DOES PLACE MATTER?

Health Equity in Hamilton County

August 10th 2015

HAMILTON COUNTY
PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.

ACKNOWLEDGMENTS

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INTRODUCTION

One of the fundamental principles of public health is that all people have a right to health. Differences in health status – often called health inequities – are differences that are avoidable and oftentimes unfair. These inequities are, in large part, driven by determinants such as social, economic and environmental conditions, health behaviors, disease, injury and ultimately, mortality.

Hamilton County Public Health has taken a "deep dive" into the health factors in our County and has published its first County-wide health equity report. This report shows that where you live can have a significant impact on your health. All of the above factors and more can be associated with your ZIP code. This report is based on geography so that you may quickly identify your community and then see how it shapes up in comparison to other communities in the County

The report includes the following indicators and/or topics of relevance to health equity in Hamilton County:

- Population characteristics
- Population density
- Poverty rates
- Educational attainment
- 4-Year graduation rates
- Unemployment rates
- Uninsured status

- Concentrated disadvantage
- Racial residential segregation
- Food access
- Mortality rates for selected causes of death
- Infant mortality rate
- Life expectancy

We are providing you the tools to make significant, lasting policy changes that will have a positive effect on your community for generations to come. Please read this report and then begin a conversation with community leaders about what you can do to improve the health of your community.

Tim Ingram
Health Commissioner

Data for the indicators in this report were obtained from the following federal, state, and local government agencies: United States Census Bureau, Ohio Department of Health (ODH), Ohio Department of Education, and the United States Department of Agriculture

Please note that data illustrated on maps throughout this report are shown at the Census Tract level with the Hamilton County communities overlaid unless otherwise specified. Data presented throughout this report are for the period 2010-2012 unless otherwise specified. This is due to changes in census tract by the United States Census Bureau in 2010, and at the time of this report, 2012 was the most recent finalized dataset available.

Mortality and birth data note: "These data were provided by the Ohio Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions".

EXECUTIVE SUMMARY

Does place matter?

Unquestionably!

With a population of just over 800,000, Hamilton County and its diverse communities represent a gamut of social determinants that answer the question of place affecting health. These determinants form an inter-related circle of factors contributing to the health, well-being and longevity of County residents.

Nowhere is this better represented than in life expectancy. The average life expectancy for all residents of Hamilton County is just over 77 years. However, the range can go as low as 69, and as high as into the 80s, based on where in the County one resides.

Other factors reviewed in this report include poverty, educational attainment, employment status, health insurance, race, food access and various causes of mortality; all of which are very much inter-related. For instance, it is no surprise that educational attainment affects employment status which affects income. Income can then determine the degree to which one is able to access and engage in healthy behaviors; e.g. preventative medical care, exercise/recreation activities, purchase and consumption of healthy foods, etc. Similarly, poverty (or lack of sufficient income) affects access to insurance and health care along with access to healthy food, and safe and available exercise and recreation opportunities.

As a result, when entire communities are comprised largely of individuals suffering from economic disadvantage, this may lead to generations of individuals burdened by less-than-ideal health outcomes. In other words, "place" can directly affect a number of factors that contribute to poor health.

Understanding a problem is the first step to providing solutions. While Hamilton County has a long way to go toward achieving health equity, a thorough review and subsequent understanding of the social determinants of health impacting residents can provide a road-map to better health for all, regardless of where one calls home.
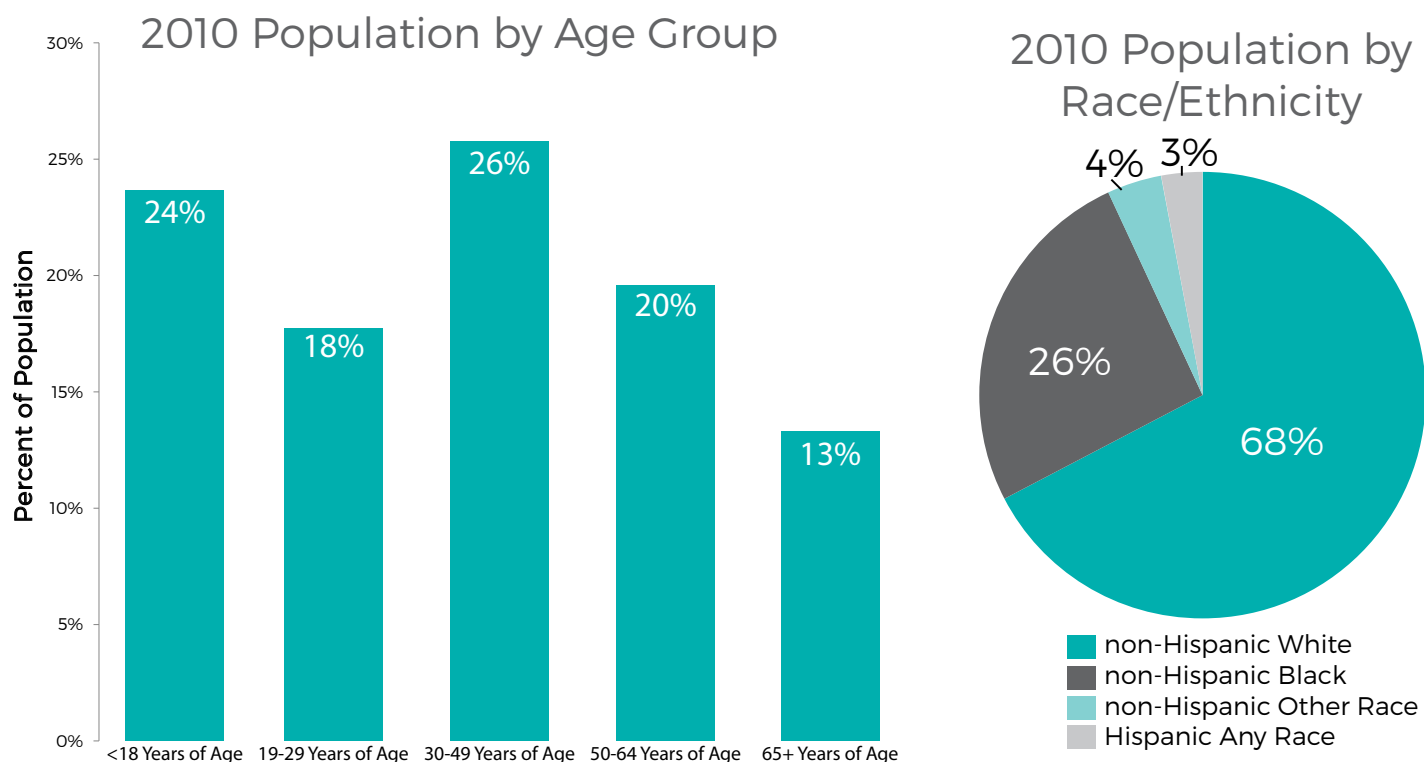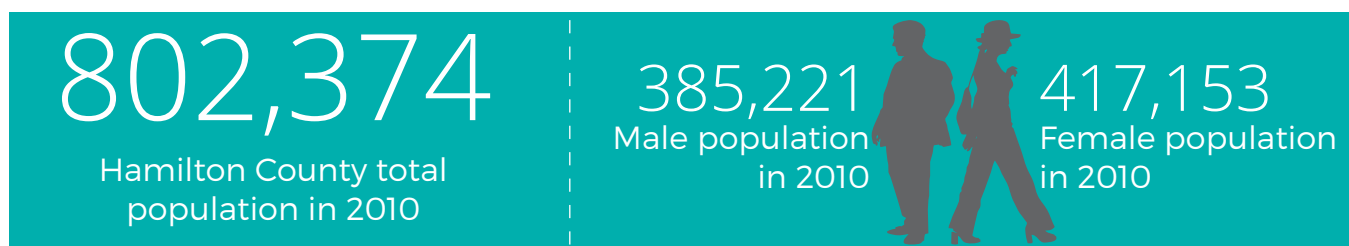
WHAT IS HEALTH EQUITY?

Health equity is defined by Healthy People 2020 as:

> "The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequities, historical and contemporary injustices, and the elimination of health and health care disparities[1]."

In order to understand health equity, we must first understand a little bit about the community we call home: Hamilton County.

802,374
Hamilton County total population in 2010

385,221
Male population in 2010

417,153
Female population in 2010

2010 Population by Age Group

Age Group	Percent
<18 Years of Age	24%
19-29 Years of Age	18%
30-49 Years of Age	26%
50-64 Years of Age	20%
65+ Years of Age	13%

2010 Population by Race/Ethnicity

- non-Hispanic White: 68%
- non-Hispanic Black: 26%
- non-Hispanic Other Race: 4%
- Hispanic Any Race: 3%

Source: US Census Bureau/American FactFinder, 2010 Census. Accessed: 10/13/2014. Available: http://factfinder2.census.gov

WHERE ARE PEOPLE LIVING?

Within Hamilton County, there are 49 communities comprised of cities, villages, and townships. Visualizing where each community is located allows us to see the distribution of various health indicators that contribute to health equity. Below is a map that illustrates the location of each community.
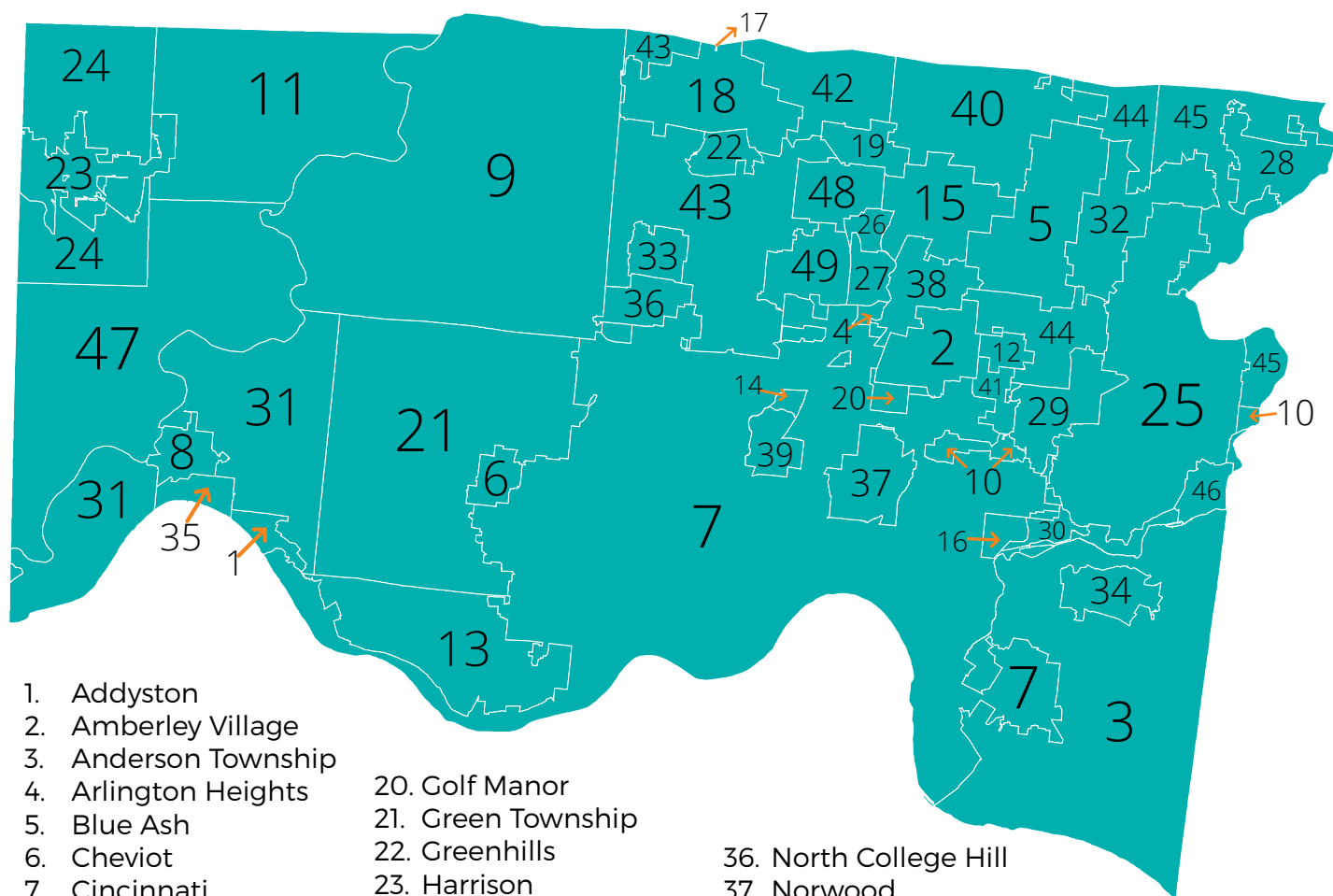
1. Addyston
2. Amberley Village
3. Anderson Township
4. Arlington Heights
5. Blue Ash
6. Cheviot
7. Cincinnati
8. Cleves
9. Colerain Township
10. Columbia Township
11. Crosby Township
12. Deer Park
13. Delhi Township
14. Elmwood Place
15. Evendale
16. Fairfax
17. Fairfield
18. Forest Park
19. Glendale
20. Golf Manor
21. Green Township
22. Greenhills
23. Harrison
24. Harrison Township
25. Indian Hill
26. Lincoln Heights
27. Lockland
28. Loveland
29. Madeira
30. Mariemont
31. Miami Township
32. Montgomery
33. Mount Healthy
34. Newtown
35. North Bend
36. North College Hill
37. Norwood
38. Reading
39. Saint Bernard
40. Sharonville
41. Silverton
42. Springdale
43. Springfield Township
44. Sycamore Township
45. Symmes Township
46. Terrace Park
47. Whitewater Township
48. Woodlawn
49. Wyoming

Now that we know where the communities are located within Hamilton County, we can look at where people are living. One way to know where people are living in Hamilton County is to look at population density.

FYI	Population density is the number of people (population) per square mile. This measure helps to show the areas in Hamilton County that have the highest density of residents.

This map illustrates the population density across Hamilton County in 2010.

Number of People per Square Mile

- 157-2,143
- 2,144-4,185
- 4,186-6,534
- 6,535-9,783
- 9,784-17,829
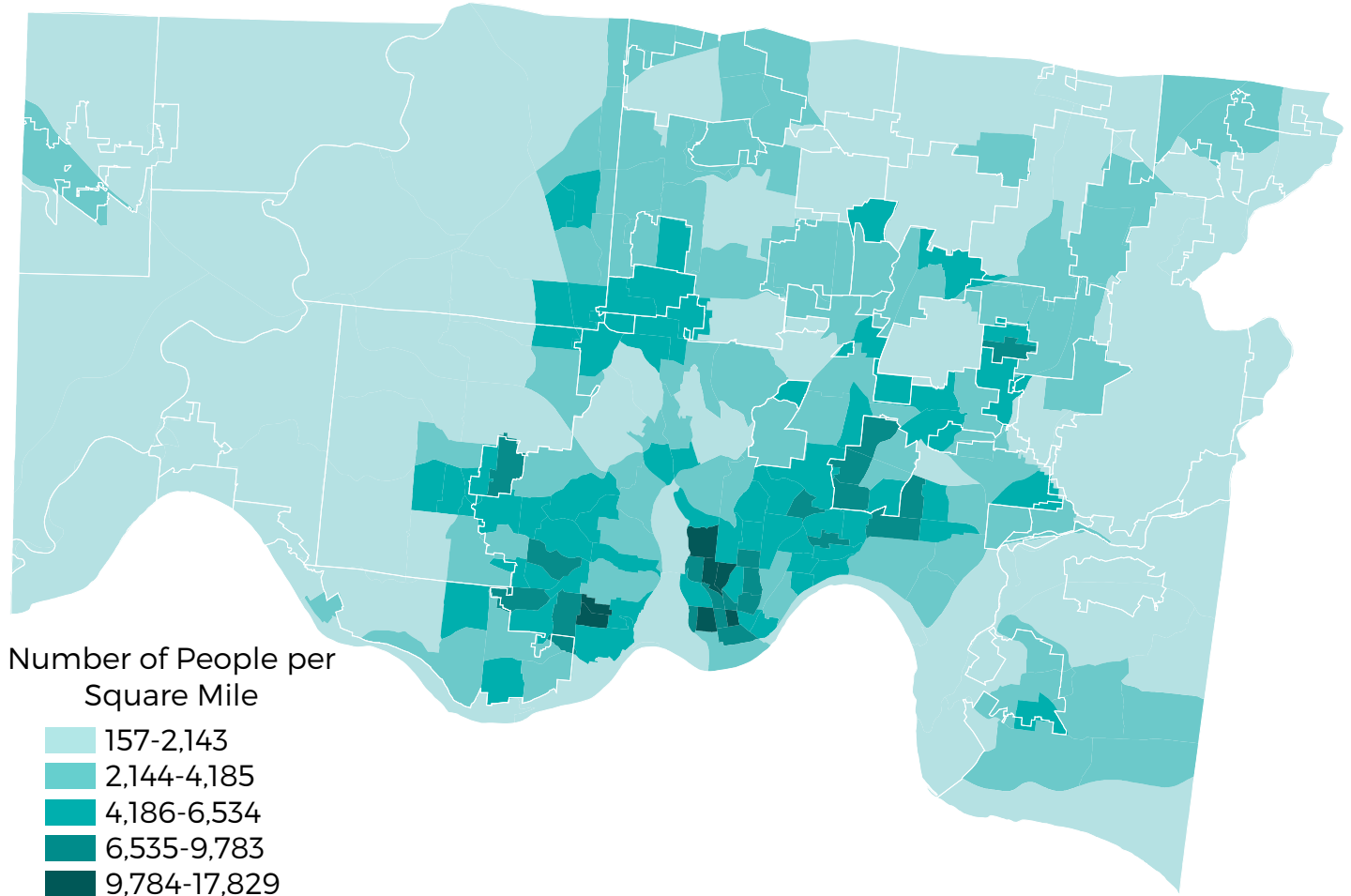
As the map shows, areas with the highest population densities are centered in the urban areas in Hamilton County or within the City of Cincinnati.

