more uninsured community members.

## CRIME RATES

**Exhibit 18: Crime Rates by Type, Per 100,000, 2019**

Crime Type	City of Anderson	Madison County	Indiana
Violent Crime	440.8	28.6	370.8
Murder and Non-Negligent Manslaughter	7.3	-	5.6
Rape	112.9	12.4	36.8
Robbery	112.9	4.6	79.2
Aggravated Assault	207.7	11.6	249.3
Property Crime	3,817.9	285.0	1,971.0
Burglary	683.1	73.4	323.7
Larceny - Theft	2,779.6	192.3	1,443.4
Motor Vehicle Theft	355.2	19.3	203.8

Source: Federal Bureau of Investigation, 2020.

### DESCRIPTION

**Exhibit 18** provides crime statistics and rates per 100,000 for the City of Anderson, Madison County, and Indiana. Light grey shading indicates rates above the Indiana average; dark grey shading indicates rates more than 50 percent above the average.

### OBSERVATIONS

- Rates in Anderson were significantly above state rates for most crime types, including rape, property crime, burglary, larceny-theft, and motor vehicle theft.

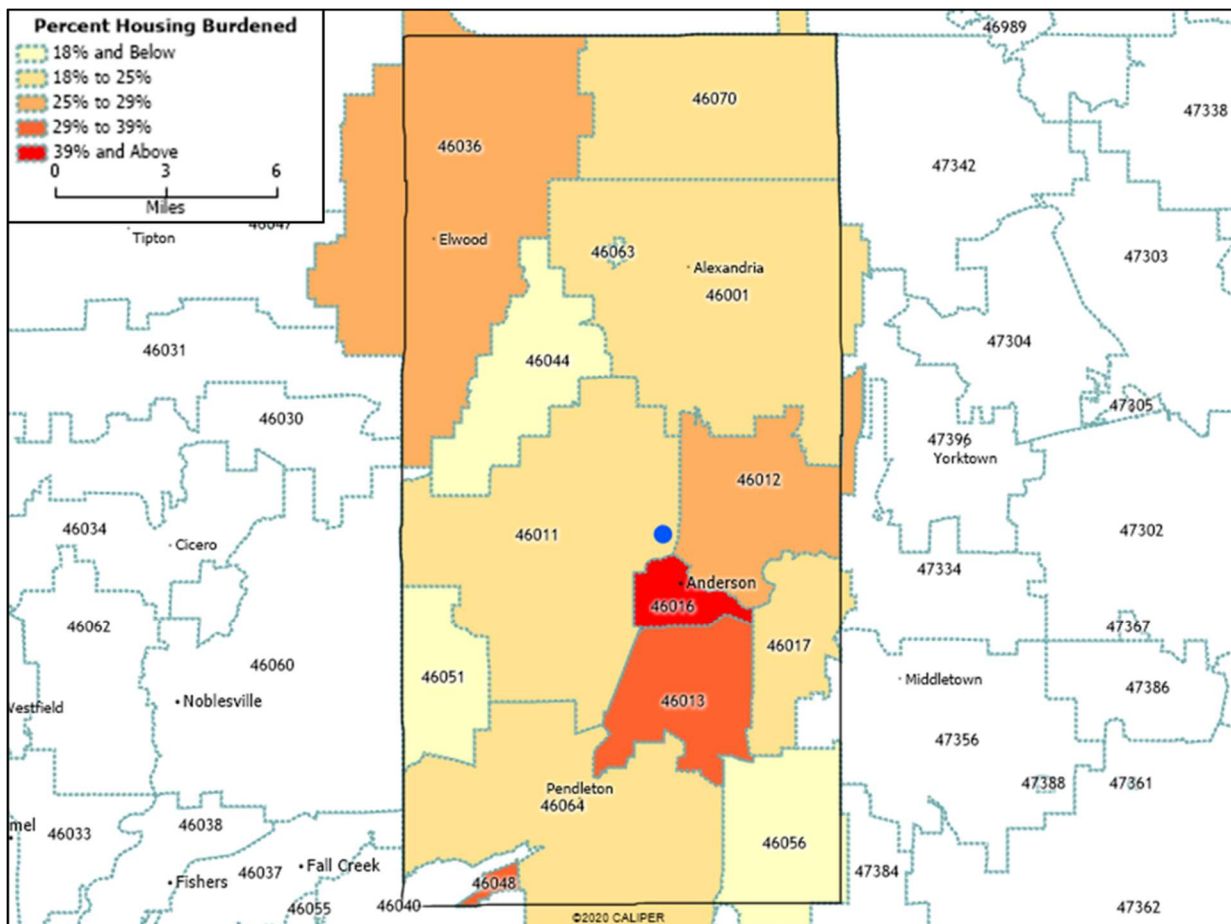
## HOUSING AFFORDABILITY

**Exhibit 19: Percent of Households – Housing Burdened, 2015-2019**

Area	Occupied Housing Units	Excessive Housing Costs (30%+ of Income)	Percent Housing Burdened
<b>Madison County</b>	<b>51,003</b>	<b>13,093</b>	<b>25.7%</b>
Indiana	2,570,419	626,325	24.4%
United States	120,756,048	37,249,895	30.8%

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, via mySidewalk.

**Exhibit 20: Map of Percent of Housing Burdened Households, 2015-2019**



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

## DESCRIPTION

The U.S. Department of Health and Human Services (“HHS”) identifies “housing burdened” as those spending more than 30 percent of income on housing and as a contributor to poor health outcomes.<sup>5</sup>

**Exhibits 19 and 20** portray the percent of household spending on housing in the community.

## OBSERVATIONS

As stated by the Federal Reserve, “households that have little income left after paying rent may not be able to afford other necessities, such as food, clothes, health care, and transportation.”<sup>6</sup>

- In Madison County, 26 percent of households have been designated as “housing burdened,” a level below both the Indiana and United States averages.
- The percentage of occupied households cost burdened was highest in ZIP codes 46016 (40 percent) and 46048 (32 percent). Percentages in these two ZIP codes exceeded state and national averages.
- Housing insecurity became more problematic due to the COVID-19 pandemic.

---

<sup>5</sup> <https://health.gov/healthypeople/objectives-and-data/browse-objectives/housing-and-homes/reduce-proportion-families-spend-more-30-percent-income-housing-sdoh-04>

<sup>6</sup> Ibid.

## DIGNITY HEALTH COMMUNITY NEED INDEX™

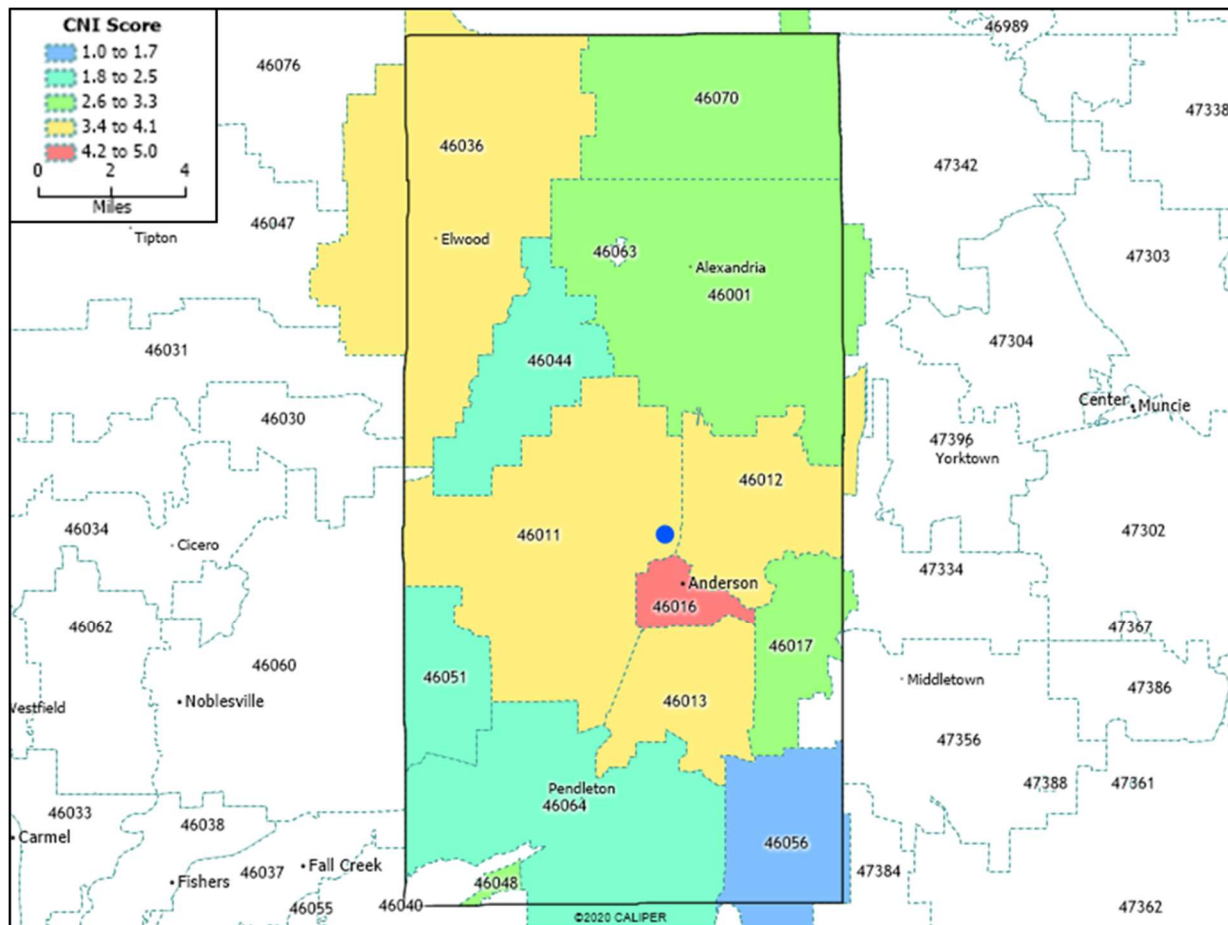
**Exhibit 21: Weighted Average Community Need Index™ Score by County, 2021**

Area	CNI Score
<b>Madison County</b>	<b>3.4</b>
United States	3.0

Source: CommonSpirit Health, 2021.

Note: CNI scores weighted by the number of people living within each area.

**Exhibit 22: Community Need Index, 2021**



Source: CommonSpirit Health, 2021, and Caliper Maptitude.

## DESCRIPTION

**Exhibits 21 and 22** present *Community Need Index™* (CNI) scores. Higher scores (e.g., 4.2 to 5.0) indicate the highest levels of community need. The index is calibrated such that 3.0 represents a U.S.-wide median score.

