Colerain Township Does Place Matter? A Community Health Assessment March 2017



An initiative of



PREVENT. PROMOTE. PROTECT.



This report was prepared by Hamilton County Public Health, Department of Community Health Services.

Hamilton County Public Health Staff Timothy Ingram, Health Commissioner Craig Davidson, M.S., R.S. Assistant Health Commissioner David Carlson. MPH. Director of Epidemiology & Assessment Thomas Boeshart, MPH, Senior Epidemiologist Alexis Grimes Trotter, MPH, Epidemiologist Kevin Strobino, MPH, Epidemiologist Rebecca Stowe, M.Ed., MCHES Director of Health Promotion & Education Kim Chelf. MPH. CHES. Health Educator Mary Ellen Kramer, MPH, MCHES, Senior Health Educator Hannah Smith, MS, Health Educator Mike Samet. Public Information Officer For questions regarding this report, contact: David Carlson Director of Epidemiology & Assessment

david.carlson@hamilton-co.org

For questions regarding WeTHRIVE!, contact:

Kim Chelf Health Educator Hamilton County Public Health 513-946-7820 kimberly.chelf@hamilton-co.org

Hamilton County Public Health

513-946-7933

Special thanks to Colerain Township for their contribution to this report.

All material in this report is in the public domain and may be used and reprinted without special permission. Citation as to source, however, is appreciated.

TABLE OF CONTENTS

Introduction	1
Technical Notes	2
Community Context	3
Educational Attainment	5
Economic Stability	7
Neighborhood and Built Environment	0
Healthcare and Health Outcomes	4
Appendix	19

INTRODUCTION

One of the fundamental principles of public health is that all people have a right to good 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.

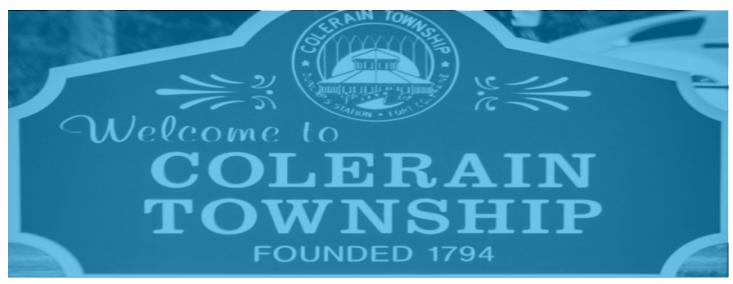
This report includes the following indicators and/or topics of relevance to health equity in Colerain Township, Ohio:

- Community Context
- Economic Stability
- Educational Attainment
- Neighborhood and Built Environment
- Health and Healthcare Outcomes

This report provides a starting point to guide you in making lasting 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.

Understanding a problem is the first step to providing solutions. While we have 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.

Mortality, cancer 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".



TECHNICAL NOTES

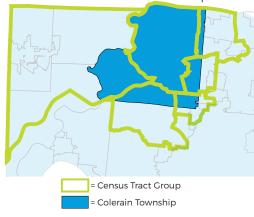
Geography

Data presented throughout this report are presented at a community level, however, there are instances in which data were not available, or could not be calculated at a community level. As such, these indicators include residents from neighboring communities who share the same ZIP code(s) and/or census tract groups as your community. Below are two maps that illustrate the neighboring communities that share the same ZIP code(s) and census tract groups with your community.

ZIP Codes for Colerain Township



Census Tract Groups for Colerain Township



Data Sources/Time Frames

Data presented throughout this report are presented for different periods of time; time periods are noted throughout the report. This is due to availability of the most recently finalized datasets. Single year estimates for Census data are not available from the U.S. Census Bureau for most sub-county jurisdictions. Therefore, the American Community Survey (ACS) 5-year estimates were used for calculating certain statistics/estimate for individual years. Data for the indicators in this report were obtained from the following sources: United States Census Bureau, Ohio Department of Health (ODH), Ohio Department of Education, Ohio Department of Public Safety, Hamilton County Job and Family Services and Hamilton County Public Health. Hamilton County comparison data are presented in the tables at the end of this report. Additional data about your community that does not fit into one of the sections of the report are presented in the data tables. The assets and opportunity audit was completed on 02/22/2016 and 03/24/2016 (9:00 a.m.-12:00 p.m.).

Terminology

For an explanation of common terminology used throughout this report, please reference the common terminology on page xx of the Appendix of this report.

Small Numbers

It should be noted that some statistics regarding disease/ injury in Colerain Township are based on a small number of cases and should be interpreted with caution, as it may be

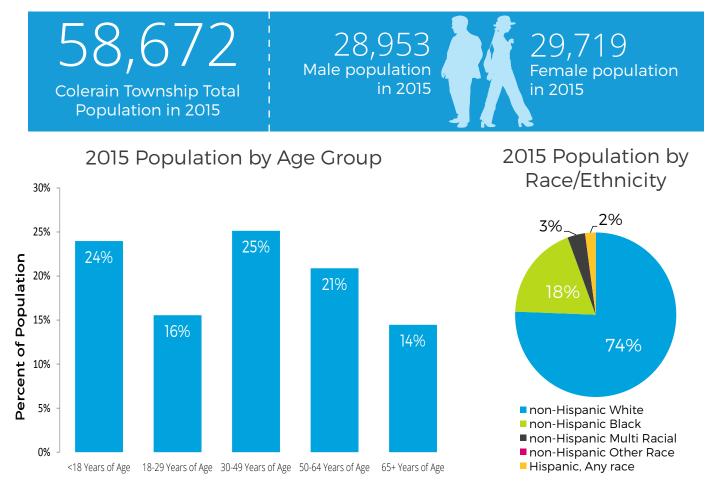
difficult to distinguish random fluctuation in disease/injury incidence from true changes in the underlying risk for the disease/injury. Rates calculated from counts of less than 20 are particularly susceptible to this phenomenon, have been footnoted throughout this report, and are denoted by the ♦ symbol.

While mortality and injury data can provide a snapshot of the most severe outcomes, it does not always tell the whole story. To fully understand the problem, additional sources, such as police, fire and EMS run data, and most importantly, the community voice, should also be considered to fully understand and solve the problem in your community.

COMMUNITY CONTEXT

In order to understand and effectively solve health and health equity problems, we have to understand the context in which the issue exists. Understanding the community context is the first, and one of the most important, steps in effectively addressing health outcomes and health equity in our community. In this report, community context covers population demographics (age, gender and race/ethnicity, language spoken at home), child well-being (suspected child abuse), segregation and concentrated disadvantage.

The understanding of the demographics of a community is important to program planning and program implementation¹. Understanding the population helps, not only with developing successful programs, but also in understanding the health of a community. Characteristics of a population in a community can help to determine the possible impact of health patterns and disease trends over time².



Language Spoken at Home in Residents 5 Years of Age and Older, 2015

Speaks English Only	95%
Speaks Spanish	2%
Speaks Other Indo-European Languages	2%
Speaks Asian & Pacific Islander Languages	1.1%
Speaks Some Other Language(s)	0.3%

Language is fundamental to the expression of cultural identity³. Understanding and valuing cultural diversity in a community are the keys to countering racism and discrimination³. The effect of racism and discrimination can contribute to the racial residential segregation of a community⁴.

Racial residential segregation is the degree to which two or more racial groups live separately from one another in a

geographic area⁴. Racial residential segregation was calculated using differences between non-Hispanic black and non-Hispanic white residents. Racial residential segregation can affect health outcomes in multiple ways, including constraining the socioeconomic advancement of minority groups by limiting education quality and employment⁴. Racial residential segregation also diminishes the benefits of homeownership because disadvantaged communities tend to have lower school quality, fewer job opportunities and diminished property values⁴. Racial residential segregation is found to be associated with unequal access to healthcare resources, including the overall number and quality of healthcare settings and quality of treatment⁵.



The level of racial residential segregation in majority of the census tract group for Colerain Township was:

MODERATELY SEGREGATED-WELL INTEGRATED

Note: Racial residential segregation was calculated using census tract groups. To see what additional communities are included in the census tract group please see the map on page 2.

Health equity, and the health status of an individual are influenced by many factors. One way to look at how multiple factors influence the health of an individual and community is to look at the level of concentrated disadvantage in a community. Concentrated disadvantage is an indicator that shows communities that are at an economic disadvantage. Concentrated disadvantage is calculated using five indicators:



- 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 age⁵

Concentrated disadvantage is often associated with worse overall health⁵. Communities that have higher levels of concentrated disadvantage oftentimes

have less mutual trust and willingness among

community members to intervene for the common good, often known as collective efficacy⁵. Collective efficacy is a critical way that communities inhibit the perpetration of violence⁵. Children who live and grow in disadvantaged areas are more likely to experience violence, such as child abuse⁵. Communities with high levels of concentrated disadvantage are also at an increased risk for higher rates of infant mortality⁵.



abuse by perpetrator captured by the hospital.

DID YOU KNOW?

IN 2015

Colerain Township had:

MEDIUM I EVELS OF

CONCENTRATED

DISADVANTAGE

EDUCATIONAL ATTAINMENT

Living in communities with higher levels of concentrated disadvantage can affect an individual's level of educational attainment. Educational attainment is defined as the highest level of education that an individual has completed⁶. Educational attainment, like concentrated disadvantage, 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 health⁷. Educational attainment or highest level of ed

School Enrollment by Level of Schooling, 2015		
Total Population Enrolled in School	14,867	
Enrolled in Nursery/Pre-School	5%	
Enrolled in Elementary & Middle School (K-8 th Grade)	48%	
Enrolled in High School (9-12 th Grade)	23%	
Enrolled in College (Undergraduate & Graduate School)	24%	

degree earned for Colerain Township residents who are 25 years of age and older.

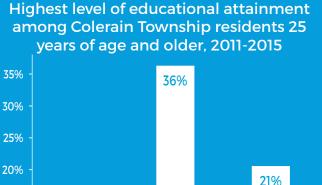
High quality early childhood education can have significant long-term

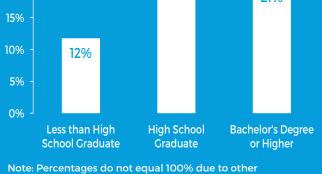
benefits for children⁸. Children who participate in established early childhood interventions, particularly low-income children, oftentimes have better educational and social outcomes⁹.

Children who are enrolled in pre-school programs are often more likely to continue with schooling and graduate from high school¹⁰.

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 income⁸. Increasing the educational attainment of an individual can have lasting impacts on the health of an individual over the course of his/her lifetime⁹.







