2023-2028 Community Health Assessment

JUNE 2023-2028

This report is produced by the City of Cincinnati Health Department. For more information and updates, please call 513-357-7272 or visit http://www.cincinnati-oh.gov/health

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Chapter 1: Introduction

Purpose

The purpose of the Community Health Assessment (CHA) is to learn about the health of the Cincinnati population, identify contributing factors to higher health risks or poorer health outcomes, and determine what assets and resources are available to improve the population health status.

2023 CHA Update and Addendum

In 2020, the Cincinnati Health Department (CHD) initiated this assessment process to develop a comprehensive CHA for the residents of Cincinnati. Over time, the health of the population and the broad range of factors that impact health may change. It is important to continually monitor and update the CHA to better understand the ongoing health of our community. This 2023 update is our continuous effort to ensure the best and most current data and information is available for decision-making and health planning.

Ongoing Monitoring and Updating the CHA

All Ohio local health departments (LHDs) and tax-exempt hospitals are required by statute to submit assessments to the state on an established cycle (Ohio Revised Code 3701.981). This assures that the CHA, the Community Health Needs Assessment (CHNA) required by tax-exempt hospitals, and the State Health Assessment (SHA) are in alignment. By October 1, 2023, all LHDs shall submit their completed CHA to ODH, and every three years thereafter. Tax-exempt hospitals will follow the same schedule for their CHNAs. With this 2023 update of our CHA, the Cincinnati Health Department is on track to meet these established intervals and will have a fully revised CHA every three years.

Between the 3-year intervals established above, ongoing analyses will be conducted to assure that the most current data is available to better understand the health of Cincinnati residents. Ongoing monitoring includes revising existing data in the CHA, as well as furthering our analyses of specific neighborhood data and information with an emphasis on health inequities and socioeconomic factors.

Collaborative Process for Sharing and Analyzing Data

The CHA was developed through a collaborative process of collecting and analyzing data, involving many sectors of the community (local government, for-profits, non-profits, community foundations, health care providers, academia, and human service agencies); and ensuring representation of populations that are at higher health risk or have poorer health outcomes. All these partners have committed to using the assessment, in which they have highlighted areas for improvement, identified resources, and prepare to adopt priorities and policies and develop plans to address community health outcomes.

Community Health Needs Assessment (CHNA)

The Cincinnati Health Department participates in an ongoing partnership of the Regional Community Health Needs Assessment (CHNA) group convened by the Health Collaborative of Cincinnati in 2021; 36 hospitals, 22 local health departments, 26 counties, and 3 states share data for the whole region as well as detailed county-level data. This approach provides another source of data describing health needs locally and regionally and recognizes the impact of the region on local health. CHD utilizes this partnership data to augment and inform its CHA and to support data analyses in specific areas, such as access to health care. A full list of stakeholders can be found in Appendix A.

Data and Information Sources Contributing to the Assessment

Sources of data for this report include the Cincinnati Health Department (CHD), the Ohio Department of Health, Hamilton County Public Health, Ohio Department of Job and Family Services (ODJFS), the Center for Disease Control and Prevention (CDC), the Bureau of the Census' American Community Survey (Census: ACS), the Ohio Department of Public Safety (ODPS), the Ohio Development Services Agency (ODSA), the Ohio Mental Health and Addiction Services (OMHAS), the Health Resources and Services Association (HRSA), the United States Department of Agriculture Economic Research Service (USDA ERS), and the Robert Wood Johnson Foundation.

Report Structure

This report illustrates the key health issues faced by City of Cincinnati residents along with relevant health disparities affecting community health. Data in this report are organized into topic areas, which can be located by referring to the table of contents. The structure of this report includes: this introduction and description of the process; a demographic discussion of the population; an analysis of the Social Determinants of Health; a community health status report based on four of the Foundational Public Health Areas (Communicable Disease, Chronic Disease, Maternal & Child Health, and Access to Care); summaries of focus group sessions; and a summary of the key findings and conclusions. This report compiles primary (newly collected data) and secondary (existing) data to paint a detailed picture of the city and compares the area's status to state and national data where possible, highlighting critical areas of public health concern.

Contributing Causes of Health Challenges

The City of Cincinnati has its share of health challenges. The city has seen some progress in reducing infant mortality, but there is still significant work to be done. Leading causes of death vary by gender and race, but we continue to see heart disease, cancer and injury deaths topping the list. The emergence of COVID-19 has impacted the entire city, becoming the fourth leading cause of death in Cincinnati in 2021. Drug overdoses and the opioid epidemic have a significant impact on our neighborhoods as well. Finally, there is a growing concern about mental and behavioral health and the stigma associated with seeking needed help.

A large and growing body of evidence tells us that many factors impact our health outcomes, especially socioeconomic status indicators such as income, education, and even the neighborhood we live in. This update to our Community Health Assessment (CHA) provides a deeper look at those factors that contribute to our health and well-being at a neighborhood level. Where we live has a significant impact on our health and tells us more about what we can do as a community to improve.

The CHA contains many color-coded neighborhood maps, identifying data specific to a particular neighborhood. This information will be invaluable for health department programs, Cincy CHIP (Community Health Improvement Plan), hospitals, healthcare, and community organizations to better target high need areas. For example, those organizations that are concerned about heart disease will not only see heart disease deaths but identify the neighborhoods where those deaths are highest. The hypertension prevalence by neighborhood map compliments the heart disease map by showing where to intervene to reduce hypertension: a contributing cause of heart disease. Overlaying maps for age, gender, race, and ethnicity provides additional help in determining interventions that are culturally appropriate for a particular neighborhood.

Across this assessment, trends and patterns appear throughout the data, emphasizing different health disparities. For example, maps showing poverty levels across neighborhoods often mirror maps for access to care, life expectancy, and high-risk factors related to disease and disability (such as food deserts or tobacco use). These issues are highlighted throughout the report. These health concerns. While challenging, can be prevented through public health action and collaboration with community stakeholders and state and federal partnerships.

Vision and Values Statements

In the development of the 2017 CHA, Cincinnati Public Health Department stakeholders developed vision and value statements. The Health Department still uses the vision, mission, and core values revised in 2020, as shown below. This guiding image of a healthy Cincinnati is supported by value statements that define what is important to this community as it carries out this public health vision.

VISION

The Cincinnati Health Department will be a public health leader for building and maintaining a healthy and safe community.

MISSION

To assure access to quality services and to improve community health and wellness.

CORE VALUES (GUIDING PRINCIPLES)

Collaboration

We believe in being an active member of our community, participating in conversations and engaging with each other productively and respectfully to achieve common goals.

Commitment

We foster a culture of compassion and mutual respect among our employees and clients and recognize diversity as a strength in our organization and community.

Accountability

We demonstrate the highest level of respect, integrity, and professionalism, guided by our sense of trust and morality. We are dedicated to cultivating a sense of transparency both internally and with the general public.

Quality

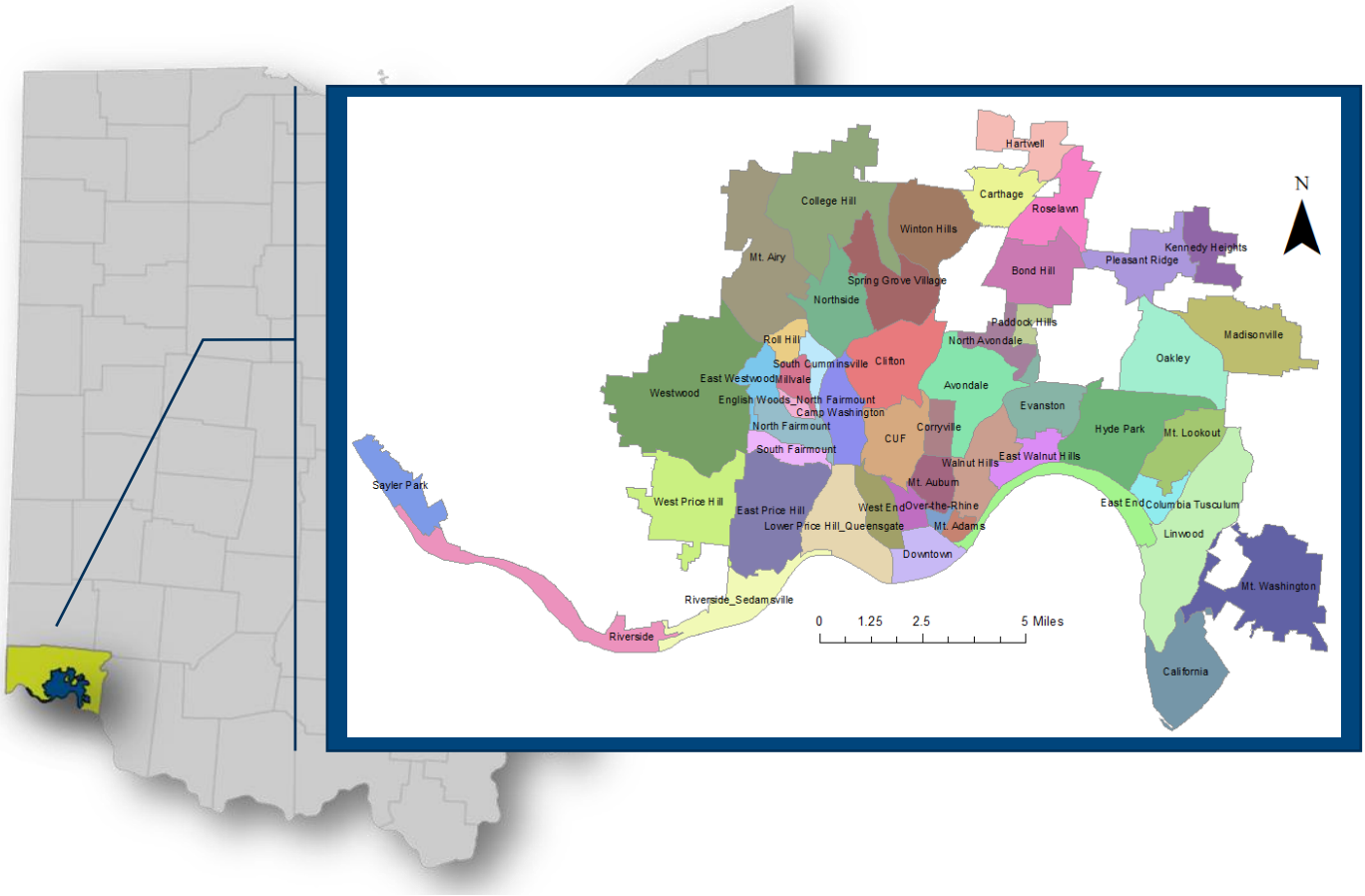
We honor our mission by upholding excellence in personal, public health and patient care services. We strive to be the model for public health practice to continuously improve health and social equity for the people of Cincinnati. We measure performance outcomes and social determinants of health through continuous quality improvement.

Health Equity & Access

We strive to eliminate disparities and assure that everyone has a fair and just opportunity to be healthy. We work toward the timely availability of personal health services to achieve the best health outcomes.