Where is my community?
To determine the location of your community, please refer to the map on page 4.
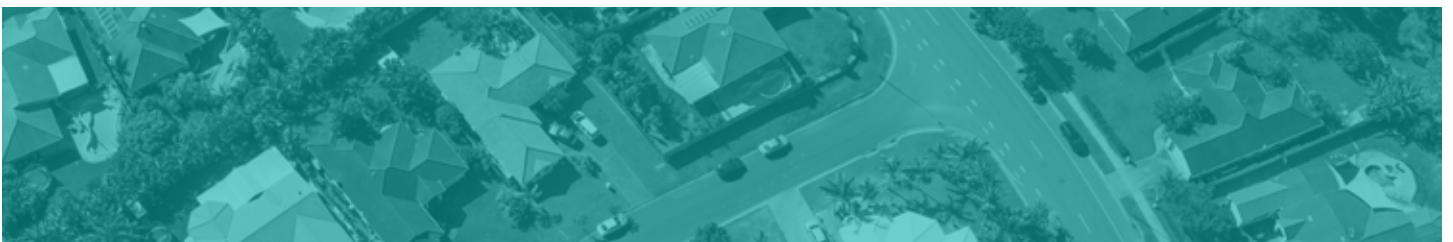
POVERTY

Living in poverty can significantly impact the health of an individual. Those living in poverty often have poor health, high levels of disease and disability, and have limited access to health care[2]. When an individual living in poverty becomes ill, they can become engulfed in a downward spiral that includes loss of income and higher health care costs[2].

FYI

The federal poverty line for individuals in the United States is $11,670[3]

The federal poverty line for a family of 4 in the United States is $23,850[3]

16%

$

Hamilton County residents that were living in poverty, 2010-2012

Between 2010-2012, Hamilton County had 16 percent of its residents living in poverty. The poverty rate in Hamilton County is higher than both the rate of poverty in Ohio (15 percent) and in the United States (15 percent) for the same time period. However, poverty is not equally spread across the county. There are areas within Hamilton County that have higher rates of poverty than other parts. Identifying the areas that experience the highest rates of poverty will help to shed light on some of the underlying causes of poor health outcomes in those communities.

Percent Living in Poverty

- 1-9%
- 10-17%
- 18-28%
- 29-45%
- 46-80%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov

Does Place Matter? Health Equity in Hamilton County

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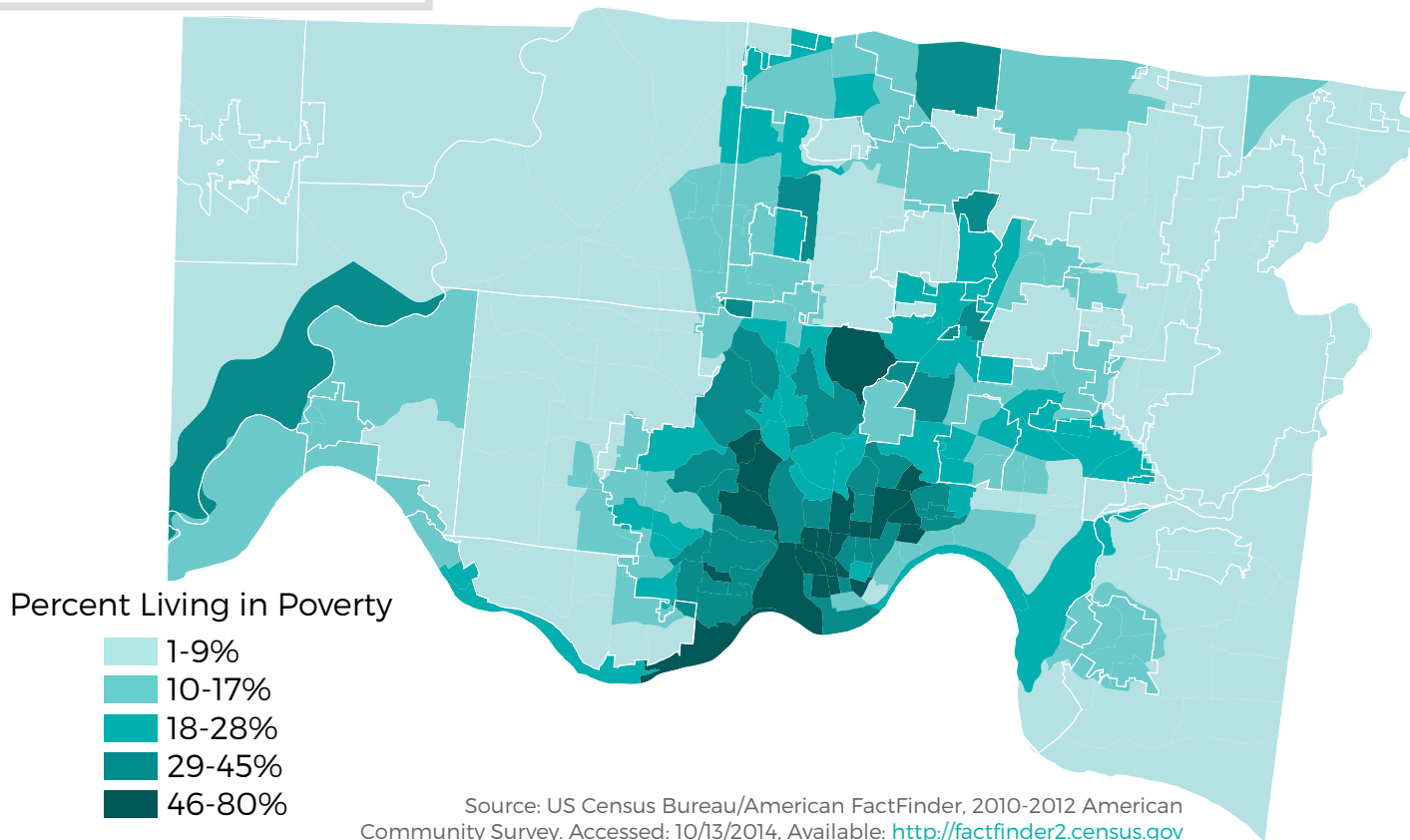
The map on the previous page shows the areas that have the highest rates of people living in poverty. While areas within Cincinnati city limits are found to have some of the highest rates of poverty in Hamilton County, there are pockets of residents west and north of the urban core that also suffer from high poverty rates. Living in poverty not only affects adults, it also greatly impacts children.

From 2010-2012, 24 percent of all Hamilton County children were living in poverty. Children who are living in poverty are at an increased risk for poor academic achievement, inadequate healthcare access, poor nutrition and food insecurity[4]. The child poverty rate in Hamilton County was higher than that for the state of Ohio (21 percent) and the United States (20 percent) for the same time period. The map below shows the child poverty rates in Hamilton County from 2010-2012.

24%
Hamilton County children living in poverty, 2010-2012

Percent of Children Living in Poverty

- 0.0-12%
- 13-27%
- 28-42%
- 43-64%
- 65-100%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov
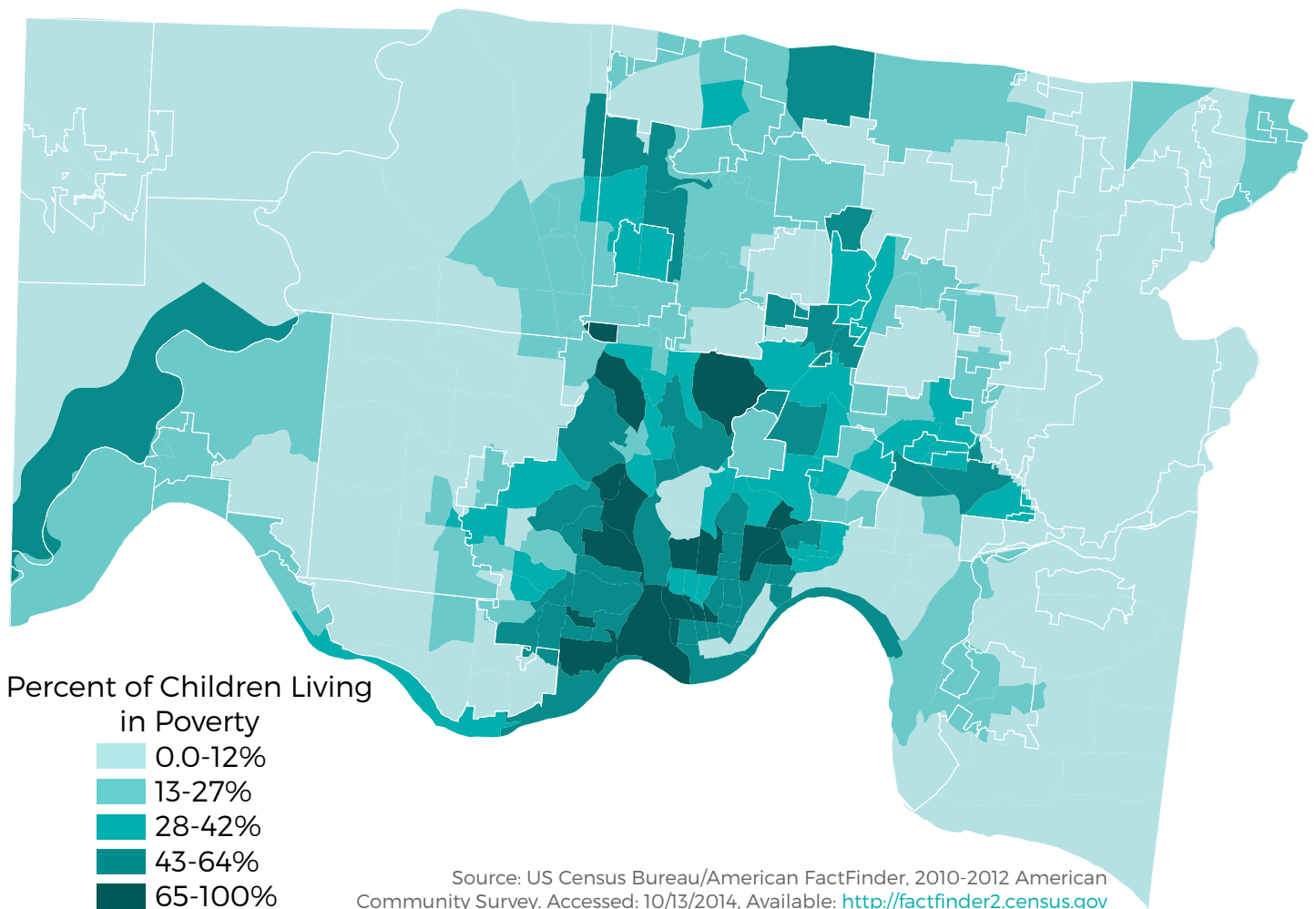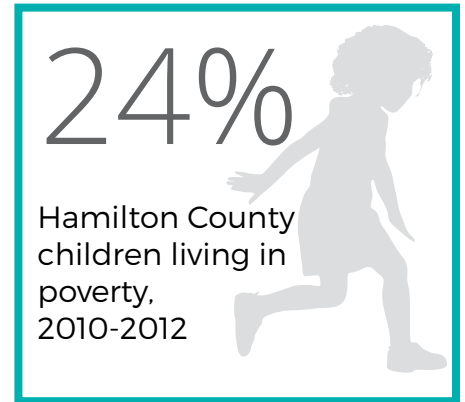
The map above shows that the areas with the highest rates of children living in poverty fall within the City of Cincinnati along with some areas to the west and north of the city. It's important to identify the areas that have not only the highest rates of poverty, but children living in poverty, in order to tailor interventions aimed at reducing poverty which can lead to healthier lives for both adult and child residents of Hamilton County.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

Does Place Matter? Health Equity in Hamilton County

EDUCATIONAL ATTAINMENT

Living in poverty can affect an individual's level of educational attainment. Educational attainment is defined as the highest level of education that an individual has completed[5]. Educational attainment, like poverty, has an influence on the health of an individual. Higher educational attainment, such as a Bachelor's degree or higher, is often associated with better health[6]. Educational attainment measured in this report is the highest level of educational attainment or highest degree for Hamilton County residents who are 25 years of age and older.
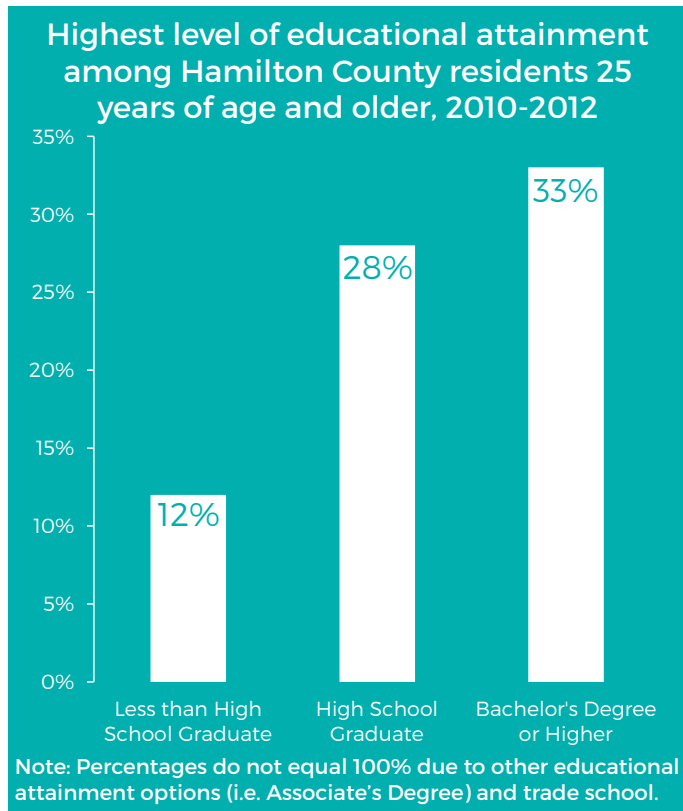
Graduation from high school, or the equivalent, is required for any individual who seeks to obtain a college degree. Completing college, and obtaining a higher level of educational attainment contributes to an individual's occupational status and income[7]. Increasing the educational attainment of an individual can have lasting impacts on the health of an individual over the course of his/her lifetime[7].

Between 2010-2012, 12 percent of Hamilton County residents 25 years of age and older did not graduate from high school. Twenty-eight percent of Hamilton County residents 25 years of age and older were only high school graduates (or had an equivalent status as their highest level of educational attainment). Individuals whose highest level of educational attainment was a Bachelor's degree or higher represented 33 percent of Hamilton County residents 25 years of age and older.

Highest level of educational attainment among Hamilton County residents 25 years of age and older, 2010-2012

Less than High School Graduate	High School Graduate	Bachelor's Degree or Higher
12%	28%	33%

Note: Percentages do not equal 100% due to other educational attainment options (i.e. Associate's Degree) and trade school.

Some areas of the County have higher rates of individuals with higher educational attainment. The maps on the following pages illustrate the highest level of educational attainment of Hamilton County residents.
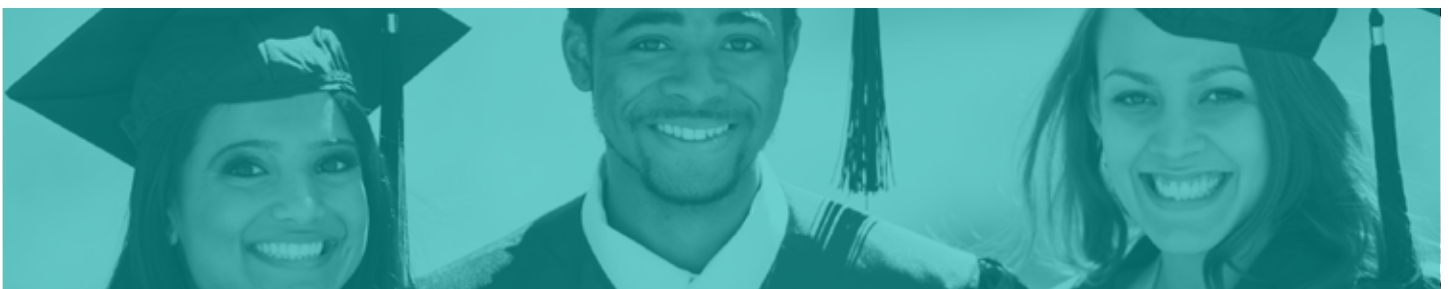
This map illustrates the percent of Hamilton County residents, 25 years of age and older whose highest level of educational attainment from 2010-2012 was less than a high school graduate.

Percent Highest Level of Educational Attainment; Less Than a High School Graduate

- 0-8%
- 9-13%
- 14-20%
- 21-30%
- 31-41%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov
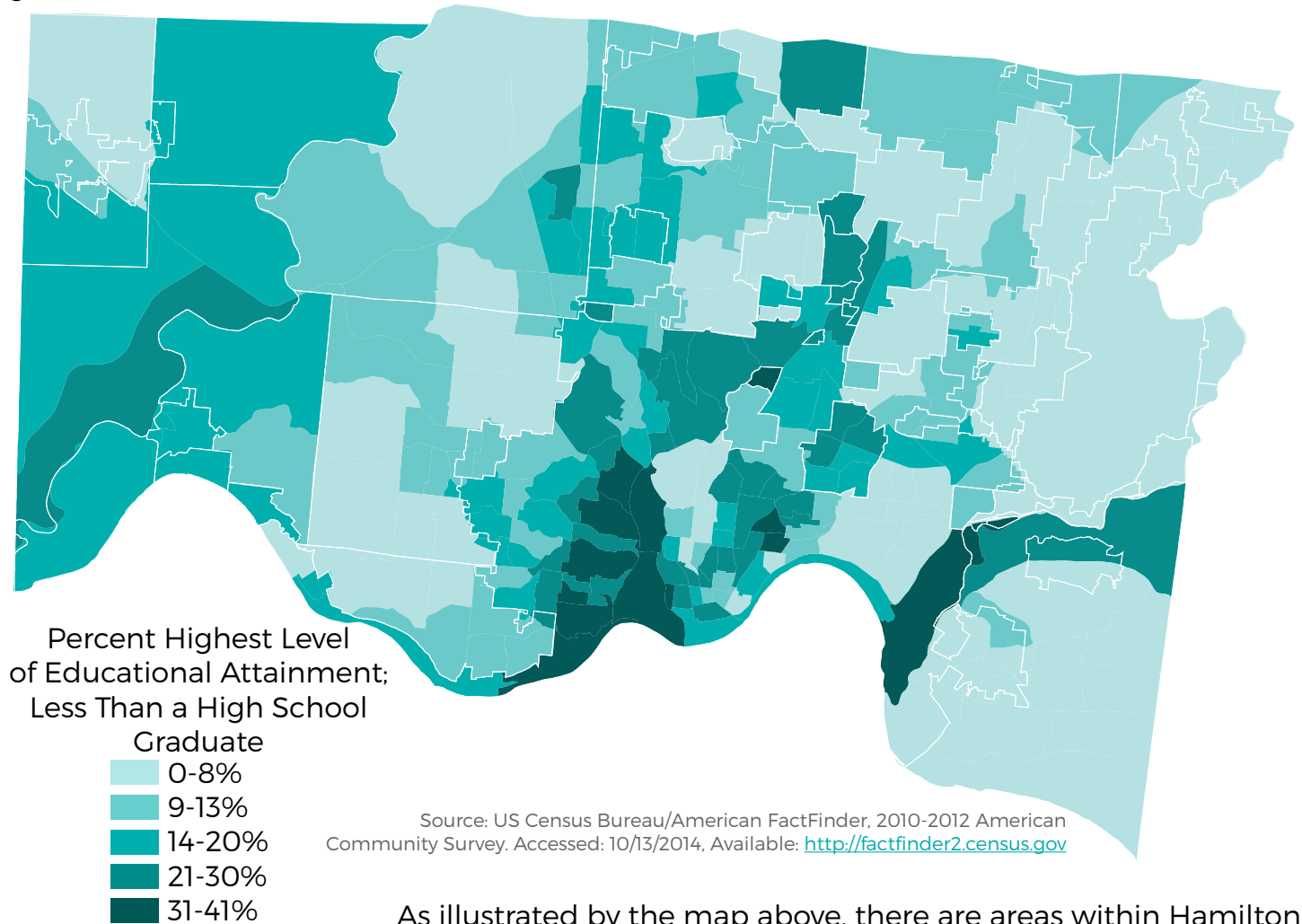
As illustrated by the map above, there are areas within Hamilton County that are disproportionately affected by a higher percentage of individuals whose highest level of educational attainment was less than a high school graduate. The urban areas in and around downtown Cincinnati and some areas to the west and north of the city, which are the same areas that have higher rates of poverty, have a higher population of individuals whose highest level of educational attainment was less than a high school graduate.