Note: Percentages do not equal 100% due to other educational attainment options (e.g., associates degree) and trade school. Increasing the graduation rates impact an individual's well-being, along with influencing his/her health¹¹. To measure the graduation rate, the 4-year graduation rate of the public school district(s) that serves your community is monitored. The 4-year graduation rate for 2015 was the percentage of students who entered ninth grade in 2012 and graduated by 2015. Based on the percentage of students who graduate within 4-years, the Ohio Department of Education assigns a letter grade to each school district. To find out how the school district(s) that serves your community's children compared to other public school districts in Hamilton County, take a look at the 4-year graduation rate report card below. The school district(s) that serves your community's children are highlighted in pink.

School District	Percent	Grade
Madeira City Schools	100%	А
Wyoming City Schools	98.7%	А
Three Rivers Local Schools	98.4%	А
Mariemont Local Schools	97.2%	А
Indian Hill Schools	96.7%	А
Sycamore Local Schools	96.5%	А
Milford City Schools	96.4 %	А
Loveland City Schools	96.2%	А
Forest Hills Local Schools	95.8%	А
Oak Hills LocalSchools	94.3%	А
St. Bernard-Elmwood Place Schools	92.9%	В
Deer Park City Schools	89.0%	В
Southwest Local Schools	88.5%	С
Reading City Schools	88.0%	С
Northwest Local Schools	87.6 %	C C
Princeton City Schools	86.4%	С
Finneytown Local Schools	83.2%	D
Mount Healthy City Schools	83.2%	D
Winton Woods Local Schools	83.2%	D
Norwood City Schools	81.9%	D
Lockland LocalSchools	76.5 %	F
North College Hill City Schools	75.5%	F
Cincinnati Public Schools	72.9%	F

ECONOMIC STABILITY

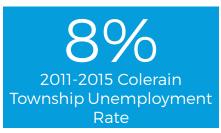
The economic stability of individuals within a community can have a lasting impact on the overall health of a community. Economic stability means that individuals within a community have sufficient and reliable income to pay for expenses such as healthcare¹². Economic stability can help individuals ensure better health outcomes for themselves¹³.



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 limited access to healthcare¹⁴. When an individual living in poverty becomes ill, they can become engulfed in a downward spiral that includes loss of income and higher healthcare costs¹⁴. Living in poverty not only affects the access to healthcare, but can also greatly

impact the overall health of children. Children who are living in poverty are at an increased risk for poor academic achievement, inadequate healthcare access, poor nutrition and food

insecurity¹⁵. Living in poverty not only has been shown to impact the overall health of individuals, but also to increase high school drop-out rates. Educational attainment can impact the employment opportunities an individual receives. Individuals who have less than a high school diploma have the highest rates of unemployment¹⁵. Unemployment



has been linked to a variety of adverse health outcomes¹⁶. This is often due to unemployment resulting in the

DID YOU KNOW? FROM 2011-2015

Of Colerain Township residents who were less than a high school graduate* were living in poverty

Of Colerain Township residents who were a high school graduate* were living in poverty

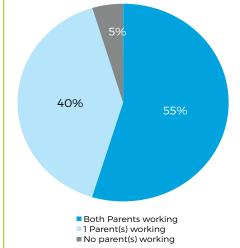
Of Colerain Township residents
 who had a Bachelor's Degree or
 higher* were living in poverty

*Note: Education level is the highest level of educational attainment an individual has completed.

availability of fewer resources for individuals and their families, including adequate access to healthcare¹⁶.



Percent of Families by Number of Parents Working, 2011-2015



Employment oftentimes means more than just a steady job in a safe working environment, or a paycheck; employment can provide numerous benefits that are critical for individuals and families to maintain proper health¹⁷.

Many families find that they need two wage earners to pay rent/mortgage, or to maintain the family budget¹⁸. When both parents are working, the family has an increased income which can lead to fewer financial stresses¹⁸. One financial

strain that а family can experience known is as housing-cost burden. Housingcost burden is families when individuals or

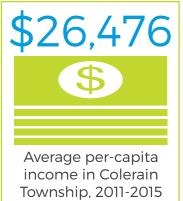


spend 30 percent or more of their income on housing costs¹⁹. Families and individuals who spend more than 30 percent of their income

Of Colerain Township residents spend 30% or more of their monthly income on housing.

on housing costs are considered housing cost-burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care²⁰.

Another way to measure economic stability of individuals and a community, is to look at the per-capita income within that community. Per-capita income, more commonly known as



income per person, is the average income received in the past 12 months for every man, woman, and child²¹.

Per-capita income is often used as an indicator of a community's economic health²². Median household income, another of community's measure а economic stability, is the household income that divides the income distribution into two equal groups²³. Communities with higher median household incomes are more likely to have a higher percentage of residents with higher



Higher employment rates can often lead to better access to healthcare and better health outcomes for the residents of a community²⁴.

There are, however, instances in which the level of income a family receives may make it difficult to afford necessities. In these instances, the family may qualify for cash assistance through Ohio Works First (OWF). Ohio Works First is the financial assistance portion of the State's Temporary Assistance to Needy Families (TANF) program, which provides cash benefits to needy families for up to 36 months²⁵. Ultimately, OWF allows for families to work toward financial stability.

levels of educational attainment and lower unemployment rates²⁴.

1310 Individuals who received cash assistance in Hamilton County from October 2014 - November 2015 and lived in the ZIP codes for Colerain Township Note: To see what additional communities are included in the ZIP code please see the map on page 2.

Quality child care enables parents to work or go to school while providing young children with the early childhood education experiences needed for healthy development²⁶. Financial constraints on the family can limit the accessibility of child care for low income families. To help alleviate the burden this can place on families, subsidized child care is made available to help cover part of the cost of child care for children of eligible caretakers/parents who are either working or in school²⁷. Subsidized child care is often linked to improved employment outcomes for parents, and when parents do better economically, their children do better as well²⁶.



Access to healthy foods is an important factor in the overall health of a community, as poor

14.5% Of individuals who received food stamps in Hamilton County from October 2014 -November 2015 lived in the ZIP codes for Colerain Township

Note: To see what additional communities are included in the ZIP code please see the map on page 2.

38.7% Of all students in participating schools in the school district that serves Colerain Township had free and reduced lunches. Note: To see individual schools and the school district overall, please see page vii of the appendix.

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. One way to ensure that food is accessible to children is through the participation in the National School Lunch and Breakfast program. The



National School Lunch and Breakfast Program is a federally assisted meal program that can operate in public and nonprofit private schools and residential child care institutions to provide nutritionally-balanced, low-cost or free lunches to children each school day²⁸.



NEIGHBORHOOD & BUILT ENVIRONMENT

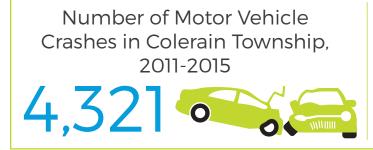
The built environment is the man-made space where individuals live, work, and play on a day-to-day basis, which includes buildings and spaces that are created or modified²⁹. The neighborhood and built environment of a community can affect the potential for injuries related to pedestrian and motor vehicle crashes, and impact the ability of individuals in a community to exercise²⁹. The way a community is built can affect the health of its residents.





Percent of car crashes in Colerain Township were fatal, 2011-2015 Motor vehicle crashes are a leading cause of death in the AVAILABLE public transportation in Colerain Township

United States³¹. Motor vehicle crashes, particularly those that involve pedestrians, are a significant public health concern.



Age-Adjusted Motor Vehicle Accident Injury Rate in Colerain Township, 2010-2014

922.6 per 100,000



Percent of Motor Vehicle Crashes Involving a Teen Driver (15-17 years), 2011-2015

Percent of motor vehicle crashes

in Colerain Township that

involved a pedestrian, 2011-2015

Motor vehicle crashes can happen to anyone, however, new teen drivers are at a high risk for causing motor vehicle

crashes³¹. Injuries due to motor vehicle crashes are a leading cause of death among children in the United States, many of which are preventable³².

The built environment,

including road infrastructure and pedestrian infrastructure (side walks), have a strong influence on not only motor vehicle

safety, but also pedestrian safety. Pedestrian injuries are

injuries in which a person (not in a vehicle, or riding a bicycle or motorcycle) was struck by a car, truck, SUV, or van³³. Built

environmental features at intersections and crosswalks can have an impact on pedestrian-

Age-Adjusted Pedestrian Injury Rate in Colerain Township, 2010-2014

DID YOU KNO

Between 2011-2015

Of Motor Vehicle Crashes in

Colerain Township Involved a

Child as a Driver, Passenger or

Pedestrian*

Note: Child is anyone younger than 18 years of age

51.3 per 100,000

related injuries and motor vehicle crashes that involve a pedestrian³⁴. The infrastructure of roads in a community can be associated with pedestrian related injuries and motor vehicle crashes³⁴.

The built environment can also impact the rate of motor vehicle crashes that involve bicyclists. Bicycle related injuries are injuries in which an individual riding a bicycle collided, lost control and collided or crashed into either a moving vehicle or a pedestrian³³. When communities provide facilities such

Age-Adjusted Bicycle Injury Rate in Colerain Township, 2010-2014

106.3 per 100,000

as sidewalks, crosswalks, and bike lanes, it gives residents the option to



Motor vehicle crashes in Colerain Township that involved a bicyclist, 2011-2015

choose how they want to travel³⁴. Not installing these types of facilities can force residents to unsafe walking and biking practices³⁴

travel by their own personal cars or engage in unsafe walking and biking practices³⁴.



The built environment can also influence the crime committed in a community. Zoning, street designs, housing, location of public transit and land use shape the built environment in

DID YOU KNOW?



ways that can increase or reduce crime³⁵. Communities that have high levels of violent crime may also increase the risk of residents experiencing violence³⁶. Violent crime is composed

have lasting effects on communities. Homicide is an extreme outcome of the broader public health problem of interpersonal

of four offenses: murder and non-negligent manslaughter, robbery. rape, and aggravated

Age-Adjusted Homicide Rate in Colerain Township, 2011-2015

4.5[•]per 100,000

assault³⁷. Homicides, also known as murders, are a serious public health problem and can



Age-Adjusted Firearm-Related Injury Rate in Colerain Township, 2010-2014

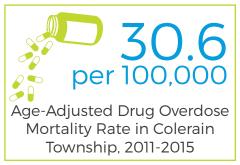
violence³⁸. Intentional injury is another form of interpersonal violence. Intentional injury is the type of injury that is sustained due to knowingly inflicting harm

to oneself or another individual. Violence, such as intentional injuries and homicides, can be fostered by the built environment by promoting feelings of alienation and isolation or by sending signals to potentially violent individuals that their actions will not be observed³⁹. However, the design of the built environment can also help to deter crime.