CommonSpirit Health (formerly Dignity Health) developed the CNI as a way to assess barriers to health care access. The index, available for every ZIP code in the United States, consists of five social and economic indicators:

- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

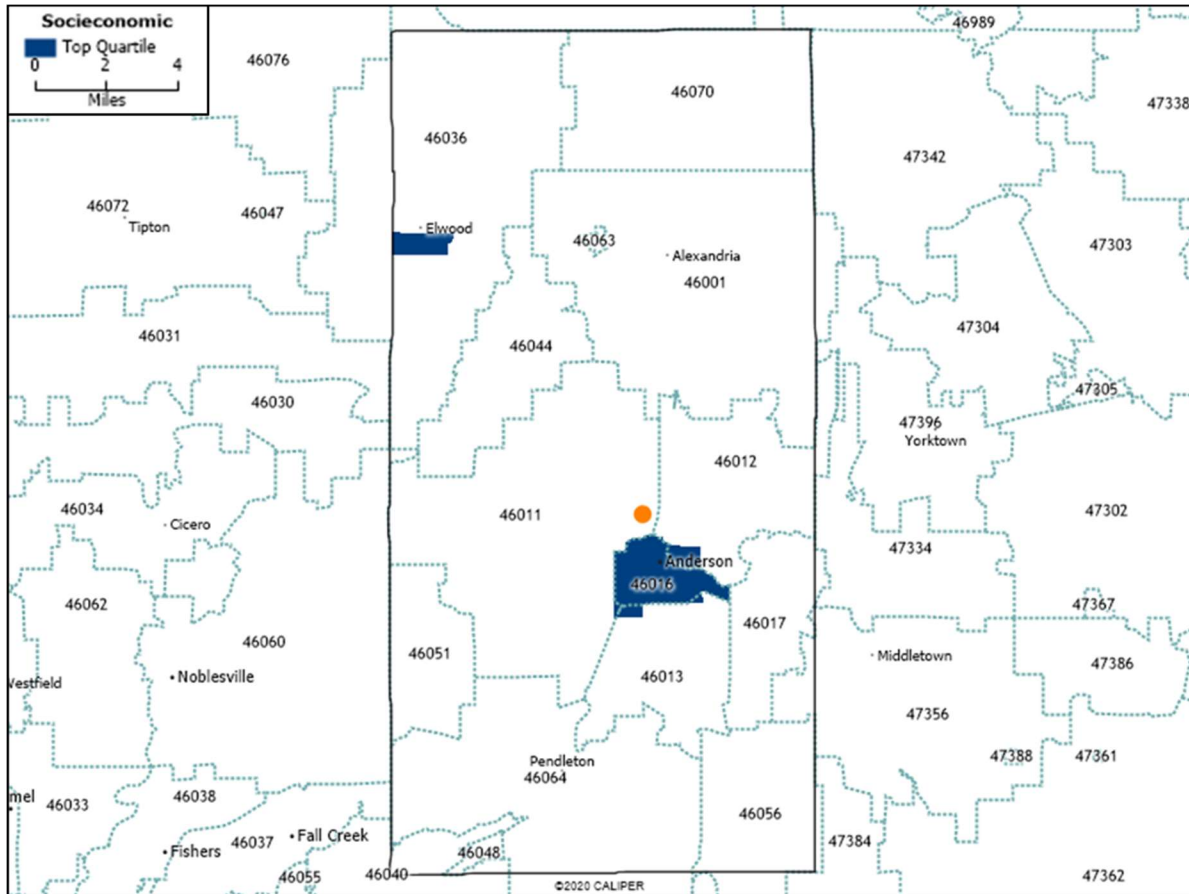
CNI scores are grouped into “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0) categories.

## OBSERVATIONS

- At 3.4, the weighted average CNI score for Madison County is higher than the U.S. median.
- Anderson ZIP code 46016 received a score of 4.8, the highest in the county and scoring in the “highest need” category.

## CENTERS FOR DISEASE CONTROL AND PREVENTION SOCIAL VULNERABILITY INDEX (SVI)

Exhibit 23: Socioeconomic Index – Top Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

### DESCRIPTION

Exhibits 23 through 26 are maps that show the Center for Disease Control and Prevention's *Social Vulnerability Index* (SVI) scores for census tracts throughout the community. Highlighted census tracts are in the top quartile nationally for different indicators on which the SVI is based.

The SVI is based on 15 variables derived from U.S. census data. Variables are grouped into four themes, including:

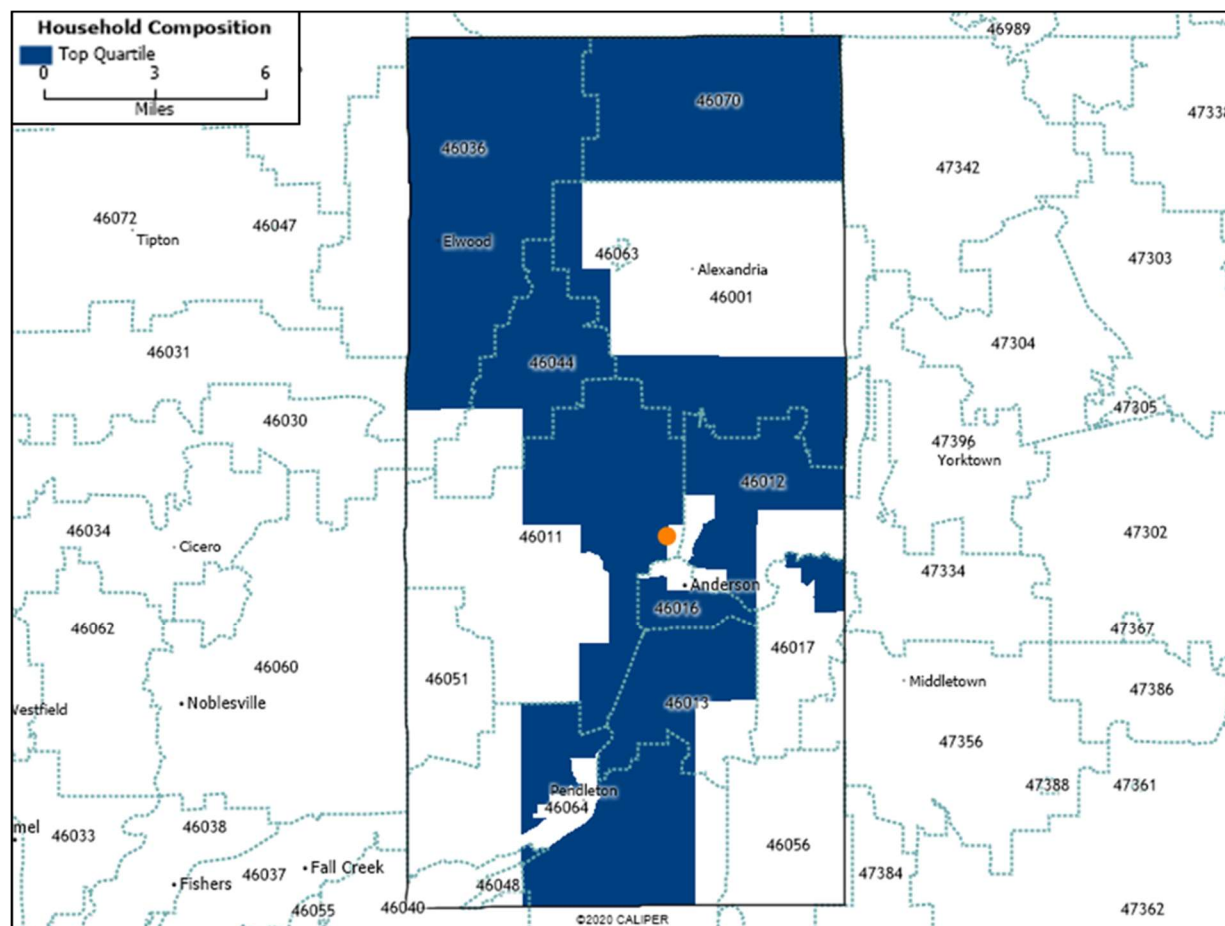
- Socioeconomic status;
- Household composition;
- Race, Ethnicity, and Language; and
- Housing and transportation.

**Exhibits 23 through 26** highlight SVI scores for each of these themes.

**Exhibit 23** identifies census tracts in the top quartile nationally for socioeconomic vulnerability.

#### **OBSERVATIONS**

- Census tracts with the highest levels of socioeconomic vulnerability are located near the hospital in Anderson, and in areas near Elwood.

**Exhibit 24: Household Composition and Disability Index – Top Quartile Census Tracts**

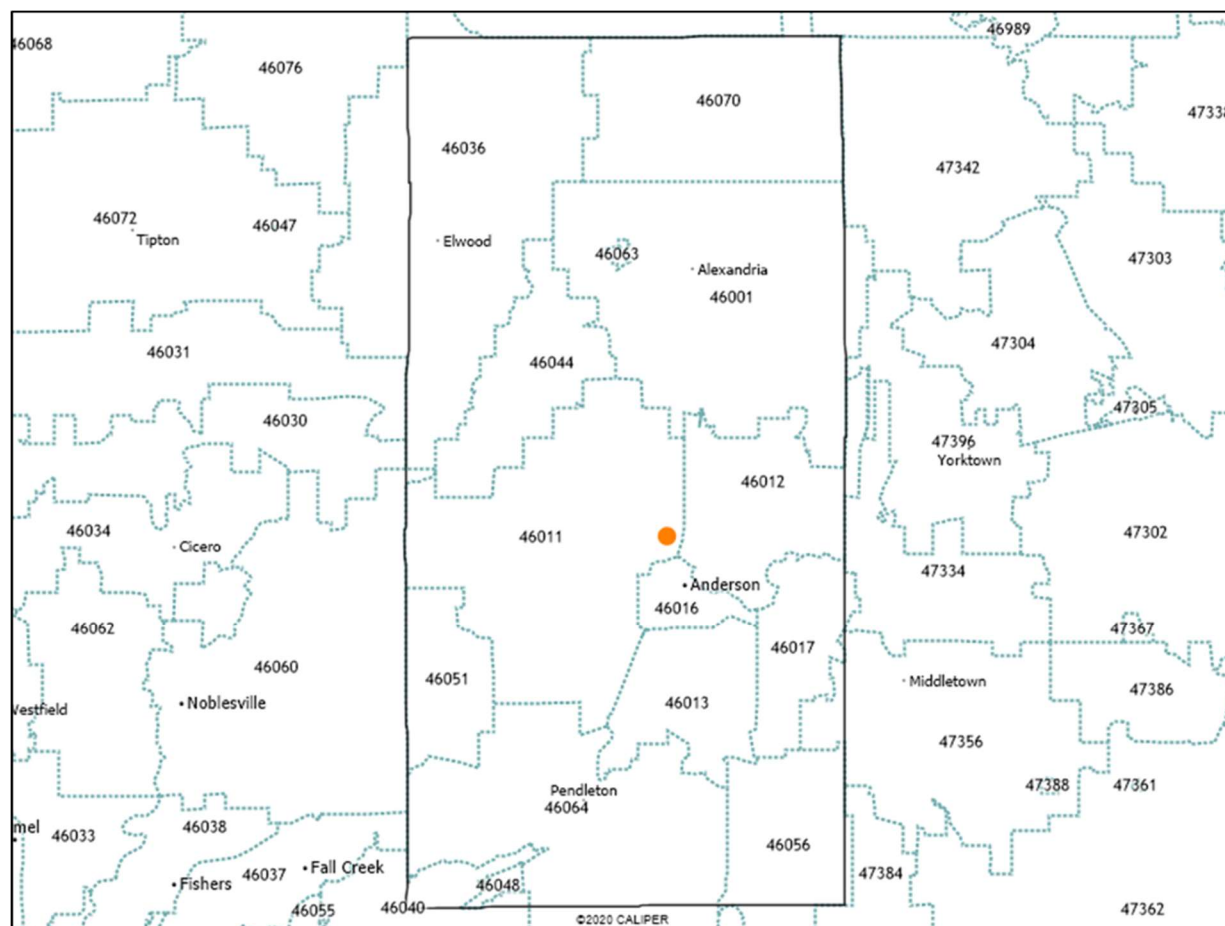
Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

## DESCRIPTION

**Exhibit 24** identifies census tracts in the top quartile nationally for household composition and disability vulnerability.

## OBSERVATIONS

- Census tracts throughout Madison County are in the top quartile for household composition and disability vulnerability, including in areas proximate to the hospital.

**Exhibit 25: Minority Status and Language Index – Top Quartile Census Tracts**

Source: Centers for Disease Control and Prevention, 2018, and Caliper Maptitude.