Definition of the Community Served

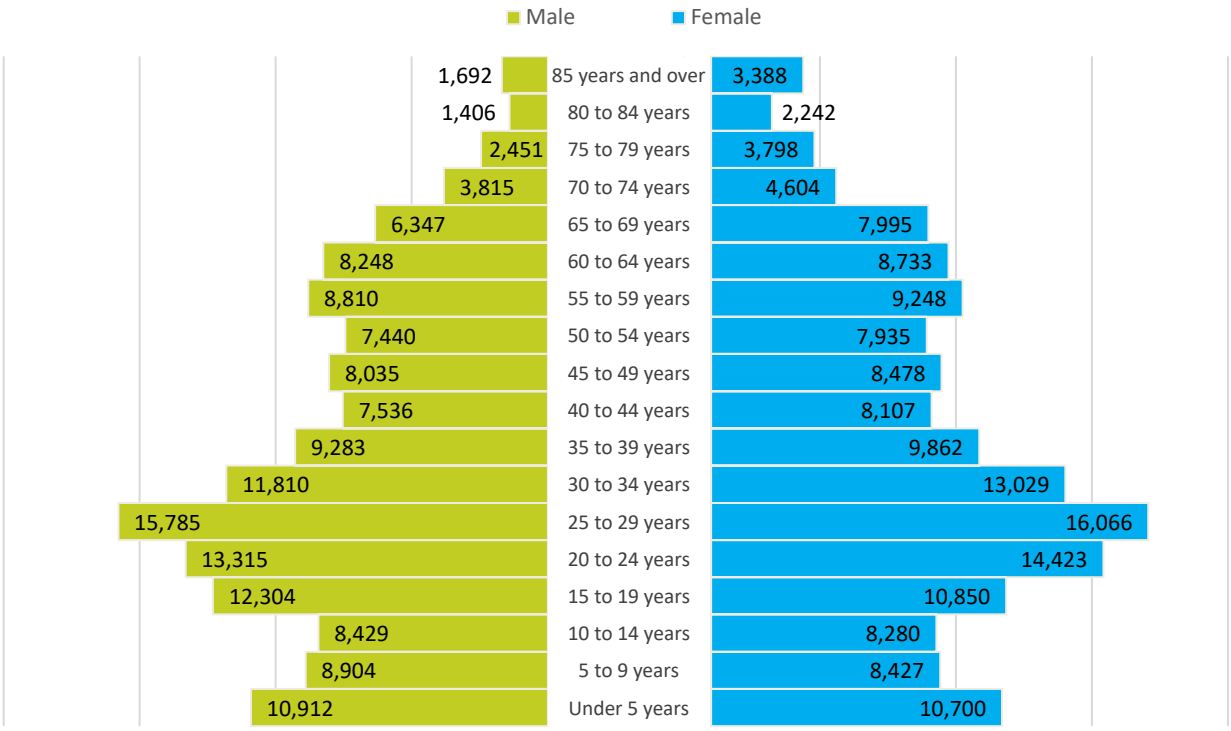
Map 1: Cincinnati, Ohio



The City of Cincinnati lies in the most southwestern county of the State of Ohio, Hamilton County. Both I-70 and I-71 are major north–south interstate highways running through Cincinnati and Hamilton County. The City of Cincinnati is mostly urban, with over 76.2% of its land area being developed.[1] The city has a vibrant and diverse population, with strong healthcare, educational, and business institutions. It is the largest city in the region and is comprised of 52 distinct neighborhoods (Map 1). As of 2020, Cincinnati had 309,317 residents with 51.6% identifying as female and 48.4% identifying as male; this ratio is similar to Hamilton County and of Ohio. Cincinnati's age distribution trends toward young adults, with the highest percent of males and females between the ages of 25-29 years old. (Figure 1) Of all Cincinnati residents, 50.6% are White and 40.3% are Black or African American[2], a racial distribution that is much more diverse than Hamilton County (White 67.3%; Black 26.6%) and the State of Ohio (White 81.2%; Black 13.2%). (Figure 2) Age, education, and income distributions also differ between the city and the rest of the country. 37.4% of Cincinnati children live in poverty, compared to 18.6% of Ohio children, and 17.0% of children nationally.[3] These and other social and economic factors affect the health status of the residents. For this reason, a Cincinnati specific profile is included to identify unique Cincinnati needs and challenges.

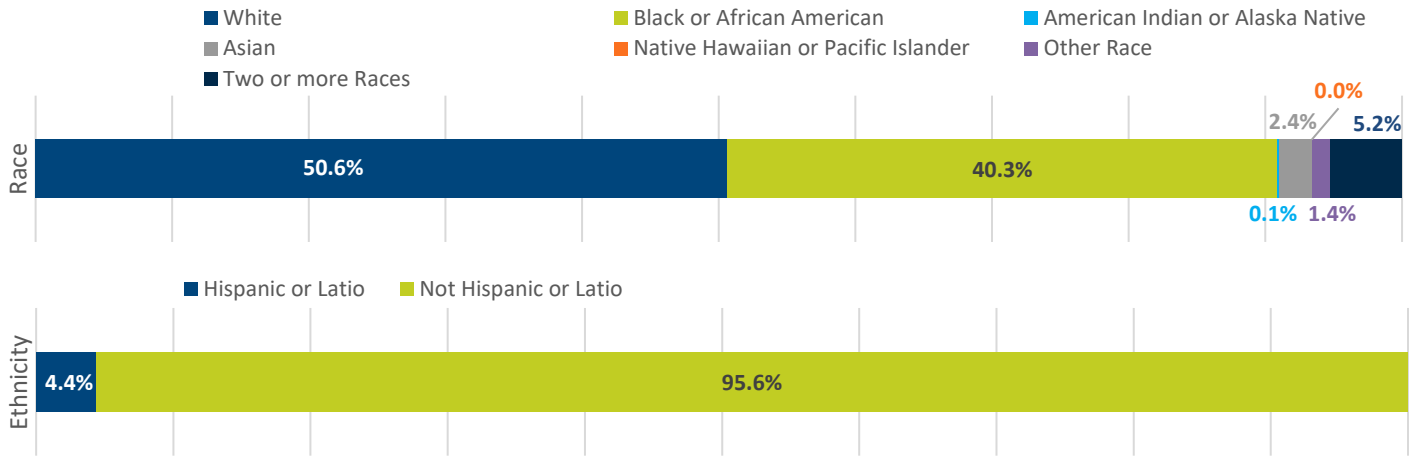
[1] U.S. Geographic Survey
[2] American Community Survey, 2020: ACS 5-Year Estimates Data Profiles
[3] American Community Survey, 2020: ACS 5-Year Estimates Data Profiles S1701 – Poverty Status in the Past 12 Months

Figure 1: Cincinnati Population Pyramid (2020)



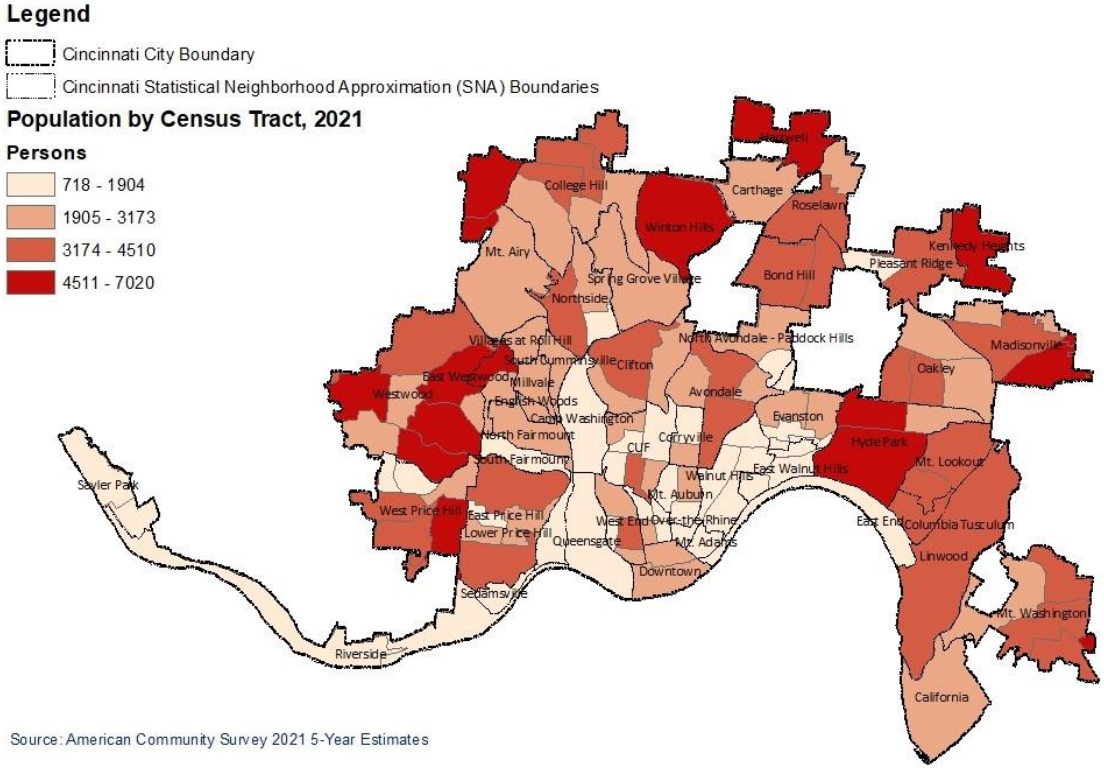
Source: American Community Survey, 2016-2020 Ohio Development Services Agency

Figure 2: Cincinnati Race and Ethnicity (%) (2020)

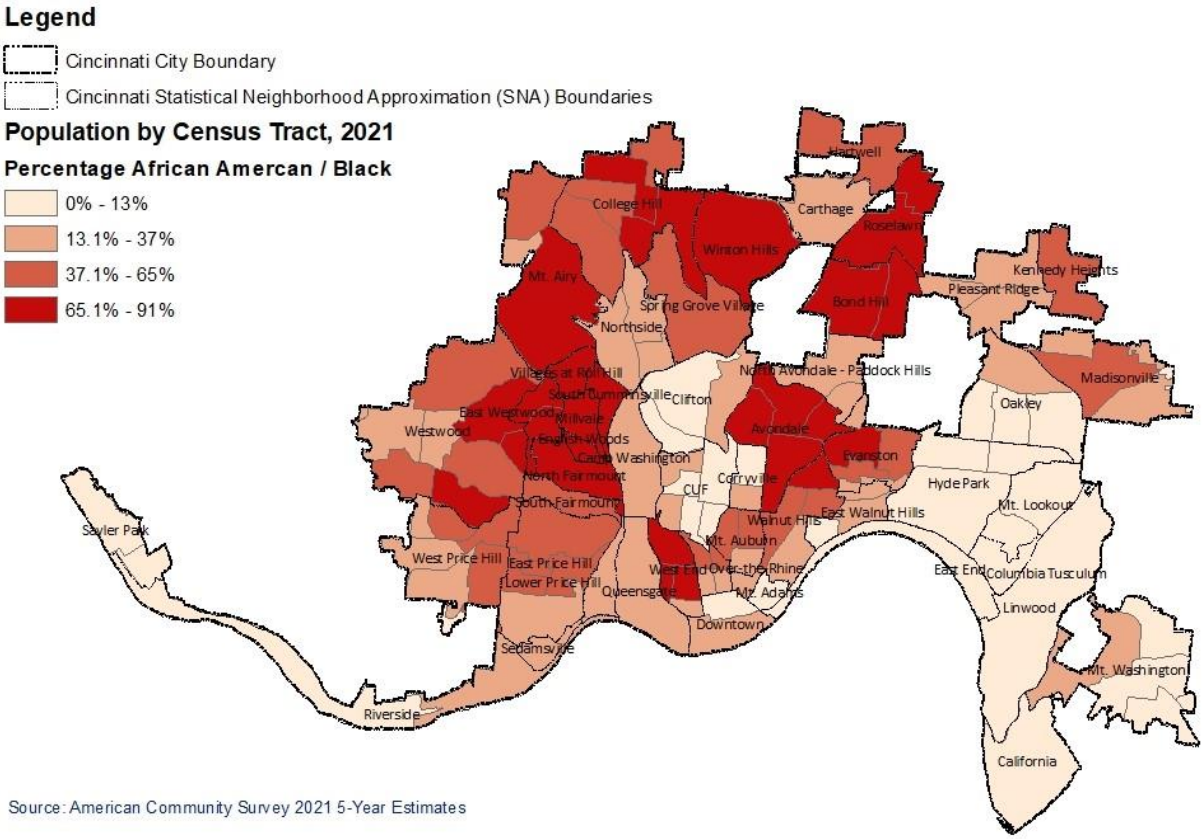


Source: American Community Survey, 2020

Map 2: Cincinnati Population All Ages by Census Tract (%) (2021)