As we move to the next highest level of educational attainment, high school degree or equivalent, we can see the areas in Hamilton County that have higher percentages of individuals with a high school diploma. The map on the following page shows areas within Hamilton County that have the highest percentage of residents whose highest level of educational attainment was a high school graduate (or equivalent) from 2010-2012.

DID YOU KNOW?
BETWEEN 2010-2012:

1 in 8

Individuals 25 years of age or older living in Hamilton County are less than a high school graduate, their highest level of educational attainment.

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014. Available: http://factfinder2.census.gov

**Percent Highest Level
of Educational Attainment;
High School Graduate**

- 5-15%
- 16-25%
- 26-32%
- 33-40%
- 41-57%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov
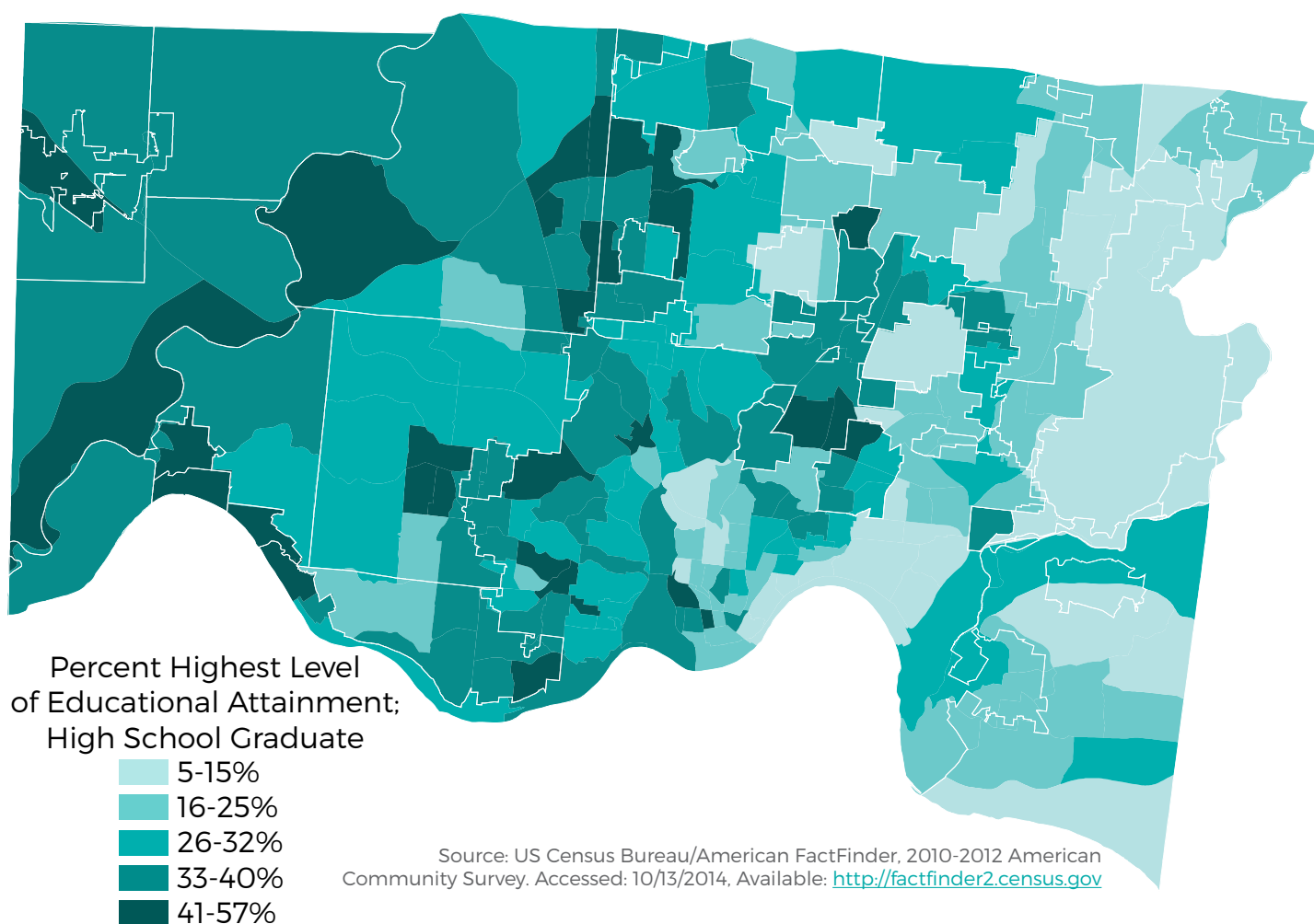
As illustrated by the map above, there are areas within Hamilton County that have higher percentages of individuals whose highest level of educational attainment was a high school graduate (or equivalent) from 2010-2012. The areas in the western half of the County are found to have the highest percentage of individuals whose highest level of educational attainment was a high school graduate.

Individuals who are high school graduates are able to further their educational attainment by pursuing a college degree such as a Bachelor's degree or higher. The map on the following page shows the areas that have the highest percentage of individuals whose highest level of educational attainment was a Bachelor's degree or higher.

DID YOU KNOW?
BETWEEN 2010-2012:

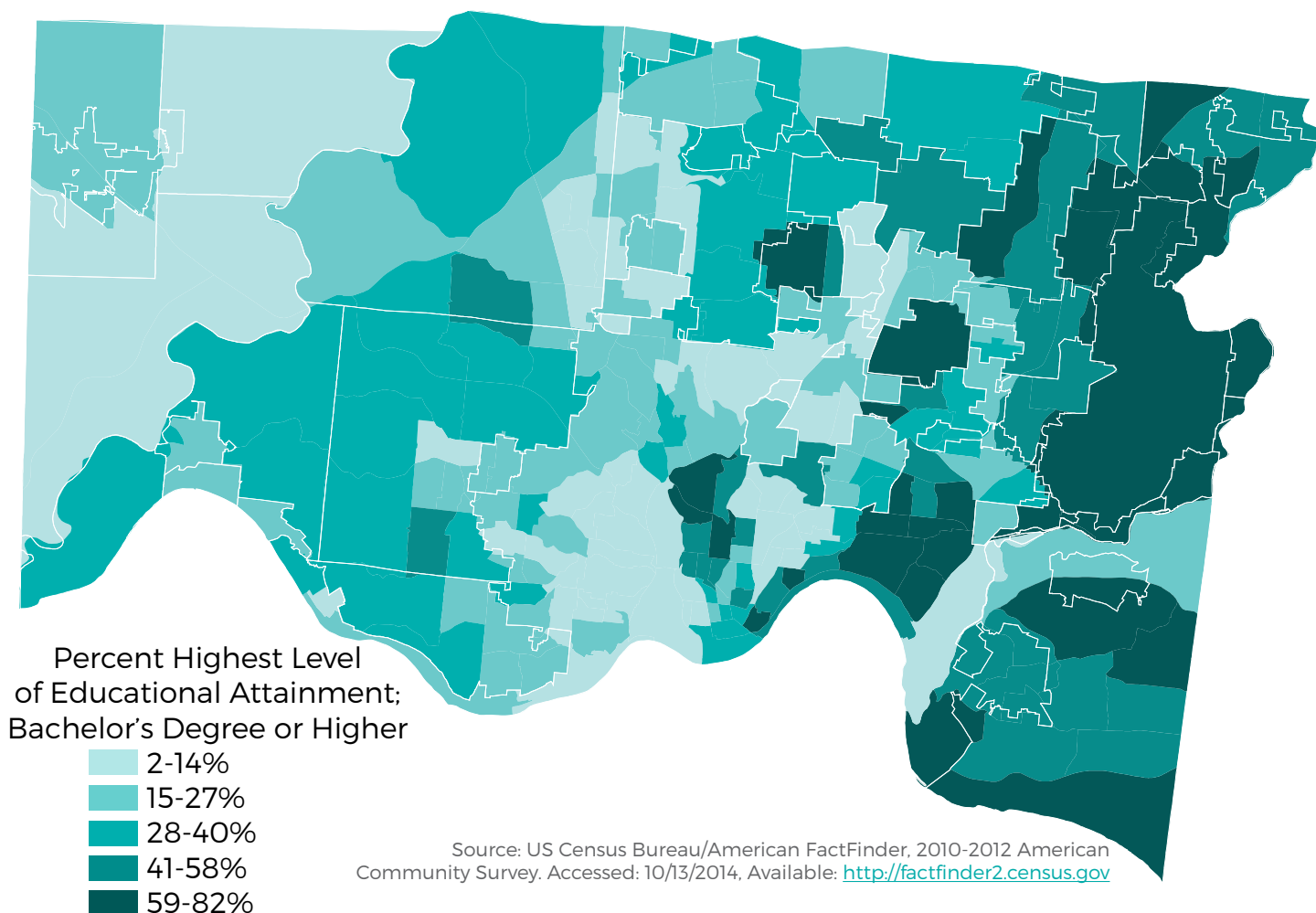# 1 in 4

Individuals 25 years of age or older living in Hamilton County are high school graduates, their highest level of educational attainment.

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014. Available: http://factfinder2.census.gov

Where is my community?
To determine the location of your community, please refer to the map on page 4.

Percent Highest Level
of Educational Attainment;
Bachelor's Degree or Higher

- 2-14%
- 15-27%
- 28-40%
- 41-58%
- 59-82%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov

As illustrated by the map above, there are areas within Hamilton County that have higher percentages of individuals whose highest level of educational attainment was a Bachelor's degree or higher from 2010-2012. The areas that reside in the eastern half of the county are found to have the highest percentages of individuals whose highest level of educational attainment was a Bachelor's degree or higher.

DID YOU KNOW?
BETWEEN 2010-2012:

1 in 3

Individuals 25 years of age or older living in the Hamilton County had a Bachelor's degree or higher as their highest level of educational attainment.

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014. Available: http://factfinder2.census.gov
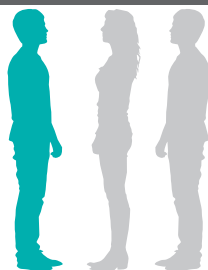
Individuals who have higher educational attainment often times have lower rates of many health problems such as chronic diseases[6]. High educational attainment also aids in increasing an individual's income, which can provide the opportunity to seek out and receive preventive health care, increasing the overall health of an individual.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

GRADUATION RATES

As illustrated in the previous section, 12 percent of Hamilton County residents were less than high school graduates from 2010-2012. Increasing graduation rates impact an individuals well-being, along with influencing his/her health[7]. To measure the graduation rate, the 4-year graduation rate of public school districts in Hamilton County is monitored. The 4-year graduation rate for 2013 was the percentage of students who entered 9th grade in 2010 and graduated by 2013. Based on the percent of students who graduate within 4-years, the Ohio Department of Education assigns a letter grade to each school district. Within Hamilton County there are 23 public school districts, each with various 4-year graduation rates.

Want to find out how your school district's 4- year graduation rate in 2013 compared to other Hamilton County school districts? Take a look at the 4-year graduation rate report card below.

REPORT CARD: 2013, 4-Year Graduation Rate

School District	Percent	Grade
Wyoming City Schools	98.7%	A
Madeira City Schools	98.4%	A
Forest Hills Local Schools	97.8%	A
Indian Hill Schools	97.2%	A
Three Rivers Local Schools	96.2%	A
Sycamore Local Schools	95.0%	A
Mariemont Local Schools	94.9%	A
Loveland City Schools	93.7%	A
Milford City Schools	93.6%	A
Oak Hills Local Schools	93.5%	A
Reading City Schools	92.2%	B
Finneytown Local Schools	91.5%	B
Southwest Local Schools	89.0%	B
Northwest Local Schools	88.7%	C
Deer Park City Schools	88.2%	C
Norwood City Schools	86.8%	C
Princeton City Schools	86.4%	C
Lockland City Schools	86.4%	C
Winton Woods Local	83.8%	D
Mount Healthy City Schools	83.0%	D
Saint Bernard City Schools	81.3%	D
North College Hill City	75.2%	F
Cincinnati Public Schools	73.6%	F

Grades are assigned by the Ohio Department of Education.
A=100.0-93.0%   B=92.9-89.0%   C=88.9-84.0%
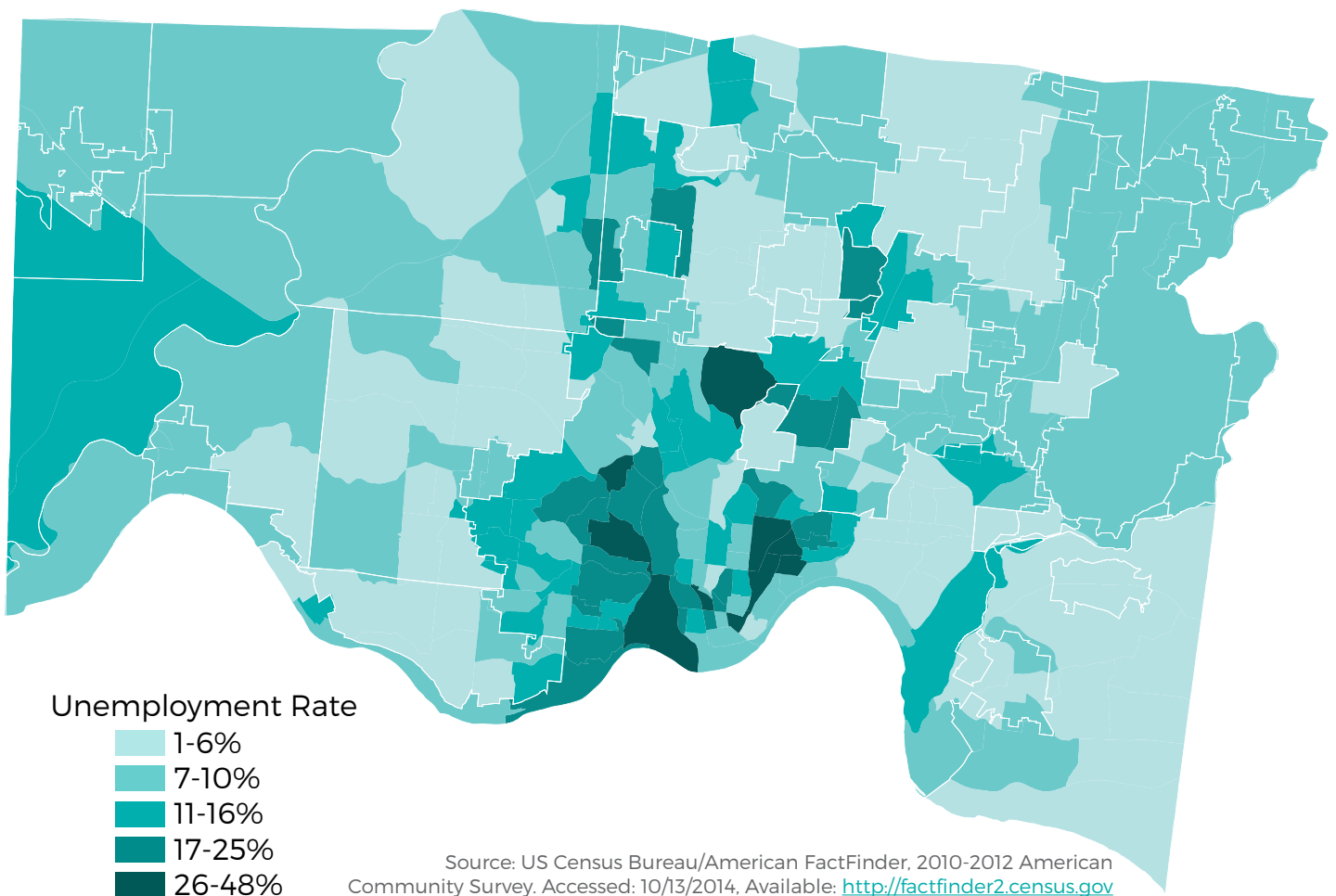D=83.9-79.0%   F=78.9-0.0%

UNEMPLOYMENT

Educational attainment, can impact the employment opportunities an individual receives. Individuals who have less than a high school diploma have the highest rates of unemployment[8]. Unemployment has been linked to a variety of adverse health outcomes[9]. This is often due to unemployment resulting in the availability of fewer resources for individuals and their families, including adequate access to health care[9].

8.5%
2010-2012 Hamilton County Unemployment Rate.