Age-Adjusted Intentional Injury Rate in Colerain Township, 2010-2014 767.9 per 100,000

Age-Adjusted Intentional Injury Mortality Rate in Colerain Township, 2010-2014 14.6 per 100.000

There are multiple factors associated with the built environment that can influence drug use and drug overdoses⁴⁰. Neighborhood deterioration can also have an influence on drug usage



and overdose⁴⁰. A community with deteriorating neighborhoods can lack empowerment and collective

Erom

Age-Adjusted Overdose-Related Injury Rate in Colerain Township, 2010-2014

274.6 per 100,000

efficacy. a critical way that communities inhibit the perpetration of violence^{40,5}. Residents who are living in a

deteriorating built environment may experience an increase in psychological distress which may encourage an increase in risk taking and more dangerous drug abuse activity⁴⁰.

1%

Of motor vehicle crashes in Colerain Township were drug related.



2011 - 2015

JKNOW?

3%

Of motor vehicle crashes in Colerain Township were alcohol related.

A high quality built environment is essential for children to achieve optimal health and development⁴¹. The quality of the built environment in which children live can cause or prevent illness, disability and injury⁴¹. Sports-related injuries are more



Township, 2010-2014

common in children in Hamilton County than in older adults⁴². Sports-related injuries are the type of injury that occur during exercise or sports, and oftentimes result from accidents, poor training insufficient warm-up practices.

and stretching, lack of conditioning, or improper equipment⁴³. Children are not only more likely to experience sports-related



per 1.000 Child Dog Bite-Related Injury Rate in Colerain Township, 2010-2014

injuries, but they are also the most common victims of dog bites and are more likely to be severely injured by a dog bite⁴⁴. Most of the time individuals who suffer dog bites are bitten by their own dog, or by a dog they know, such as a neighbor's or a family friend's dog⁴⁵. Whether the dog bite is a small nip of a puppy or an attack from an adult dog, they are a public health concern. Approximately one in five dog bite victims require medical attention, and many more dog bites go unreported and untreated every year.

The built environment is often thought to be associated with health through physical activity.

As illustrated previously, the built environment is connected to health through other aspects as well. The way a neighborhood and environment is created can directly impact the number of falls a community witnesses each year. Fall-related injuries can happen to people of all ages within a community. Young children often experience

Age-Adjusted Fall-Related Mortality Rate in Colerain Township, 2010-2014

0.2[•] per 100,000

Age-Adjusted Fall-Related Injury Rate in Colerain Township, 2010-2014

3.090.7 per 100,000

fall-related injuries while playing or participating in physical activities. For elderly adults, improper home environments, as well as decreased physical well-being, contribute greatly to the overall risk of experiencing a fall-related injury.

"The built environment embraces a wide range of concepts, from the design and integrity of

housing, to land-use and urban planning⁴¹." The built environment of a community significantly affects the health of its residents. Advocates can help shape the design of communities in ways that improve the health of its residents.

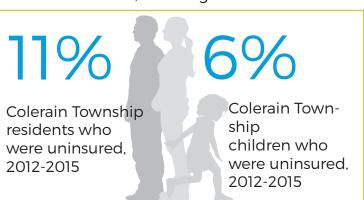


HEALTHCARE & HEALTH OUTCOMES

Access to Care

Access to comprehensive, quality healthcare services is important for the achievement of health equity and increasing the quality of a healthy life for everyone⁴⁵. However, individuals may lack the financial security to afford health insurance, causing them to become

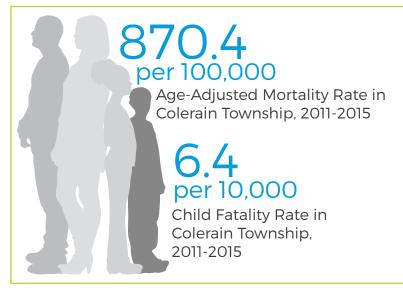
uninsured. When an individual is uninsured, they may forgo preventative care and the necessary healthcare they need⁴⁶. Delaying or forgoing healthcare places individuals at increased risk for being hospitalized for health conditions that could have been avoided or prevented⁴⁶. Being uninsured can also negatively affect the health and well-being of children. Children who are uninsured may be prevented from receiving preventative care, or early necessarv



immunizations that provide a foundation for healthy childhood and a healthy life as an adult.

Mortality

Health outcomes can be influenced by many of the social factors previously discussed in this report. 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 time⁴⁷. Mortality rates also provide the opportunity to identify areas where premature death could have been prevented⁴⁷.



One indicator to measure the overall health of a community is the child fatality rate. A child fatality rate is a specific type of mortality rate that measures the number of child deaths over a specified time frame. The child fatality rate is the number of child deaths per 10,000 child residents.

While the overall mortality rate provides a glimpse into the health problems of a community, mortality rates for specific diseases and injuries provide more insight into the health problems of a community.

Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease, or COPD, refers to the group of diseases that cause airflow blockage and breathing-related problems that include such diseases as emphysema, chronic bronchitis and in some cases asthma⁴⁸. COPD is the third leading cause of death in the Unites States with more than 11 million people having been diagnosed with COPD, with an estimated 24 million people who may have the disease without even knowing it⁴⁹.

Heart Disease

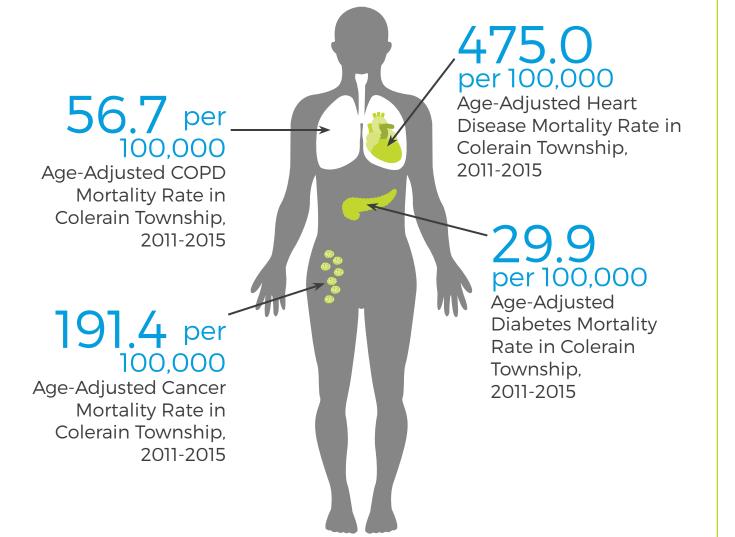
Heart Disease, like COPD, when left untreated can cause death. Heart disease is the general term that refers to several types of heart conditions. The most common type of heart disease in the United States is coronary artery disease, which can cause heart attacks and heart failure⁵⁰. Heart disease can be caused by multiple reasons, including diabetes⁵¹.

Diabetes

Diabetes is a disease that causes the blood glucose (sugar) levels in the body to be higher than normal⁵¹. This is caused when your body is not able to make enough insulin (used to break down the sugar) or cannot use its own insulin as it should⁵¹. Diabetes is the seventh leading cause of death in the United States⁵¹.

Cancer

The second leading cause of death in the United States is cancer, and many cancer deaths can be prevented⁵². Cancer is the name that is given to describe over 100 different types of diseases⁵³. While there are many different types of cancer, all cancers start the same way, and when left untreated can cause illness and even death⁵³.



1.6 per 100,000 Age-Adjusted Oral Cancer Mortality Rate in Colerain Township, 2011-2015

6.5 per 100,000 Age-Adjusted Oral Cancer Incidence Rate in Colerain Township, 2009-2013

3.5 per 100,000

Age-Adjusted Female Breast Cancer Mortality Rate in Colerain Township, 2011-2015

54.2 per 100,000

Age-Adjusted Female Breast Cancer Incidence Rate in Colerain Township, 2009-2013

22.3 per 100,000

Age-Adjusted Colon & Rectal Cancer Mortality Rate in Colerain Township, 2011-2015

40.1 per 100,000

Age-Adjusted Colon & Rectal Cancer Incidence Rate in Colerain Township, 2009-2013

Age-Adjusted Lung Cancer Mortality Rate in Colerain Township, 2011-2015

57.8 per 100,000 Age-Adjusted Lung Cancer Incidence

Age-Adjusted Lung Cancer Incidence Rate in Colerain Township, 2009-2013

3.9°per 100,000 Age-Adjusted Liver Cancer Mortality Rate in Colerain Township, 2011-2015

3.4 per 100,000 Age-Adjusted Liver Cancer Incidence Rate in Colerain Township, 2009-2013

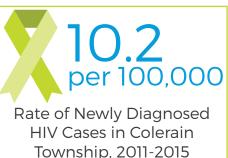
Cancer is a complex group of diseases with many possible causes, however, lifestyle factors such as lack of physical activity and tobacco usage can cause certain types of cancer⁵⁴. The majority of lung cancer cases are caused by smoking cigarettes⁵⁵. Smoking cigarettes can cause cancer almost anywhere in your body including the liver, colon and rectum, and the mouth (often referred to as oral cancer)⁵⁵. Heavy alcohol drinking can also increase the risk an individual has for developing cancer⁵⁶. Long-term alcohol use has been linked to an increased risk for liver cancer⁵⁶. Regular, heavy alcohol use can damage the liver, leading to inflammation, which can increase the risk for liver cancer⁵⁶. Some types of cancer can run in certain families, and having a family history of certain types of cancer, such as breast cancer, can increase the risk an individual has for developing certain types of cancer, however, most cancers are not directly linked to the genes we inherit from our parents^{54,57}. While cancer is a serious health issue, many of the new cancer cases can be reduced and many cancer deaths can be prevented⁵⁸. Early and regular screenings for certain types of cancer (e.g., cervical, colorectal and breast cancers), as recommended, can help prevent disease through early diagnosis and treatment⁵⁸. Maintaining a healthy lifestyle, such as avoiding tobacco and maintaining a healthy weight, can reduce the risk of developing cancer⁵⁸.