Map 3: Cincinnati African American Population All Ages by Census Tract (%) (2021)



Chapter 2: Significant Health Needs of the Community

Maternal and Infant Executive Summary

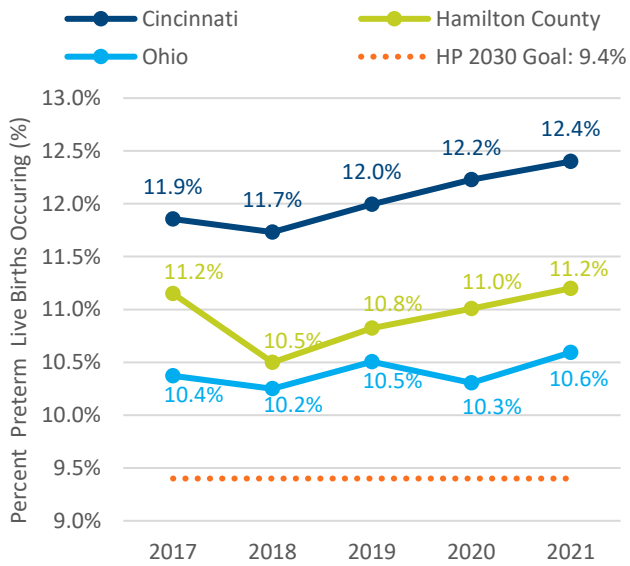
The Healthy People 2030 (HP 2030) goal for maternal and child health is to- prevent pregnancy complications and maternal deaths and improve women's health before, during, and after pregnancy. Maternal and infant health includes infant and maternal mortality, birth outcomes and related risk factors impacting preconception, pregnancy, and infancy such as teen pregnancy.

Public Health Importance: The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy), prenatal (during pregnancy), interconception (between pregnancies) care, and avoiding risky behaviors.

-Healthy People 2030

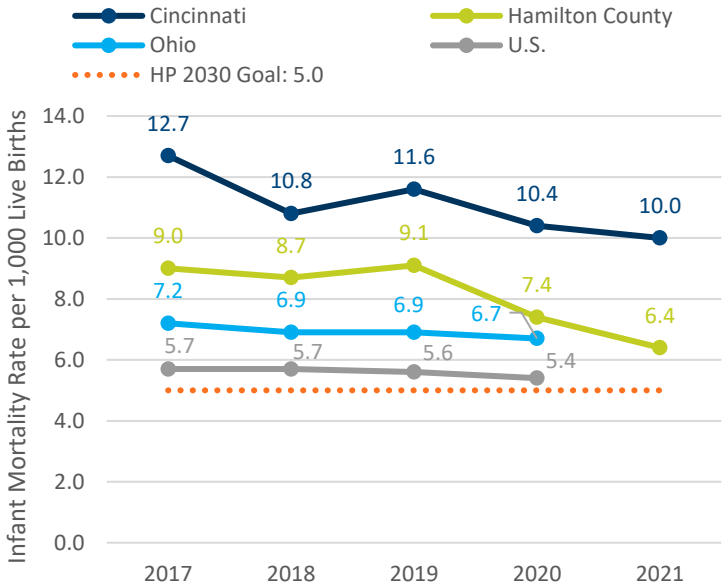
Image Source: Kidstock: Getty Images

Figure 3: Preterm Live Births (<37 weeks gestation) (%) (2017-2021)



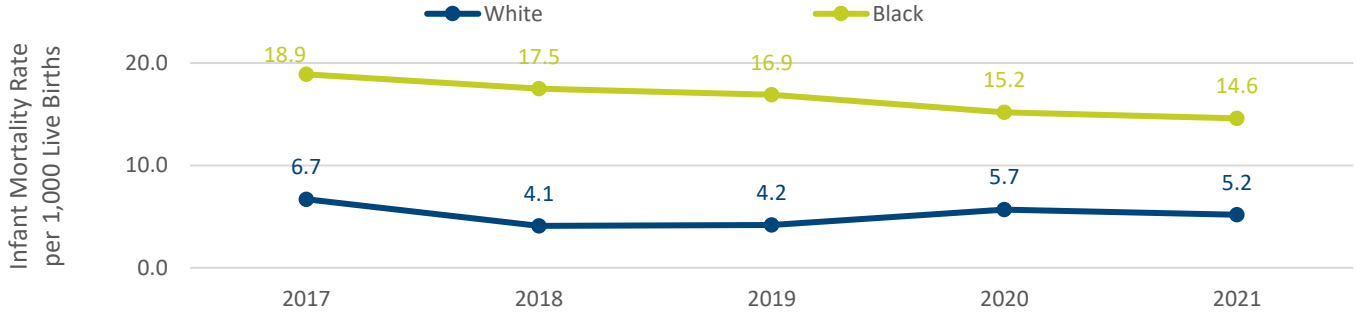
Source: Ohio Department of Health, Office of Vital Statistics

Figure 4: Infant Mortality Rate (2017-2021)



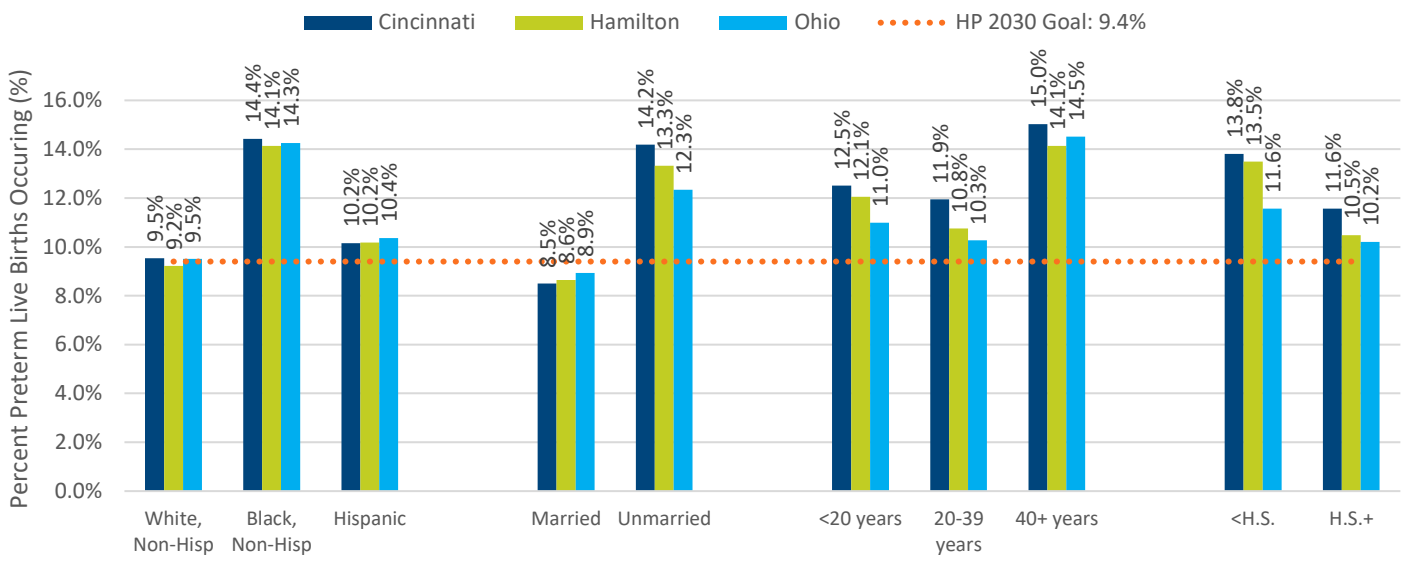
Source: Ohio Department of Health, Office of Vital Statistics

Figure 5: Cincinnati Infant Mortality by Race (2017-2021)



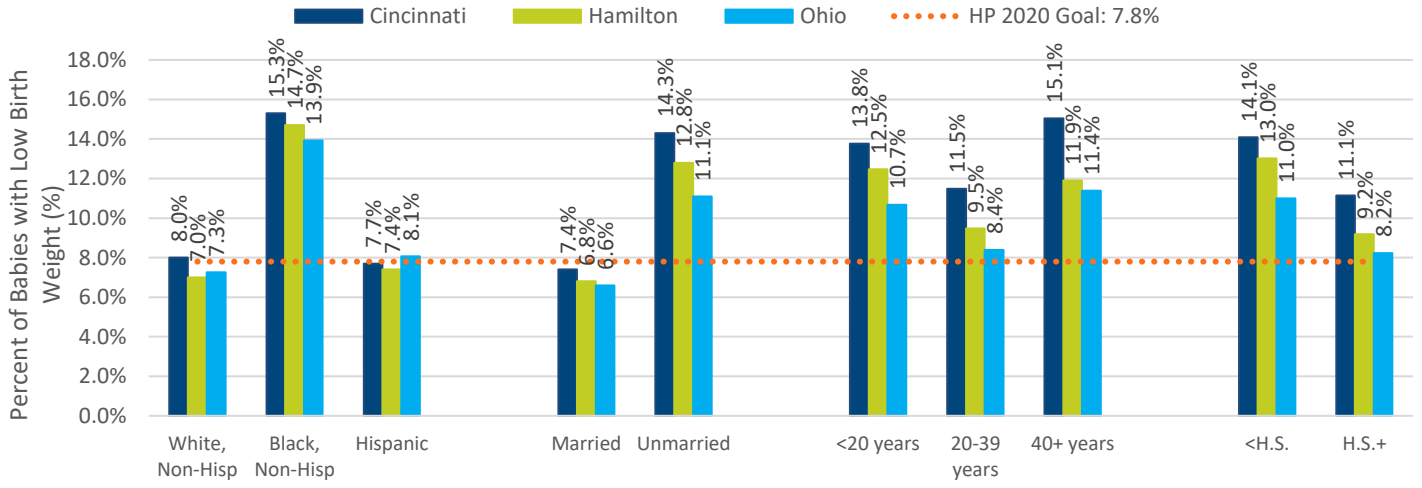
Source: Ohio Department of Health, Office of Vital Statistics

Figure 6: Preterm Live Births (<37 Weeks Gestation) by Demographics (%) (2016-2020)