From 2010-2012, Hamilton County had an unemployment rate of 8.5 percent. This rate mirrors that of the United States unemployment rate for 2010-2012—8.6 percent. There are communities within Hamilton County with higher rates of unemployment, as illustrated in the map below.

Unemployment Rate

- 1-6%
- 7-10%
- 11-16%
- 17-25%
- 26-48%

Source: US Census Bureau/American FactFinder, 2010-2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov

As can be seen by the above map, the areas that experience the highest unemployment rate are the urban areas within the County primarily those within the City of Cincinnati along with a few pockets north of the city. A sizable number of residents living on the west side of the County have also experienced an unemployment rate higher than the County average. As shown on page 9, these areas also have the highest percentage of the population who were less than a high school graduate.

Does Place Matter? Health Equity in Hamilton County

UNINSURED

When an individual is unemployed, it can put increased stress on their financial situation. This can lead to the individual being unable to afford health insurance, causing them to become uninsured. When an individual is uninsured, they may forgo preventive care and obtaining the necessary health care they need[10]. Delaying or forgoing health care places individuals at increased risk for being hospitalized for health conditions that could have been avoided or prevented[10].
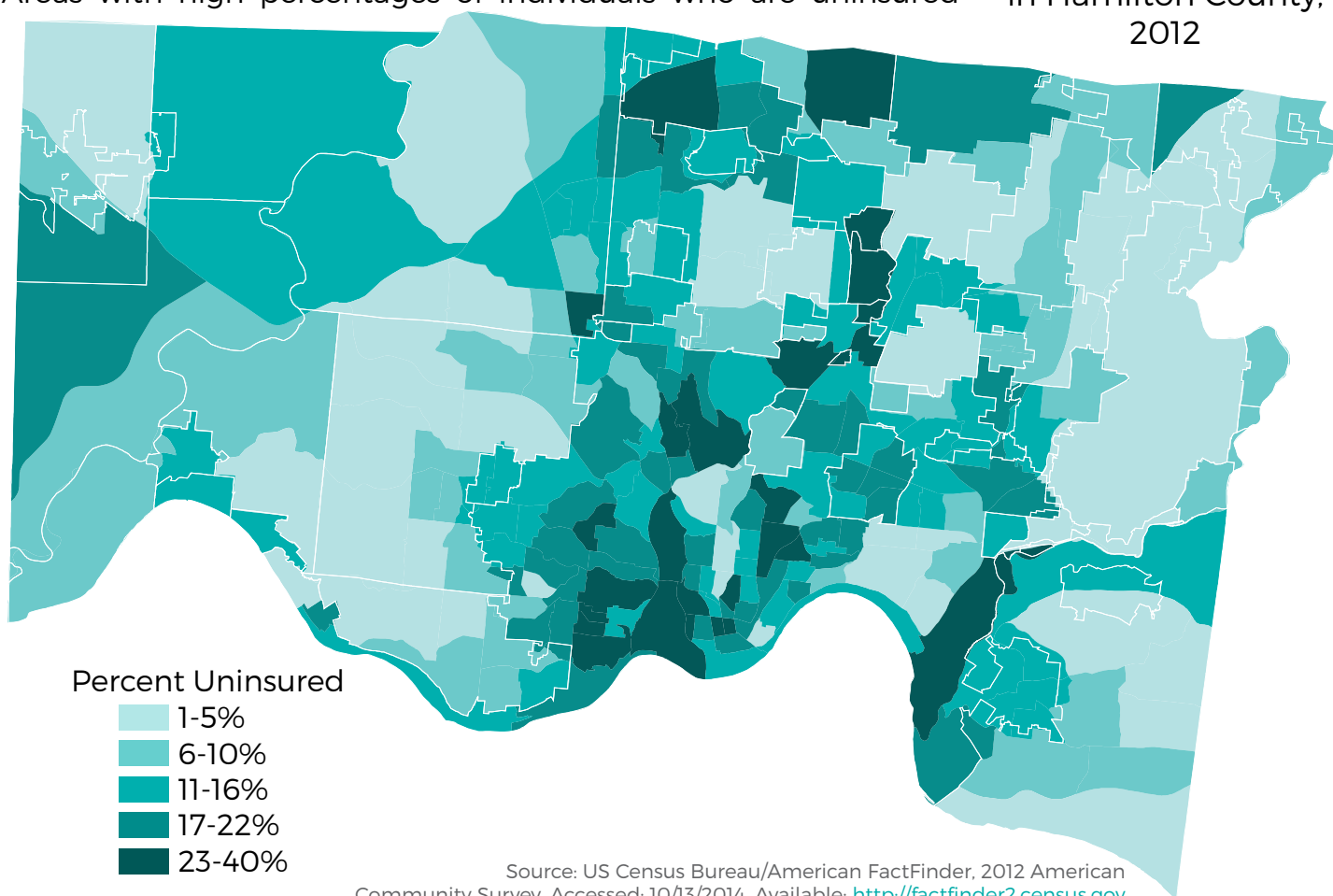
In 2012, 11.5 percent of Hamilton County residents were uninsured. The map below illustrates the percent of uninsured residents across Hamilton County. While the urban areas in Hamilton County have the highest percentage of individuals who are uninsured, high rates of uninsured individuals can be found spread throughout the county.

Areas with high percentages of individuals who are uninsured

11.5%
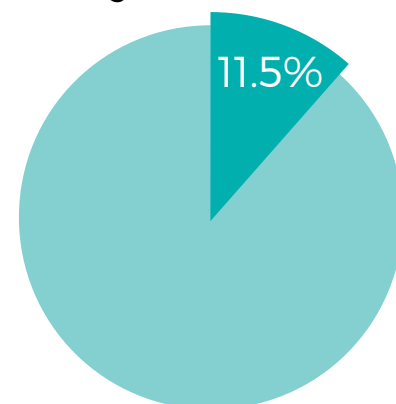
Percent uninsured in Hamilton County, 2012
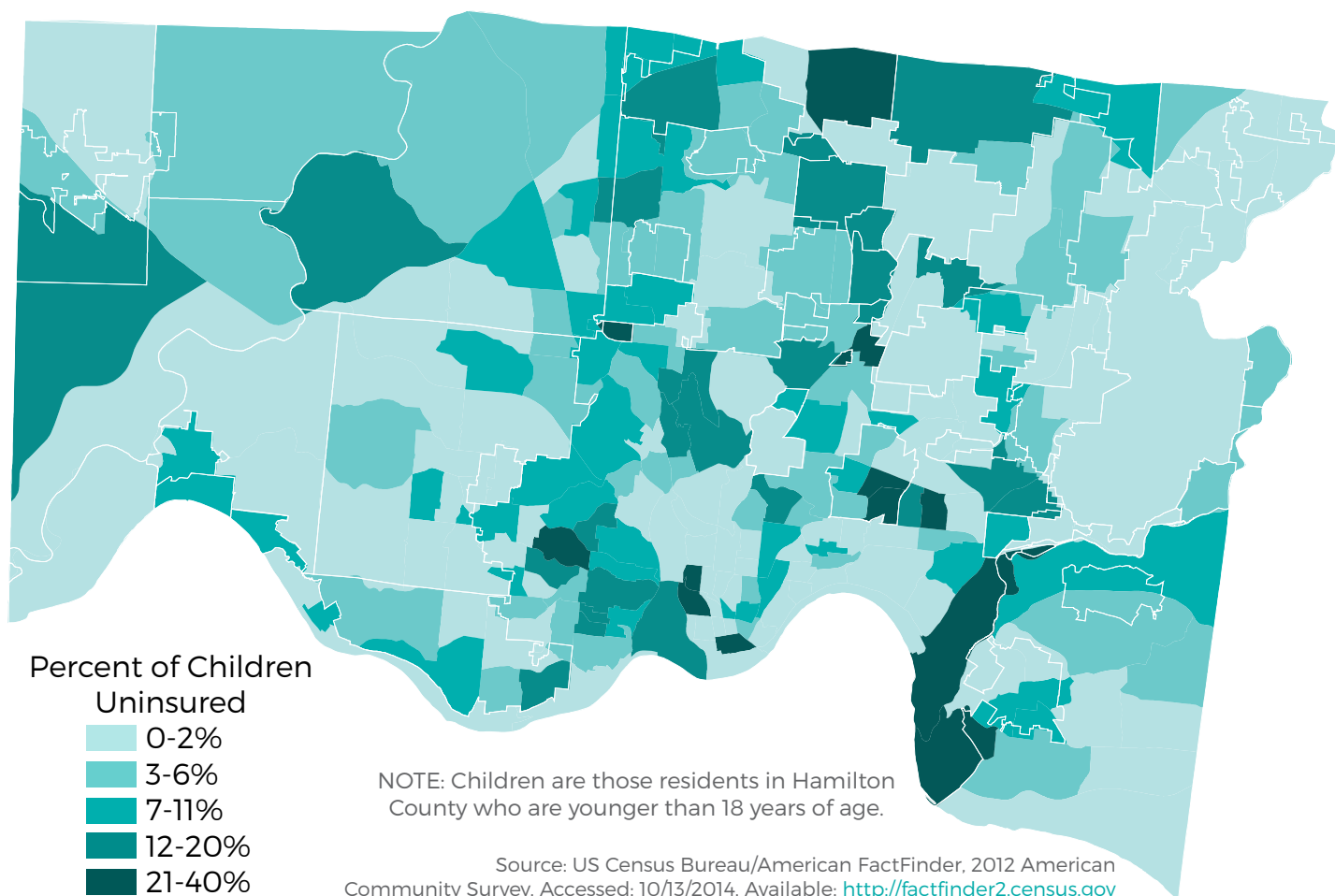

Percent Uninsured
- 1-5%
- 6-10%
- 11-16%
- 17-22%
- 23-40%

overlap the areas where there are not only higher rates of individuals living in poverty, but also high percentages of individuals who were less than a high school graduate. Being un-

insured can also negatively affect the health and well-being of children. In 2012, 5.4 percent of children living in Hamilton County were uninsured. Children who are uninsured may be prevented from receiving necessary early preventative care, or necessary immunizations that provide a foundation for healthy childhood and a healthy life as an adult.

As can be seen in the map below, there are areas within Hamilton County with higher percentages of uninsured children.

Percent of Children Uninsured

- 0-2%
- 3-6%
- 7-11%
- 12-20%
- 21-40%

NOTE: Children are those residents in Hamilton County who are younger than 18 years of age.

Source: US Census Bureau/American FactFinder, 2012 American Community Survey. Accessed: 10/13/2014, Available: http://factfinder2.census.gov

The areas in the map that have the highest percentage of unsured children are found to be the same areas that have higher rates of the uninsured individuals. The percentage of uninsured individuals and uninsured children in Hamilton County may change in the future due to the implementation of the Affordable Care Act and Medicaid expansion.

Where's 2010-2011 data??

2010 & 2011 American Community Survey data about uninsured populations was not available at county & census tract level.

Where is my community?
To determine the location of your community, please refer to the map on page 4.
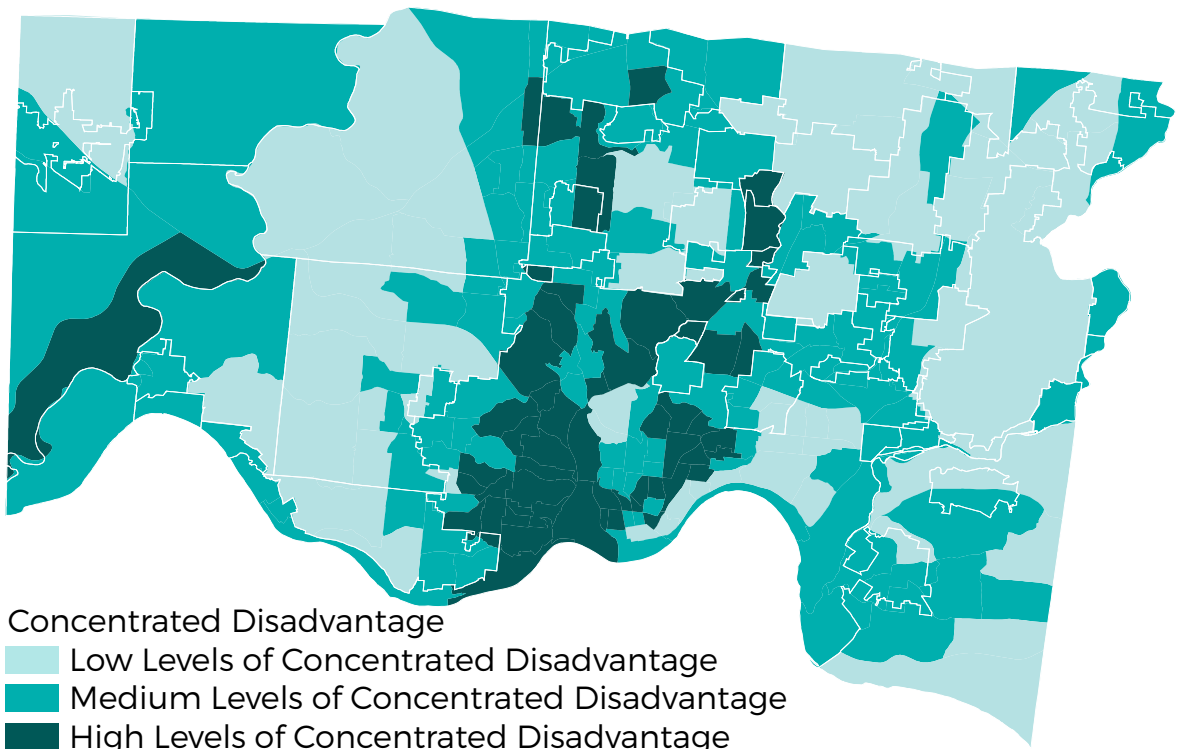
CONCENTRATED DISADVANTAGE

Health equity, and the health status of an individual are influenced by many factors. One way to look at how multiple factors interact to influence the health of an individual is to look at the level of concentrated disadvantage in an area. Concentrated disadvantage is a proxy (or substitute) indicator that shows areas of a community that are at an economic disadvantage. Concentrated disadvantage is often associated with worse overall health. Areas with high levels of concentrated disadvantage are at an increased risk for higher rates of infant mortality and low birth weight[12]. Concentrated disadvantage is calculated using five indicators:

1. Percent of individuals living below the poverty line
2. Percent of individuals on public assistance
3. Percent of female-headed households
4. Percent of the population who are unemployed
5. Percent of the population who are less than 18 years of age[11]

Several of the indicators used to calculate concentrated disadvantage were presented previously in this report. Concentrated disadvantage shows how the indicators interact with each other to influence the overall health of individuals living in a particular community. The map below shows areas that have low, medium and high levels of concentrated disadvantage. The more urbanized areas in Hamilton County (City of Cincinnati and to the north), along with a pocket of residents in the western portion of the County, tend to have the highest levels of concentrated disadvantage, and correspondingly are the areas that have the highest rates of individuals living in poverty. It is important to identify areas with high levels of concentrated disadvantage so that targeted interventions may be implemented that can improve the health of individuals and communities.

Concentrated Disadvantage
- Low Levels of Concentrated Disadvantage
- Medium Levels of Concentrated Disadvantage
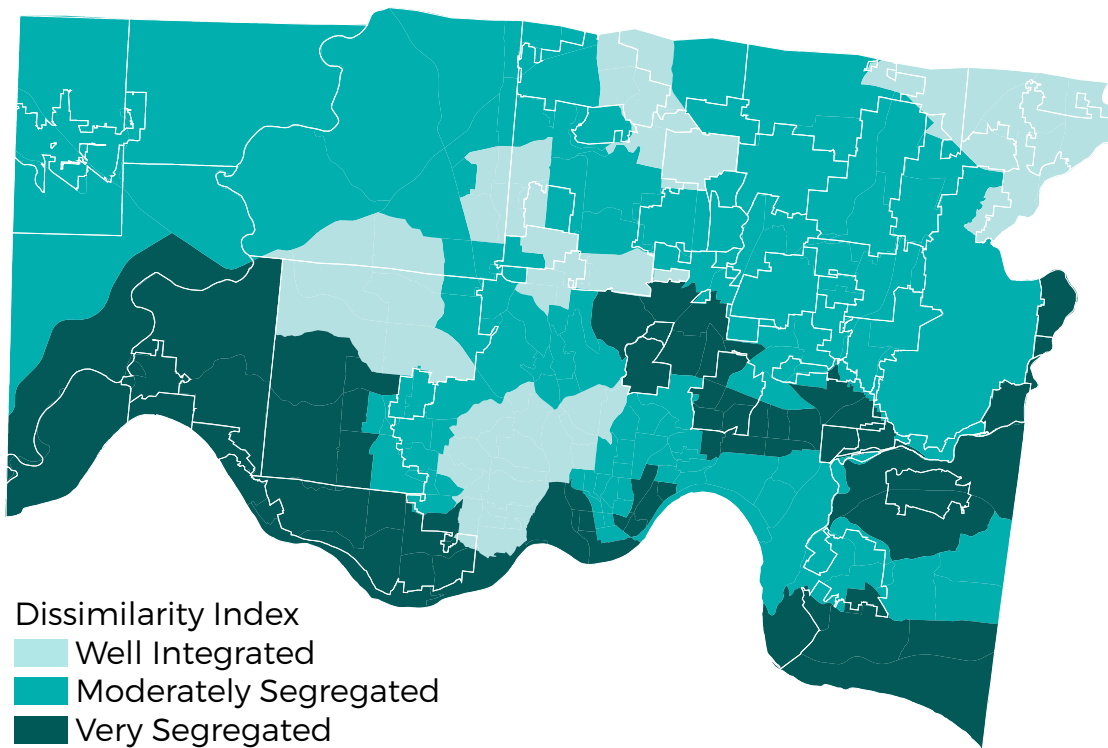- High Levels of Concentrated Disadvantage

Note: a z-score for each indicator is calculated and then averaged to determine areas with high concentrated disadvantage (those scores in the 75th percentile).

RACIAL RESIDENTIAL SEGREGATION

In addition to being influenced by poverty, unemployment, and being uninsured, health equity may also be influenced by the segregation of a community. One way to identify how segregated parts of a community may be, is to look at racial residential segregation. Racial residential segregation is the degree to which two or more racial groups live separately from one another in a geographic area[12]. Racial residential segregation can affect health outcomes in multiple ways, including constraining the socioeconomic advancement of minority groups by limiting education quality and employment[12]. Racial residential segregation also diminishes the benefits of homeownership because disadvantaged communities tend to have lower school quality, fewer job opportunities, and diminished property values[12]. Racial residential segregation is found to be associated with unequal access to health care resources, including the overall number and quality of health care settings and quality of treatment[12].