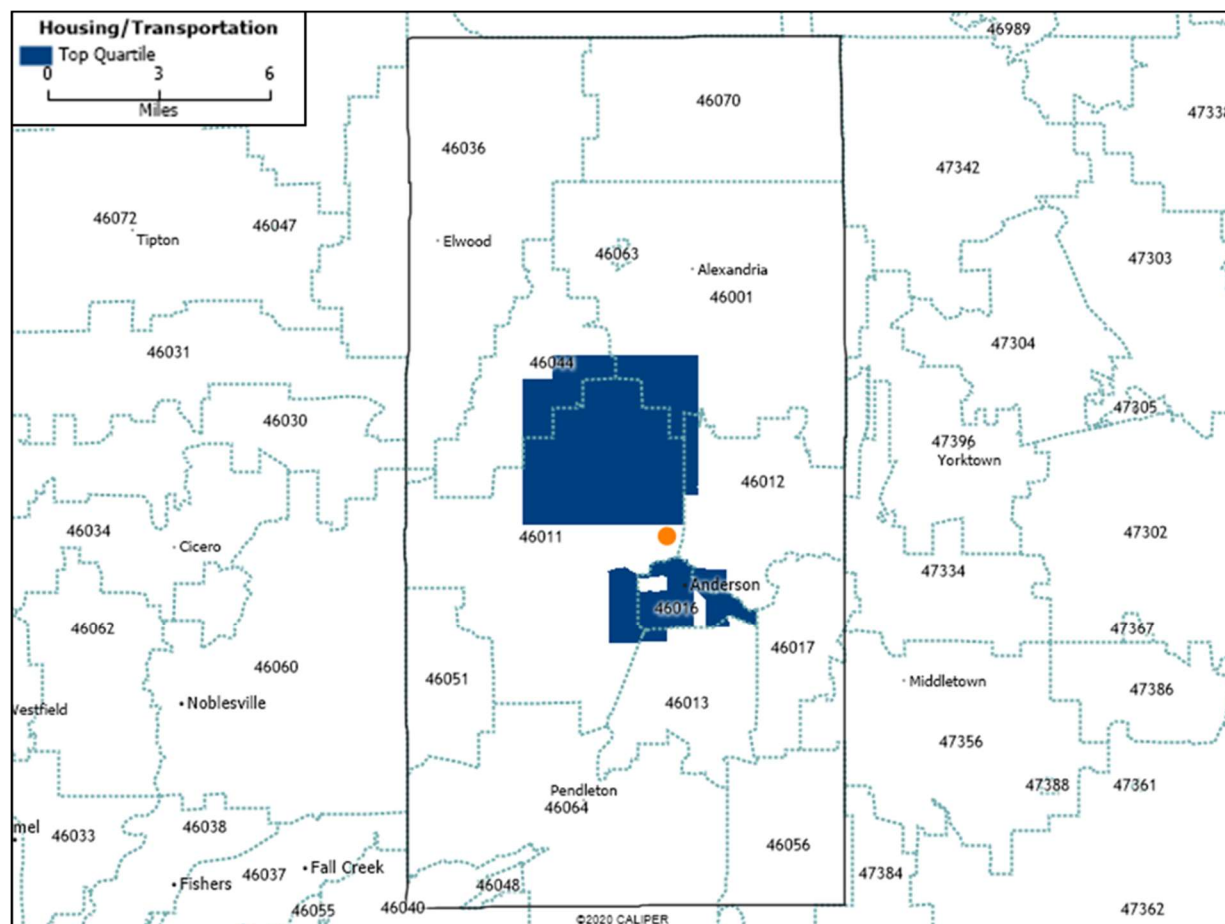
## DESCRIPTION

**Exhibit 25** identifies census tracts in the top quartile nationally for minority status and language vulnerability.

## OBSERVATIONS

- No census tracts in Madison County are in the top quartile for minority status and language vulnerability.

### Exhibit 26: Housing Type and Transportation Index – Top Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2018, and Caliper Maptitude.

### DESCRIPTION

**Exhibit 26** identifies census tracts in the top quartile nationally for housing type and transportation vulnerability.

## OBSERVATIONS

- Census tracts located in central Madison County are in the top quartile for housing and transportation vulnerability, including in areas proximate to the hospital.

## OTHER HEALTH STATUS AND ACCESS INDICATORS

### County Health Rankings

Exhibit 27: County Health Rankings, 2020

Measure	Madison County
<b>Health Outcomes</b>	83
<b>Health Factors</b>	81
<b>Length of Life</b>	67
<b>Quality of Life</b>	91
Poor or fair health	82
Poor physical health days	92
Poor mental health days	89
Low birthweight	87
<b>Health Behaviors</b>	88
Adult smoking	78
Adult obesity	87
Food environment index	85
Physical inactivity	77
Access to exercise opportunities	30
Excessive drinking	12
Alcohol-impaired driving deaths	40
Sexually transmitted infections	81
Teen births	69
<b>Clinical Care</b>	39
Uninsured	45
Primary care physicians	36
Dentists	17
Mental health providers	23
Preventable hospital stays	60
Mammography screening	32
Flu Vaccinations	18
<b>Social &amp; Economic Factors</b>	83
High school graduation	82
Some college	50
Unemployment	72
Children in poverty	87
Income inequality	77
Children in single-parent households	85
Social associations	36
Violent crime	39
Injury deaths	73
<b>Physical Environment</b>	40
Air pollution - particulate matter	24
Severe housing problems	74
Driving alone to work	36
Long commute - driving alone	63

Source: County Health Rankings, 2020.

## DESCRIPTION

**Exhibit 27** presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation that incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” The health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,<sup>7</sup> social and economic factors, and physical environment.<sup>8</sup> *County Health Rankings* is updated annually. *County Health Rankings 2020* relies on data from 2012 to 2018. Most data are from 2015 to 2019.

The exhibit presents 2020 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 92 counties in Indiana. The lowest numbers indicate the most favorable rankings. Light grey shading indicates rankings in the bottom half of Indiana’s counties; dark grey shading indicates rankings in bottom quartile.

## OBSERVATIONS

- In 2020, Madison County ranked in the bottom 50<sup>th</sup> percentile among Indiana counties for 26 of the 41 indicators assessed. Of those, 21 were in the bottom quartile, including:
  - Health outcomes;
  - Health factors;
  - Quality of life;
  - Poor or fair health;
  - Poor physical health days;
  - Poor mental health days;
  - Low birthweight births;
  - Health behaviors;
  - Smoking;
  - Obesity;
  - Food environment index;
  - Physical inactivity;

---

<sup>7</sup>A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

<sup>8</sup>A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are fast food.

- Sexually transmitted infections;
- Social and economic factors;
- High school graduation;
- Unemployment;
- Children in poverty;
- Income inequality;
- Children in single-parent households;
- Injury deaths; and
- Severe housing problems.

Exhibit 28: County Health Rankings Data Compared to State and U.S. Averages, 2020

Indicator Category	Data	Madison County	Indiana	United States
<b>Health Outcomes</b>				
Length of Life	Years of potential life lost before age 75 per 100,000 population	9,495	8,306	<b>6,900</b>
Quality of Life	Percent of adults reporting fair or poor health	20.6%	19.8%	<b>17.0%</b>
	Average number of physically unhealthy days reported in past 30 days	4.7	4.2	<b>3.8</b>
	Average number of mentally unhealthy days reported in past 30 days	5.0	4.7	<b>4.0</b>
	Percent of live births with low birthweight (<2500 grams)	9.0%	8.0%	<b>8.0%</b>
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	21.6%	21.8%	<b>17.0%</b>
Adult Obesity	Percent of adults that report a BMI >= 30	38.8%	33.4%	<b>29.0%</b>
Food Environment Index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.1	7.1	<b>7.6</b>
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	32.5%	26.7%	<b>23.0%</b>
Access to Exercise Opportunities	Percent of population with adequate access to locations for physical activity	70.5%	75.2%	<b>84.0%</b>
Excessive Drinking	Binge plus heavy drinking	15.9%	17.6%	<b>19.0%</b>
Alcohol-Impaired Driving Deaths	Percent of driving deaths with alcohol involvement	17.0%	19.7%	<b>28.0%</b>
STDs	Chlamydia rate per 100,000 population	511.2	514.2	<b>524.6</b>
Teen Births	Teen birth rate per 1,000 female population, ages 15-19	34.6	26.5	<b>23.0</b>
<b>Clinical Care</b>				
Uninsured	Percent of population under age 65 without health insurance	9.1%	9.6%	<b>10.0%</b>
Primary Care Physicians	Ratio of population to primary care physicians	2,023:1	1,511:1	<b>1,330:1</b>
Dentists	Ratio of population to dentists	1,752:1	1,777:1	<b>1,450:1</b>
Mental Health Providers	Ratio of population to mental health providers	776:1	623:1	<b>400:1</b>
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	5,325	5,006	<b>4,535</b>
Mammography Screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	42.0%	42.0%	<b>42.0%</b>
Flu Vaccinations	Percent of Medicare enrollees who receive an influenza vaccination	52.0%	49.0%	<b>46.0%</b>

Source: County Health Rankings, 2020.

Exhibit 28: County Health Rankings Data Compared to State and U.S. Averages, 2020 (continued)

Indicator Category	Data	Madison County	Indiana	United States
<b>Health Factors</b>				
<b>Social &amp; Economic Factors</b>				
High School Graduation	Percent of ninth-grade cohort that graduates in four years	84.9%	83.8%	<b>85.0%</b>
Some College	Percent of adults aged 25-44 years with some post-secondary education	55.6%	62.7%	<b>66.0%</b>
Unemployment	Percent of population age 16+ unemployed but seeking work	3.9%	3.4%	<b>3.9%</b>
Children in Poverty	Percent of children under age 18 in poverty	24.7%	17.5%	<b>18.0%</b>
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.4	4.4	<b>4.9</b>
Children in Single-Parent Households	Percent of children that live in a household headed by single parent	39.3%	33.9%	<b>33.0%</b>
Social Associations	Number of associations per 10,000 population	13.8	12.3	<b>9.3</b>
Violent Crime	Number of reported violent crime offenses per 100,000 population	211.5	385.1	<b>386.0</b>
Injury Deaths	Injury mortality per 100,000	93.2	77.1	<b>70.0</b>
<b>Physical Environment</b>				
Air Pollution	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	11.4	11.8	<b>8.6</b>
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	13.0%	13.2%	<b>18.0%</b>
Driving Alone to Work	Percent of the workforce that drives alone to work	83.0%	83.0%	<b>76.0%</b>
Long Commute – Drive Alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	39.9%	31.1%	<b>36.0%</b>

Source: County Health Rankings, 2020.

## DESCRIPTION

**Exhibit 28** provides data that underlie the County Health Rankings and compares indicators to statewide and national averages.<sup>9</sup> Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators more than 50 percent worse.

Note that higher values generally indicate that health outcomes, health behaviors, and other factors are worse in the county than in the United States. However, for several indicators, lower values are more problematic, including:

- Food environment index;
- Percent with access to exercise opportunities;
- Percent receiving mammography screening;
- Percent receiving flu vaccination;
- High school graduation rate;
- Percent with some college; and
- Social associations rate.

## OBSERVATIONS

- Indiana-wide and Madison County indicators are worse than U.S. averages for all health outcome indicators.
- The following indicators compared particularly unfavorably in Madison County:
  - Teen birth rate;
  - Supply of primary care physicians; and
  - Supply of mental health providers.