Source: Ohio Department of Health, Office of Vital Statistics

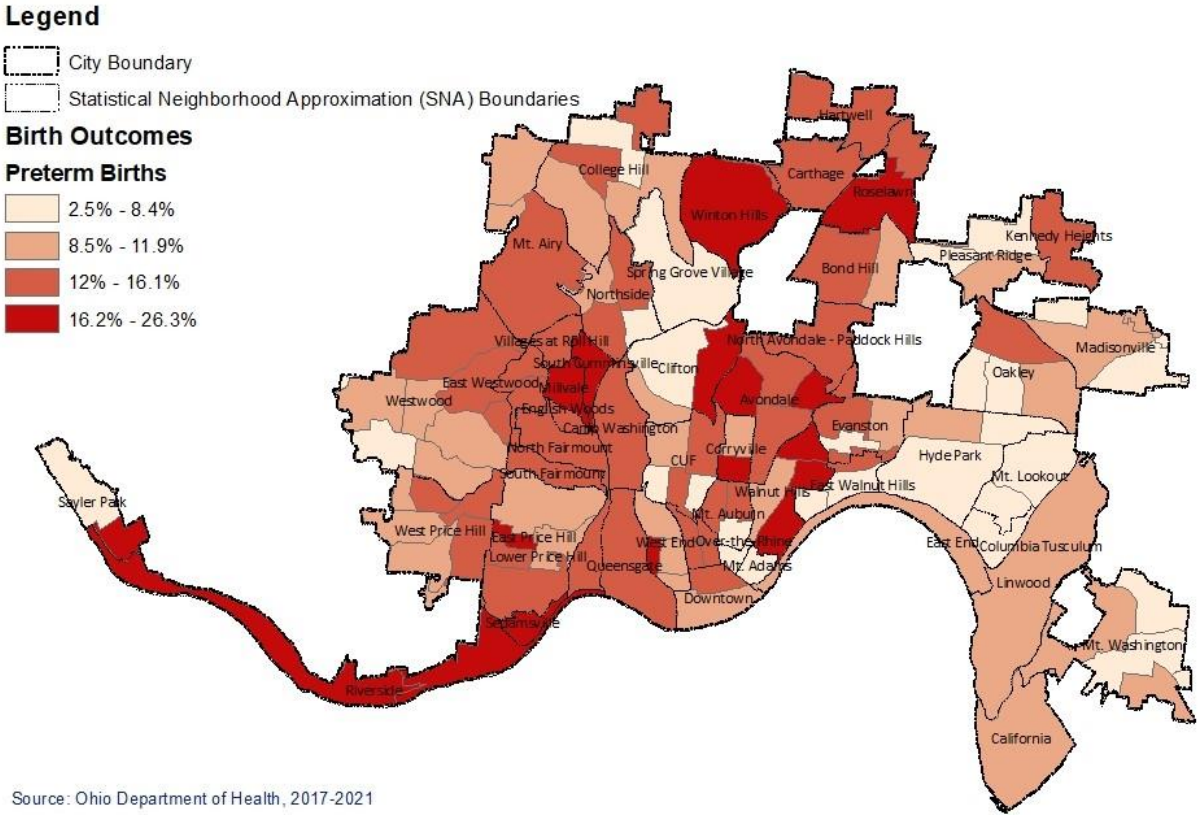
Figure 7: Low Birth Weight (<5lb 8oz or 2500g) by Demographics (%) (2016-2020)*



*Note: Healthy People 2030 does not have a specific objective goal for low birth weight.
Source: Ohio Department of Health, Office of Vital Statistics

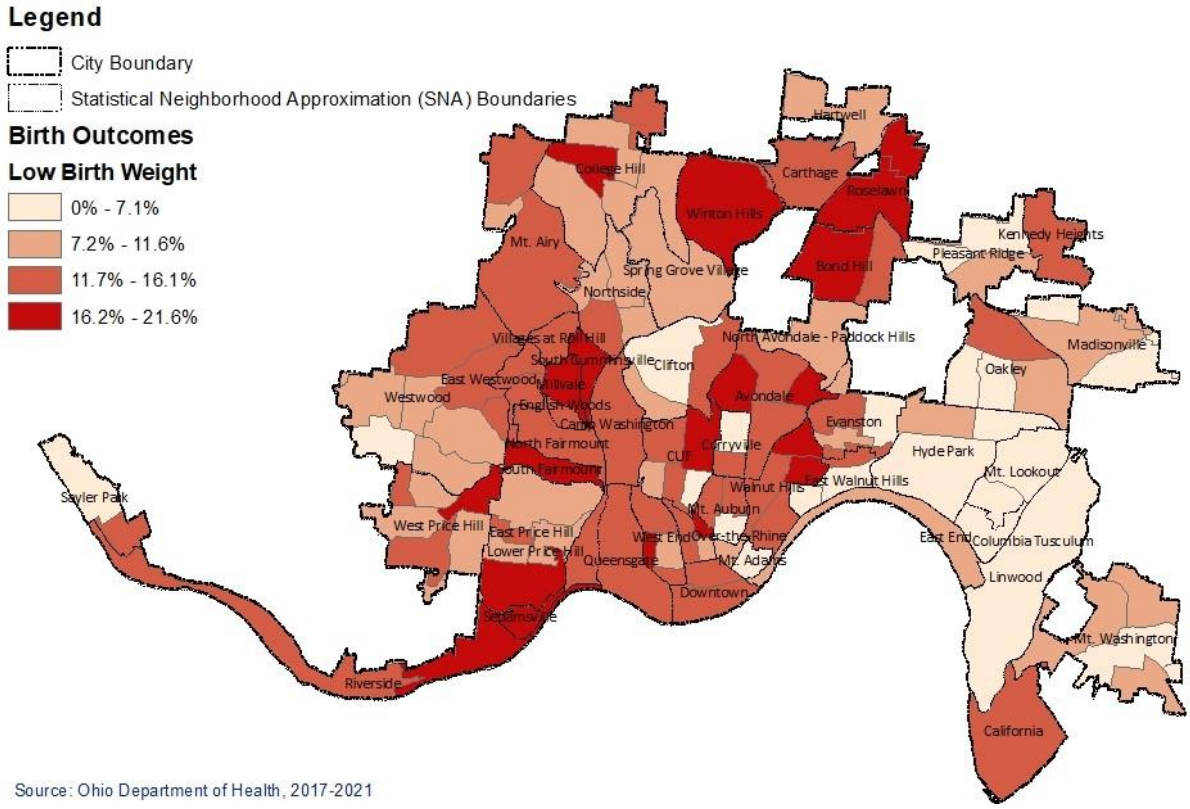
Key Research Findings: According to the literature, socioeconomic status, and poverty are predictors of infant mortality (infant death before age one). Nationally, Black/African Americans have a significantly higher rate of low birth weight (babies born under 5 pounds 8 ounces or 2500 grams) and preterm births (babies born before 37 weeks gestation) (Figures 3, 6 & 7). These indicators are associated with infant mortality, which is higher in Black/ African American population compared to the white population (Figures 5, 6, &7). Infant mortality is also higher among mothers in the youngest and oldest age groups (Figures 6 & 7). Additionally, there are geographic differences where preterm births are highest, particularly in the following neighborhoods, the West End (26.3%), Avondale (21.4%), and Walnut Hills (21.4%) neighborhoods. Low birth weight newborns are more prevalent in the Walnut Hills (21.6%), CUF (21.4%), and Millvale/South Cumminsville (21.1%) neighborhoods (Maps 4 & 5).

Map 4: Cincinnati Preterm Births (<37 Weeks Gestation) (%) (2017-2021)



Source: Ohio Department of Health, 2017-2021

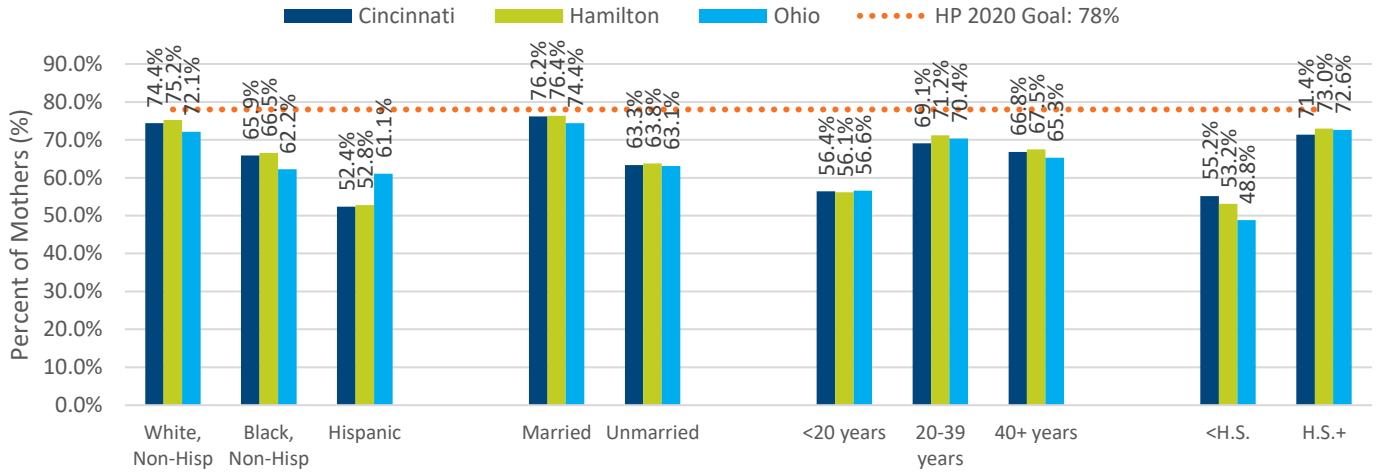
Map 5: Cincinnati Low Birth Weight Infants (<5lbs 8oz or 2500g) (%) (2017-2021)



Source: Ohio Department of Health, 2017-2021

Health Disparities

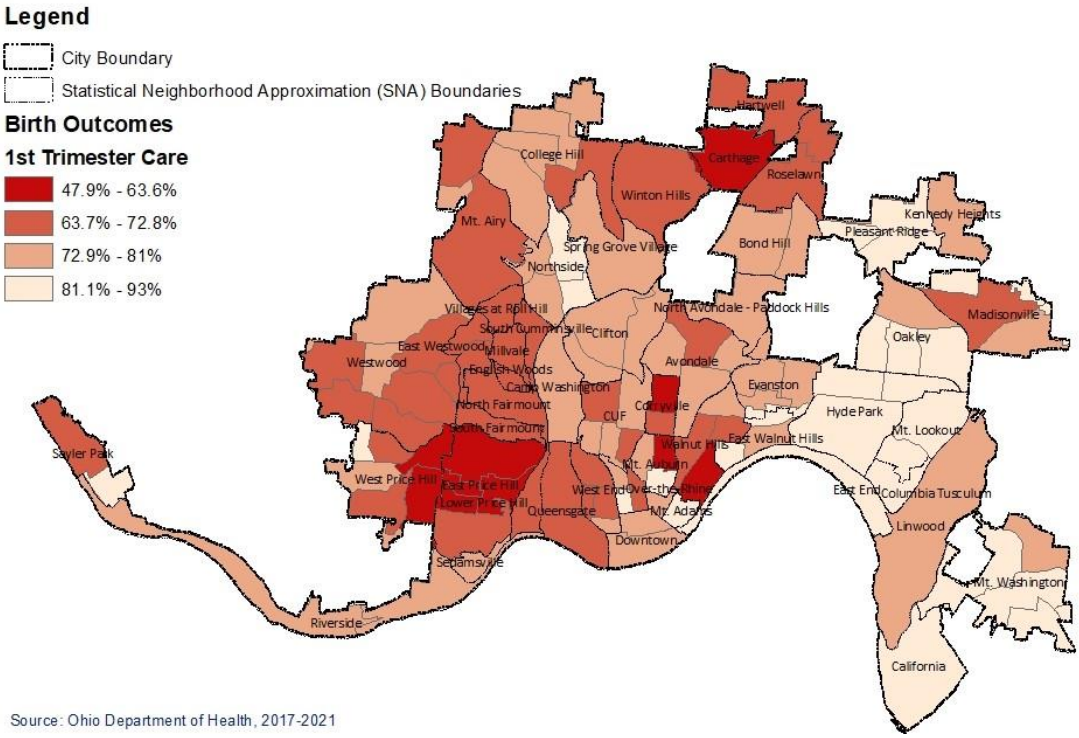
Figure 8: Mothers Receiving First Trimester Care by Demographics (%) (2016-2020)*