The map below shows the areas within the County that had high residential racial segregation in 2012. For Hamilton County, racial residential segregation is calculated using differences between non-Hispanic black and non-Hispanic white residents. Areas that have higher populations of both races relative to the population of the County as a whole are displayed as areas of low racial residential segregation or as well-integrated. Areas that have a smaller number of populations from both races are displayed as moderately or very segregated.

Dissimilarity Index
- Well Integrated
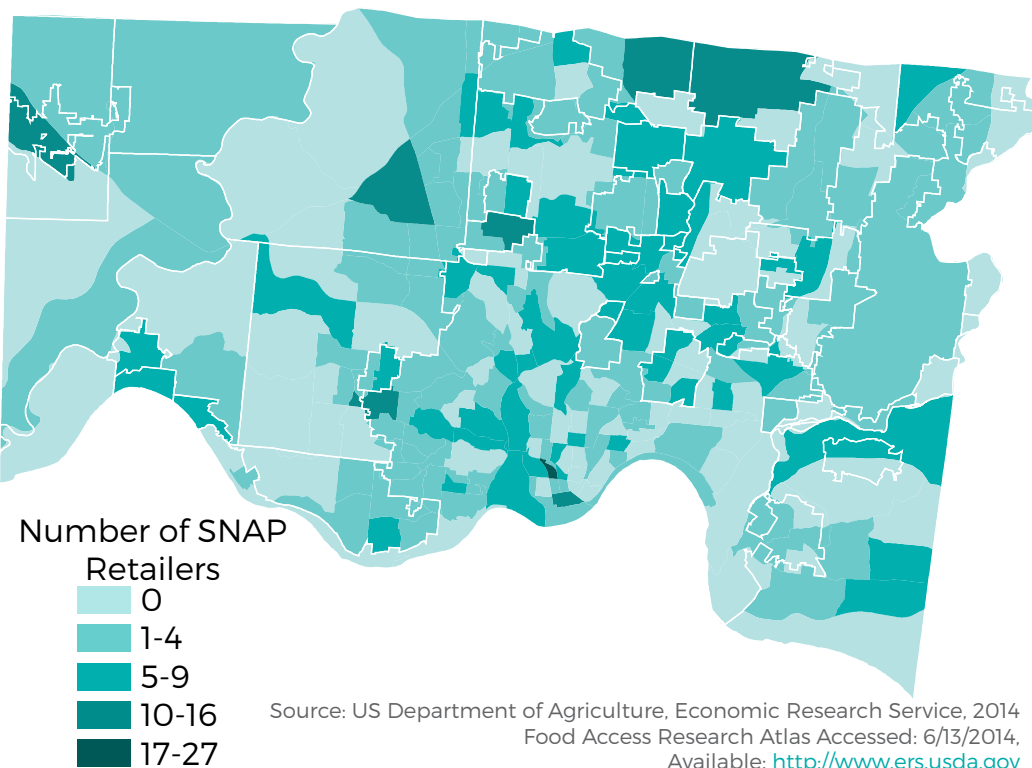- Moderately Segregated
- Very Segregated

Note: A dissimilarity index (DI) score was calculated to illustrate racial residential segregation between non-Hispanic Black and non-Hispanic White residents in Hamilton County. A DI score of <0.3 is considered well integrated. A DI score between 0.3-0.6 is considered moderately segregated, and a DI score above 0.6 is considered very segregated[12].

FOOD ACCESS

Access to healthy foods is also an important factor in the overall health of a community, as poor food access can cause increased risk for malnourishment and other adverse health outcomes. To help low-income families and individuals, the U.S. Department of Agriculture administers the Supplemental Nutrition Assistance Program (SNAP), which was formerly known as the Food Stamp Program.

In Hamilton County, there were 672 retailers that accepted SNAP as a form of payment in 2014. As can be seen from the map below, there are areas within Hamilton County that have multiple retailers that accept SNAP as a form of payment. However, there are far more areas where there are fewer, or no retailers that accept SNAP as a form of payment. Retailers such as Kroger and Wal-Mart accept SNAP as a form of payment. However, individual stores may not always be within close proximity to where people live. These areas may be classified as a "food desert".

A food desert is defined by the U.S Department of Agriculture, Division of Economic Research Services as low-income areas where a significant number of residents are more than 1 mile (in urban areas) or 10 miles (in rural areas) from the nearest supermarket. While a majority of Hamilton County is not classified as a food desert, there are areas that are considered to be food deserts.

Number of SNAP Retailers
- 0
- 1-4
- 5-9
- 10-16
- 17-27

Source: US Department of Agriculture, Economic Research Service, 2014
Food Access Research Atlas Accessed: 6/13/2014,
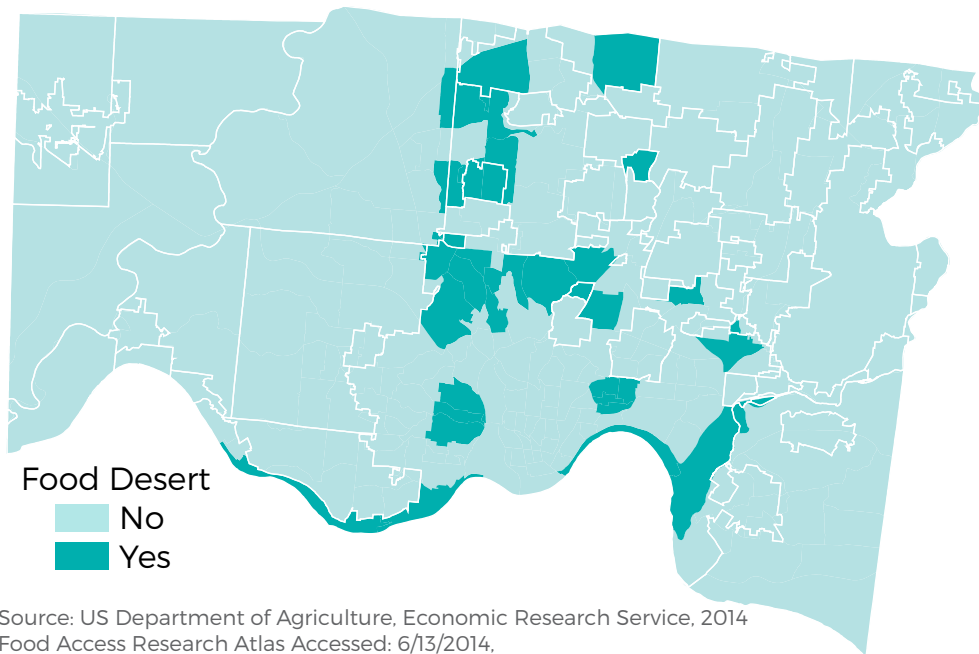Available: http://www.ers.usda.gov

DID YOU KNOW?

12%
Of Hamilton County residents lived in food deserts in 2010.

29%
Of Hamilton County residents who lived in food deserts in 2010 were living in poverty.

Food Desert
- No
- Yes

Source: US Department of Agriculture, Economic Research Service, 2014
Food Access Research Atlas Accessed: 6/13/2014,
Available: http://www.ers.usda.gov

As illustrated by the map to the left, there are areas within Hamilton County that are considered to be food deserts. Many of these areas also have high rates of individuals and children living in poverty.

The ability an individual has to access healthy food is also affected by one's poverty status. Healthy food is important to a nutritious healthy diet and good health. One way to determine the accessibility to healthy food is by looking at the modified Retail Food Environment Index (mRFEI). The mRFEI measures the number of healthy and less-healthy food within a census tract[13]. Healthy food retailers include supermarkets, produce stores or super-centers[13]. Less healthy food retailers include fast food restaurants and convenience stores[13]. The mRFEI is the percentage of food retailers in an area that are considered to be healthy.

As shown by the map to the right, there are areas within Hamilton County that have fewer healthy food retailers than others. The areas with the lowest percentage of healthy food retailers are also found to be the areas that are considered food deserts.

mRFEI Score
- 0%
- 1-7%
- 8-12%
- 13-19%
- 20-33%
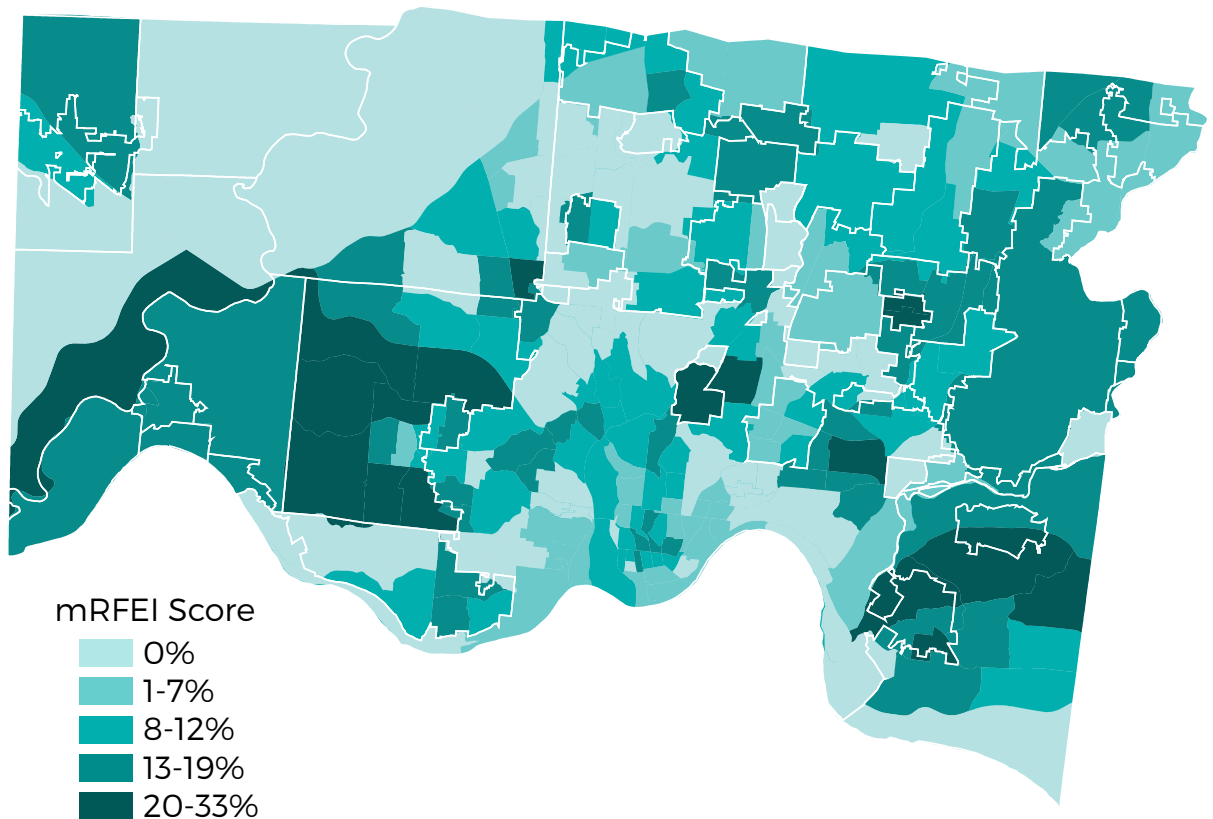
Source: Centers for Disease Control and Prevention, Overweight and Obesity, Children's Food Environment, 2011, Census Tract Level State Maps of the Modified Retail Food Environment index
Accessed: 5/26/2015, Available: http://www.cdc.gov/obesity/resources/reports.html

Where is my community?
To determine the location of your community, please refer to the map on page 4.

MORTALITY

Health outcomes can be influenced by many of the social factors previously discussed in this report (poverty, being uninsured, educational attainment, and where a person lives). These social factors can also adversely impact the rates of mortality in a community. Mortality rates are a powerful measure for assessing the overall health of a community. They are important because they provide a snapshot of health problems, identify potential patterns of risk within a community, and show trends in death over time[14]. Mortality rates also provide the opportunity to identify areas where premature death could have been prevented[14].

FYI | A mortality rate is the number of deaths per 10,000 residents.

Between 2010 and 2012, Hamilton County had a mortality rate from all causes of death of 94.8 per 10,000 residents. While this rate is from all causes of death, there are specific causes of death that have higher rates than others. The seven specific causes of death covered in this report are:

- Cancer
- Heart Disease
- Stroke
- Chronic Lower Respiratory Disease
- Accidents
- Suicides
- Homicides

Take a look below to see the mortality rates in Hamilton County for these seven specific causes of death from 2010-2012.
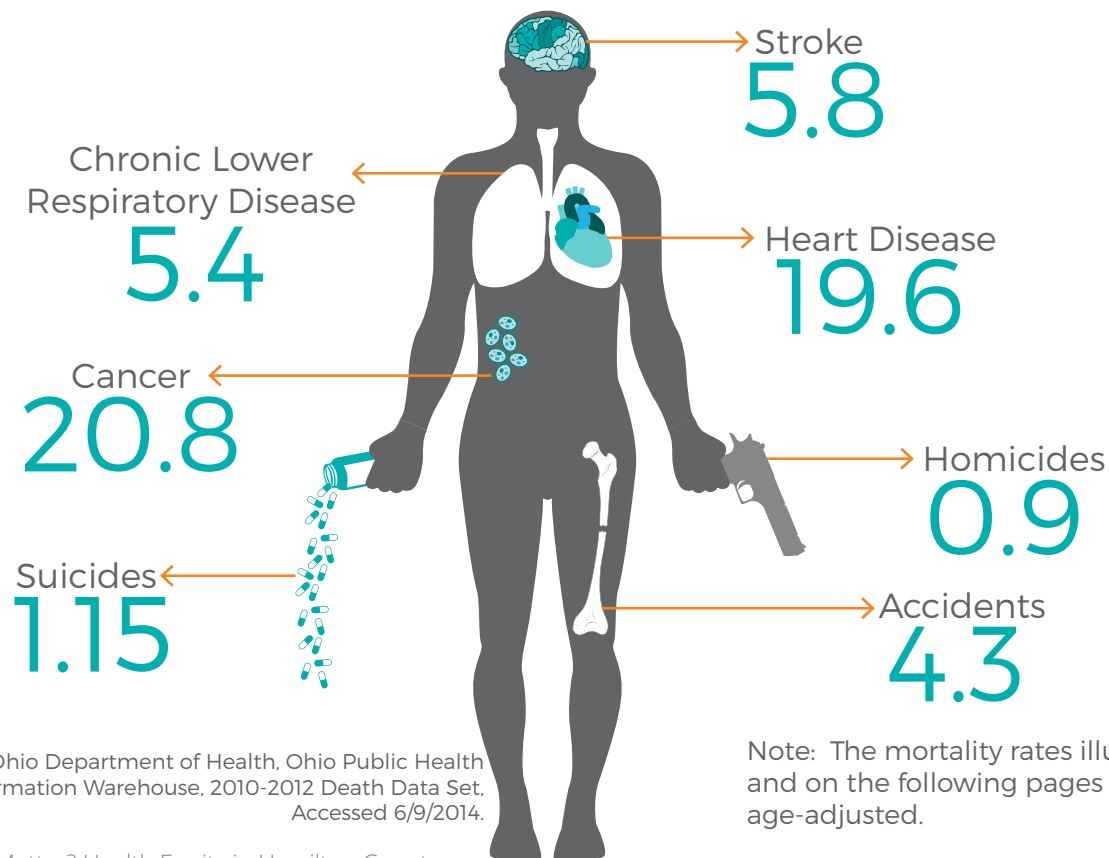
Stroke
5.8

Chronic Lower Respiratory Disease
5.4

Heart Disease
19.6

Cancer
20.8

Homicides
0.9

Suicides
1.15

Accidents
4.3

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.

Note: The mortality rates illustrated above and on the following pages have been age-adjusted.

Does Place Matter? Health Equity in Hamilton County

Page 20

As with many health indicators shown throughout this report, there are areas within Hamilton County that experience higher mortality rates. The map below shows the overall mortality rate from all causes.