---

<sup>9</sup> County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at [http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures\\_datasources\\_years.pdf](http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf)

## Community Health Status Indicators

### Exhibit 29: Community Health Status Indicators, 2020

(Light Grey Shading Denotes Bottom Half of Peer Counties; Dark Grey Denotes Bottom Quartile)

Category	Indicator	Madison County		Peer Counties
Length of Life	Years of Potential Life Lost Rate		9,495.1	9,400.6
Quality of Life	% Fair/Poor Health		20.6%	18.2%
	Physically Unhealthy Days		4.7	4.2
	Mentally Unhealthy Days		5.0	4.4
	% Births - Low Birth Weight		9.0%	8.5%
Health Behaviors	% Smokers		21.6%	18.9%
	% Obese (BMI >30)		38.8%	35.8%
	Food Environment Index		7.1	7.8
	% Physically Inactive		32.5%	29.4%
	% With Access to Exercise Opportunities		70.5%	51.8%
	% Excessive Drinking		15.9%	17.4%
	% Driving Deaths Alcohol-Impaired		17.0%	27.5%
	Chlamydia (per 100,000 population)		511.2	349.1
	Teen Births (per 1,000 females ages 15-19)		34.6	29.7
Clinical Care	% Uninsured		9.1%	9.8%
	Per capita supply of primary care physicians		49.4	32.6
	Per capita supply of dentists		57.1	29.2
	Per capita supply of mental health providers		128.8	86.8
	Preventable Hospitalizations (per 100,000 Medicare Enrollees)		5,325.0	5,551.0
	% Mammography Screening		42.0%	40.4%
	% Flu Vaccination		52.0%	44.8%
Social & Economic Factors	% High School Graduation		84.9%	90.3%
	% Some College		55.6%	52.4%
	% Unemployed		3.9%	4.2%
	% Children in Poverty		24.7%	19.9%
	Income Ratio		4.4	4.5
	% Children in Single-Parent Households		39.3%	32.2%
	Social Association (per 10,000 population)		13.8	10.2
	Violent Crime (per 100,000 population)		211.5	242.7
Physical Environment	Injury Deaths (per 100,000 population)		93.2	92.7
	Average Daily PM2.5		11.4	10.3
	% Severe Housing Problems		13.0%	13.0%
	% Drive Alone to Work		83.0%	83.9%
	% Long Commute - Drives Alone		39.9%	48.0%

Source: County Health Rankings and Verité Analysis, 2019.

## DESCRIPTION

County Health Rankings has assembled community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control's *Community Health Status Indicators* Project (CHSI), County Health Rankings also publishes lists of "peer counties," so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

CHSI formerly was available from the CDC. Because comparisons with peer counties (rather than only counties in the same state) are meaningful, Verité Healthcare Consulting rebuilt the CHSI comparisons for this and other CHNAs.

**Exhibit 29** compares Madison County to its respective peer counties and highlights community health issues found to rank in the bottom half and bottom quartile of the counties included in the analysis. Light grey shading indicates rankings in the bottom half of peer counties; dark grey shading indicates rankings in the bottom quartile of peer counties. Underlying statistics also are provided.

See Appendix D for a list of Madison County's peer counties.

## OBSERVATIONS

- Madison County ranks in the bottom quartile of peer counties for 13 of the 34 indicators:
  - Fair or poor health;
  - Physically unhealthy days;
  - Mentally unhealthy days;
  - Smoking;
  - Obesity;
  - Food environment index;
  - Chlamydia;
  - Teen births;
  - High school graduation;
  - Children in poverty;
  - Children in single-parent households;
  - Air pollution; and
  - Long commute – drive alone.

## COVID-19 Incidence and Mortality

**Exhibit 30: COVID-19 Incidence, Mortality, and Vaccination (As of October 6, 2021)**

Indicator	Madison County	Indiana	United States
Total Confirmed Cases	18,042	974,169	<b>43,332,327</b>
Confirmed Cases (per 100,000 Population)	13,917	14,557	<b>13,281</b>
Total Deaths	398	15,342	<b>676,871</b>
Deaths (per 100,000 Population)	307.0	229.3	<b>207.5</b>
Percent of Adults Fully Vaccinated	56.7%	59.1%	<b>63.1%</b>
Estimated Percent of Adults Hesitant About Receiving COVID-19 Vaccination	13.8%	11.9%	<b>10.0%</b>

Source: Sparkmap, 2021.

### DESCRIPTION

**Exhibit 30** presents data regarding COVID-19 incidence and mortality. Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators 50 percent or worse than the national average.

### OBSERVATIONS

- The rate of COVID-19 mortality per 100,000 in Madison County is above the Indiana and U.S. averages, and the incidence rate is above the U.S. average.

The percent of adults fully vaccinated and the percent hesitant about receiving the vaccine in Madison County are both unfavorable compared to state and national averages.

## Mortality Rates

**Exhibit 31: Causes of Death (Age-Adjusted, Per 100,000), 2019**

Indicator	Madison County	Indiana
Major Cardiovascular Disease	228.9	<b>237.5</b>
Diseases of Heart	160.7	<b>178.7</b>
Malignant Neoplasms (Cancer)	162.8	<b>163.3</b>
Ischemic Heart Disease	89.1	<b>93.1</b>
Accidents (Unintentional Injuries)	77.0	<b>56.1</b>
Chronic Lower Respiratory Diseases	74.2	<b>56.1</b>
Cerebrovascular Disease (Stroke)	43.5	<b>41.5</b>
Alzheimers Disease	51.4	<b>31.7</b>
Drug Poisoning	39.6	<b>26.6</b>
Accidental Poisoning And Exposure To Noxious Substances	40.7	<b>25.4</b>
Diabetes Mellitus	34.2	<b>25.0</b>
Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)	19.7	<b>17.1</b>
Septicemia	15.8	<b>14.3</b>
Intentional Self-Harm (Suicide)	22.7	<b>14.1</b>
Motor Vehicle Accidents	13.4	<b>12.6</b>
Alcohol Related Causes	15.1	<b>10.4</b>
Assault (Homicide)	0.0	<b>7.2</b>

Source: Indiana Department of Health, 2020.

### DESCRIPTION

**Exhibit 31** provides age-adjusted mortality rates from 2019 for a variety of causes in Madison County and Indiana. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

### OBSERVATIONS

- Rates of mortality for Alzheimer's disease, accidental poisoning and exposure to noxious substances, and intentional self-harm (suicide) are significantly above state averages in Madison County.
- The county's mortality rates also are above average due to accidents, chronic lower respiratory diseases, stroke, drug poisoning, diabetes, kidney disease, septicemia, motor vehicle accidents, and alcohol related causes.

**Exhibit 32: Cancer Mortality Rates, Age-Adjusted per 100,000 Population, 2014-2018**

Measure	Madison County	Indiana	United States
All Cancers	179.8	<b>173.0</b>	155.6
Lung and Bronchus	59.1	<b>48.8</b>	38.5
Breast	20.5	<b>20.8</b>	20.1
Prostate	19.1	<b>19.5</b>	19.0
Colon and Rectum	13.1	<b>15.1</b>	13.7
Pancreas	12.6	<b>11.6</b>	11.0
Leukemias	7.4	<b>6.9</b>	6.3
Ovary	6.4	<b>6.9</b>	6.7
Non-Hodgkin Lymphoma	5.9	<b>6.1</b>	5.4
Liver and Intrahepatic Bile Duct	4.2	<b>6.0</b>	6.6
Corpus and Uterus, NOS	4.1	<b>5.1</b>	4.9
Esophagus	5.0	<b>4.9</b>	3.9
Brain and Other Nervous System	5.4	<b>4.6</b>	4.4
Urinary Bladder	4.0	<b>4.6</b>	4.3
Kidney and Renal Pelvis	4.5	<b>4.3</b>	3.6
Myeloma	3.7	<b>3.4</b>	3.2
Cervix	N/A	<b>2.5</b>	2.2
Melanomas of the Skin	3.2	<b>2.5</b>	2.3
Oral Cavity and Pharynx	4.0	<b>2.5</b>	2.5
Stomach	1.8	<b>2.5</b>	3.0
Larynx	N/A	<b>1.1</b>	0.9
Thyroid	N/A	<b>0.5</b>	0.5

Source: Centers for Disease Control and Prevention, 2019.

## DESCRIPTION

**Exhibit 32** provides age-adjusted mortality rates for selected forms of cancer in 2014-2018. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

## OBSERVATIONS

- Madison County's overall cancer mortality rate was above the state and national average.
- Madison County also compared unfavorably to Indiana averages in cancer mortality for lung and bronchus, pancreas, leukemias, esophagus, brain and other nervous system, kidney and renal pelvis, myeloma, melanomas of the skin, and oral cavity and pharynx.

**Exhibit 33: Cancer Incidence Rates, Age-Adjusted per 100,000 Population, 2013-2017**

Indicator	Madison County	Indiana	United States
All Cancer Types	478.5	<b>459.3</b>	448.7
Breast	125.4	<b>122.9</b>	125.9
Prostate	87.0	<b>94.2</b>	104.5
Lung & Bronchus	80.7	<b>72.2</b>	58.3
Colon & Rectum	40.6	<b>42.6</b>	38.4
Uterus (Corpus & Uterus)	28.4	<b>28.2</b>	27.0
Bladder	21.8	<b>21.7</b>	20.0
Melanoma of the Skin	25.2	<b>21.7</b>	22.3
Kidney & Renal Pelvis	19.2	<b>19.0</b>	16.8
Non-Hodgkin Lymphoma	21.0	<b>18.6</b>	19.3
Childhood (Ages <20)	20.7	<b>17.6</b>	18.9
Childhood (Ages <15)	17.1	<b>16.2</b>	17.4
Leukemia	18.7	<b>13.7</b>	14.2
Pancreas	12.7	<b>13.3</b>	12.9
Oral Cavity & Pharynx	18.3	<b>12.7</b>	11.8
Thyroid	8.7	<b>12.5</b>	14.3
Ovary	10.8	<b>10.4</b>	10.9
Cervix	10.0	<b>8.2</b>	7.6
Liver & Bile Duct	6.5	<b>7.2</b>	8.4
Brain & ONS	7.3	<b>6.5</b>	6.5
Stomach	5.0	<b>5.9</b>	6.5
Esophagus	6.5	<b>5.5</b>	4.5

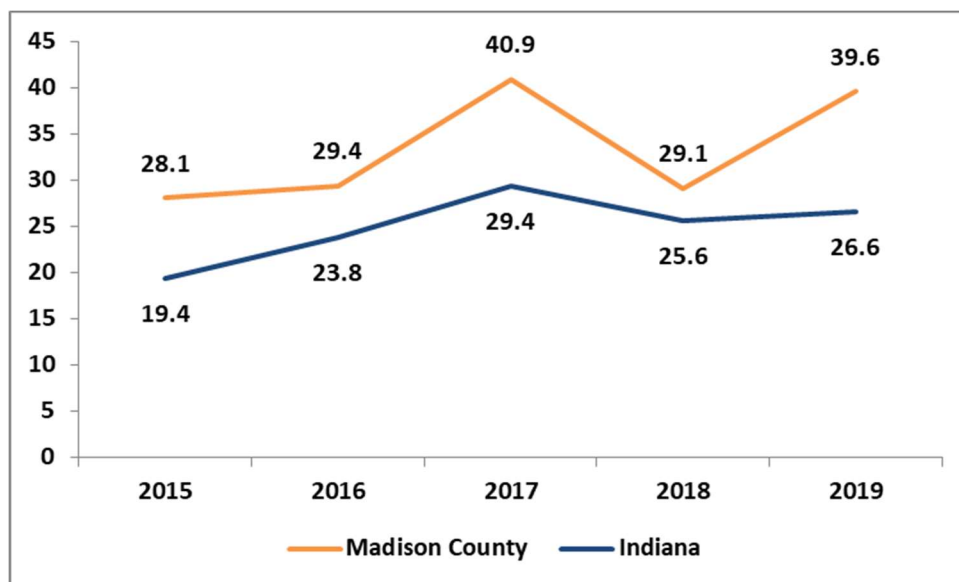
Source: Centers for Disease Control and Prevention and National Cancer Institute, 2019.

## DESCRIPTION

**Exhibit 33** provides age-adjusted incidence rates for selected forms of cancer in 2013-2017. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

## OBSERVATIONS

- Madison County's overall cancer incidence rate was above the state and national averages.
- Madison County also compared unfavorably to Indiana averages for most types of cancer, including breast, lung and bronchus, and childhood.

**Exhibit 34: Drug Poisoning Mortality per 100,000, 2015 through 2019**

Source: Indiana Department of Health, 2020.