STD/HIV/Hepatitis C

Risky health behaviors can not only place an individual at risk for certain types of cancer, but also increase the risk for other diseases. Syphilis is a disease that an individual can be at an increased risk to acquire through risky sexual behaviors. Syphilis is a sexually transmitted disease that can have very serious complications when left untreated⁵⁹. Syphilis can be



Syphilis Rate in Colerain Township, 2011-2015



spread from person to person

by having unprotected sex with an infected individual, but it can also be spread from an infected mother to her unborn baby⁵⁹.

Risky sexual behavior not only places individuals at a risk for exposure to syphilis, but also increases the risk for Human Immunodeficiency Virus (HIV) infection. HIV is the virus that when not treated, can lead to Acquired Immunodeficiency Syndrome (AIDS)⁶⁰. HIV is most commonly transmitted

through risky sexual behaviors, but can also be transmitted from sharing a needle or syringe with an individual who is HIV positive⁶¹.

Sharing needles or other equipment that is used to inject drugs can also increase the risk an individual has to become infected with hepatitis C⁶². Hepatitis C is a virus that can result in long-term health problems, including death⁶². The majority of individuals who are infected with hepatitis C may not be aware of their infection because they do not feel sick⁶². The

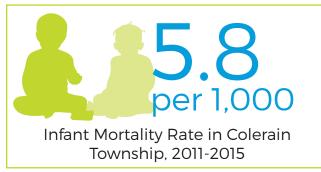
74.7 per 100,000 Hepatitis C Rate in Colerain

Township, 2011-2015

best way an individual has to reduce their risk for syphilis, HIV and hepatitis C is to avoid the behaviors that can spread the diseases, like risky sexual behavior, and sharing needles while injecting drugs.

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 community⁶³. Infant mortality is often associated with other factors such as maternal health, access to and quality of healthcare, and socioeconomic conditions. Infant mortality is defined by the Centers for Disease Control and Prevention (CDC) as the "death of a baby before his or her first

birthday⁶³." 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, a community that experiences several infant deaths during a given year, but also only saw a small number of births during that same year, will have an elevated infant mortality rate. 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. Therefore, while it is important to show if 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.

Quality of Life

Many of the health outcomes and socioeconomic indicators presented throughout the report can have lasting effects on an individual's quality of life and can lead to having difficulty doing everyday tasks. One way to measure the quality of life of an individual is to look at independent living difficulties. Individuals with independent living difficulties are the percent of individuals in a community, 18 years of age and older who, due to a physical, mental, or emotional problem, have difficulty doing errands alone such as visiting a doctor's office or shopping for necessities⁶⁴.



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

80.3 years Average Life Expectancy in Colerain Township, 2011-2015 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 because life expectancy summarizes the mortality

patterns that prevail across all age groups⁶⁵. Factors such as access to healthcare, 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 twentieth century⁶⁶. However, while life expectancy has been increasing, individuals living in poverty and 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. In order to achieve health equity, targeted interventions and policy change are needed, otherwise the disparities will only increase. It is hoped that this report will serve as a tool that can be used to inform and empower community change to improve upon the health of the residents in Colerain Township.

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

APPENDICES

Assets and Opportunitiesi
Recommendations iii
Data Tablesiv
Asset & Opportunity Audit Photographs
Frequently Asked QuestionsXVii
Common TerminologyXX
References XXiii

ASSETS & OPPORTUNITIES

This section of the report provides assets and opportunities identified as a result of a review of the data and an asset and opportunity audit. Please see Frequently Asked Questions page xvii for an explanation of the asset and opportunity audit. Assets are areas or outcomes that positively impact your community. Opportunities are areas or outcomes that we view as areas for improvement to better the health, safety, and vitality of your community. Assets and opportunities identified by Hamilton County Public Health may differ from what you see in your community. For each asset and opportunity, the data table number is referenced where available.

Assets

- Approximately ninety-five percent of families with children living in Colerain Township have at least one parent working (Table 14).
- There are low percentages of Colerain Township residents (both adults and children) who live in poverty (Table 10 & Table 11).
- Colerain Township had zero motor vehicle crashes from 2011-2015 that were fatal. (Table 27).
- There are lower rates of Hepatitis C, HIV, and Syphilis in Colerain Township compared to Hamilton County (Table 63, Table 64, & Table 65).
- There are 61 childcare centers in Colerain Township and 95 percent of those childcare centers accept public vouchers. (Table 22&Table 23).
- Only 17% of less than high school graduates, 7% of high school graduates, and 3% of Bachelor's degree or higher live in poverty; all of these percentages are less than Hamilton County (Table 12).
- Both the age-adjusted rate for pedestrian injury and bicycle injury is lower than Hamilton County. (Table 31 & Table 32).
- Colerain Township has zero motor vehicle crashes from 2011-2015 involving a bicyclist (Table 33)
- Both the age-adjusted homicide rate and firearm-related injury rate are two times lower than Hamilton County (Table 35 + and Table 36).
- The age-adjusted motor vehicle accident injury rate is lower than Hamilton County (Table 26).
- Colerain Township residents suffer from lower rates of intentional injuries and intentional injury mortalities compared to Hamilton County (Table 37 and Table 38).
- Overall, Colerain Township cancer incidence and mortality rates are less than Hamilton County (Table 53).
- Colerain Township residents suffer from lower rates of drug overdose injuries and mortalities compared to Hamilton County (Table 39 and Table 40).
- Overall, Colerain Township age-adjusted mortality rate is lower than Hamilton County (Table 49).

- Colerain Township residents suffer from lower rates of heart disease and diabetes mortality compared to Hamilton County (Table 52 and Table 54).
- Colerain Township has a good network of parks with playgrounds, ballfields, and recreation spaces for kids (Asset & Opportunity Results).
- Colerain Township offers youth sports leagues for children to participate in (Asset & Opportunity Results).
- There is an updated Community Points of Dispensing (POD) plan for the township (Asset & Opportunity Results).
- Colerain Township provides residents with child safety seat checks (Asset & Opportunity Results).
- Colerain Township has a prescription drug drop box for residents to dispose of any unwanted prescription drugs (Asset & Opportunity Results).
- The playgrounds in Colerain Township have safe surfaces (Asset & Opportunity Results).
- Wert Family Park in Colerain Township offers a community garden (Asset & Opportunity Results).
- Colerain Township possesses a diverse business community(Asset & Opportunity Results)

Opportunities

- Colerain Township has higher rates of colon & rectal cancer mortality and incidence compared to Hamilton County (Table 61 & 62).
- Colerain Township residents suffer from higher rates of fall-related injuries compared to Hamilton County (Table 46).
- The unemployment rate in Colerain Township is slightly higher than Hamilton County (Table 13).
- Colerain Township residents suffer from higher rates of COPD mortality than Hamilton County (Table 51).
- Colerain Township average Per-Capita Income is slightly lower than Hamilton County (Table 16).
- Only 21% of Colerain Township residents who are 25 years of age and older had an educational attainment of a Bachelor's Degree or higher, which is lower than Hamilton County (Table 8).
- Key areas of Colerain Township lack sidewalks (i.e. near parks, connecting the business district to other areas) (Asset & Opportunity Results).
- In Colerain Township, there are some playgrounds without posted age ranges (Asset & Opportunity Results).
- Colerain Township parks are not marked as drug, alcohol, and tobacco free zones (Asset & Opportunity Results)
- Community Points of Dispensing (POD) are not fully staffed with the necessary volunteers in Colerain Township (Asset & Opportunity Results).
- Colerain Township has an open dumping site on the backside of Wert Family Park (Asset & Opportunity).
- There are no grocery stores on the eastern edge of Colerain Township creating a food desert. On the western edge of Colerain Township there are no SNAP retailers (Asset & Opportunity Results).
- There is a low community recycling rate and no curbside recycling available for Colerain Township residents (Asset & Opportunity Results).
- Colerain Township has a higher percentage of motor vehicle crashes involving a teen driver compared to Hamilton County (Table 28).

The \blacklozenge symbol indicates an opportunity which is based on a small number of cases (less than 20)

RECOMMENDATIONS

The following recommendations are based on opportunities identified for your community, as well as the corresponding WeTHRIVE! pathways that address the recommendations.

= Chronic Disease Pathway	ency Pr	reparednes	s Pathw	/ay	
🛞 = Environmental Health Pathway 🛛 🌈 = Injury P	revent	ion Pathwa	У		
🔊 = Substance Use/Abuse Pathway 🛛 👔 = Social H	lealth	Pathway			
Recommendation		WeTHRI	/E! Pat	hway	
Increase the community recycling rate.					
Promote resources available to residents from Hamilton County Public Health		🔁 😪		(
Work with Northwest Local Schools to increase the High School Graduation Rates and the number of kids who pursue further education.				(
Educate township residents on why open dumping is a problem and provide residents with resources on who to call if they see an open dumping site.					
Post 'Share the Road' signs throughout the community for increased bicycle visibility.		3			
Work with community businesses and organizations to help decrease the unemployment rate.				(
Work with Northwest Local School District to educate teens on safe driving practices.			?		
Continue to implement strategies to reduce the number of fall-related injuries for Colerain Township residents.					
Increase opportunities for access to healthy foods in the township, especially in underserved areas				(
Implement an Idle Free policy on township owned property.					
Implement a tobacco free policy on township owned property.					
Find ways to increase physical activity opportunities for children and adults .					
Educate residents on the importance of getting regular preventative screenings for Colon & Rectal Cancer.				(
Post the recommended ages for children on playground equipment.					
Partner with Northwest Local Schools to implement Safe Routes to School Strategies within Colerain Township.		3	Ø		
Work to create or implement a sidewalk master plan to help connect points of interest in the community (i.e. parks, businesses, schools).		3			
Post signs at township parks denoting them as drug, alcohol, and tobacco free zones					
Work to increase the number of Community Points of Dispensing (POD) volunteers		€			

DATA TABLES

Please Note: Some percentages may not equal 100 percent due to rounding.