*Note: Healthy People 2030 does not have a specific objective goal for first trimester care.
Source: Ohio Department of Health, Office of Vital Statistics

Key Research Findings: Early prenatal care is essential to improve mother and child health and reduce associated unwanted outcomes. We observe pronounced disparities in obtaining early prenatal care in Cincinnati. Both Black (65.9%) and Hispanic mothers (52.4%) are less likely to access first trimester prenatal care than white mothers (74.4%) (Figure 8). Unmarried mothers (63.3%), young mothers under 18 years old (56.4%), and mothers who have not completed high school (55.2%) are also less likely to access early prenatal care (Figure 8). Neighborhoods where more than one-third of mothers do not access first trimester prenatal care include West End (44.2%), East Price Hill (42.1%), and Mt. Auburn (41.1%) (Map 6).

Map 6: Cincinnati Mothers Receiving First Trimester Care (%) (2017-2021)

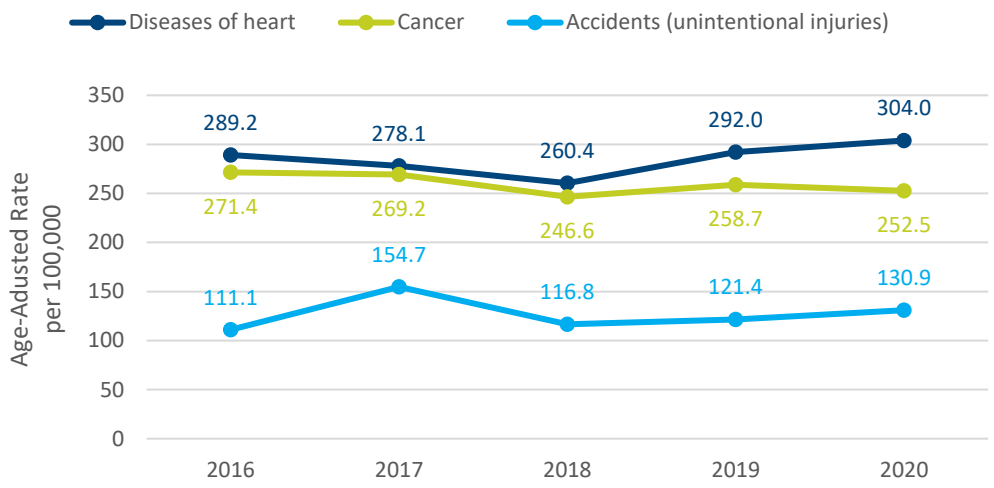


Source: Ohio Department of Health, 2017-2021

Chronic Disease Executive Summary

According to the CDC, about half of all adults had one or more chronic health conditions and a quarter of adults had two or more chronic health conditions. Heart disease and cancer (malignant neoplasms) account for almost half (48%) of the deaths in the United States.

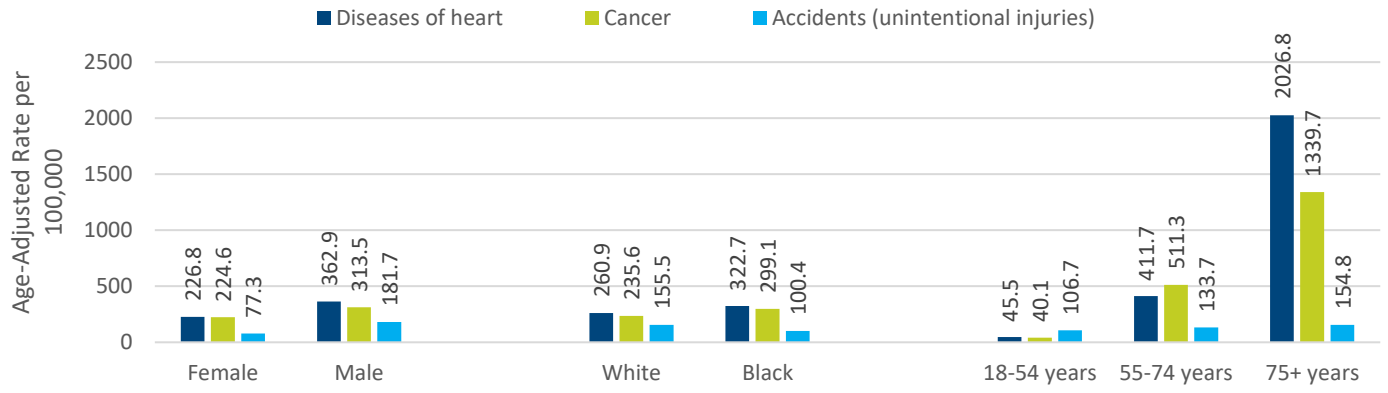
Figure 9: Cincinnati Top 3 Leading Causes of Death in Adults 18+ Years (2016-2020)



Source: Ohio Department of Health, Office of Vital Statistics

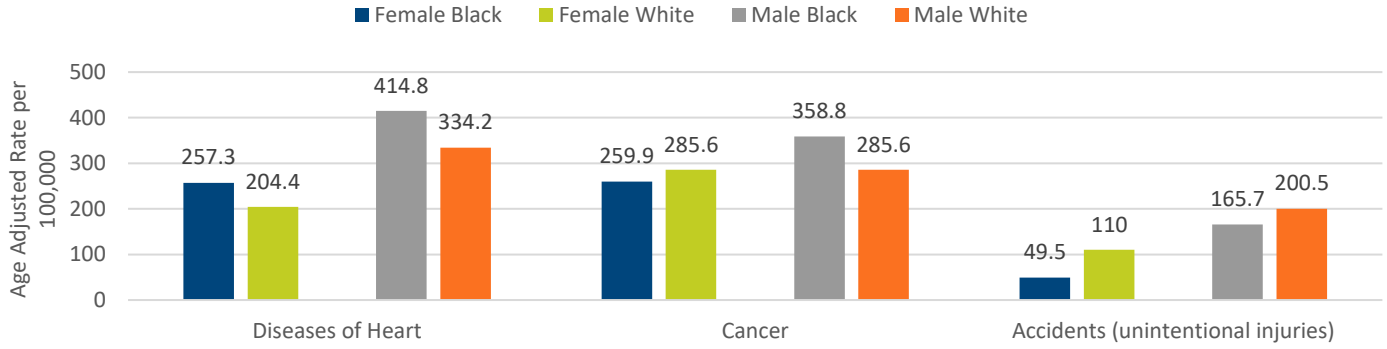
Key Research Findings: Chronic diseases, including obesity, cardiovascular disease, and cancer stand out as concerns for Cincinnati. Obesity and hypertension, for example, are highly prevalent conditions in Cincinnati, affecting more than one-third of the population (Figures 9, 10 & 11).

Figure 10: Cincinnati Top 3 Leading Causes of Death in Adults 18+ Years by Demographics (2016-2020)



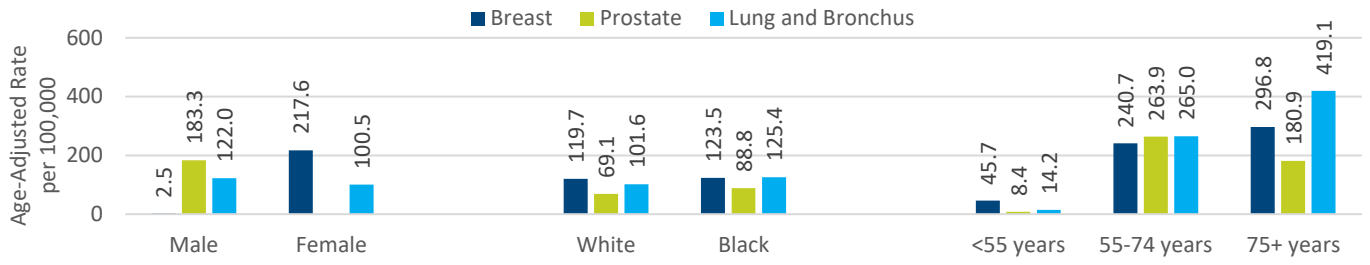
Source: Ohio Department of Health, Office of Vital Statistics

Figure 11: Cincinnati Top 3 Leading Causes of Death in Adults 18+ Years by Cause of Death (2016-2020)



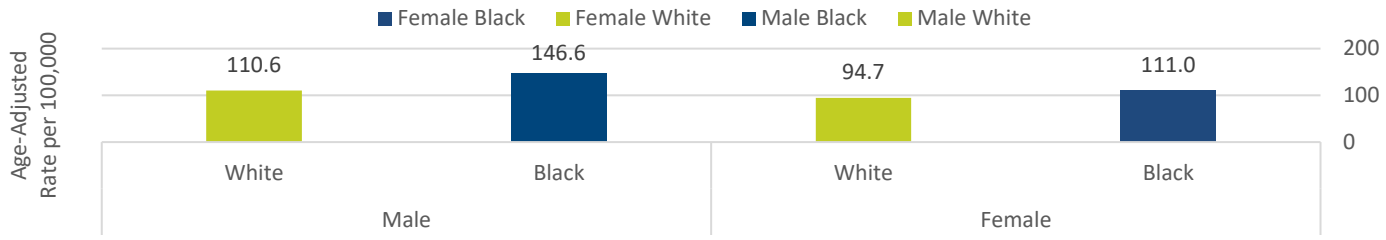
Source: Ohio Department of Health, Office of Vital Statistics

Figure 12: Cincinnati Cancer Incidence in Adults 18+ Years by Demographics (2017-2021)



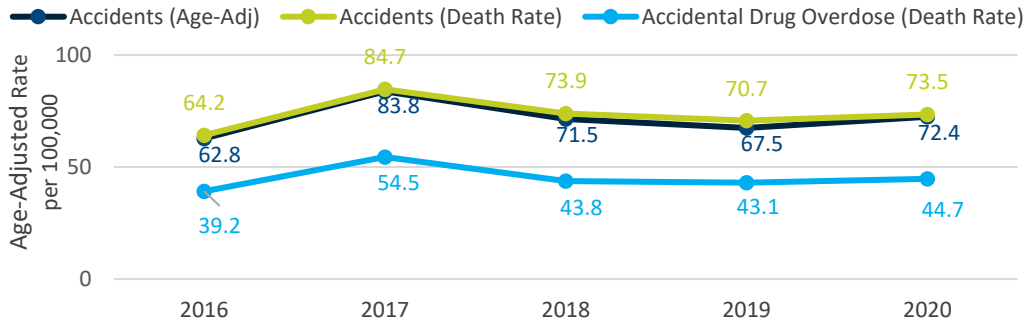
Source: Ohio Department of Health, Office of Vital Statistics