## DESCRIPTION

**Exhibit 34** provides age-adjusted mortality rates for drug poisoning for 2015 through 2019 for Madison County and Indiana.

## OBSERVATIONS

- Between 2015 and 2019, drug overdose and poisoning deaths increased in Madison County and Indiana.
- Mortality rates in Madison County have been higher than Indiana rates for each year between 2015 and 2019.

## Communicable Diseases

**Exhibit 35: Communicable Disease Incidence Rates per 100,000 Population, 2018-2019**

Indicator	Madison County	Indiana
HIV and AIDS	170.5	<b>189.9</b>
Newly Diagnosed - HIV and AIDS	5.2	<b>8.2</b>
Chlamydia	505.5	<b>526.3</b>
Gonorrhea	220.0	<b>177.1</b>
Primary and Secondary Syphilis	-	<b>5.0</b>

Source: Indiana Department of Health, 2020.

### DESCRIPTION

**Exhibit 35** presents incidence rates for certain communicable diseases in Madison County and Indiana. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

### OBSERVATIONS

- The incidence rate of gonorrhea was higher in Madison County than the Indiana average.

## Maternal and Child Health

**Exhibit 36: Maternal and Child Health Indicators, 2018-2019**

Indicator	Madison County	Indiana
Infant Mortality Rate (per 1,000 births)	7.2	<b>7.2</b>
Preterm Births	10.6%	<b>10.1%</b>
Low Birthweight Infants	8.1%	<b>8.2%</b>
Very Low Birthweight Infants	1.3%	<b>1.3%</b>
Mothers Receiving Prenatal Care (First Trimester)	75.4%	<b>68.9%</b>
Mothers Breastfeeding	75.7%	<b>82.0%</b>
Mothers Smoking during Pregnancy	19.0%	<b>11.8%</b>
Births to Unmarried Mothers	51.6%	<b>44.5%</b>
Mothers on Medicaid Percent	49.4%	<b>38.5%</b>
Child Immunization Percent	76.0%	<b>67.0%</b>
ER Visits due to Asthma (Aged 5-17, per 10,000)	69.9	<b>49.7</b>

Source: Indiana Department of Health, 2020.

### DESCRIPTION

**Exhibit 36** compares various maternal and child health indicators for Madison County with Indiana averages. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

### OBSERVATIONS

- The rate of mothers who smoked during pregnancy in Madison County was significantly above the statewide average.
- Madison County compared unfavorably to Indiana averages for several other indicators, including preterm births, mothers breastfeeding, and ER visits due to asthma for children aged 5 to 17.

**Exhibit 37: Maternal and Child Health Indicators by Race/Ethnicity, 2013-2019**

Indicator	Madison County			Indiana		
	Black	Hispanic (or Latino)	White	Black	Hispanic (or Latino)	White
Prenatal Care Started in First Trimester	76.4%	69.9%	81.6%	58.0%	59.5%	77.7%
Tobacco Used During Pregnancy	17.2%	N/A	21.2%	8.7%	3.3%	14.9%
Preterm Births	9.8%	9.1%	10.9%	13.6%	9.7%	9.5%
Infant Mortality Rate (2013-2019)	N/A	N/A	6.7	13.7	7.4	6.0

Source: Indiana Department of Health, 2020.

**DESCRIPTION**

**Exhibit 37** provides maternal and infant health indicators, by race and ethnicity, for Madison County and Indiana.

**OBSERVATIONS**

- In Madison County, Black and Hispanic (or Latino) populations compared unfavorably to White populations for prenatal care. White populations compared unfavorably for preterm births and mothers who used tobacco during pregnancy.
- In Indiana, infant mortality rates for Black and Hispanic (or Latino) populations are higher than rates for White populations.

## Indiana Data by Race and Ethnicity

**Exhibit 38: Causes of Death by Race/Ethnicity per 100,000, Indiana, 2017-2019**

Indicator	Black	Hispanic (or Latino)	White	Indiana Total
Heart Disease	216.5	92.1	181.8	<b>178.8</b>
Cancer (Malignant Neoplasms)	183.6	91.5	168.8	<b>163.4</b>
Chronic Lower Respiratory Disease (CLRD)	45.4	14.1	58.5	<b>56.1</b>
Accidents / Unintentional Injuries	60.5	34.0	59.3	<b>56.0</b>
Stroke / Cerebrovascular Disease	51.5	29.2	39.8	<b>41.4</b>
Alzheimer's Disease	29.5	16.1	34.2	<b>31.6</b>
Diabetes	48.4	24.1	24.5	<b>25.0</b>
Kidney Disease (Nephritis, Nephrosis)	34.1	16.4	16.6	<b>17.1</b>
Septicemia	21.6	11.9	14.9	<b>14.3</b>
Suicide	8.7	7.0	17.3	<b>14.2</b>
Chronic Liver Disease / Cirrhosis	8.9	12.9	12.5	<b>12.0</b>
Influenza / Pneumonia	11.9	6.7	13.4	<b>11.6</b>
High Blood Pressure / Related Kidney Disease	18.5	5.6	9.6	<b>10.4</b>
Parkinson's Disease	4.7	N/A	10.0	<b>9.9</b>
Homicide	36.8	6.6	3.4	<b>7.2</b>
Pneumonitis (Lung Inflammation)	6.1	N/A	6.3	<b>6.0</b>
Nutritional Deficiencies	3.9	3.9	3.4	<b>4.3</b>
Neoplasms (Abnormal Growth)	3.4	N/A	4.2	<b>4.1</b>
Birth Defects	4.5	2.9	3.7	<b>4.0</b>
Condition Originating Around Time of Birth	8.9	4.3	3.6	<b>3.6</b>

Source: Indiana Department of Health, 2020.

### DESCRIPTION

**Exhibit 38** provides mortality rates from 2017-2019 for a variety of causes by race and ethnicity for the state of Indiana. Light grey shading highlights indicators found to be worse than the overall state average; dark grey shading highlights indicators more than 50 percent worse.

### OBSERVATIONS

- Black populations had particularly high mortality rates for a variety of causes, including diabetes, kidney disease, septicemia, high blood pressure, homicide, and conditions originating in the time of birth. Black populations also had higher rates of mortality for heart disease, cancer, accidents, stroke, and others.
- Hispanic or Latino population compared unfavorably for mortality due to chronic liver disease and conditions originating in the time of birth.
- White populations compared unfavorably for mortality due to chronic lower respiratory disease, Alzheimer's disease, suicide, Parkinson's disease, and influenza/pneumonia.

**Exhibit 39: America's Health Rankings, Underlying Data by Race/Ethnicity, 2020**

Indicator	Black	Hispanic (or Latino)	White	Indiana
Arthritis	22.0%	8.8%	28.9%	27.0%
Asthma	12.7%	5.1%	9.8%	9.8%
Avoided Care Due to Cost	13.3%	23.7%	11.2%	12.6%
Cancer	3.6%	N/A	7.9%	7.2%
Cardiovascular Diseases	11.2%	3.8%	10.1%	9.9%
Children in Poverty	37.8%	27.2%	13.7%	18.0%
Chlamydia Rate	1,864.1	559.5	279.4	523.9
Chronic Kidney Disease	4.1%	N/A	3.3%	3.4%
Chronic Obstructive Pulmonary Disease	6.5%	N/A	9.5%	8.7%
Colorectal Cancer Screening	70.0%	42.2%	69.2%	68.2%
Crowded Housing	1.5%	4.7%	1.2%	1.5%
Dedicated Health Care Provider	78.4%	54.3%	80.0%	77.9%
Dental Visit	55.6%	60.8%	65.6%	64.4%
Depression	14.6%	11.1%	22.8%	21.0%
Diabetes	17.9%	9.0%	12.1%	12.4%
Drug Deaths (1-year) Rate	27.0	7.3	27.3	24.9
Education - Less Than High School	12.3%	30.1%	8.7%	10.4%
Excessive Drinking	17.5%	20.9%	16.3%	16.5%
Exercise	21.7%	16.7%	21.1%	21.1%
Flu Vaccination	33.3%	35.7%	44.0%	42.1%
Frequent Mental Distress	13.3%	8.2%	14.5%	14.3%
Frequent Physical Distress	13.4%	12.8%	13.7%	13.8%
Fruit and Vegetable Consumption	8.1%	6.6%	9.1%	9.1%
High Blood Pressure	44.5%	20.5%	35.1%	34.8%
High Cholesterol	30.9%	25.9%	34.9%	33.8%
High Health Status	40.4%	35.5%	49.1%	47.3%
High School Graduation	79.4%	84.3%	90.0%	88.1%
High-speed Internet	79.0%	85.2%	87.2%	86.4%
Insufficient Sleep	47.4%	37.8%	35.4%	36.9%
Low Birthweight	13.7%	7.1%	7.1%	8.1%
Multiple Chronic Conditions	10.6%	5.2%	12.2%	11.7%
Non-medical Drug Use	12.2%	16.7%	10.1%	10.8%
Obesity	36.7%	46.2%	34.9%	35.3%
Per Capita Income	21,824	18,721	33,653	30,988
Physical Inactivity	33.9%	38.0%	30.3%	30.9%
Preventable Hospitalizations	7,542	5,186	4,626	4,810
Severe Housing Problems	24.5%	22.1%	10.9%	12.9%
Smoking	19.6%	13.8%	19.5%	19.2%
Suicide Rate	8.6	6.9	18.2	16.3
Teen Births Rate	37.5	31.5	18.4	21.8
Unemployment	8.7%	4.7%	3.7%	4.3%
Voter Participation (Midterm)	47.2%	36.5%	50.1%	49.3%
Voter Participation (Presidential)	51.6%	46.0%	58.9%	58.3%

Source: America's Health Rankings, 2020.

## DESCRIPTION

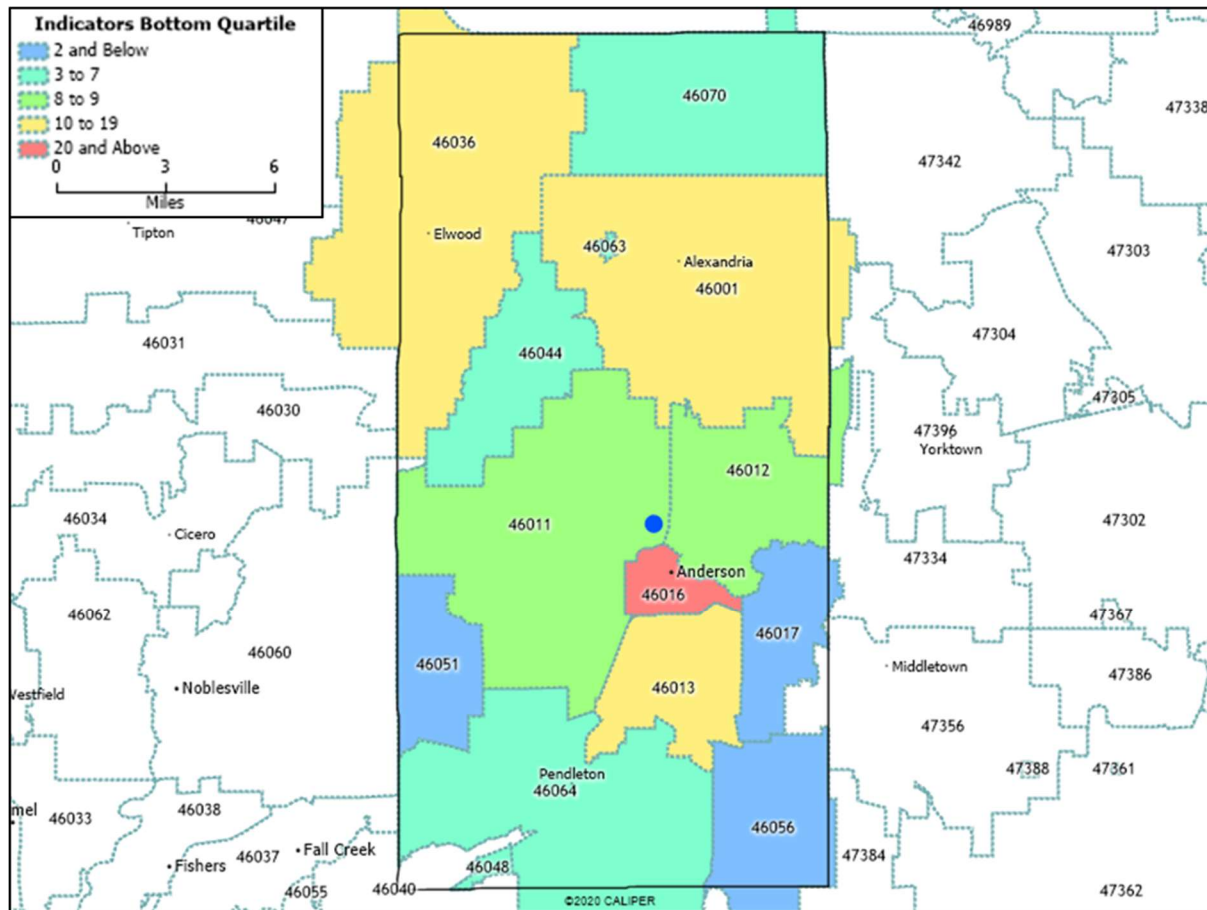
**Exhibit 39** presents Indiana data from America's Health Rankings for racial and ethnic cohorts, with Indiana overall for comparison. America's Health Rankings provides an analysis of national health on a state-by-state basis by evaluating a historical and comprehensive set of health, environmental and socioeconomic data to determine national health benchmarks and state rankings. Light grey shading highlights indicators found to be worse than the overall state average; dark grey shading highlights indicators more than 50 percent worse.