Hamilton County comparison percentages and rates are provided where available/applicable

Table 1: Population		
	2015	
Total Population	58,672	
Male Population	28,953	
Female Population	29,719	
Source: U.S. Census Bureau/FactFinder, 2015 American Community Survey 5-Year Estimates		

Table 2: Population by Age				
2015				
<18 Years of Age	14,061	24%		
18-29 Years of Age	9,123	16 %		
30-49 Years of Age	14,747	25%		
50-64 Years of Age	12,254	21%		
65+ Years of Age	8,487	14%		

Source: U.S. Census Bureau/FactFinder, 2015 American Community Survey 5-Year Estimates

Table 3: Population by Race/Ethnicity				
	2015			
non-Hispanic white	43,493	7 4%		
non-Hispanic black	10,788	18%		
non-Hispanic multi-racial	2,028	3%		
non-Hispanic other race	10	0.02%		
Hispanic, Any Race	1,214	2%		
Source: LLS Census Bureau/EactEinder 2015	American Comr	munity Survey		

Source: U.S. Census Bureau/FactFinder, 2015 American Community Survey 5-Year Estimates

Table 4: Language Spoken at Home in Residents 5-Years-of-Age and Older

	2015	
Speaks English Only	52,588	95 %
Speaks Spanish	904	2%
Speaks Other Indo-European Languages	832	2%
Speaks Asian & Pacific Islander Languages	632	1.1%
Speaks Some Other Language(s)	147	0.3%
	E	

Source: U.S. Census Bureau/FactFinder, 2015 American Community Survey 5-Year Estimates

Table 5: Racial Resid	ential Segregation	Table 6: Concentrated Disadvantage		
	2015		2015	
Level of Racial	Moderately Segregated	Level of Concentrated	Medium Level	
Residential Segregation	-Well Integrated	Disadvantage		
Source: U.S. Census Bureau/FactFinder, 2015 American Community		Source: U.S. Census Bureau/FactFinder, 2015 American		
Survey 5-Year Estimates. Methodology: Association of Maternal and		Community Survey 5-Year Estimates. Methodology: Associa		
Child Health Programs		Maternal and Child Health Programs		

Table 7: School Enrollment by Level of Schooling				
	2015			
Total Population Enrolled in School	14,8	367		
Enrolled in Nursery/Pre-School	762	5%		
Enrolled in Elementary & Middle School (K-8 th Grade)	7072	48%		
Enrolled in High School (9-12 th Grade)	3416	23%		
Enrolled in College (Undergraduate & Graduate School)	3617	24%		
Source: U.S. Census Bureau/FactFinder, 2015 American Community Survey 5-Year Estimates				

Table 8: Highest Level of Educational Attainment, Residents 25 Years and Older				
2011-2015				
	Less than High School Graduate	12%		
Colerain Township	High School Graduate	36%		
	Bachelor's Degree or Higher	21%		
	Less than High School Graduate	11%		
Hamilton County	High School Graduate	27 %		
county	Bachelor's Degree or Higher	34%		

Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates

Table 9: Public School District(s) & 4-Year Graduation Rate		
	201	5
Northwest Local Schools	87.6%	С
Source: Ohio Department of Education, School District Report Cards		

Source: Ohio Department of Education, School District Report Cards

Table 10: Percent of Total Population Living in Poverty			Table 11: Percent o (<18-Years-of-Age) Livi	
	2011-2015			2011-2015
Colerain Township	11%	C	Colerain Township	19%
Hamilton County	18%	H	Hamilton County	26%
Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates			Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates	

	Table 12: Percent Living in Poverty by Highest Level of Educational Attainment		
	2011-2015		
Less than High School Graduate	17%		
High School Graduate	7%		
Bachelor's Degree or Higher	3%		
Less than High School Graduate	48%		
High School Graduate	38%		
Bachelor's Degree or Higher	15%		
	High School Graduate Bachelor's Degree or Higher Less than High School Graduate High School Graduate		

Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates

Table 13: Unemployment Rate		
2011-2015		
Colerain Township 8%		
Hamilton County 6%		
Source: U.S. Census Bureau/FactFinder, 2011-2015 American		

Community Survey 5-Year Estimates

Table 14: Percent of Families with Children, by Number of Parents Working			
2011-2015			
	Both Parents Working	55%	
Colerain Township	One Parent(s) Working	40%	
	No Parent(s) Working	5%	
	Both Parents Working	50%	
Hamilton County	One Parent(s) Working	43%	
county	No Parent(s) Working	8%	

Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates

Table 15: Percent of Residents who Spend 30% or More of Income on Housing	
	2011-2015
Colerain Township	25%
Hamilton County	32%
Source: LLS Census Bureau/EactEinder 2011	-2015 American Community

Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates

Table 16: Average Per-Capita Income			Table 17: Average Median Household Income		
2011-2015			2011-2015		
Colerain Township	\$26,476	C	Colerain Township	\$55,345	
Hamilton County	\$29,761	H	Hamilton County	\$48,971	
Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates			Source: U.S. Census Bureau/FactFinder, 2011-2015 American Community Survey 5-Year Estimates		
Table 18: Average Percent of Individuals Receiv- Table 19: Average Percent of Individuals Receiv-				nt of Individuals Receiv-	

ing Cash Assistance by Community ZIP Code		ing Food Stamps by Community ZIP Code		
		October 2014 - November 2015		October 2014 - November 2015
	45002,45231,45239,45247, 45251,45252	13.1%	45002,45231,45239,45247, 45251,45252	14.5%
	Source: Hamilton County Job and Family S	ervices	Source: Hamilton County lob and Family S	ervices

Table 20: Number of Stores that Accept SNAP
as a Form of Payment2015Colerain Township44Source: U.S. Department of Agriculture

Table 21: Percent of Students who by Participating School Dist			ch
		2015 School Yea	ar
Northwest Local School District		38.7%	
Houston Early Learning Cente	er	31.5%	
Colerain Elementary School		49 .1%	
Monfort Heights Elementary S	School	38.4%	
Pleasant Run Elementary Sch	lool	67.1%	
Struble Elementary School		60.2%	
Taylor Elementary School		69.2%	
Weigel Elementary School		66.4%	
Welch Elementary School		59.8%	
Colerain Middle School		46.9%	
Pleasant Run Middle School		64.9%	
White Oak Middle School		52.9%	
Colerain High School		36.3%	
Northwest High School		51.4%	
Source: Ohio Department of Education			
Centers 2015	Centers tl	hat Serve Childrer Child Car	e
rain Township 61			2015
Hamilton County Job and Family Services	Colerain To	· · · · · · · · · · · · · · · · · · ·	58
Table 24: Outdoor and I	_	on County Job and Family S	ervices
Table 24: Outdoor and F	-TIYSICAI ACU		yground?
Clippard Park			Yes
Clippard YMCA			Yes
Colerain Park			Yes
Coleraine Hertiage Memorial			
ooronamio mortiago mornan			NO
Drew Campbell Memorial Commons			No No
Drew Campbell Memorial Commons Groesbeck Park			No
Groesbeck Park			
Groesbeck Park Heritage Park			No Yes
Groesbeck Park			No Yes Yes
Groesbeck Park Heritage Park Obergiesing Soccer Complex at Dravo Park Palm Memorial Park			No Yes Yes No
Groesbeck Park Heritage Park Obergiesing Soccer Complex at Dravo Park Palm Memorial Park Skyline Park/Skyline Community Center			No Yes No Yes
Groesbeck Park Heritage Park Obergiesing Soccer Complex at Dravo Park Palm Memorial Park			No Yes No Yes Yes

Table 25: Number of Motor Vehicle Crashes

	2011-2015
Colerain Township	4321

Source: Ohio Department of Public Safety, Crash Data Extracts

Table 27: Percent of Motor Vehicle Crashes that were Fatal		
2011-2015		
Colerain Township	0%♦	
Hamilton County 0.2%		
Source: Ohio Department of Public Safety, Crash Data Extracts		

Table 29: Percent of Motor Vehicle Crashes Involving a Child Driver, Passenger or	
Pedestrian	
	2011-2015
Colerain Township	11%
Hamilton County	13%
Source: Obio Department of Public Safety, Crash Data Extracts	

Source: Ohio Department of Public Safety, Crash Data Extracts

Table 31: Age-Adjusted Pedestrian Injury Rate, per 100,000	
	2010-2014
Colerain Township	51.3
Hamilton County	56.0
Source: Hamilton County Iniury Surveillance System	

Table 33: Percent of Motor Vehicle Crashes Involving a Bicyclist	
2011-2015	
Colerain Township	0%♦
Hamilton County	0.5%
Source: Obio Department of Public Safety Crash Data Extracts	

Source: Onio Department of Public Safety, Crash Data Extracts

Table 35: Age-Adjusted Homicide Rate, per 100,000	
	2011-2015
Colerain Township	4.5♦
Hamilton County	9.7
Source: Obio Department of Health Public Health Information	

ource: Onio Department of Health, Public Health Information Warehouse Death Data Set

Table 26: Age-Adjusted Motor Vehicle Accident Injury Rate, per 100,000

	2010-2014
Colerain Township	922.6
Hamilton County	1087.0
Courses Hamilton County Injung Cunyallance Cystem	

Source: Hamilton County Injury Surveillance System

Table 28: Percent of Motor Vehicle Crashes Involving a Teen Driver (15-17 years of age)		
	2011-2015	
Colerain Township	6%	
Hamilton County 5%		
Source: Ohio Department of Public Safety, Crash Data Extracts		

Table 30: Percent of Motor Vehicle Crashes Involving a Pedestrian	
	2011-2015
Colerain Township	1%
Hamilton County	2%

Source: Ohio Department of Public Safety, Crash Data Extracts

Table 32: Age-Adjusted Bicycle Injury Rate, per 100,000	
	2010-2014
Colerain Township	106.3
Hamilton County	111.2
Source: Hamilton County Injury Surveillance System	

Table 34: Number of Violent Crimes	
	2015
Colerain Township	114
Source: Hamilton County Sheriff	

Table 36: Age-Adjusted Firearm-Related Injury rate	
	2010-2014
Colerain Township	31.5
Hamilton County	64.9
Source: Hamilton County Injuny Sunvaillance System	

Source: Hamilton County Injury Surveillance System

Table 37: Age-Adjusted Intentional Injury Rate, per 100,000	
	2010-2014
Colerain Township	767.9
Hamilton County	861.4

Source: Hamilton County Injury Surveillance System

Table 39: Age-Adjusted Drug Overdose Mortality Rate, per 100,000	
	2011-2015
Colerain Township	30.6
Hamilton County	30.5

Source: Ohio Department of Health, Public Health Information Warehouse Death Data Set

Table 41: Percent of Motor Vehicle Crashes that were Drug Related		
2011-2015		
Colerain Township	1%	
Hamilton County 1%		
Source: Ohio Department of Public Safety, Crash Data Extracts		

Source: Onio Department of Public Safety, Crash Data Extracts

Table 43: Child Injury Rate, per 1,000			
2010-2014			
Colerain Township 112.1			
Hamilton County 117.3			
Source: Hamilton County Injury Surveillance System			