Figure 13: Cincinnati Lung & Bronchus Cancer Incidence in Adults 18+ Years by Race (2017-2021)



Source: Ohio Department of Health, Office of Vital Statistics

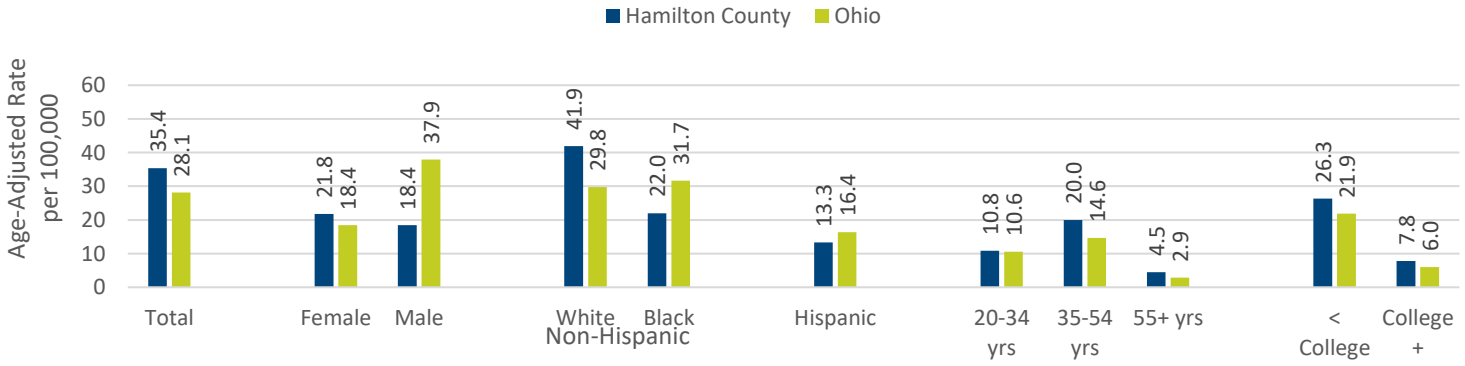
Figure 14: Hamilton County Accidents (Unintentional)* and Accidental Drug Overdoses** in Adults 20+ Years (2016-2020)



*Accidents includes (from highest to lowest rate): Accidental poisoning and exposure to noxious substances, falls, motor vehicle accidents, other and unspecified non-transport accidents, accidental drowning and submersion, accidental exposure to smoke fire and flames, water/air and space, other land transport accidents, accidental discharge of firearms.
**Accidental poisoning and exposure to noxious substances (drug overdoses) account for 59% of total accidents.

Source: Ohio Department of Health, Office of Vital Statistics

Figure 15: Hamilton County Accidental Drug Overdose Deaths in Adults 20+ Years (2010-2019)*



Source: Ohio Department of Health, Office of Vital Statistics

*Data has not changed from previous publication

Key Research Findings:

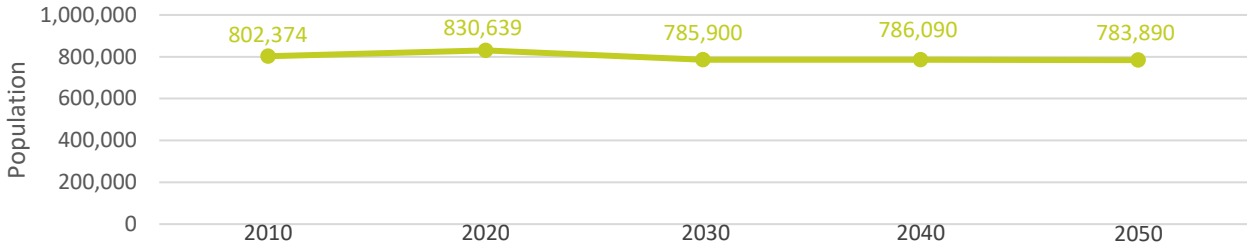
Cincinnati observed high rates of mortality due to cancer, accidents, and heart disease among males (Figure 10, 11). Mortality from heart disease and cancer is higher among the Black population than those who are white (Figure 10, 11). Adult accidental (unintentional) drug overdoses are more than double the rate for Hamilton County males than females. This is also true for white adults and adults between the ages of 35-54 years compared with all other age groups combined (Figure 15). Adults who have less than a college education are three times more likely to overdose than adults who do have a college education (Figure 15).

Chapter 3: Demographics of the Population and Social Determinants of Health

Population Demographics

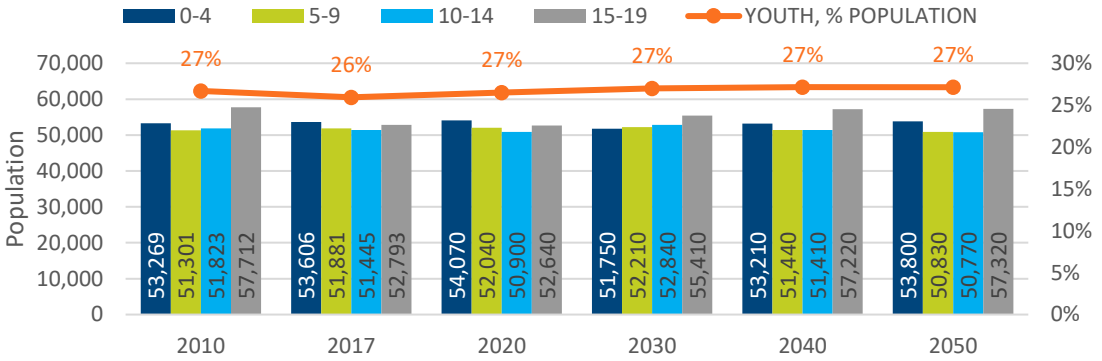
All information presented in this section is for the City of Cincinnati unless specified otherwise. A large and expanding body of evidence shows that sociodemographic factors – such as age, race, ethnicity, and socioeconomic status (SES) influence health outcomes.

Figure 16: Hamilton County Population Projection (2010-2050)



Source: American Community Survey, 2016-2020 Ohio Development Services Agency

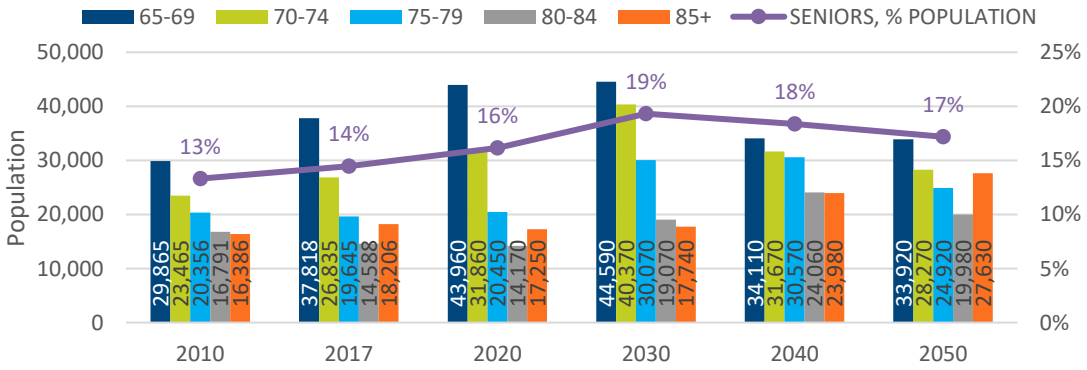
Figure 17: Hamilton County Youth Population Projection by Age Group (Years) (2010-2050)



Source: American Community Survey, 2013-2017 Ohio Development Services Agency

Image Source: CDC/ Amanda Mills

Figure 18: Hamilton County Senior Population Projection by Age Group (Years) (2010-2050)

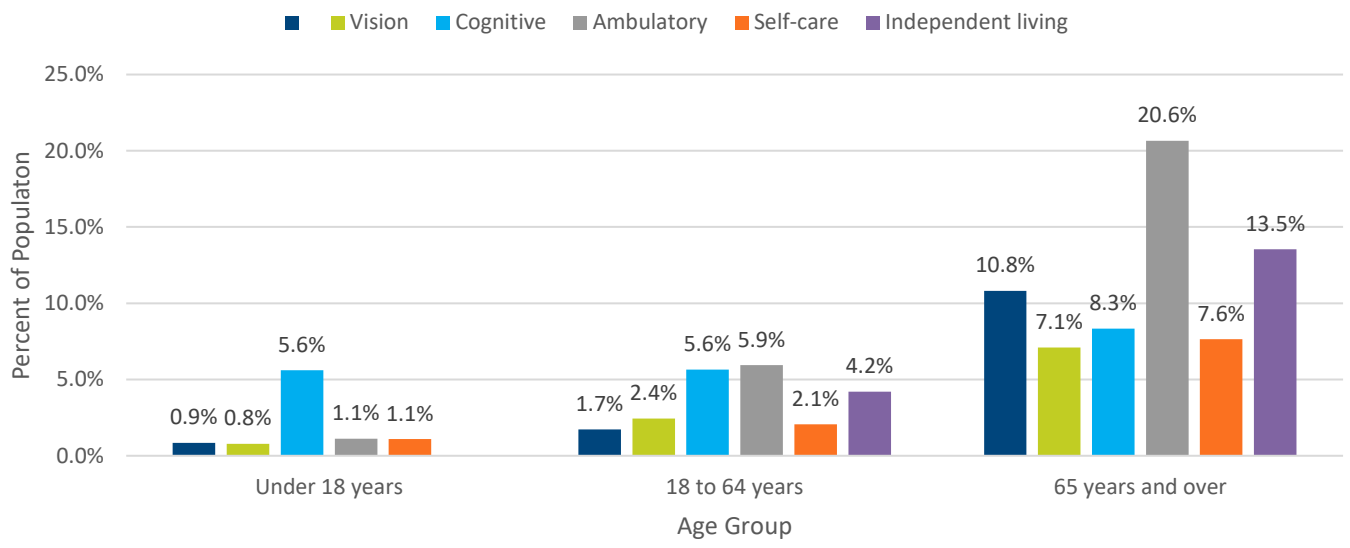


Source: American Community Survey, 2013-2017 and the Ohio Development Services Agency

Image Source: CDC/ Dawn Arlotta

Cincinnati's projected population is predicted to stay stable to 2050 (Figure 16, 17, & 18).