## OBSERVATIONS

- Black populations compared worse than state averages for many indicators, with particularly unfavorable rates of children in poverty, chlamydia, low birthweight births, preventable hospitalizations, severe housing problems, teen births, and unemployment.
- Hispanic populations compared worse for a variety of indicators, with significantly unfavorable rates for avoiding healthcare due to cost, children in poverty, crowded housing, high school diploma, non-medical drug use, and severe housing problems.
- White populations compared unfavorably for several indicators, including arthritis, cancer, COPD, depression, mental distress, high cholesterol, and suicide.

## Centers for Disease Control and Prevention PLACES

### Exhibit 40: BRFSS Indicators in Bottom Quartile Nationally, 2017-2018



Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

## DESCRIPTION

**Exhibit 40** presents CDC PLACES data. PLACES, a collaboration between CDC, the Robert Wood Johnson Foundation, and the CDC Foundation, provides model-based population-level analysis and community estimates to all counties, places (incorporated and census designated places), census tracts, and ZIP Code Tabulation Areas (ZCTAs) across the United States.

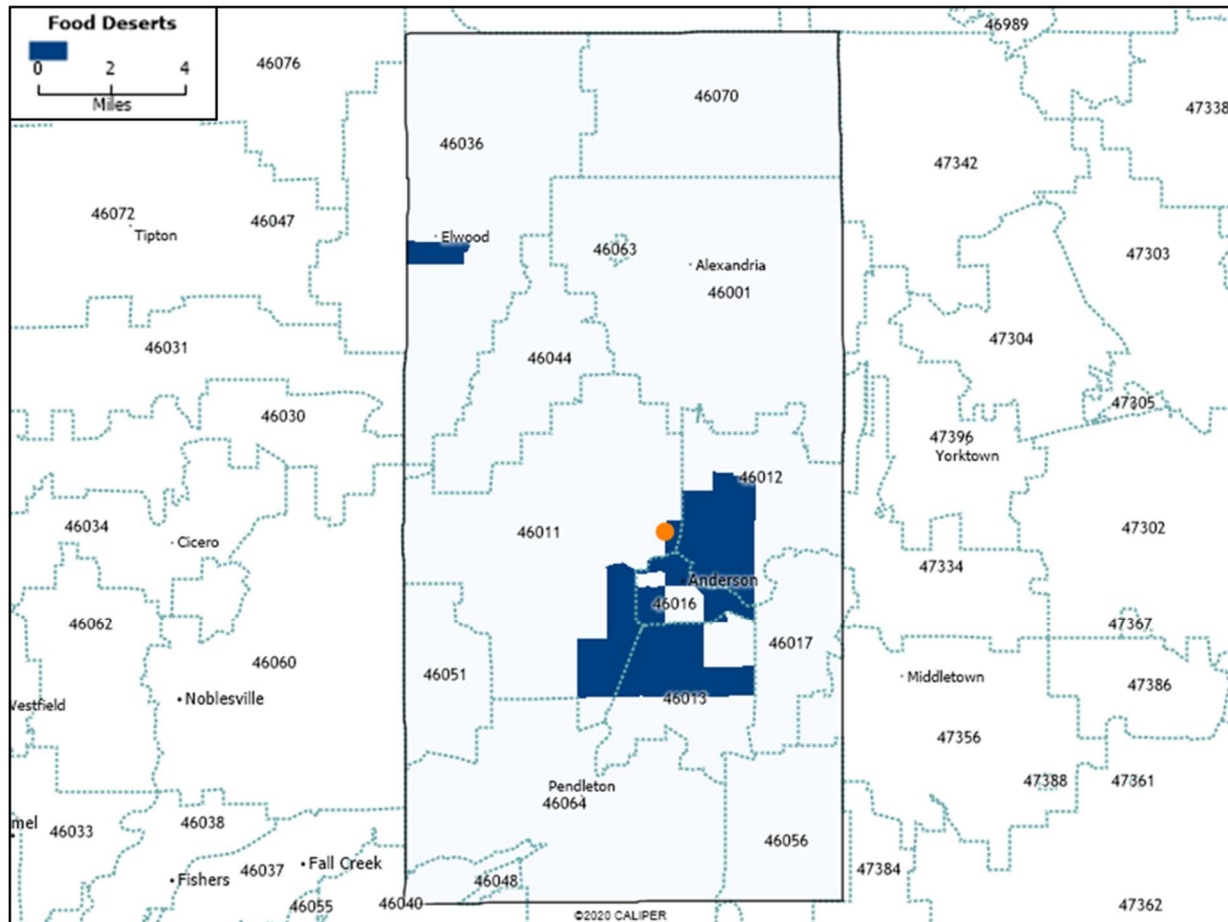
**Exhibit 40** identifies how many BRFSS indicators are in the bottom quartile nationally by ZIP code out of 28 indicators.

## OBSERVATIONS

- Anderson ZIP code 46016 had the most BRFSS indicators in the bottom quartile nationally with 22 indicators.
- ZIP codes with the worst health outcomes corresponding to those with low-income census tracts (**Exhibit 15**) and high Community Need Index scores (**Exhibit 22**).

## Food Deserts

### Exhibit 41: Locations of Food Deserts, 2019



Source: Caliper Maptitude and U.S. Department of Agriculture, 2021.

## DESCRIPTION

The U.S. Department of Agriculture's Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store, and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these areas.

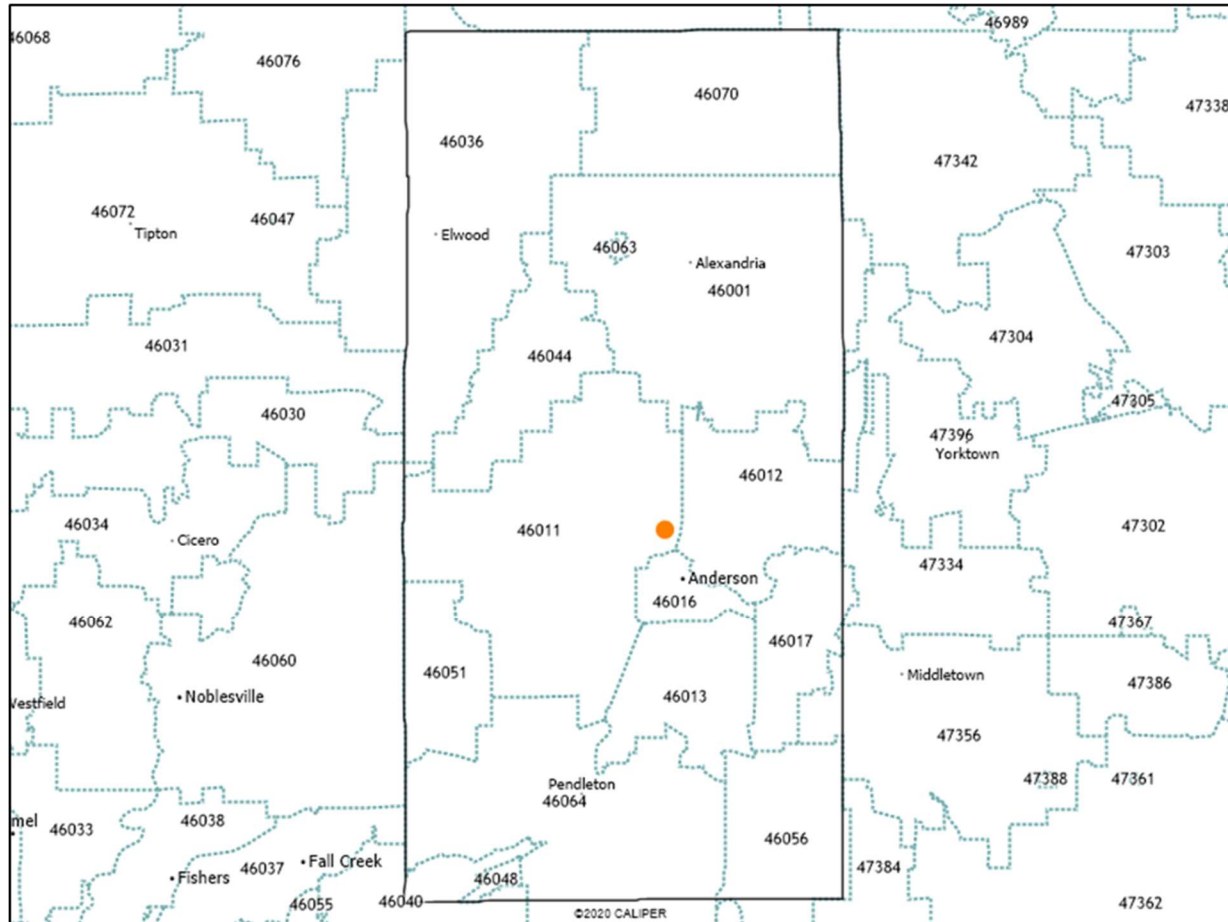
**Exhibit 41** identifies where food deserts are present in the community.

## OBSERVATIONS

- There are several food deserts in Madison County, particularly in Anderson and surrounding areas.

## Medically Underserved Areas and Populations

Exhibit 42: Medically Underserved Areas and Populations, 2021



Source: Caliper Maptitude and Health Resources and Services Administration, 2019.

### DESCRIPTION

Medically Underserved Areas and Populations (MUA/Ps) are designated by HRSA based on an “Index of Medical Underservice.” The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.<sup>10</sup> Areas with a score of 62 or less are considered “medically underserved.”

Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. If a population group does not

<sup>10</sup> Health Resources and Services Administration. See <http://www.hrsa.gov/shortage/mua/index.html>

qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides.”<sup>11</sup>

**Exhibit 42** identifies Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs).

#### **OBSERVATIONS**

- No areas or populations have been designated as Medically Underserved in Madison County.