Table 45: Child Dog Bite-Related Injury Rate, per 1,000		
	2010-2014	
Colerain Township	2.3	
Hamilton County 2.0		
Source: Hamilton County Injury Surveillance System		

Table 38: Age-Adjusted Intentional Injury Mortality Rate, per 100,000

	2010-2014
Colerain Township	14.6
Hamilton County	21.3
Hamilton County	21.3

Source: Hamilton County Injury Surveillance System

Table 40: Age-Adjusted Drug Overdose Injury Rate, per 100,000 2010-2014 **Colerain Township** 274.6 Hamilton County 298.9

Source: Hamilton County Injury Surveillance System

Table 42: Percent of Motor Vehicle Crashes that were Alcohol Related		
	2011-2015	
Colerain Township	3%	
Hamilton County	3%	

Source: Ohio Department of Public Safety, Crash Data Extracts

Table 44: Child Sports-Related Injury Rate, per 1,000		
	2010-2014	
Colerain Township 10.2		
Hamilton County 10.6		
Source: Hamilton County Injury Surveillance System		

Table 46: Age-Adjusted Fall-Related Injury Rate, per 100,000		
	2010-2014	
Colerain Township3,090.7		
Hamilton County 2,935.9		
Source: Hamilton County Injury Surveillance System		

Source: Hamilton	i County injury	/ Surveillance System

Table 47: Age-Adjusted Fall-Related Mortality Rate, per 100,000	
	2010-2014
Colerain Township	0.2♦
Hamilton County 0.8	
Source: Hamilton County Injuny Sunyeillance System	

Source: Hamilton County Injury Surveillance System

Table 48: Percent Uninsured				
			2012-20	15
Colerain	Total Residents		11%	
Township	Children		6%	
Hamilton	Total Residents		11%	
County	Children		5%	
Source: U.S. Census Bu	reau/FactFinder, 2012-2015 Ame	erican Community Survey 5-	Year Estimates	
Table 49: Age-Adjust per 100			: Child Fatalit per 10,000	y Rate,
	2011-2015			2011-2015
Colerain Township	870.4	Colerain Townsh	nip	6.4
Hamilton County	834.4	Hamilton Count	ty	7.6
Source: Ohio Department of Heal Warehouse Death Data Set	th,Public Health Information	Source: Ohio Departme Surveillance System	ent of Health, Ohio	Cancer Incidence
Table 51: Age-Adjuste Rate, per 1	-	Table 52: Age Mortality	-Adjusted He / Rate, per 1(
	2011-2015			2011-2015
Colerain Township	56.7	Colerain Townsh	nip	475.0
Hamilton County	44.6	Hamilton Count	•	434.2
Source: Ohio Department of Health,Public Health Information Warehouse Death Data SetSource: Ohio Department of Health,Public Health Information Warehouse Death Data Set				Health Information
Table 53: Age-Adjuste Rate, per 1			ge-Adjusted / Rate, per 1(
	2011-2015			2011-2015
Colerain Township	191.4	Colerain Townsh	nip	29.9
Hamilton County	183.0	Hamilton Count	•	26.4
Source: Ohio Department of Heal Warehouse Death Data Set	th,Public Health Information	Source: Ohio Departme Surveillance System	ent of Health, Ohio	Cancer Incidence
Table 55: Age-Adjus Mortality Rate,		Table 56: Age Incidence	e-Adjusted Lu e Rate, per 10	
	2011-2015			2009-2013
Colerain Township	62.0	Colerain Townsh	nip	57.8
Hamilton County	54.4	Hamilton Count	ty	71.3
Source: Ohio Department of Heal Warehouse Death Data Set	th,Public Health Information	Source: Ohio Departme Surveillance System	ent of Health, Ohio	Cancer Incidence
Table 57: Age-Adjus Mortality Rate,	per 100,000	Table 58: Age Incidence	e-Adjusted Li e Rate, per 1	00,000
	2011-2015			2009-2013
Colerain Township	3.9♦	Colerain Townsh		3.4♦
Hamilton County Source: Ohio Department of Heal	6.5	Hamilton Count Source: Ohio Departme	•	6.4 Cancer Incidence
Warehouse Death Data Set				

Table 59: Age-Adjusted Oral Cancer Mortality Rate, per 100,000

	2011-2015
Colerain Township	1.6♦
Hamilton County	2.2

Source: Ohio Department of Health,Public Health Information Warehouse Death Data Set

Table 59: Age-Adjusted Female Breast Cancer Mortality Rate, per 100,000		
	2011-2015	
Colerain Township	13.5	
Hamilton County 14.0		
Source: Obio Department of Health Public Health Information		

Source: Ohio Department of Health,Public Health Informatio Warehouse Death Data Set

Table 61: Age-Adjusted Colon & Rectal Cancer Mortality Rate, per 100,000	
	2011-2015
Colerain Township	22.3
Hamilton County	16.2

Source: Ohio Department of Health,Public Health Information Warehouse Death Data Set

Table 63: Syphilis Rate, per 100,000	
	2011-2015
Colerain Township	19.1
Hamilton County	34.9
Source: Ohio Department of Health, Ohio Disease Reporting System	

Table 65: Hepatitis C Rate, per 100,000	
	2011-2015
Colerain Township	74.7
Hamilton County	120.8
Source: Obio Department of Health, Obio Disease Reporting	

Source: Ohio Department of Health, Ohio Disease Reporting System

Table 67: Percent of Residents with an Independent Living Difficulty	
	2012-2015
Colerain Township	6%
Hamilton County	6%
Source: U.S. Census Bureau/FactFinder, 2012-2015 American Community Survey 5-Year Estimates	

Table 60: Age-Adjusted Oral Cancer Incidence Rate, per 100,000

	2009-2013
Colerain Township	6.5♦
Hamilton County	9.3

Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System

Table 60: Age-Adjusted Female Breast Cancer Incidence Rate, per 100,000	
	2009-2013
Colerain Township	54.2
Hamilton County	68.2

Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System

Table 62: Age-Adjusted Colon & Rectal Cancer Incidence Rate, per 100,000	
	2009-2013
Colerain Township	40.1
Hamilton County	38.7
Source: Ohio Department of Health, Ohio Cancer Incidence	

Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System

Table 64: Newly Diagnosed HIV Rate, per 100,000	
	2011-2015
Colerain Township	10.2
Hamilton County	15.9

Source: Ohio Department of Health, Ohio Disease Reporting System

Table 66: Infant Mortality Rate, per 1,000	
	2011-2015
Colerain Township	5.8
Hamilton County	9.3
Source: Obio Department of Health Public Health Information	

Source: Ohio Department of Health, Public Health Information Warehouse Death and Birth Data Set

Table 68: Average Life Expectancy in Years	
	2011-2015
Colerain Township	80.3
Hamilton County	76.1

Source: Ohio Department of Health,Public Health Information Warehouse Death Data Set

ASSET & OPPORTUNITY AUDIT PHOTOS

Colerain Township Welcome Sign





Business District Colerain Avenue





Senior & Community Center Springdale Road



Clippard Park Clippard Park Drive



Skyline Community Center and Skyline Park Pippin Road



Colerain Park Springdale Road







Heritage Park East Miami River Road



Groesbeck Park Clara Avenue



Palm Memorial Park Springdale Road



Drew Campbell Memorial Commons Springdale Road



Clippard YMCA Cheviot Road



Municipal Building Springdale Road Colerain High School Cheviot Road





Wert Family Park W. Galbraith Road



FREQUENTLY ASKED QUESTIONS

The following provides answers to some of the most frequently asked questions about the WeTHRIVE! Community Health Assessment.

How are you determining if someone lives in my community?

We have access to the address of every injury, death, birth and reported cases of notifiable cancer and infectious diseases. We geocode, or map out, each address to determine the exact location within Hamilton County to determine if that individual resides within your community.

What is a rate?

A rate is the measure of an outcome of interest (e.g., injury, death, etc.) over a specific time frame within your community.

Why is the rate per 100,000 residents?

In order to compare your community to Hamilton County, rates are typically standardized (e.g., per 100,000 residents) to allow them to be compared to other communities and geographic areas. It allows for a more "apples-to-apples" comparison.

What is a mortality rate?

A mortality rate is a specific type of rate that measures the number of deaths in your community's population over a specific time frame.

What is an incidence rate?

An incidence rate is a specific type of rate that measures the number of NEW cases of a disease within your community.

What are age-adjusted rates and why do we use them?

Age-adjusted rates are a specific type of rate that takes into account the age structure of your community to help get a better picture of how a certain disease or injury is affecting your community.

Age-adjusted rates are important to use because it allows us to compare your community with other areas that may be very different in terms of the age of their residents. This allows for an "apples-to-apples" comparison of your community with another area. For example, a community with more young residents is able to be compared to a community with more older residents.

Why are you indicating when a rate is based on less than 20 cases, and why is it a concern?

When a rate is based on a small number of cases (less than 20), it can be difficult to determine if there was a true change in the underlying risk for the disease/injury, or if it was due to random changes in the disease/injury. It is a concern because it is difficult to make assumptions about an entire community's problem when the incidence of the disease/injury is sporadic and/or infrequent.

Why is my community grouped with other communities using census tracts?

Certain indicators are only available at the census tract level. In order to perform the necessary calculations, the indicator groupings of the census tracts had to be done. The grouping of the census tracts was done by grouping census tracts that were in the same area.

What is racial residential segregation, why is it important and what does it mean?

Racial residential segregation is the degree to which two or more racial groups live separately from one another in a geographic area. Racial residential segregation is important because it can constrain the socioeconomic advancement of minority groups by limiting education quality and employment. Racial residential segregation is associated with unequal access to healthcare resources including healthcare settings and quality of treatment.

In this report racial residential segregation is calculated using non-Hispanic white and non-Hispanic black populations. When an area is highly segregated this means that whites live in white only census tracts and blacks live in black only census tracts. When an area is well integrated, white and black residents live in the same census tracts in nearly equal numbers. Areas that are moderately segregated means that there are census tracts in which both white and black residents live together in and census tracts in which only white residents live and census tracts in which only black residents live.

What is concentrated disadvantage and how is it calculated?

Concentrated disadvantage is an indicator that shows areas that are at an economic disadvantage. Communities that have higher levels of concentrated disadvantage oftentimes have less mutual trust and willingness among community members to intervene for the common good, often known as collective efficacy. Collective efficacy is a critical way that communities inhibit the perpetration of violence; children who live and grow in disadvantage areas are more likely to experience violence. Communities with high levels of concentrated disadvantage are also at an increased risk for higher rates of infant mortality.