Figure 19: Hamilton County Population with Disabilities by Age Group (%) (2020)



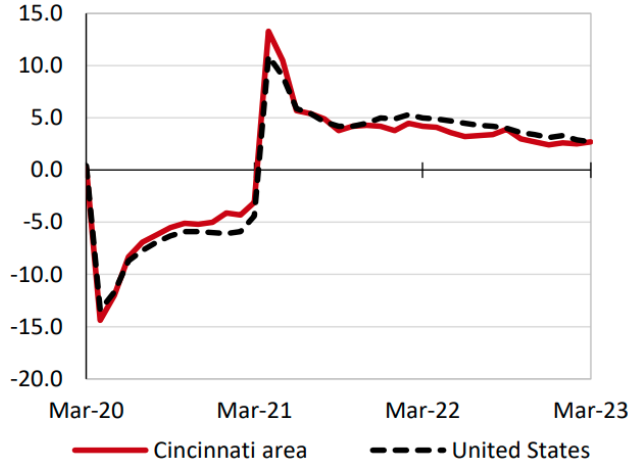
Source: American Community Survey, 2016-2020

Social Determinants of Health[4]

Social determinants of health (SDOH) are conditions in the environment in which people are born, live, learn, work, play, worship, and age, that affect a wide range of health, functioning, and quality-of-life outcomes and risks. There are five parts of the HP 2030 SDOH definition that will be touched upon in this chapter: economic stability, education access and quality, social and community context, health care access and quality, and neighborhood and the built environment.

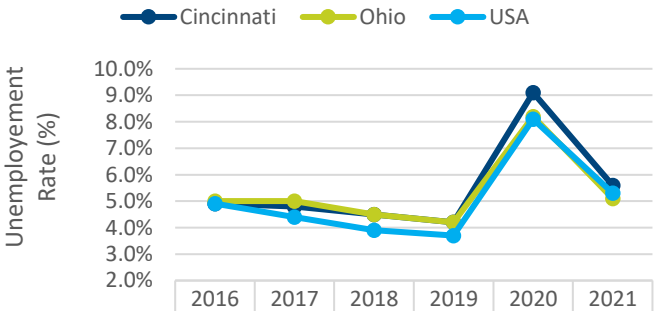
Economic Stability

Figure 20: 12-Month Percent Change in Employment (%) (2020-2023)



Source: U.S. BLS, Current Employment Statistics – Cincinnati Area Economic Summary, March 2023

Figure 21: Annual Unemployment Rate (%) (2016-2021)



	2016	2017	2018	2019	2020	2021
Cincinnati	4.9%	4.8%	4.5%	4.2%	9.1%	5.6%
Ohio	5.0%	5.0%	4.5%	4.2%	8.2%	5.1%
USA	4.9%	4.4%	3.9%	3.7%	8.1%	5.3%

Source: Ohio Dept. of Job & Family Services, Local Area Unemployment Statistics (LAUS) Program

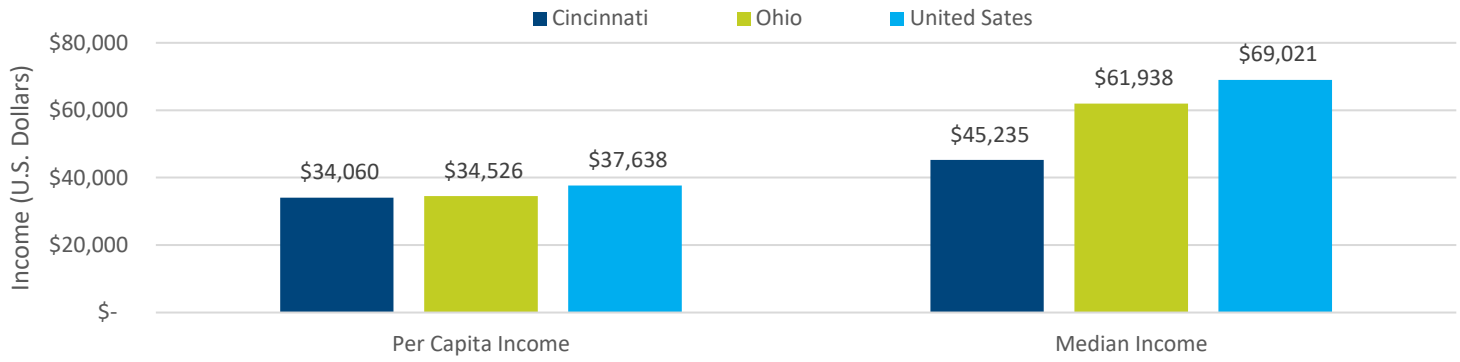
n recent years 2017-2021, we witnessed a relatively higher unemployment rate in Ohio and Cincinnati compared to national figures. The job growth rate for Cincinnati has lagged in comparison to the state and national rates especially in 2020, due to the COVID-19 pandemic (Figures 20 & 21).

[4] Healthy People (HP) 2030 Social Determinants of Health

Public Health Importance: A person's health is linked to their economic and educational status. Economic stability is influenced by employment, food insecurity, housing instability, and poverty.

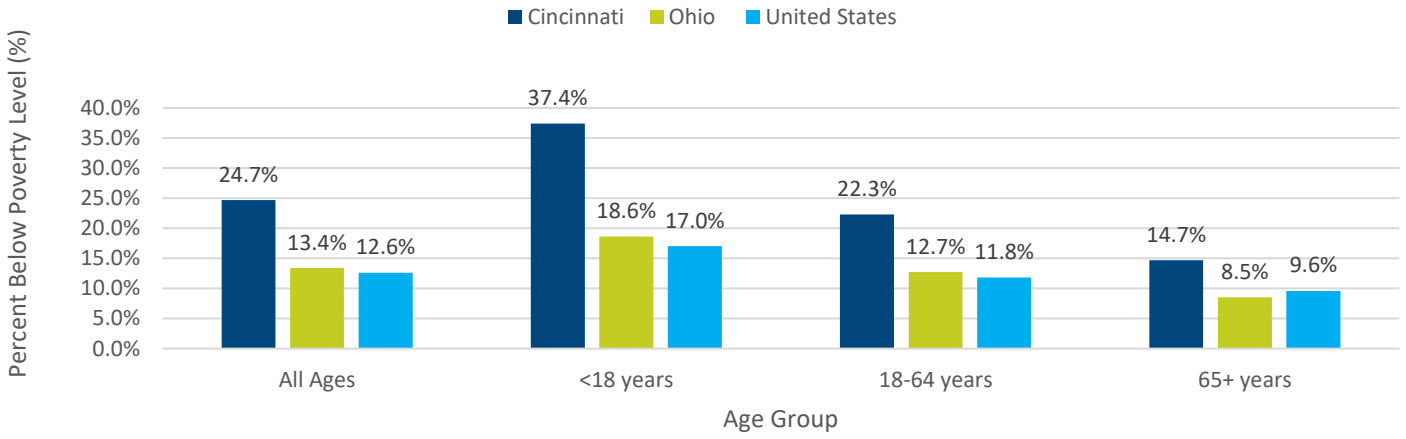
-Healthy People 2030

Figure 22: Per Capita and Median Household Income (2021)



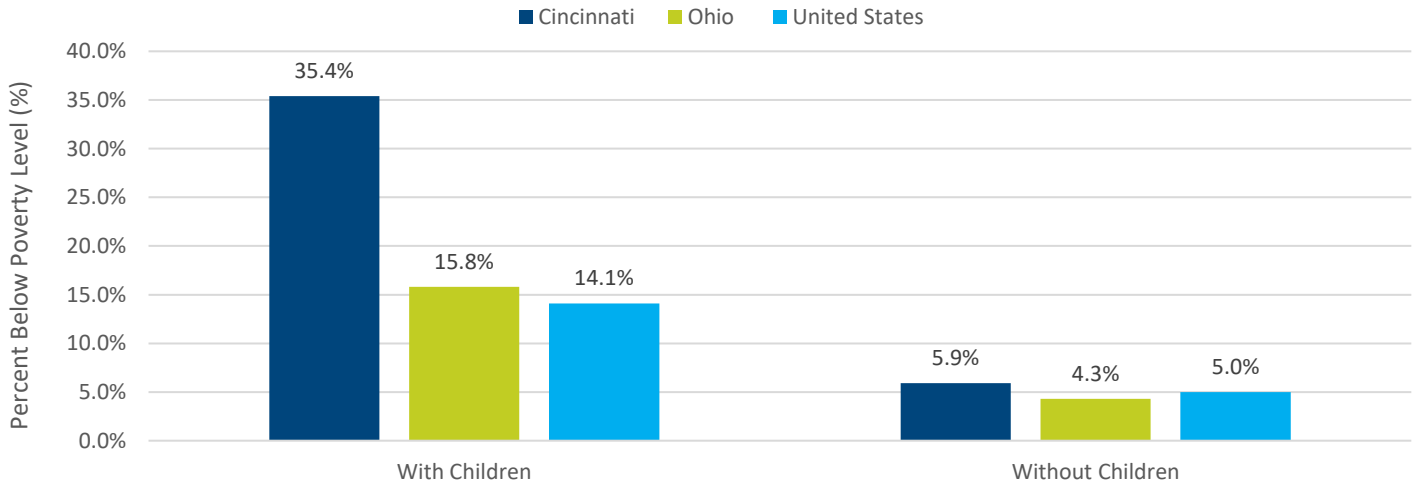
Source: American Community Survey, 2021

Figure 23: Individuals Below the 100% of the Federal Poverty Level by Age Group (%) (2021)



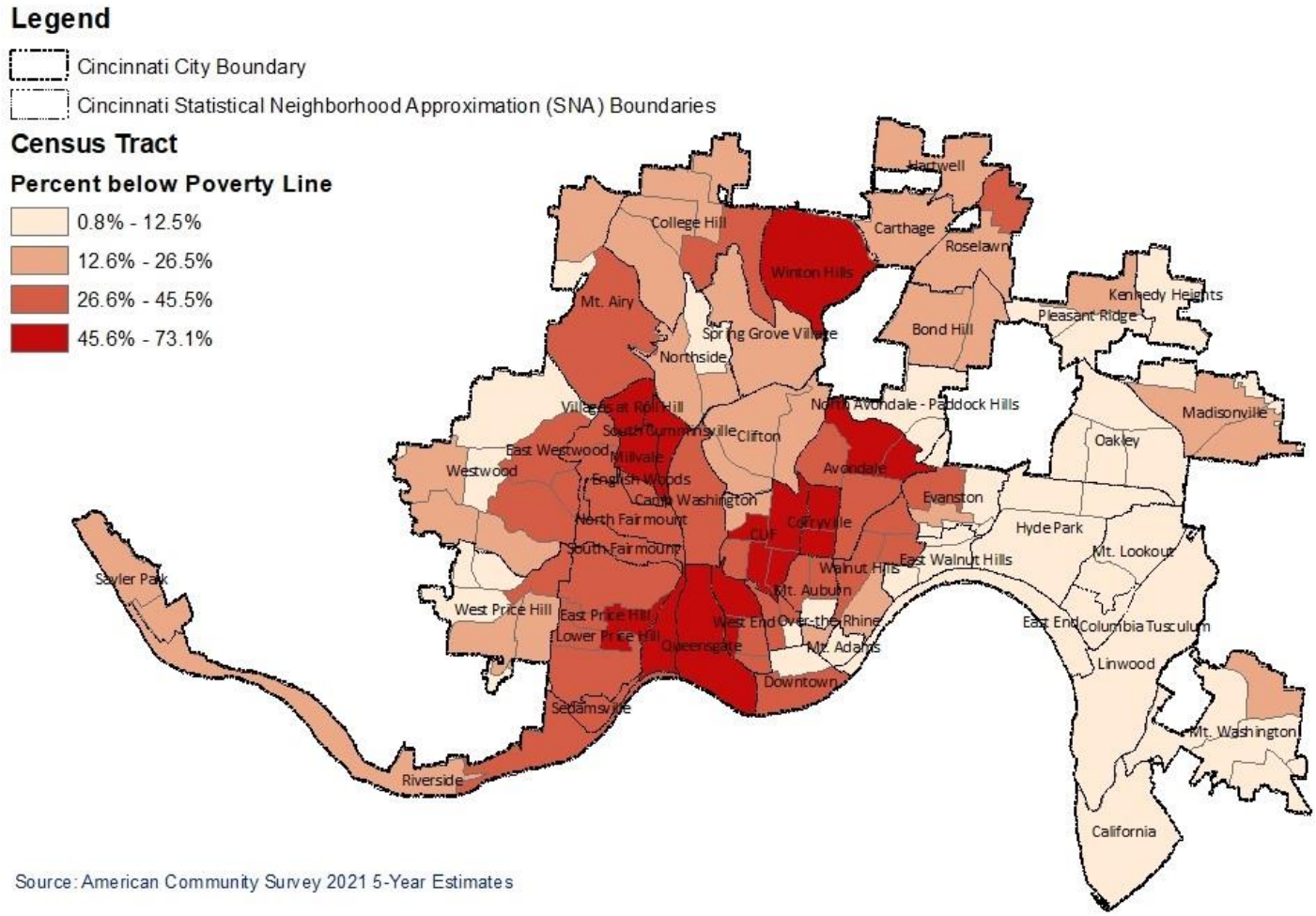
Source: American Community Survey, 2021

Figure 24: Families Below 100% of the Federal Poverty Level by Children (%) (2021)