---

<sup>11</sup>*Ibid.*

## Health Professional Shortage Areas

### Exhibit 43: Primary Care Health Professional Shortage Areas, 2021

HPSA Name	Designation Type	County
Low Income - Madison County	Low Income Population HPSA	Madison County
Aspire Health Center	Federally Qualified Health Center Look-alike	Madison County
Jane Pauley Community Health Center, Inc.	Federally Qualified Health Center	Madison County
Meridian Health Services Corp.	Federally Qualified Health Center	Madison County
Open Door Health Services, Inc.	Federally Qualified Health Center	Madison County

Source: Health Resources and Services Administration, 2021.

### DESCRIPTION

**Exhibits 43 through 45** identify the locations of federally designated primary care, dental care, and mental health care Health Professional Shortage Areas (HPSAs).

A geographic area can be designated a HPSA if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. In addition to areas and populations that can be designated as HPSAs, a health care facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

HPSAs can be: “(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision, and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility.”<sup>12</sup>

**Exhibit 43** provides a list of federally designated primary care HPSAs.

### OBSERVATIONS

- The low income population of Madison County is designated as a Primary Care HPSA.
- Four health centers were also designated as Primary Care HPSAs in Madison County.

<sup>12</sup> U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). *Health Professional Shortage Area Designation Criteria*. Retrieved 2012, from <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html>

**Exhibit 44: Dental Care Health Professional Shortage Areas, 2021**

HPSA Name	Designation Type	County
Aspire Health Center	Federally Qualified Health Center Look-alike	Madison County
Jane Pauley Community Health Center, Inc.	Federally Qualified Health Center	Madison County
Meridian Health Services Corp.	Federally Qualified Health Center	Madison County
Open Door Health Services, Inc.	Federally Qualified Health Center	Madison County
Pendleton Correctional Facility	Correctional Facility	Madison County

Source: Health Resources and Services Administration, 2021.

**DESCRIPTION**

**Exhibit 44** provides a list of federally designated dental care HPSAs.

**OBSERVATIONS**

- Four health centers and one correctional facility were designated as Dental Care HPSAs in Madison County.

**Exhibit 45: Mental Health Care Health Professional Shortage Areas, 2021**

HPSA Name	Designation Type	County
Aspire Health Center	Federally Qualified Health Center Look-alike	Madison County
Jane Pauley Community Health Center, Inc.	Federally Qualified Health Center	Madison County
Meridian Health Services Corp.	Federally Qualified Health Center	Madison County
Open Door Health Services, Inc.	Federally Qualified Health Center	Madison County
Correctional Industrial Facility	Correctional Facility	Madison County
Pendleton Correctional Facility	Correctional Facility	Madison County

Source: Health Resources and Services Administration, 2021.

**DESCRIPTION**

**Exhibit 45** provides a list of federally designated mental health HPSAs.

**OBSERVATIONS**

- Four health centers and two correctional facilities were designated as Mental Health Care HPSAs in Madison County.

## FINDINGS OF OTHER ASSESSMENTS

### CDC COVID-19 Prevalence and Mortality Findings

The Centers for Disease Control and Prevention (CDC) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues. Part of the CDC's work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. To date, the CDC's work has yielded the outlined below.

**Underlying medical conditions may contribute.** People with certain underlying medical conditions are at increased risk for severe illness and outcomes from COVID-19, including the following:<sup>13</sup>

- Cancer;
- Chronic kidney disease;
- Chronic obstructive pulmonary disease (COPD);
- Immunocompromised state from organ transplant;
- Obesity;
- Serious heart conditions, including heart failure, coronary artery disease, or cardiomyopathies;
- Sickle cell disease; and
- Type 2 diabetes mellitus.

Based on what is known at this time, people with other conditions might be at an increased risk for severe illness and outcomes from COVID-19, including:<sup>14</sup>

- Asthma (moderate-to-severe);
- Cerebrovascular disease (affects blood vessels and blood supply to the brain);
- Cystic fibrosis;
- Hypertension or high blood pressure;
- Immunocompromised state from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines;
- Neurologic conditions, such as dementia;

---

<sup>13</sup> <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

<sup>14</sup> Ibid.

- Liver disease;
- Pregnancy;
- Pulmonary fibrosis (having damaged or scarred lung tissues);
- Smoking;
- Thalassemia (a type of blood disorder); and
- Type 1 diabetes mellitus.

**Older adults are at-risk.** Older adults and the elderly are disproportionately at risk of severe illness and death from COVID-19. Risks increase with age, and those aged 85 and older are at the highest risk. At present time, eight out of 10 COVID-19 deaths have been in adults aged 65 or older.<sup>15</sup>

**Men are at-risk.** Data thus far indicate that men are more likely to die from COVID-19 than women. While the reasons for this disparity are unclear, a variety of biological factors, behavioral influences, and psychosocial elements may contribute.<sup>16</sup>

**Racial and ethnic minorities are at-risk.** According to the CDC, “Long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age.” Evidence points to higher rates of hospitalization or death among racial and ethnic minority groups, including non-Hispanic Black persons, Hispanics and Latinos, and American Indians or Alaska Natives.<sup>17</sup>

- Non-Hispanic American Indian or Alaska Native persons - incidence rate is approximately five times greater than non-Hispanic White persons.
- Non-Hispanic Black persons - incidence rate is approximately five times greater than non-Hispanic White persons.
- Hispanic or Latino persons - incidence rate is approximately four times greater than non-Hispanic White persons.

In explaining these differences of COVID-19 incidence rates, the CDC states: “Health differences between racial and ethnic groups result from inequities in living, working, health, and social conditions that have persisted across generations.”<sup>18</sup>

---

<sup>15</sup> <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>

<sup>16</sup> [https://www.cdc.gov/pcd/issues/2020/20\\_0247.htm](https://www.cdc.gov/pcd/issues/2020/20_0247.htm)

<sup>17</sup> <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

<sup>18</sup> Ibid.

## Indiana State Health Assessment and Improvement Plan – 2018-2021

In 2017, the Indiana Department of Health (formerly the Indiana State Department of Health) began the process of revising the State Health Assessment and State Health Improvement Plan in collaboration with over 100 partner organizations, key informants, and subject matter experts.

The 2018 Indiana State Health Assessment (SHA) provides an overview of the health and social wellbeing of Hoosiers and the issues impacting the public health system. This assessment provides the foundation for the Indiana State Health Improvement Plan (SHIP), which identified the following priority health issues for the State of Indiana:

- Social Determinants of Health and health equity
  - “Conditions in the environment that affect a broad range of health and quality of life outcomes”
- Improving public health infrastructure
  - Funding and culture/quality of public health practice
- Improving health outcomes and reducing health disparities
  - Reduce rates of chronic disease
  - Address the opioid epidemic (reduced injury and death due to opioid exposure)
  - Improve birth outcomes and reduce infant mortality
  - Improved access to mental health services

## Appendix C – Community Input Participants

### Exhibit 46: Interviewee Organizational Affiliations

Organization or Affiliation
Madison County Health Department

### Exhibit 47: Community Meeting Invitees

Organization	
Alexandria Community Center	Madison County Community Foundation
Alexandria Community School Corporation	Madison County Council of Government
Alternatives Incorporated	Madison County Sheriff
Anderson Community Schools	Madison County Triad
Anderson Housing Authority	Madison Minority Health Coalition
Anderson Preparatory Academy	Meridian Health Services
Anderson University	NAACP - Madison County
Ascension St. Vincent Board of Directors	Office of Rep. Bob Cherry
Ascension St. Vincent Board of Directors	Office of Rep. Terri Austin
Ascension St. Vincent Foundation	Office of Senator Mike Gaskill
Aspire Indiana Health	Office of Senator Tim Lanane
Bridges of Hope	Operation Love
Buckskin Bikes	Purdue Extension
Community Hospital Anderson Foundation Board	Purdue Polytechnic Anderson
Corporation for Economic Development	Salvation Army
East Central Indiana CASA	Second Harvest
Elwood Chamber of Commerce	Sheriff Chaplain
Elwood Community Schools	South Madison Community Schools
First Church of the Nazarene	The Christian Center
Frankton-Lapel Community Schools	The Impact Center
Holy Cross School	The Jane Pauley Community Health Center
Intersect, Inc.	United Way of Madison County
Ivy Tech Anderson	Victoria Guild
Leadership Academy of Madison County	YMCA of Madison County
Madison County Chamber of Commerce	YWCA of Central Indiana

## Appendix D – CHSI Peer Counties

County Health Rankings has assembled community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control’s *Community Health Status Indicators* Project (CHSI), County Health Rankings also publishes lists of “peer counties,” so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates. **Exhibit 48** lists peer counties for Madison County, IN.

**Exhibit 48: CHSI Peer Counties**

Madison County, Indiana	
Bibb County, Alabama	Salem County, New Jersey
Blount County, Alabama	Livingston County, New York
Chilton County, Alabama	Orleans County, New York
St. Clair County, Alabama	Gates County, North Carolina
Baker County, Florida	Lincoln County, North Carolina
Pike County, Georgia	Brown County, Ohio
Bond County, Illinois	Hocking County, Ohio
Madison County, Indiana	Lorain County, Ohio
Washington County, Indiana	Perry County, Ohio
Bracken County, Kentucky	Lincoln County, Oklahoma
Pendleton County, Kentucky	Fayette County, Pennsylvania
St. James Parish, Louisiana	Dickson County, Tennessee
Montcalm County, Michigan	Smith County, Tennessee
St. Clair County, Michigan	Medina County, Texas
Caldwell County, Missouri	Dinwiddie County, Virginia
Ray County, Missouri	Sussex County, Virginia
Warren County, Missouri	

## Appendix E – Impact Evaluation

This appendix highlights Community Hospital Anderson’s initiatives and impact in addressing the significant health needs identified in the 2018 Community Health Needs Assessment.

### SOCIAL DETERMINANTS OF HEALTH

- CHA Community Farm:** Anderson Community Farm has shown tremendous growth and success since its first growing season in 2018. Thanks in part to a grant from the Bee Cause and Whole Kids Foundation, a beehive was installed on the grounds. A grant from the Madison County Community Foundation helped with the installation of a refrigeration unit, allowing for more long-term storage of produce. Community Hospital Anderson funds a full-time farmer to staff the Community Farm and each year approximately 5,000 pounds of produce is grown and distributed to both the Community Hospital Anderson’s dietary department and local community organizations.
- Touchpoint for Seniors:** Community Health Network supports the nutrition needs of seniors with the Senior Meal Voucher Program, made possible through collaboration with Community Health Network Foundation and CICOA Aging and In-Home Solutions. This program aims to expand the availability of healthy meal options for seniors, while also providing opportunities for social engagement through the free membership program. Recipients 60 and older, or the spouse of an enrollee are provided up to four meal vouchers each month. Recipients may redeem meal vouchers for breakfast, lunch or dinner at Community Hospital Anderson’s cafeteria. Designated menus are designed by a registered dietitian to ensure a nutritionally balanced meal for seniors. During the current Implementation Strategy time period, the Community Hospital Anderson’s Touchpoint program has provided over 4,798 meals to 308 local residents.
- Second Harvest Food Bank:** Second Harvest Food Bank of East Central Indiana is the region’s largest hunger-relief organization with a network of 96 agency partners and 36 schools in East Central Indiana. Second Harvest is devoted to feeding the hungry, advocating for those facing food insecurity, and providing nutrition education. Staff from Community Hospital Anderson provide monthly health screenings to staff and nutrition and safety education to students and staff in all Madison County schools. Second Harvest delivers over 12 million meals each year. In 2020, Second Harvest provided 3,368,180 pounds of food or 2,806,817 meals to families living in Madison County. During the current Implementation Strategy time period, Community Hospital Anderson has provided \$120,000 to help support Second Harvest food insecurity programs and services.
- Community Bikes Program:** The Community Bikes program was developed as an affordable means of transportation, affording participants easier access to employment and health care. The program kicked off in 2016, with 30 bikes placed at the Christian Center and Exodus House. Each bike comes with a helmet, light, and lock. In addition, each participant

receives safety instruction. Each year, over 100 residents of Christian Center and Exodus House benefit from the availability to transportation afforded to them through the Community Bikes program.