Mortality Rate per
10,000 Residents
- 11.8-62.4
- 62.5-91.2
- 91.3-123.8
- 123.9-173.7
- 173.8-273.8

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.
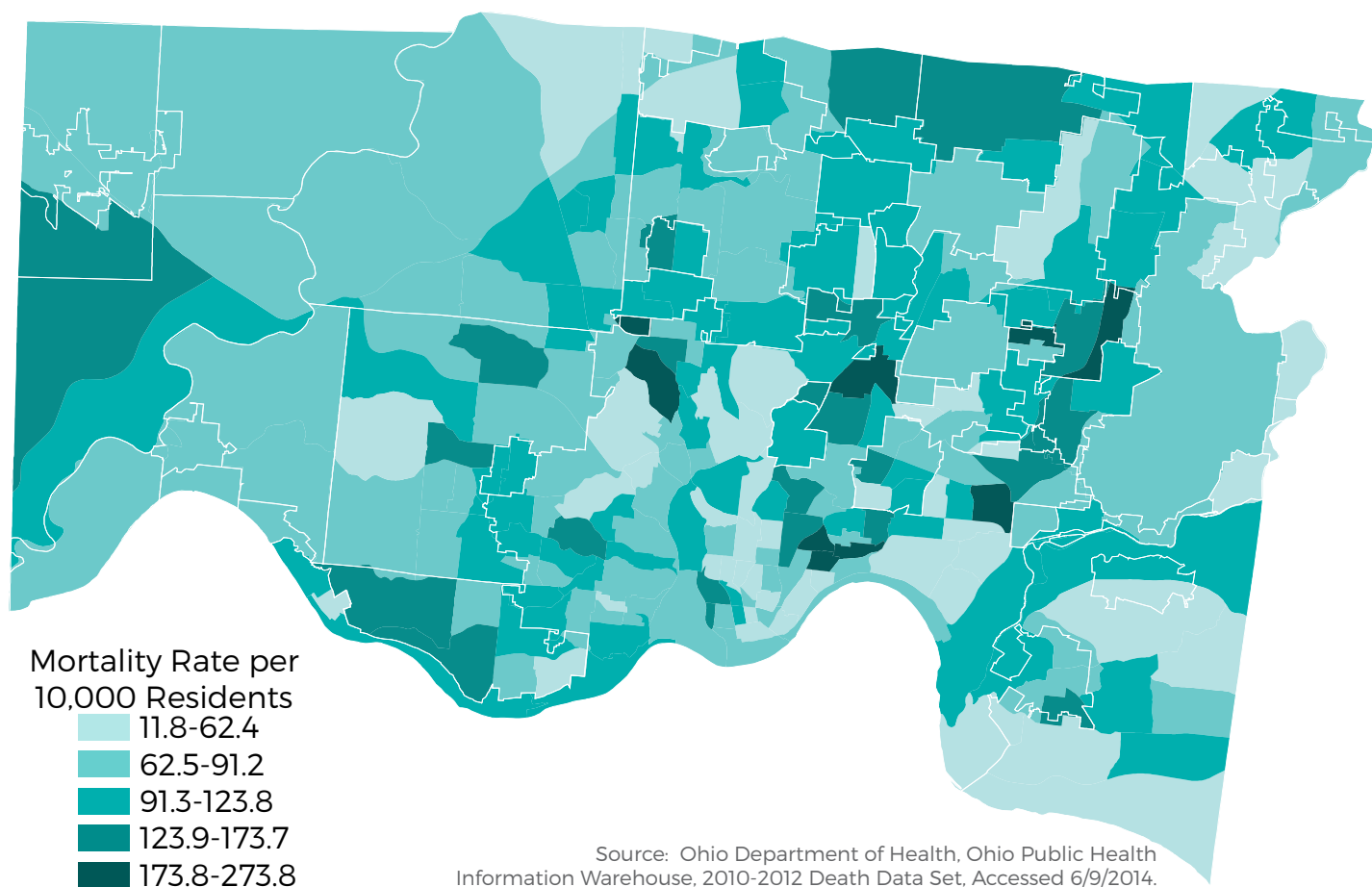
While mortality rates from all causes of death are distributed fairly uniformly across the County there are a few areas that have high mortality rates. It is important to note that areas that have higher elderly populations may experience higher overall mortality rates as a result of the aging population. To account for these differences and in order to make accurate comparisons between communities, the mortality rates were age-adjusted. Standardizing or age-adjusting the rates takes into account that some communities may have a larger population of elderly individuals, while some may have a larger population of younger individuals.

One type of mortality that can be impacted by age is cancer. Cancer is the second leading cause of death in the United States, and many cancer deaths can be prevented[14]. Cancer is the name that is given to describe over 100 different types of diseases[15]. While there are many

DID YOU KNOW?
BETWEEN 2010-2012:

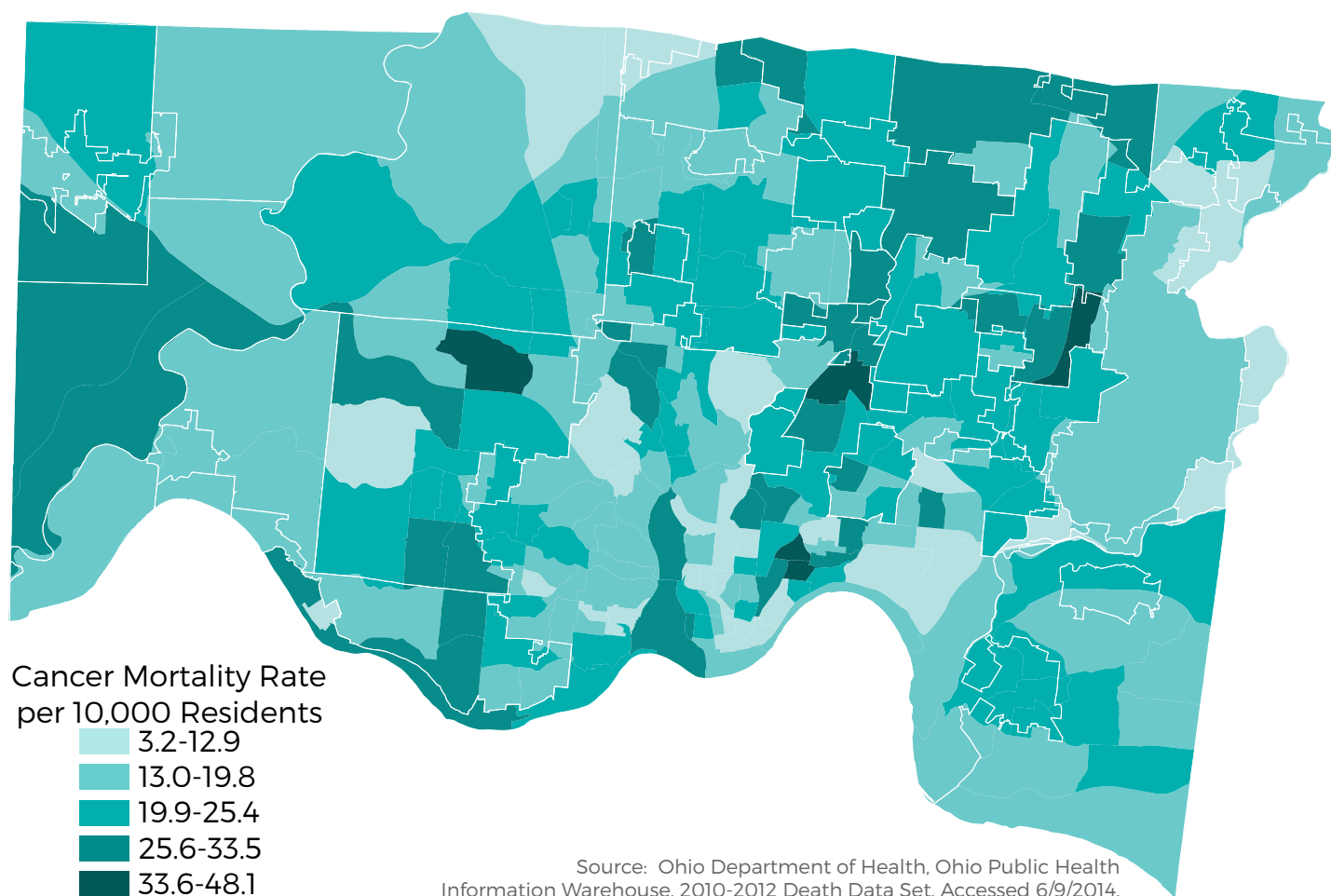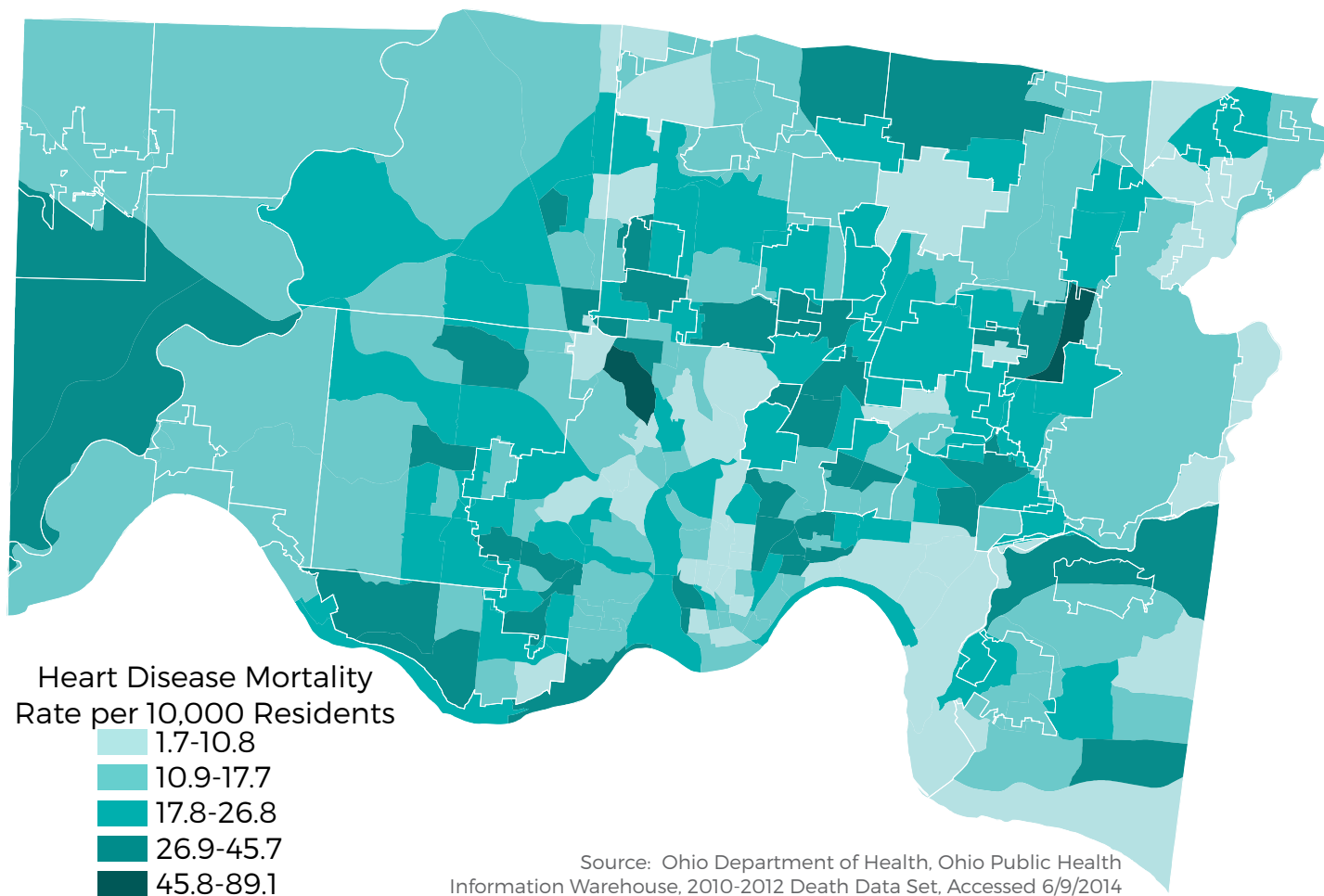**20** Hamilton County residents died **Every DAY**

different types of cancer, all cancers start the same way, and when left untreated can cause illness and even death[15]. The map below shows the distribution of deaths due to cancer in Hamilton County. These deaths are from all types of cancer.

Cancer Mortality Rate per 10,000 Residents

- 3.2-12.9
- 13.0-19.8
- 19.9-25.4
- 25.6-33.5
- 33.6-48.1

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.

As illustrated by the map above, cancer affects all parts of Hamilton County, however, there are areas affected by higher cancer mortality rates. An individual may become diagnosed with cancer for multiple reasons. Some cancer, such as breast cancer, can run in certain families and can be linked to genetics[16]. However, not all cancers are linked to the genes one inherits from his or her parents[16]. Other cancer, such as lung and oral cancer, can be caused by using tobacco products (cigarettes and smokeless tobacco)[16]. Many cancer deaths and new cancer cases can be reduced and prevented. Screening can help prevent deaths or advance of the disease by diagnosing early stage cancers and recommending individuals for treatment. Individuals can also reduce their risk for cancer by receiving regular medical care, avoiding tobacco, maintaining a healthy weight, and being physically active[17].

Individuals who are uninsured or living in poverty may be unable to access regular medical care or maintain a healthy lifestyle. This not only affects an individual's risk for developing cancer, but can also increase an individual's risk for heart disease. Heart disease is the general term that refers to several types of heart conditions. The most common type of heart disease in the United States is coronary artery disease, which can cause heart attacks and heart failure[18]. Heart disease can affect any individual, however, like cancer, heart disease predominately impacts the health of the older population. The map on the following page shows what areas within Hamilton County have the highest mortality rates due to heart disease.

The map below shows that, like cancer, heart disease affects all parts of Hamilton County. There are areas, however, that have higher rates of heart disease than others. Many of these areas with higher rates of heart disease are also the same areas affected by higher rates of cancer mortality. Heart disease can be caused by smoking, which includes secondhand smoke, an unhealthy diet that raises cholesterol, and/or blood pressure[19]. Much like cancer, heart disease can be detected through early screenings, and an individual can lower their risk by receiving regular medical care, avoiding tobacco, and maintaining a healthy lifestyle.

Heart Disease Mortality
Rate per 10,000 Residents
1.7-10.8
10.9-17.7
17.8-26.8
26.9-45.7
45.8-89.1

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014

An individual who is diagnosed with heart disease may also be at an increased risk for stroke. Strokes are the fifth leading cause of death in the United States and a major cause of disability in adults[20]. Anyone can have a stroke, however, the older an individual is the more likely they are to have a stroke. The chance of having a stroke doubles every 10 years after the age of 55[21]. As with cancer and heart disease, there are areas within Hamilton County that experience higher rates of death from stroke. The map on the following page shows the distribution of deaths from a stroke.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

Does Place Matter? Health Equity in Hamilton County

Overall, Hamilton County has low rates of death due to stroke. The areas affected by high rates of stroke mortality also have some of the highest mortality rates due to cancer, and heart disease. Heart disease is, however, a significant risk factor associated with stroke. Being aware of the signs and symptoms of a stroke can help prevent death and disability. Strokes can be prevented by making healthy choices, such as not smoking, being physically active and eating healthy.

Stroke Mortality Rate per 10,000 Residents
- 0.0-2.8
- 2.9-6.0
- 6.1-10.0
- 10.1-16.2
- 16.3-32.4

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.
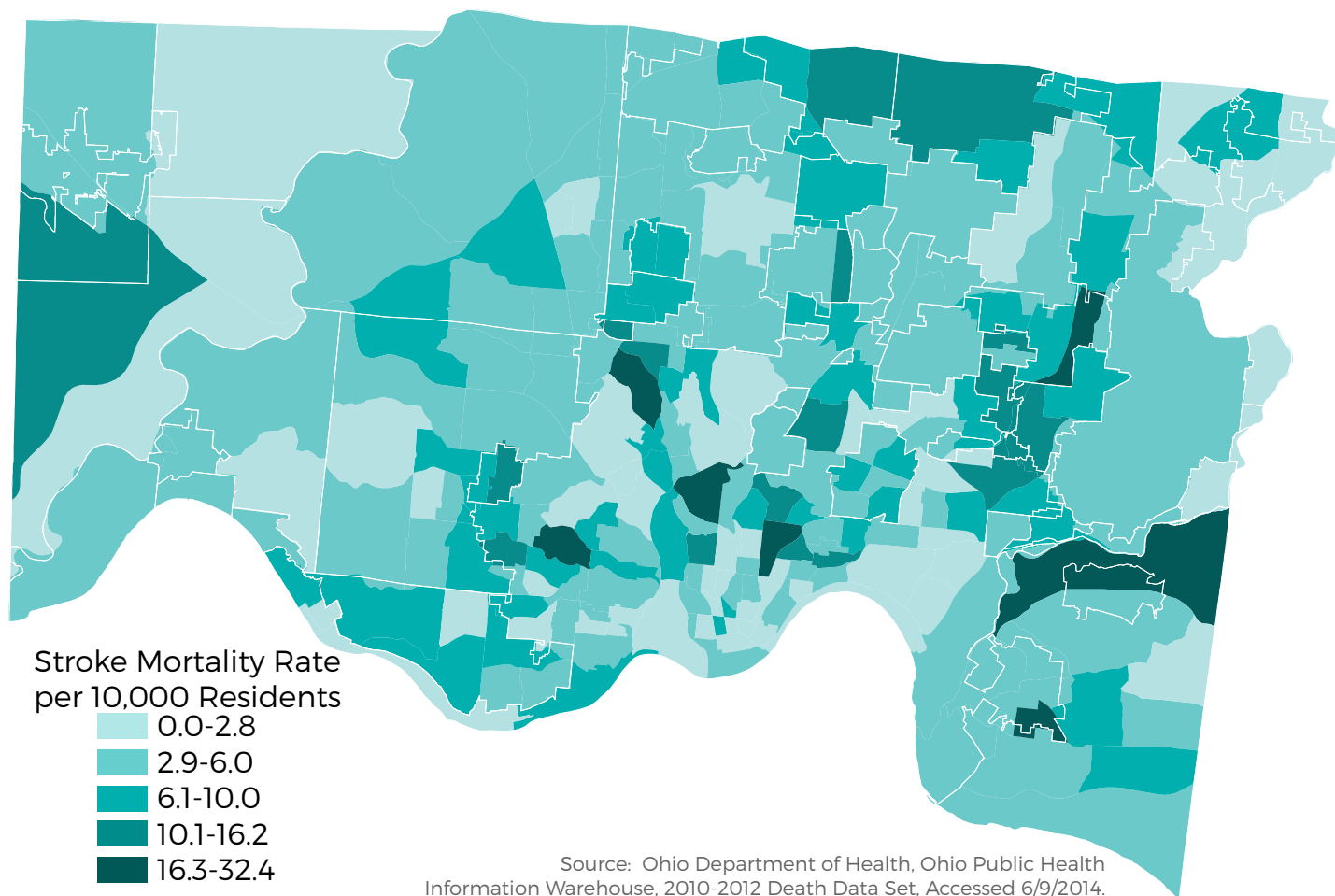
Hamilton County also has a low overall rate of deaths due to chronic lower respiratory diseases. Chronic lower respiratory diseases that affect lungs and include asthma, bronchitis, and chronic obstructive pulmonary disease (COPD)[22]. As with many health conditions, an individual who is uninsured or living in poverty may be unable to seek medical treatment for their condition. When left untreated, chronic lower respiratory diseases can eventually lead to death. The map on the following page shows the areas in Hamilton County that have the highest rates of death due to chronic lower respiratory diseases.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

Certain areas within Hamilton County have more residents dying from chronic lower respiratory diseases. The areas that experience high mortality rates due to chronic lower respiratory diseases are those areas that experience higher mortality rates due to cancer, heart disease and stroke. There are ways an individual can reduce their risk for a chronic lower respiratory disease. Cigarette smoking is the main cause of many chronic lower respiratory diseases, including the most deadly, COPD[22]. By not smoking, or avoiding secondhand smoke an individual can reduce his/her risk for COPD, or even prevent the disease from occurring[23].