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

Concentrated disadvantage shows how the indicators interact with each other to influence the overall health of individuals living in a particular community.

What do you mean by educational attainment?

Educational attainment is the highest level of education that an individual has completed. For example, the percent of individuals who are less than a high school graduate means that those individuals did not finish and graduate from high school.

What is an asset and opportunity audit?

The asset and opportunity audit is when Hamilton County Public Health, health educators gathered information about your community using a variety of methods, including internet searches, data review, making visual observations while driving and walking and taking photographs to illustrate the story. The asset and opportunity audit focused on the physical environment, nutrition environment, air and water quality, housing, waste management, and emergency preparedness. Information gathered

as part of the asset and opportunity audit is used to provide a snapshot of existing risk and protective factors in your community, as well as to shape recommendations for interventions that can directly be tied back to your community. Assets and opportunities identified provide context on how the community's social, economic, and physical environment may impact its health, safety, and vitality.

How did you determine what was a park in my community?

A park was determined through an assets and opportunities audit of your community where our Health Educators went out into your community. Parks were classified if they had signs that indicated the open green space (area with grass and/or trees and plants), there were signs it was a park or contained a playground.

How did you determine if there was public transportation in my community?

Through an assets and opportunities audit of your community, our Health Educators went out into your community to find bus stops. If there were bus stops in your community, it was determined that there was public transportation in your community. If no bus stops were found in your community, it was determined that there was no public transportation in your community.

How did you know how many car crashes occurred in my community?

Access to crash data was obtained from the Ohio Department of Public Safety that contained community-level data.

Do motor vehicle injuries include those where a person was hit by a car?

No. Motor vehicle injuries are only those injuries where a person was inside the car, either as the driver or passenger, and was involved in a car accident. If a person is riding their bike and is hit by a car, it is classified as a bicycle-related injury. If the person was walking across the street and was hit by a car, it is classified as a pedestrian-related injury.

Why are you only reporting the number of people who died from a chronic disease and not how many people are living with the disease in my community?

Unfortunately, there is no way to determine the number of individuals living with a chronic disease such as diabetes or heart disease within your community. This is because there is no national, or state reporting database that will allow us to see how many people are currently living with the disease below a county level. Providing death information on chronic disease gives some insight into whether a chronic disease is a problem within your community. If your community has higher rates of death due to chronic diseases such as diabetes or heart disease, it can be expected that a community may have a large number of residents currently living with the chronic disease.

Is there a way to find rates for other types of cancer in my community?

Yes. The rates presented in this report are for the most frequently reported types of cancer, or cancer that can be associated with certain health behaviors. Rates for additional types of cancer may be available upon request.

What can I do to improve the health of my community?

There are many things you can do to improve the health of your community. Throughout the health assessment of your community, assets (areas of positive outcomes) and opportunities (areas for improvement) were identified. Recommendations on how to address the opportunities or elevate the assets in your community to better the health of residents are provided. Also be sure to join your WeTHRIVE! team to find additional ways you can help to improve the health of your community.

COMMON TERMINOLOGY

The following provides information on some of the terms used throughout the WeTHRIVE! Community Health Assessment.

4-Year Graduation Rate:

The 4-year graduation rate is the percentage of students who entered high school as a freshman and graduated in four years.

Age-Adjusted Mortality Rate:

An age-adjusted mortality rate is a type of mortality rate that has been statistically modified to eliminate the effect of different age distributions among different populations.

Bicycle-Related Injury:

Injury to a bicyclist from a collision, loss of control crash, or some other event involving a moving vehicle or pedestrian.

Cause-Specific Mortality Rate:

A cause-specific mortality rate is a rate calculated as the number of deaths attributed to a specific cause during a specified time period among a population, divided by the size of the population.

Census:

The census is a measurement of a population's demographics performed by the United States Census Bureau.

Concentrated Disadvantage:

Concentrated disadvantage is an indicator that shows areas/communities that are at an economic disadvantage.

Demographic Information:

Demographic information are the characteristics of a person or group (i.e., age, sex, race/ethnicity, residence, and occupation). Demographic information is used to characterize individuals or populations.

Educational Attainment:

Educational attainment is the highest level of education that an individual has completed.

Frequency:

A frequency is the amount or number of occurrences of an attribute or health outcome in a population.

Health Indicator:

A health indicator is any of a variety of measure (e.g., mortality rate) that indicates the state of health of a population.

High-Risk Group:

A high risk group is a group of persons whose risk for a particular disease, injury or other health condition is greater than that of the rest of their community or population.

Incidence:

Incidence is a measure of the frequency with which new cases of illness, injury, or other health condition occurs among a population during a specified period.

Incidence Rate:

An incidence rate is a measure of the frequency with which new cases of illness, injury, or other health conditions occur, expressed explicitly per a time frame, usually per 100,000 population.

Infant Mortality Rate:

An infant mortality rate is a type of mortality rate for infants, children less than one year of age, and is calculated as the number of infant deaths divided by the number of live births during the same period, and is expressed per 1,000 live births. An infant mortality rate is a universally accepted indicator of the health of a nation's population and adequacy of its health-care system.

Intentional Injury:

Intentional injury is a type of injury that is sustained due to knowingly inflicting harm to oneself or another individual.

Life Expectancy:

Life expectancy is a statistical projection of the average number of years a person of a given age is expected to live, if the current mortality rates continue to apply.

Mean:

The mean is also known as the average.

Median Household Income:

The amount of income that divides all income in a community into two equal groups, half having income above that amount, and half having income below that amount.

Mortality Rate:

A mortality rate is a measure of the frequency of occurrence of death among a defined population during a specified time interval.

Notifiable Disease:

A notifiable disease is a type of disease that, by law, must be reported to public health authorities upon diagnosis.

Pedestrian-Related Injury:

Injury to a person involved in a collision, where the person was not, at the time of the collision, riding in or on a motor vehicle, motorcycle, bicycle, or streetcar. This also includes individuals who were struck by cars, pick-up trucks, vans, buses and SUVs.

Per-Capita Income:

The average money income received in the past 12 months for every man, woman, and child in a geographic area. Per-capita income is more commonly known as income per person.

Population:

The population is the total number of inhabitants of a geographic area or the total number of persons in a particular group (e.g., the number of persons engaged in a certain occupation).

Prevalence:

Prevalence is the number or proportion of cases, events, or attributes among a given population.

Prevalence Rate:

A prevalence rate is the proportion of a population that has a particular disease, injury, other health condition, or attribute at a specified point in time, or during a specified period.

Racial Residential Segregation:

Racial residential segregation is the degree to which two or more racial groups live separately from one another in a geographic region.

Rate:

A rate is an expression of the relative frequency with which an event occurs among a defined population per unit of time, calculated as the number of new cases or deaths during a specified period per the population and/or the time period in which the population was at risk.

Risk Factor:

A risk factor is an aspect of personal behavior or lifestyle, an environmental exposure, or a hereditary characteristic that is associated with an increase in the occurrence of a particular disease, injury, or health condition.

Trend:

A trend is the movement or change in frequency over time, usually upward or downward.

Vital Statistics:

Vital statistics are data about recorded births and deaths.

REFERENCES

- University of Arkansas, Division of Agriculture. (n.d). Understanding Demographics. Retrieved June 29, 2015, from https://www.uaex.edu/business-communities/Understanding%20Community%20Demographics.pdf
- 2. Centers for Disease Control and Prevention. (2012, August 24). Population Characteristics. Retrieved June 29, 2015, from http://ephtracking.cdc.gov/showPcMain.action
- 3. New South Wales Government, Department of Education. (2015). Understanding Racism. Retrieved November 20, 2015, from http://www.racismnoway.com.au/about-racism/understanding/culture-language-identity.html
- 4. Association of Maternal & Child Health Programs. (2013, January 1). Life Course Indicator: Racial Residential Segregation, by Community. Retrieved October 22, 2014, from http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-16_ Racial%20Residential%20Segregation_9-4-2014.pdf
- 5. Association of Maternal & Child Health Programs. (2013, January 1). Life Course Indicator: Concentrated Disadvantage. Retrieved October 22, 2014, from http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-06_ ConcentratedDisad_Final-4-24-2014.pdf
- 6. New Zealand Ministry of Education. (2010, February 1). Effects of Poverty, Hunger, and Homelessness on Children and Youth. Retrieved October 22, 2014, from http://www.educationcounts.govt.nz/indicators/main/education-and-learning-outcomes/1903
- Centers for Disease Control and Prevention. (2012, May 16). Higher Education and Income Levels Key to Better Health, According to Annual Report on Nation's Health. Retrieved February 19, 205 from

http://www.cdc.gov/media/releases/2012/p0516_higher_education.html

- National Education Association. (n.d.) Early Childhood Education. Retrieved November 20, 2015, from: http://www.nea.org/home/18163.htm
- Reynolds, A., Temple, J., Robertson, D., Mann, E. (2001, May 9). Long-term Effects of an Early Childhood Intervention on Educational Achievement and Juvenile Arrest. The Journal of the American Medical Association. 285(18), 2339-2346. doi:10.1001/ jama.285.18.2339. Retrieved November 23, 2015, from http://jama.jamanetwork.com/article.aspx?articleid=193816#RESULTS
- 10. National Education Association. (2008). An NEA Policy Brief: Early Childhood Education and School Readiness. Retrieved November 23, 2015, from http://www.nea.org/assets/docs/HE/mf_PB03_EarlyChildhood.pdf
- Association of Maternal & Child Health Programs. (2013, January 1). Life Course Indicator: High School Graduation Rate. Retrieved October 22, 2014, from http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-20_ HS_gradrate_Final_3-26-2014.pdf