- **CHA MedExpress:** Since 1991, Community Anderson has provided a transportation service, MedExpress, for patients who need medical services on the CHA campus. Patients do not need to worry about driving in treacherous weather conditions or relying on friends and family for rides. This service provides an alternative to public transportation or taxis, which can be costly and unreliable. Each year MedExpress transports nearly 10,000 riders to and from the CHA campus.
- **Coats for Caring:** Annually, Community Hospital Anderson's Coats of Caring event offers over 1,000 new or gently worn coats and new hats and gloves to Madison County residents, thanks to the caring hearts at Community Hospital Anderson and supporters in the community. Since 2001, 22,000 coats, hats and gloves have been given away.
- **Milk for Healthy Babies:** Community Hospital Anderson (CHA) established a human milk program to ensure the best range of options for newborns in our care. Affiliated with The Milk Bank, a nonprofit donor human milk bank located in Indianapolis, Community Hospital Anderson now makes pasteurized human milk available for newborns, primarily to premature infants in the hospital neonatal intensive care units. During the current Implementation Strategy time period, Community Hospital Anderson was able to serve 369 babies.
- **Serve360:** Each year, thousands of Community caregivers volunteer through Serve360° opportunities. The name of Community's volunteer initiative reflects the organization's way of completing the circle, collectively giving back to the people and neighborhoods that gave birth to Community. Projects range from staffing food pantries to painting homes to working in community gardens. During the current Implementation Strategy time period, 15,448 hours of volunteer service was provided by Community Health Network caregivers.
- **SafeKids Bike Rodeo:** Community Hospital Anderson Foundation provides bicycle helmets for the youth in Madison County at the annual Bike Rodeo event. Each child must go through a bicycle safety lesson before they are fitted for the helmet, and then a volunteer works with them one-on-one to help ensure the helmet fits them appropriately. Since 2013, they have given away approximately 100 bike helmets every year. Due to restrictions in place, the Bike Rodeo was postponed for 2020.
- **Stop the Bleed:** Stop the Bleed was a national campaign created in 2015 to better prepare the public with basic actions to stop life-threatening bleeding. Community Hospital Anderson adopted the program in 2017, providing training and kits to a variety of facilities, including neighborhood watch organizations, apartment managers, churches, community groups, medical staff, and Madison County schools. In 2019, 400 individuals were trained in 13 classes. With the support of the Community Hospital Anderson Foundation, one hundred kits were purchased and provided to county schools at a cost of \$140 each. In 2020 and 2021, despite the impacts of the COVID-19 pandemic 115 additional individuals were trained

and 145 additional kits distributed to local public and private schools, covering the whole of Madison County.

## MENTAL HEALTH & SUBSTANCE USE DISORDER

- **Narcan:** Since January 2016, CHA has provided Narcan training to all CHA Police Department officers and patrol officers in Madison County. They are also equipped with Narcan, a drug that can reverse the effects of opioids such as heroin, methadone and oxycodone. The program has trained over 300 people.
- **Have Hope:** With an aspirational goal of achieving a zero percent suicide incident rate among Community Behavioral Health patients by 2024, Community Health Network's Zero Suicide initiative aims to save Community patient lives specifically through early intervention and prevention, the construction of a robust crisis network, and the utilization of innovative mental health diagnostics and treatment protocols. The strategy brings crisis, telemedicine and intensive care coordination services to the patients of more than 600 primary care physicians and 7 emergency departments located throughout Central Indiana, representing both Community facilities and partner organizations where Community provides behavioral health services.
- **QPR:** Indiana has the highest measure of youth suicide ideation in the nation and ranks second for youth suicide attempts. Community Health Network has invested significant resources into suicide prevention. For example, Community Health Network provides QPR Gatekeeper certificate training at no cost to community residents, schools, faith-based organizations and businesses. This suicide prevention training is evidence-based and enabled by the QPR Institute (QPR stands for Question, Persuade, Refer). The curriculum includes 90 to 120 minutes of training and prepares attendees for tragedy prevention through providing hope and engagement by applying the QPR techniques. Community Health Network has help to train over 75 community members annually.
- **Behavioral Health Academy:** Community Health Network collaborated with the Indiana University School of Social Work (IUSSW) and the University of Indianapolis Phylis Lan Lin Department of Social Work (UIndy) to launch an innovative behavioral health talent pathway. Stakeholders from Community Behavioral Health, IUSSW, and UIndy completed an 18-month process to build the Behavioral Health Academy™, a talent pipeline expecting to yield 25 – 30 licensed clinical social workers (LCSW) annually who are eligible to become dually licensed as licensed clinical addiction counselors (LCACs) and are specially trained in treating substance use disorders. The Behavioral Health Academy creates significant benefits for Community Behavioral Health, students, and IUSSW and UIndy as education partners. As an employer, Community Health Network has a steady supply of high-caliber talent trained in Community Behavioral Health specific behavioral health practices, resulting in decreased orientation costs and time to productivity for new hires. The students participating in the Behavioral Health Academy receive specialized training in evidence-based practices, an opportunity to interview for employment upon graduation, and a

financial incentive to defray the cost of their education. By filling the workforce gap, additional opportunities will be available to address the critical need for substance use disorder treatment services. 30 students are selected for the program annually. Recognizing the success and importance of the Academy, the State of Indiana entered into contract with Community Health Network to expand the Behavioral Health Academy to include two additional behavioral health providers outside of Central Indiana. Parkview Health and Oaklawn Psychiatric Center were selected to work with Community Health Network and Indiana University School of Social Work for the 2021/22 Academy year expansion. Since the inception in 2020, 57 students have graduated from the program.

- **Drug Take Back:** Unwanted and expired medicine may be a risk to human health and the environment if disposed of improperly. Wastewater treatment plants and septic systems are not designed to deal with pharmaceutical waste. Many medicines pass through the systems and are released into streams, lakes, and groundwater. The best way to reduce the impact of pharmaceutical waste on the environment is to dispose of medicine properly. State and local law enforcement agencies have established drug disposal programs (often called “take-back” programs) to facilitate the collection and destruction of unused, unwanted, or expired medications. These programs help get outdated or unused medications off household shelves and out of the reach of children and teenagers. During the current Implementation Strategy time period, one event was held at Community Hospital Anderson collecting over 240lbs of unwanted prescription drugs.
- **Open Arms:** Open Arms extends support to families who experience a pregnancy or newborn loss. This free program offers many different services to help families grieve in a way that meets their specific needs. All Open Arms services are coordinated by a Grief Support Person specifically trained to offer support to grieving parents. They offer help during this difficult time by listening, comforting or providing resources and advice.

## OBESITY & CHRONIC DISEASE MANAGEMENT

- **Diabetes Care:** The Diabetes Care Center offers free monthly support groups for patients with diabetes. In addition to providing support the group also offers educational sessions covering topics such as, cooking demonstrations, nutrition education, emergency preparedness, carb counting, cholesterol and A1c and managing your diabetes while traveling. This program is open to the community.
- **Community Sports & Wellness:** In December of 2020, Community Hospital Anderson leased space from a large wellness facility in the community. This new space houses classroom space, fitness space, demonstration kitchen and physical therapy office. Plans for this newly acquired space include an expansion of the Rock Steady program, cooking and nutrition classes, weight loss programming and physical therapy services. Due to Covid-19 restrictions, many of the planned programs have not yet launched.

- **Healthy Hearts Heart Failure Clinic:** Community's Center for Advanced Heart Care is an outpatient center designed to improve a patient's quality of life and function while decreasing worsening heart failure symptoms, repeated hospitalization and emergency visits. We offer extensive teaching on heart failure medications, diet, disease process and coping strategies. We have a dietitian and pharmacist who offer individualized educational needs, as well as a monthly support group to offer emotional support. The goal of the program is to improve or maintain patient's quality of life while keeping patient's out of the hospital.
- **Respiratory Care Clinic:** Community's Center for Advanced Respiratory Care for patients with Asthma, COPD, Pulmonary Fibrosis, Pneumonia, and Post Covid Pneumonia. The Center provides pulmonary treatment, medications, dietary recommendations, testing, and medication review. Post hospitalization follow up to focus on maximizing patient's quality of life and return to as normal functioning as possible. Caregivers focus on early recognition of exacerbation in an effort to avoid hospitalization.
- **Rock Steady Boxing:** In 2016 Community Hospital Anderson established a Rock Steady Boxing program in Madison County. Rock Steady Boxing is a gym that is dedicated to helping patients with Parkinson's disease fight their symptoms with non-contact boxing drills. Exercises are designed to help with strength and balance. During the current Implementation Strategy time period, 141 Parkinson patients have benefited from the program.

## TOBACCO USE

- **Baby & Me Tobacco Free:** Community Hospital Anderson's Baby and Me Tobacco-Free Program is an evidence-based approach to helping pregnant women and new moms quit smoking. It has measured positive outcomes through the use of the "5 As" counseling approach promoted by the American College of Obstetricians and Gynecologists. During the current Implementation Strategy time period, the program has served 297 women and their partners.
- **Alliance for a Healthier Indiana:** The Alliance's goals are to continue educating the public and lawmakers, grow grassroots engagement around the state, increase local support, raise awareness of Indiana's poor health rankings and share ideas about ways everyone can work together to improve Hoosier health. In 2020, America's Health Rankings moved Indiana to 41st out of the 50 states in tobacco use. Due to the high prevalence of tobacco use among Hoosiers, tobacco cessation became the first focus of the Alliance for a Healthier Indiana along with a coalition of more than 200 leading Indiana organizations, called Raise It for Health. The advocacy efforts aimed to persuade state legislators to increase the cigarette tax because research shows doing so is very effective in encouraging smokers to quit and preventing young people from starting smoking. In 2019, US Sen. Todd Young (IN) co-introduced a congressional bill – the Tobacco to 21 Act. The Alliance supported this bill and was invited to join a press conference being held by Sen. Young at Carmel High School to

discuss the Act. The bill was passed in late 2019 and went into effect on July 1, 2020 effectively raising the legal sale age from 18 to 21 for all tobacco products.

## ACCESS TO HEALTH SERVICES

- **WellFund:** The WellFund exists to help patients navigate healthcare coverage options, including initial enrollment and ongoing maintenance of coverage. Patients have direct access to WellFund Patient Advocates during pre-service, admission and post-discharge for questions and determining which plan best meets their needs. During the current Implementation Strategy time period, WellFund Patient Advocates assisted 51,005 individuals with enrollment assistance. The WellFund Patient Advocates are available to meet with patients in person or over the phone to help with enrollment in one of the below programs, Medicaid, Medicare, Marketplace, Social Security and Disability.
- **Jane Pauley Community Health Center:** As a Federally Qualified Health Center, The Jane Pauley Community Health Center (JPCHC) offers comprehensive healthcare services to the communities served, regardless of insurance status, by providing family medicine, pediatrics, OB/GYN, behavioral health, and dental services. The organization was established in 2009 with generous support from the Metropolitan School District of Warren Township, Community Health Network, and the Community Health Network Foundation. Annually, The JPCHC serves over 24,000 patients with comprehensive medical and dental care in the East regions. Community Health Network continues to provide The Jane Pauley Community Health Center with \$500,000 to support operations and also provides Network leadership to participate on their Board of Directors. During the current Implementation Strategy time period, the JPCHC site that serves the Anderson community completed 65,699 visits.
- **Community Connections:** Community Connections is a program to help community members find free and reduced-cost social services. It's a free search tool to connect seekers with social services offered by verified social care organizations and non-profits. The search tool uses zip codes to best be able to find resources in close proximity of the users home. The tool has up-to-date information about location and eligibility for local food pantries, transportation services, health care, housing and other social service programs. Since the launch of Community Connections in Q3 2020, over 3,240 users have conducted 11,396 searches using the platform.
-