Chronic Lower Respiratory
Diseases Mortality Rate
per 10,000 Residents

- 0.0-2.4
- 2.5-5.3
- 5.4-8.4
- 8.5-14.3
- 14.4-30.7

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.
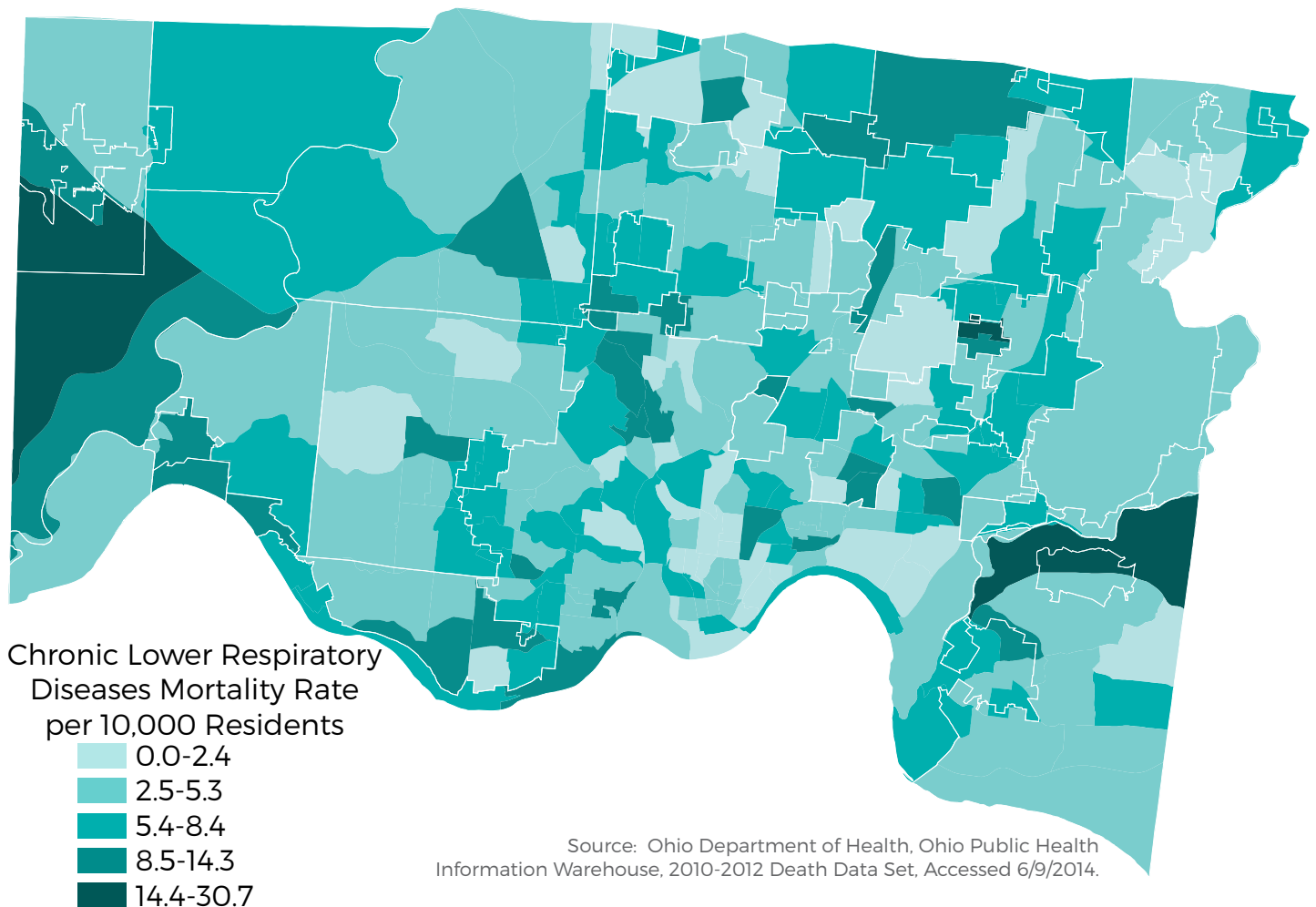
Deaths that occur as a result of accidents (often referred to as unintentional injuries) are another important cause of mortality. Accidents can be predictable and preventable when proper safety precautions are taken[23]. Accidents affect everyone, regardless of age, race, or economic status. The most common types of accidents are falls and motor vehicle accidents. However, there are many more types of accidents that can and do occur, such as drownings, poisonings, and being struck by an object. The map on the following page shows the distribution of death due to all types of accidents in Hamilton County.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

**Accident Mortality Rate
per 10,000 Residents**

- 0.0-2.4
- 2.5-4.8
- 4.9-7.7
- 7.8-13.2
- 13.3-36.8

Source: Ohio Department of Health, Ohio Public Health
Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.
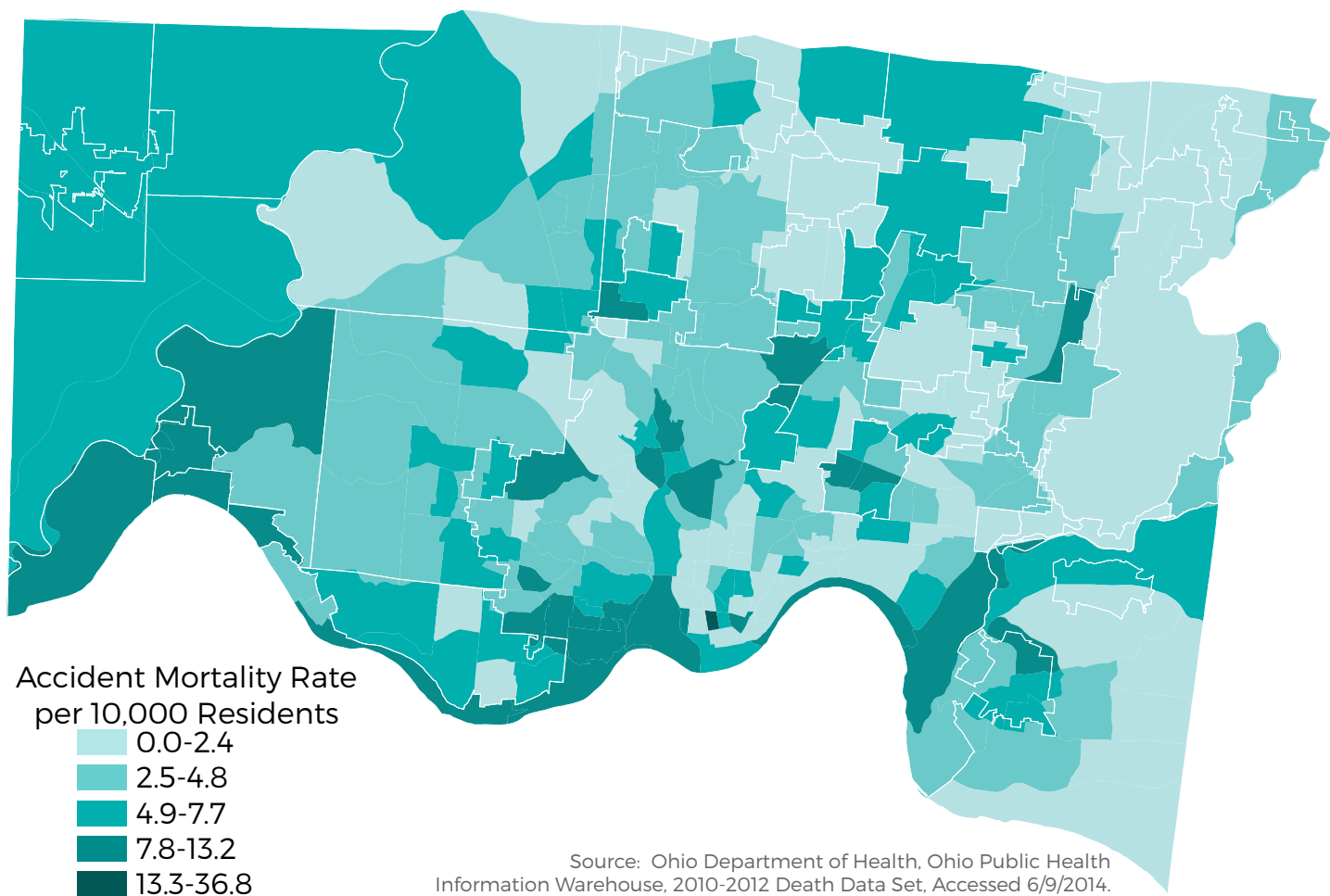
As can be seen from the map above, deaths due to accidents are spread throughout the county. Overall, Hamilton County has a low number of deaths due to accidents each year. However, these are still preventable deaths. Preventing deaths due to accidents can be done through education initiatives, such as how to prevent falls from occurring or safe driving techniques or interventions like in-home risk assessments and subsequent home modifications.

While accidents are considered to be unintentional, many deaths that are considered to be intentional also occur in Hamilton County every year; e.g. suicides and homicides. Suicides are a serious public health problem that can have lasting harmful effects on individuals, families and communities[24]. Suicide rates vary by age group and reasons for suicide are complex. A combination of individual, relational, community, and societal factors contribute to the risk of suicide[25]. Suicide is the 10th leading cause of death in the United States, and it's estimated that more than 1 million people reported making a suicide attempt in 2012[26]. As illustrated by the map on the following page, some communities in Hamilton County experience higher rates of suicide than others.

As can be seen by the map below, there are areas within Hamilton County that have no suicide deaths, while other areas have higher rates of suicides. While Hamilton County has a low overall number of suicide deaths each year, there are still many individuals who have attempted suicide or have expressed suicidal ideations that go unreported.

Suicide Mortality Rate per 10,000 Residents

- 0.0
- 0.1-1.0
- 1.1-1.8
- 1.9-3.2
- 3.3-6.2

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014.

Homicides, like suicides, are a serious public health problem and can have lasting effects on communities. Homicide is an extreme outcome of the broader public health problem of interpersonal violence[27]. Homicide can have profound long-term emotional consequences on families and friends of victims and witnesses to the violence, as well as cause excessive economic costs to residents of affected communities[28]. The map on the following page shows the distribution of homicide deaths in Hamilton County.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

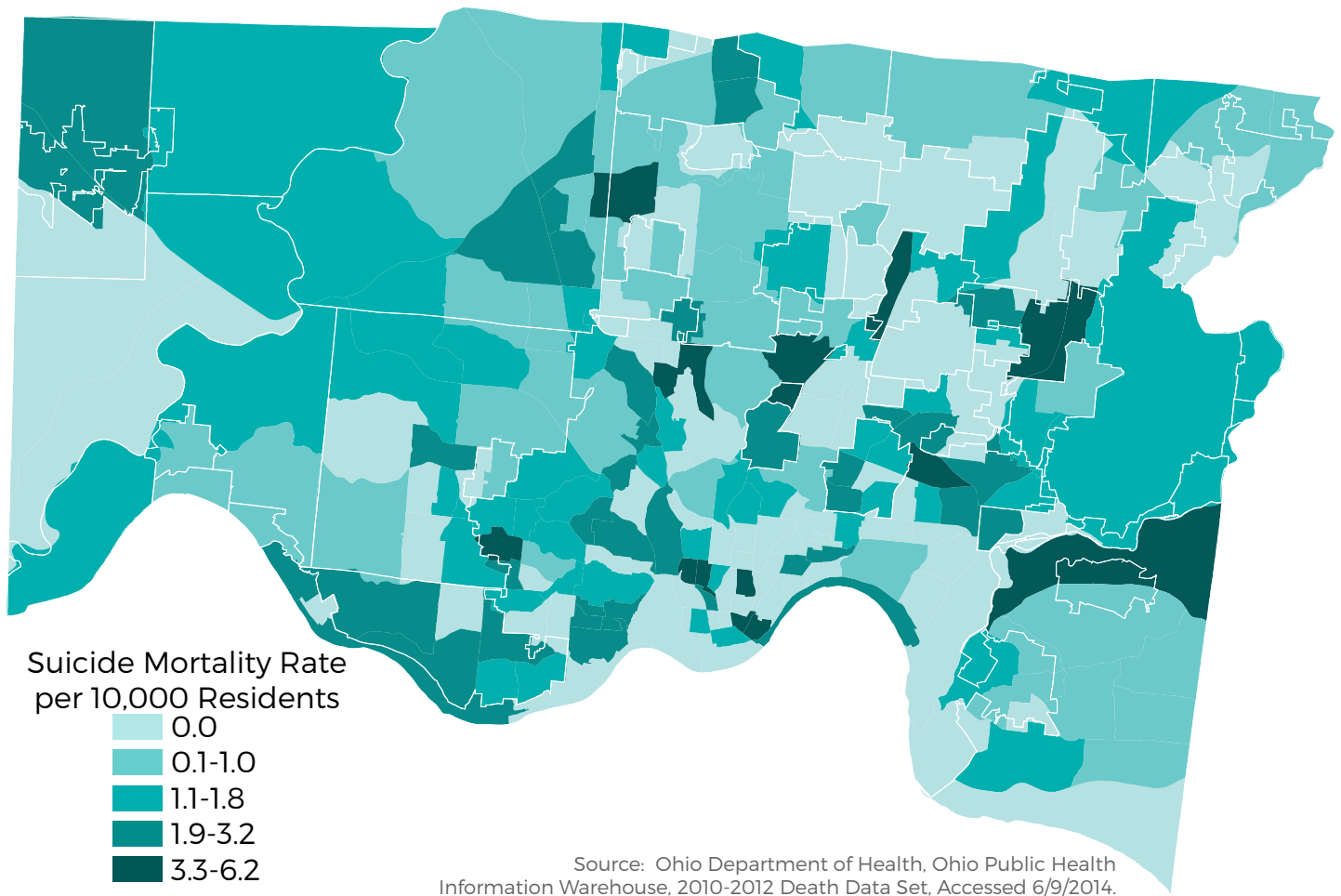Does Place Matter? Health Equity in Hamilton County

Homicide Mortality Rate per 10,000 Residents

- 0.0-0.5
- 0.6-1.6
- 1.7-3.1
- 3.2-5.8
- 5.9-9.8

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2010-2012 Death Data Set, Accessed 6/9/2014

As illustrated by the map above, many of the homicide deaths occurred among residents from in and around urban areas within Hamilton County. The areas with the highest rates of homicide, also have the highest rates of individuals and children living in poverty, and the largest percentage of residents who are uninsured. These social and economic factors play a substantial role in the homicide disparities by geographic area[28]. Areas within a community that "have high levels of poverty, unemployment, and jobs with low wages can increase the risk of income-generating crimes such as burglary and robbery, stress and conflict, and substance abuse among residents, all factors that increase the risk for homicide[29]."

DID YOU KNOW?
BETWEEN 2010-2012:

EVERY **4** Days

1 Person died by homicide in Hamilton County.

Where is my community?
To determine the location of your community, please refer to the map on page 4.

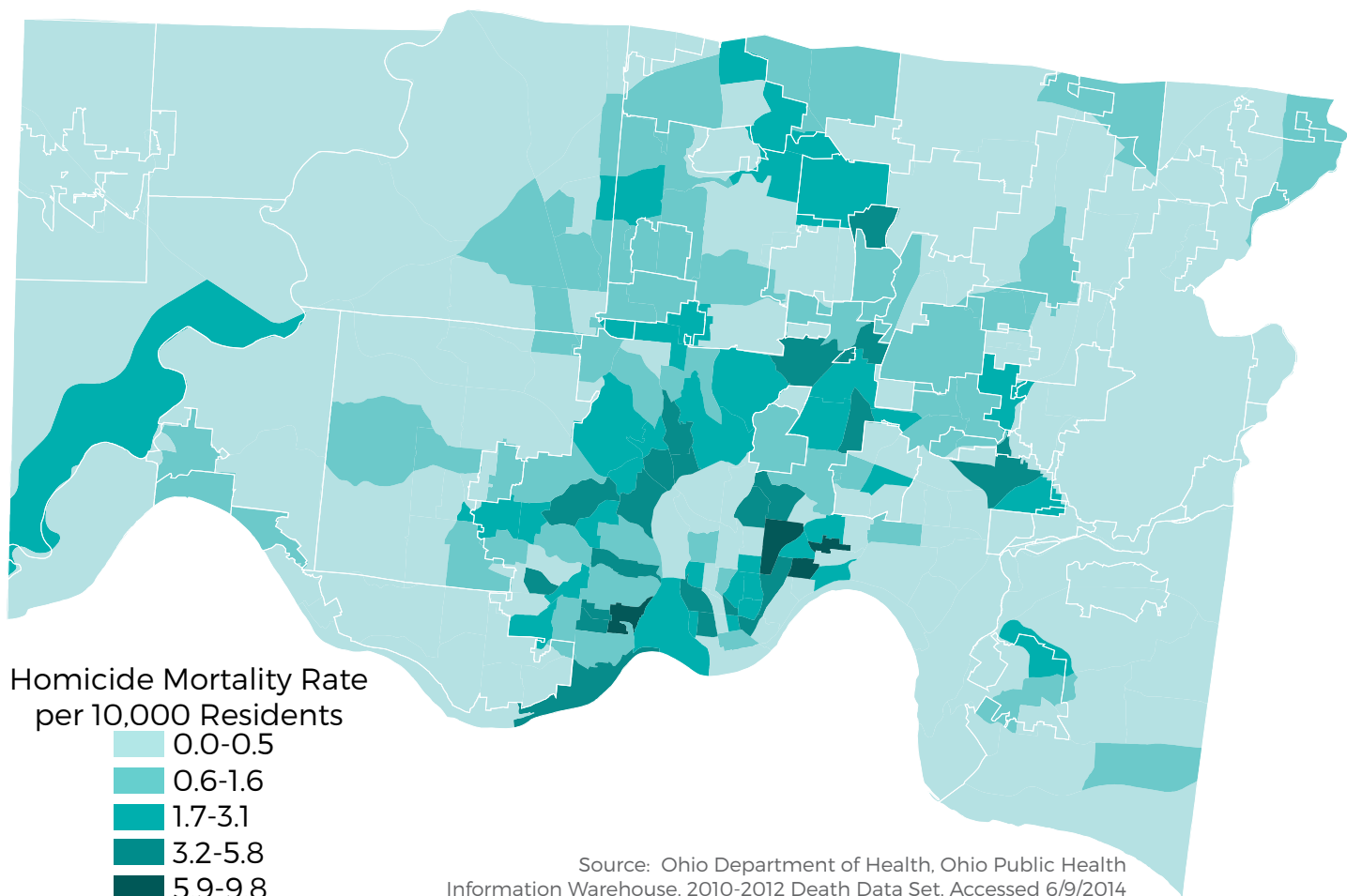Does Place Matter? Health Equity in Hamilton County

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INFANT MORTALITY

While the mortality rates presented thus far provide a snapshot of health issues that impact communities, infant mortality is a very specific type of mortality that is often considered to be one of the most important indicators of the overall health and well-being of a community. This is because factors that affect the health of the community as a whole can also greatly impact the rate at which infants die within a community[30]. Infant mortality is often associated with other factors such as maternal health, access to and quality of health care, socioeconomic conditions, and public health practices. Infant mortality is defined by the Centers for Disease Control and Prevention (CDC) as the "death of a baby before his or her first birthday[30]." An infant mortality rate is the number of infant deaths for every 1,000 live births during a period of time.