- 12. Partners for a Hunger-Free Oregon. (n.d.) Goal 1: Increase Economic Stability for People. Communities, and the State. Retrieved December 1, 2015, from https://oregonhunger.org/increase-economic-stability
- 13. Michael & Susan Dell Foundation. (n.d.). Family Economic Stability. Retrieved December 1, 2015, from http://www.msdf.org/programs/family-economic-stability/
- 14. World Health Organization. (2003, January 1). DAC Guidelines and Reference Series: Poverty and Health. Retrieved October 22, 2014, from http://www.who.int/tobacco/research/economics/publications/oecd_dac_pov_health.pdf
- 15. U.S. Department of Labor. (2015, April 2). Earnings and Unemployment Rates by Educational Attainment. Retrieved April 14, 2015, from http://www.bls.gov/emp/ep_chart_001.htm
- 16. Association of Maternal & Child Health Programs. (2013, January 1). Life Course Indicator: Unemployment. Retrieved October 22, 2014, from http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-22_ Unemployment_Final-11-6-2013.pdf
- 17. Robert Wood Johnson Foundation. (2013, March). Health Policy Snapshot: How Does Employment - or Unemployment - Affect Health?. Retrieved December 3, 2015, from http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf403360
- 18. American Academy of Pediatrics:: Healthy Children.org. (2015, November 21). Working Parents. Retrieved December 3, 2015, from https://www.healthychildren.org/English/family-life/work-play/Pages/Working-Parents.aspx
- 19. U.S. Census Bureau. (n.d.). Who Can Afford to Live in a Home?: A Look at Data From the 2006 American Community Survey. Retrieved December 4, 2015, from http://www.census.gov/housing/census/publications/who-can-afford.pdf
- 20.U.S. Department of Housing and Urban Development. (n.d.). Affordable Housing. Retrieved July 6, 2015, from http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/
- 21. U.S. Census Bureau. (n.d.). Per Capita Income. Retrieved December 4, 2015, from http://quickfacts.census.gov/qfd/meta/long_INC910213.htm
- 22. Berger. M., (n.d.). Kentucky's Per Capita Income: Catching Up to the Rest of the Country. Retrieved December 10, 2015, from http://cber.uky.edu/Downloads/berger97.htm
- 23. U.S. Census Bureau. (n.d.). Median Household Income. Retrieved December 10, 2015, from http://quickfacts.census.gov/qfd/meta/long_INC110213.htm
- 24. Rhode Island Health Care Matters. (n.d.). Median Household Income. Retrieved December 10, 2015, from http://www.rihealthcarematters.org/modules.php?op=modload&name=NS-Indicator&file=indicator&i id=14094769
- 25. Hamilton County Job & Family Services. (n.d.). Cash Assistance. Retrieved December 29, 2015, from https://www.hcjfs.org/services/cash-assistance/
- 26. CLASP: Policy Solutions That Work for low-Income People. (2015, June). Child care Assistance: A Vital Support for Working Families. Retrieved January 6, 2016, from http://www.clasp.org/resources-and-publications/publication-1/CCDBG-Advocacy-Fact-Sheet.pdf

- 27. Hamilton County Job & Family Services. (n.d.) Child Care. Retrieved January 6, 2016, from https://www.hcjfs.org/services/child-care/
- 28.U.S. Department of Agriculture. (2016, January 7). National School Lunch Program. Retrieved January 7, 2016, from http://www.fns.usda.gov/nslp/national-school-lunch-program-nslp
- 29. Roof, K., Oleru, Ngozi., (2008). Public Health: Seattle and King County's Push for the Built Environment. Journal of Environmental Health. 71(1). 24-27. Retrieved January 7, 2016, from http://www.cdc.gov/nceh/ehs/docs/jeh/2008/july-aug_w_case_studies/jeh_jul-aug_08_seattle.pdf
- 30.U.S. Department of Transportation, Federal Transit Administration. (n.d.). Alternative Transportation and Your Health. Retrieved January 7, 2016, from http://www.fta.dot.gov/14504.htm
- 31. The National Center for Review & Prevention of Child Deaths. (.n.d.). Motor Vehicle. Retrieved November 13, 2015, from https://www.childdeathreview.org/reporting/motor-vehicle/
- 32. Centers for Disease Control and Prevention. (2015, December 29). Injury Prevention & Control: Motor Vehicle Safety Cost data and Prevention Policies. Retrieved January 7, 2016, from http://www.cdc.gov/motorvehiclesafety/costs/index.html
- 33. Centers for Disease Control and Prevention. (2007, March 17). Definitions for WISQARS Nonfatal Injury. Retrieved December, 28, 2015, from http://www.cdc.gov/ncipc/wisqars/nonfatal/definitions.htm#pedestrian
- 34. U.S. Department of Transportation, Federal Highway Administration. (n.d.). Pedestrian and Bicycle Information Center. Retrieved December, 28, 2015, from http://www.pedbikeinfo.org/data/factsheet_social.cfm
- 35. MacDonald, J. (2015, September). Community Design and Crime: The Impact of Housing and the Built Environment. Retrieved January 4, 2016, from http://www.jstor.org/stable/10.1086/681558?seq=1#page_scan_tab_contents
- 36. Curry, A., Latkin, C., Davey-Rothwell, M. (2009, July 1). Pathways to Depression: The Impact of Neighborhood Violent Crime on Inner-City Residents in Baltimore, Maryland, U.S.A. Social Science & Medicine. 67(1). 23-30. Retrieved January 4, 2016, from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2684449/
- 37. The Federal Bureau of Investigation. (n.d.). Violent Crime. Retrieved January 6, 2016, from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2014/crime-in-the-u.s.-2014/offenses-known-to-law-enforcement/violent-crime
- 38. Centers for Disease Control and Prevention. (2014, December 24). Suicide: Consequences. Retrieved April 14, 2015, from http://www.cdc.gov/violenceprevention/suicide/consequences.html
- 39. Dannenberg, A., Frumkin, H. (2012, September 18). *Making Healthy Place: Designing and Building for Health, Well-being, and Sustainability,* Washington:Island Press.
- 40.Hembree, C., Galea, S. Ahern, J., Tracy, M., Markham Piper, T., Miller, J., Vlahov, D.k, Tardiff, KD. (2005). The Urban Built Environment and Overdose Mortality in New York City Neighborhoods. Health & Place 11(2005). 147-156. Retrieved January 6, 2016, from https://pubweb.bnl.gov/~frenkel/BTO/weill.pdf

- 41. Cummins, S., Jackson, R. (n.d.). The Built Environment and CHildren's Health. Retrieved January, 6, 2016, from http://www.cdc.gov/healthyplaces/articles/the_built_environment_and_children_health.pdf
- 42. Hamilton County Public Health. (2014, January 9). Sports-Related Injuries, 2004-2011. Retrieved January 6, 2016, from http://www.hamiltoncountyhealth.org/files/files/Reports/Sports_Related_Injury.pdf
- 43. National Institute of Arthritis and Musculoskeletal and Skin Diseases. (2013, November). Handout on Health: Sports Injuries. Retrieved January 6, 2016, from http://www.niams.nih.gov/Health_Info/Sports_Injuries/default.asp#ra_2
- 44. Hamilton County Public Health. (2015, September). Dog Bite-Related Injuries. Retrieved January 6, 2016 from http://www.hamiltoncountyhealth.org/files/files/Forms/EPI/Dog Bite Related Injuries.pdf
- 45. Healthy People.gov. (.n.d). Access to Health Services. Retrieved January 7, 2016, from http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services
- 46. PBS.org. (n.d.). The Uninsured. Retrieved October 22, 2014, from http://www.pbs.org/healthcarecrisis/uninsured.html
- 47. Centers for Disease Control and Prevention. (2011, April). Census Tract Level State Maps the Modified Retail Food Enviroinment Index (mRFEI). Retrieved May 26, 2015, from http://www.cdc.gov/obesity/downloads/childrensfoodenvironment.pdf
- 48. Centers for Disease Control and Prevention. (2015, March 1). Chronic Obstructive Pulmonary Disease (COPD). Retrieved January 7, 2016, from http://www.cdc.gov/copd/index.html
- 49. American Lung Association. (n.d.). How Serious is COPD. Retrieved January 7, 2016, from http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/copd/learn-about-copd/howserious-is-copd.html
- 50.Centers for Disease Control and Prevention. (2009, November 16). About Heart Disease. Retrieved October 22, 2014, from http://www.cdc.gov/heartdisease/about.htm
- 51. Centers for Disease Control and Prevention. (2015, March 31). Basics About Diabetes. Retrieved January 7, 2016, from http://www.cdc.gov/diabetes/basics/diabetes.html
- 52. Centers for Disease Control and Prevention. (2015, September 30). Leading Causes of Death. Retrieved January 7, 2016 , from http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm
- 53. American Cancer Society. (n.d.). What Causes Cancer?. Retrieved April 13, 2015, from http://www.cancer.org/cancer/cancercauses/index
- 54. Centers for Disease Control and Prevention. (2016, January 18). Retrieved January 7, 2016, from http://www.cdc.gov/tobacco/campaign/tips/diseases/cancer.html
- 55. American Cancer Society. (n.d.). Alcohol Use and Cancer. Retrieved January 7, 2016 from http://www.cancer.org/cancer/cancercauses/dietandphysicalactivity/alcohol-use-and-cancer

56. American Cancer Society. (n.d.). What are the risks for breast cancer?. Retrieved January 7, 2016, from http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-risk-factors

- 57. Centers for Disease Control and Prevention. (2015, July 21). Retrieved January 7, 2016 from http://www.cdc.gov/cancer/dcpc/prevention/index.htm
- 58. Centers for Disease Control and Prevention (2015, November 12). Syphilis CDC Fact Sheet.Retrieved January 7, 2016 from http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm
- 59. Centers for Disease Control and Prevention. (n.d.). General HIV Information. Retrieved January 7, 2016, from https://wwwn.cdc.gov/hivrisk/what is/what is hiv.html
- 60.Centers for Disease Control and Prevention. (n.d.). Can I get or transmit HIV from...?. Retrieved January 7, 2016, from https://wwwn.cdc.gov/hivrisk/transmit/
- 61. Centers for Disease Control and Prevention. (2015, May 31). Viral Hepatitis-Hepatitis C Information. Retrieved January 7, 2016 from http://www.cdc.gov/hepatitis/hcv/
- 62. Centers for Disease Control and Prevention. (2016. January 12). Infant Mortality. Retrieved January 7, 2016, from http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm
- 63. United States Census Bureau. (2014, June 9). American Community Survey. Disability Methodology. Retrieved January 8, 2016 from https://www.census.gov/people/disability/methodology/acs.html
- 64. Government of Canada. (2010, January 11). Life Expectancy. Retrieved October 22, 2014 from http://www.statcan.gc.ca/pub/82-229-x/2009001/demo/lif-eng.htm
- 65. National Institutes of Health. (2011, October). Global Health and Aging: Living Longer. Retrieved April 14, 2015, from https://www.nia.nih.gov/research/publication/global-health-and-aging/living-longer



CONTACT US.

Address 250 William Howard Taft Road 2nd Floor Cincinnati, Ohio 45219

> Phone Number (513) 946.7800

Fax Number (513) 946.7890

Website WatchUsThrive.org

Follow us on Social Media