While infant mortality is one of the most important health indicators for a community, an infant mortality rate is highly sensitive to changes in the number of live births within a community. This is often the case when the size of the population within a given community is relatively small. For example, for a community that experiences several infant deaths during a given year, but also only saw a small number of births during that same year, the infant mortality rate may be elevated. Also, when the typical number of infant deaths in a community is small (fewer than 20 deaths), it may be difficult to distinguish a random fluctuation in the number of deaths from true changes in the underlying risk for the community. This is because small changes in the number of deaths may result in large changes in the corresponding infant mortality rate. This is otherwise known as an unreliable or unsteady rate. Therefore, while it is important to show where infant deaths are occurring within a community, infant mortality rates derived from a small number (fewer than 20) of births and/or deaths should be interpreted with caution. As many of the infant mortality rates for the communities within Hamilton County would suffer from this limitation, infant deaths and corresponding infant mortality rates are presented differently from other data presented thus far in this report.

10.0 per 1,000

Hamilton County Infant Mortality Rate, 2010-2012

DID YOU KNOW?
BETWEEN 2010-2012:

1 Infant died in Hamilton County

EVERY 3 Days

From 2010-2012, Hamilton County lost 331 babies before their first birthday. This equates to an infant mortality rate for Hamilton County of 10.0 per 1,000 live births for this period. Ham-

ilton County has had one of the worst infant mortality rates in the state of Ohio, while Ohio had one of the worst infant mortality rates in the United States. From 2010-2012 in the City of Cincinnati, there were 194 infant deaths which resulted in an infant mortality rate of 11.7 per 1,000 live births. The table below shows the number of infant deaths and live births in each
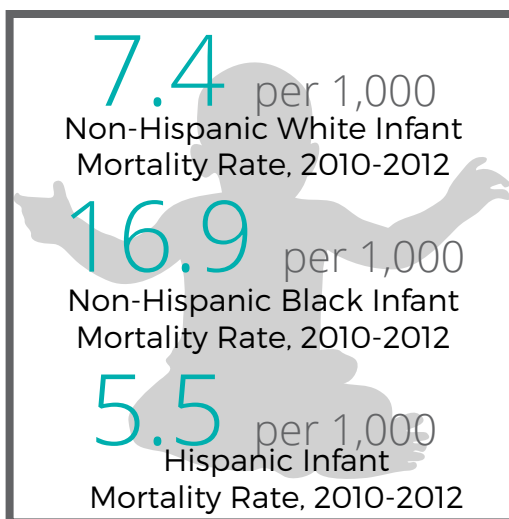
Community	Number of Infant Deaths	Number of Live Births
Addyston	0	51
Amberley Village	0	120
Anderson Township	9	1,084
Arlington Heights	0	33
Blue Ash	2	335
Cheviot	2	407
Cincinnati	194	16,511
Cleves	3	252
Colerain Township	26	2,010
Columbia Township	0	67
Crosby Township	0	65
Deer Park	3	272
Delhi Township	6	510
Elmwood Place	1	106
Evendale	0	60
Fairfax	0	63
Forest Park	9	837
Glendale	0	45
Golf Manor	4	153
Green Township	12	1,886
Greenhills	0	155
Harrison	5	503
Harrison Township	0	53
Indian Hill	0	70

Community	Number of Infant Deaths	Number of Live Births
Lincoln Heights	3	158
Lockland	5	181
Loveland	4	403
Madeira	0	285
Mariemont	0	142
Miami Township	0	174
Montgomery	0	225
Mount Healthy	1	296
Newtown	0	94
North Bend	0	53
North College Hill	7	377
Norwood	6	858
Reading	2	500
Saint Bernard	2	180
Sharonville	1	482
Silverton	0	180
Springdale	4	538
Springfield Township	12	856
Sycamore Township	3	439
Symmes Township	1	210
Terrace Park	0	43
Whitewater Township	3	105
Woodlawn	1	101
Wyoming	0	196

community in Hamilton County from 2010-2012.

As shown from the table above, over half of the communities in Hamilton County experienced the loss of one or more of its infants during 2010-2012. The City of Cincinnati has the largest number of infant deaths among the Hamilton County communities, however, this is not uncommon as the City of Cincinnati also has a large number of births every year. An increase in the number of infant deaths may not be unexpected if there is also an increase in the overall number of babies born.

While there are communities in Hamilton County that have disparities in infant mortality, there is a larger dispar-

7.4 per 1,000
Non-Hispanic White Infant Mortality Rate, 2010-2012

16.9 per 1,000
Non-Hispanic Black Infant Mortality Rate, 2010-2012

5.5 per 1,000
Hispanic Infant Mortality Rate, 2010-2012

ity when race/ethnicity is taken into consideration. In Hamilton County from 2010-2012, the infant mortality rate for non-Hispanic black babies (16.9 per 1,000 live births) was 2.3 times higher than that for non-Hispanic white babies (7.4 per 1,000 live births) and 3 times higher than the infant mortality rate for Hispanic babies (5.5 per 1,000 live births) . The table below and on the following pages show the disparities between non-Hispanic white, non-Hispanic black, and Hispanic infant deaths by Hamilton County Community.

Community	non-Hispanic White		Community	non-Hispanic White	
	Number of Infant Death	Number of Live Births		Number of Infant Death	Number of Live Births
Addyston	0	43	Lincoln Heights	0	5
Amberley Village	0	105	Lockland	4	98
Anderson Township	9	970	Loveland	1	344
Arlington Heights	0	23	Madeira	0	260
Blue Ash	0	222	Mariemont	0	128
Cheviot	1	336	Miami Township	0	171
Cincinnati	45	6,615	Montgomery	0	183
Cleves	3	232	Mount Healthy	1	146
Colerain Township	17	1,388	Newtown	0	81
Columbia Township	0	50	North Bend	0	49
Crosby Township	0	64	North College Hill	1	154
Deer Park	3	249	Norwood	6	686
Delhi Township	6	488	Reading	2	373
Elmwood Place	1	82	Saint Bernard	2	140
Evendale	0	50	Sharonville	0	314
Fairfax	0	59	Silverton	0	98
Forest Park	1	153	Springdale	0	141
Glendale	0	40	Springfield Township	3	464
Golf Manor	0	54	Sycamore Township	3	353
Green Township	12	1,715	Symmes Township	1	167
Greenhills	0	133	Terrace Park	0	42
Harrison	5	478	Whitewater Township	3	96
Harrison Township	0	51	Woodlawn	0	23
Indian Hill	0	61	Wyoming	0	157

As shown from the table above, there are communities in Hamilton County that had higher numbers of infant deaths to non-Hispanic white babies during 2010-2012. The City of Cincinnati had the largest number of non-Hispanic white infant deaths among the Hamilton County communities. However, this is not uncommon as the City of Cincinnati also had the largest number of non-Hispanic White births every year.

When we look at non-Hispanic Black infant deaths among Hamilton County communities, we see the racial/ethnic disparities increase. The table on the following page shows there are communities in Hamilton County that had higher numbers of infant deaths to non-Hispanic black babies during 2010-2012. While the number of non-Hispanic black infant deaths is

smaller than the number of non-Hispanic white infant deaths, the rate at which non-Hispanic black infants died in relation to the number of births to non-Hispanic black infants was higher than that of non-Hispanic White infants. The City of Cincinnati has the largest number of non-Hispanic black infant deaths among the Hamilton County communities. However, this not surprising as the City of Cincinnati also has the largest number of non-Hispanic black births each year.

| Community | non-Hispanic Black | | Community | non-Hispanic Black | |
	Number of Infant Death	Number of Live Births		Number of Infant Death	Number of Live Births
Addyston	0	4	Lincoln Heights	3	143
Amberley Village	0	5	Lockland	1	57
Anderson Township	0	21	Loveland	1	9
Arlington Heights	0	8	Madeira	0	2
Blue Ash	2	29	Mariemont	0	4
Cheviot	0	44	Miami Township	0	2
Cincinnati	139	8,077	Montgomery	0	6
Cleves	0	4	Mount Healthy	0	128
Colerain Township	8	430	Newtown	0	0
Columbia Township	0	15	North Bend	0	1
Crosby Township	0	0	North College Hill	6	200
Deer Park	0	6	Norwood	0	68
Delhi Township	0	3	Reading	0	68
Elmwood Place	0	16	Saint Bernard	0	26
Evendale	0	4	Sharonville	1	62
Fairfax	0	1	Silverton	0	64
Forest Park	8	509	Springdale	3	124
Glendale	0	4	Springfield Township	9	332
Golf Manor	4	90	Sycamore Township	0	16
Green Township	0	77	Symmes Township	0	8
Greenhills	0	9	Terrace Park	0	0
Harrison	0	4	Whitewater Township	0	0
Harrison Township	0	0	Woodlawn	0	59
Indian Hill	0	0	Wyoming	0	29

When we look at Hispanic infant deaths among Hamilton County communities we see the racial/ethnic disparities increase further. The table on the following page shows there are communities in Hamilton County that had higher numbers of infant deaths to Hispanic babies during 2010-2012. However, while there are few communities that had infant deaths to Hispanic babies, a majority of Hamilton County communities witnessed no infant deaths to Hispanic babies. The rate at which Hispanic infants die in Hamilton County was lower than both non-Hispanic black infants and non-Hispanic white infants. The City of Cincinnati had the largest number of Hispanic infant deaths among Hamilton County communities. However, this is not surprising as the City of Cincinnati also has the largest number of Hispanic births each year.

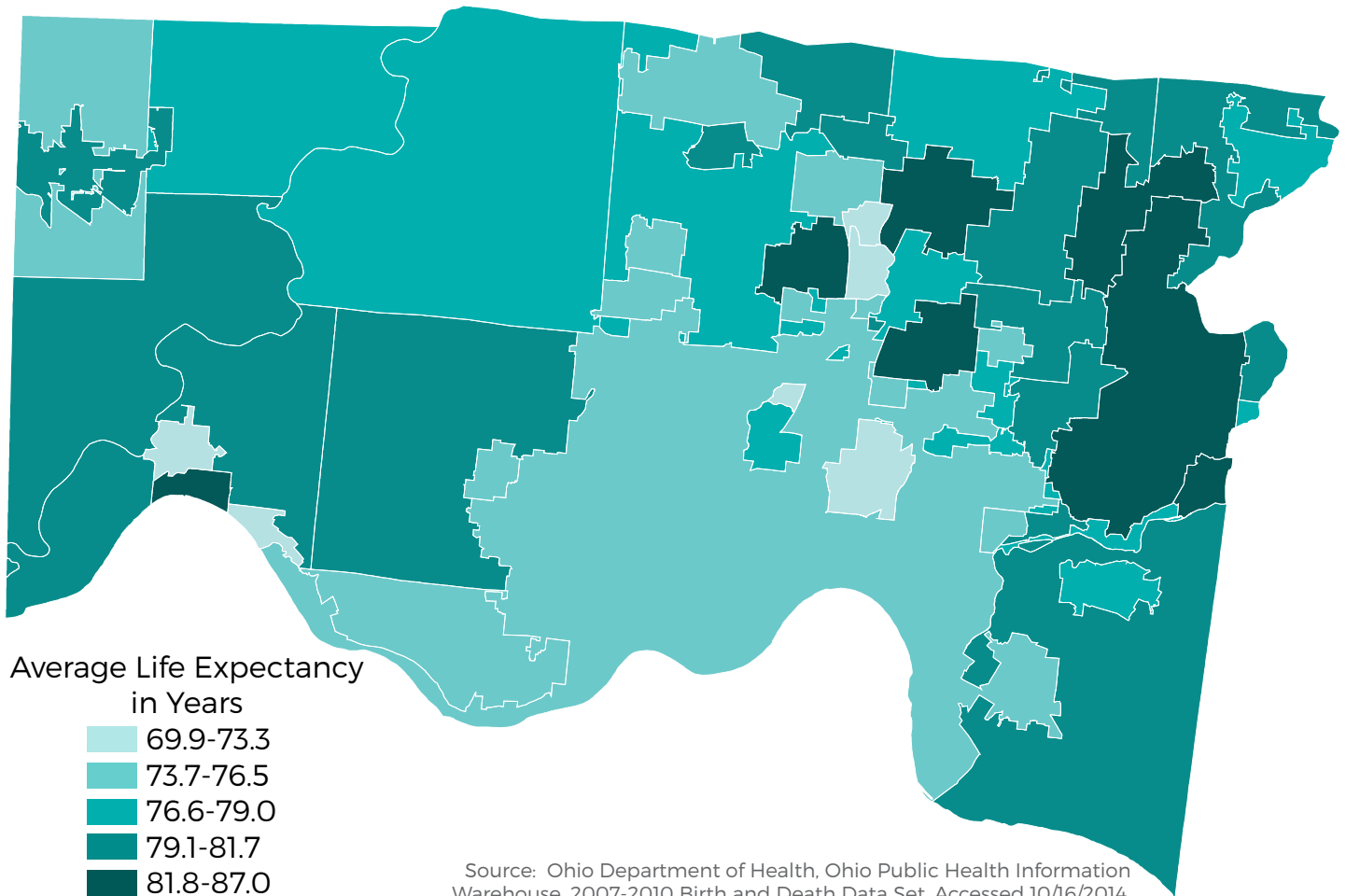| Community | Hispanic | | Community | Hispanic | |
	Number of Infant Death	Number of Live Births		Number of Infant Death	Number of Live Births
Addyston	0	3	Lincoln Heights	0	2
Amberley Village	0	2	Lockland	0	19
Anderson Township	0	28	Loveland	2	16
Arlington Heights	0	2	Madeira	0	8
Blue Ash	0	6	Mariemont	0	7
Cheviot	0	9	Miami Township	0	0
Cincinnati	4	800	Montgomery	0	9
Cleves	0	9	Mount Healthy	0	7
Colerain Township	1	77	Newtown	0	2
Columbia Township	0	1	North Bend	0	1
Crosby Township	0	0	North College Hill	0	4
Deer Park	0	11	Norwood	0	75
Delhi Township	0	2	Reading	0	14
Elmwood Place	0	5	Saint Bernard	0	5
Evendale	0	1	Sharonville	0	42
Fairfax	0	1	Silverton	0	5
Forest Park	0	123	Springdale	1	227
Glendale	0	1	Springfield Township	0	21
Golf Manor	0	1	Sycamore Township	0	23
Green Township	0	29	Symmes Township	0	13
Greenhills	0	2	Terrace Park	0	0
Harrison	0	0	Whitewater Township	0	4
Harrison Township	0	0	Woodlawn	0	9
Indian Hill	0	2	Wyoming	1	4

Infant mortality is not only a problem in Hamilton County, but also in the state of Ohio. Hamilton County is on the forefront of working to reduce the infant mortality disparities around the county with projects taking place both within the City of Cincinnati and County-wide. For more in-depth reports on monitoring infant mortality in Hamilton County, check out our resource library online by following the link found on page 35 of this report.

Note: Community specific infant mortality rates are not presented due to unstable rates being based on less than 20 cases. Number of infant deaths and number of live births are race/ethnicity specific. Each infant death was individually verified against a local Hamilton County and a US Census address search tool for appropriate placement within the county. Latitude and longitude coordinates provided by the Ohio Department of Health in the birth data file were used to appropriately place each birth within the County.

LIFE EXPECTANCY

Throughout this report, various health outcomes, and socioeconomic indicators have been presented. Each is important and can impact the overall health of a community in different ways. However, all of the indicators work together to collectively impact the average life expectancy of an individual. Average life expectancy is the estimated number of years an individual would expect to live, if they were born today, based on mortality statistics. Life expectancy is an important indicator of the overall health of a community when compared to other areas. This is important because life expectancy summarizes the mortality patterns that prevail across all age groups[31]. In 2010, the average life expectancy in Hamilton County was 77.3 years with a range of 69.9 to 87.0 years. Within Hamilton County, there are communities that have higher average life expectancy than others. This can be seen in the map below that shows the average life expectancy across Hamilton County communities.

77.3 Average Life Expectancy in 2010 Hamilton County

Average Life Expectancy in Years
- 69.9-73.3
- 73.7-76.5
- 76.6-79.0
- 79.1-81.7
- 81.8-87.0

Source: Ohio Department of Health, Ohio Public Health Information Warehouse, 2007-2010 Birth and Death Data Set, Accessed 10/16/2014.

While some communities have a lower life expectancy than others, it is important to keep in mind that many factors can influence and impact an individual's life expectancy. Factors such as access to health care, healthy lifestyle, and disease occurrence all have an impact on the life expectancy of an individual. With the help of improved medical and public health practice, life expectancy has dramatically increased during the 20th century[32]. However,

while life expectancy has been increasing, individuals living in poverty, and those living in poor communities, tend to have shorter life expectancies.

The information presented throughout this report shows the connections between health outcomes, socioeconomic status, and life expectancy and where disparities among these indicators exist within Hamilton County. In order to achieve health equity, targeted interventions and policy change are needed. Otherwise the disparities among communities will only increase. Hamilton County Public Health hope that this report will serve as a tool that can be used to inform and empower community change to improve upon health equity in Hamilton County.

"Knowledge is power.
With it you can create a healthier life for your community."

WANT TO LEARN MORE ABOUT HEALTH IN HAMILTON COUNTY?

Check out additional reports about the health in Hamilton County by visiting us online at:

www.hamiltoncountyhealth.org/en/resource_library/reports.html

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"Reducing health inequities is important because health is a fundamental human right and its progressive realization will eliminate inequalities that result from differences in health status in the opportunity to enjoy life and pursue one's life plans."

-The World Health Organization-

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