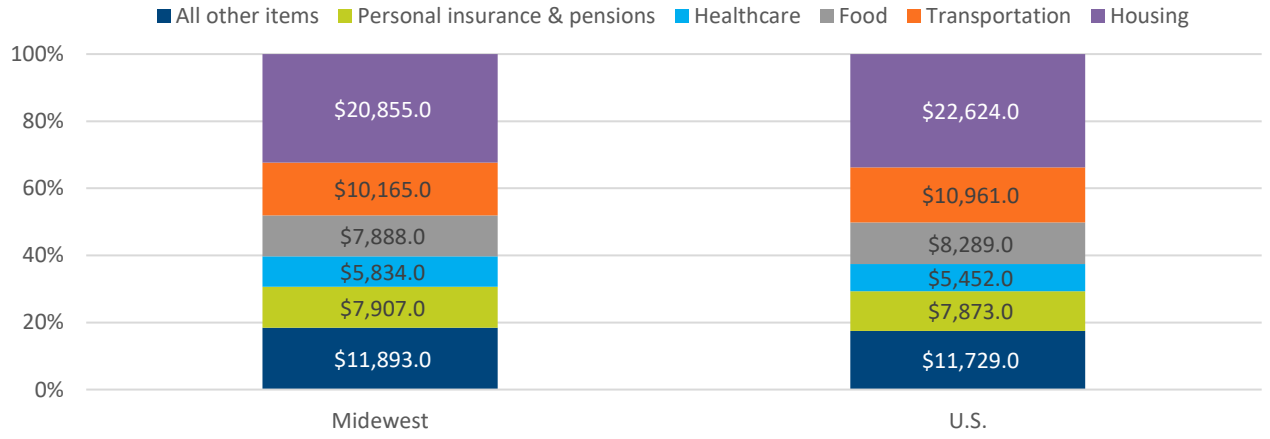
Source: American Community Survey, 2021

Map 7: Cincinnati Residents Below 100% of the Federal Poverty Level by Census Tract (%) (2021)



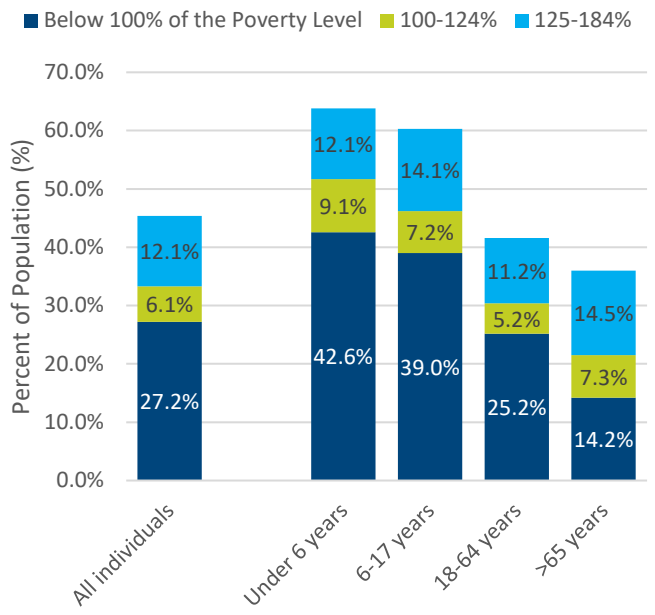
Key Research Findings: In Cincinnati, 24.7% of individuals are living below the poverty line (Figure 23). More children (37.4%) than adults (22.3%) and seniors (14.7%) are living in poverty (Figure 23). Overall, Cincinnati has a higher proportion of residents living below the poverty line compared to Ohio and the U.S (Figure 23). Poverty is highest in Census Tracts found in Roll Hill (73.1%), Lower Price Hill (69.4%), and the West End (66.9%) (Map 7).

Figure 25: Average Annual Spending and Percent Distribution of Households (%) (2021)



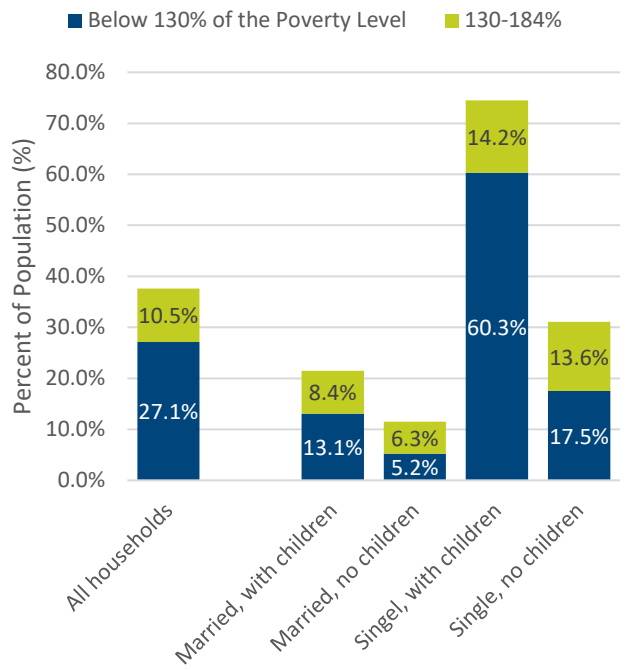
Source: U.S. BLS, Consumer Expenditure Survey– Cincinnati Area Economic Summary, March 2023

Figure 26: Cincinnati Residents Qualifying for Most Public Assistance Programs (%) (2013-2017)*



*Data has not changed from previous publication
Source: American Community Survey, 2013-2017

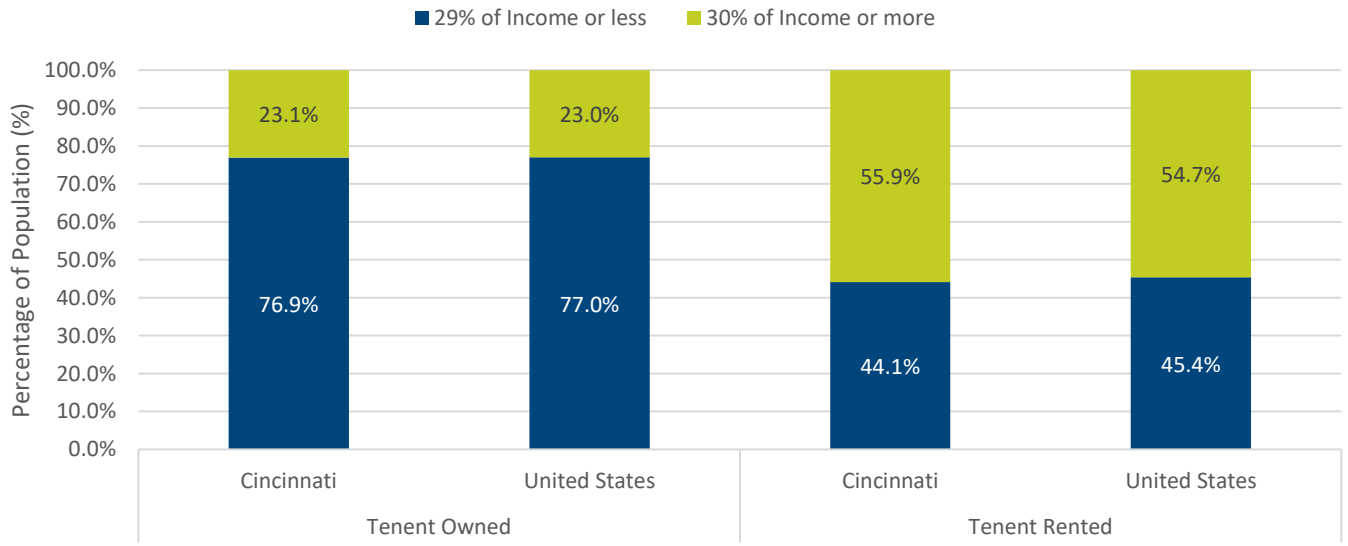
Figure 27: Cincinnati Households Qualifying for Most Public Assistance Programs (%) (2013-2017)*



*Data has not changed from previous publication
Source: American Community Survey, 2013-2017

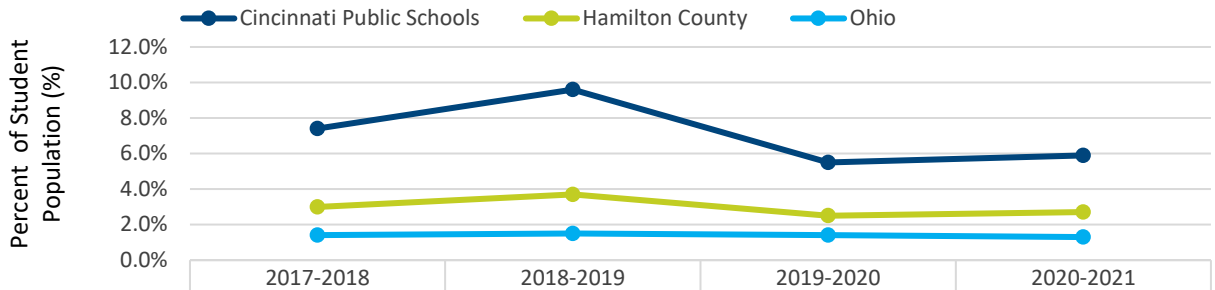
Key Research Findings: Among all individuals qualifying for public assistance, 27.2% are below the poverty level, 6.12% are at the poverty level or a little higher, and 12.1% are at 125%-184% of the poverty level (Figure 26). Among all households, a greater proportion of those qualifying for public assistance programs are single heads of households (Figures 26 & 27).

Figure 28: Cincinnati Monthly Housing Cost as a Percentage of Household Income (%) (2021)



Source: U.S. Department of Housing and Urban Development (HUD) Office of Policy Development and American Community Survey (ACS) S2503 – Financial Characteristics

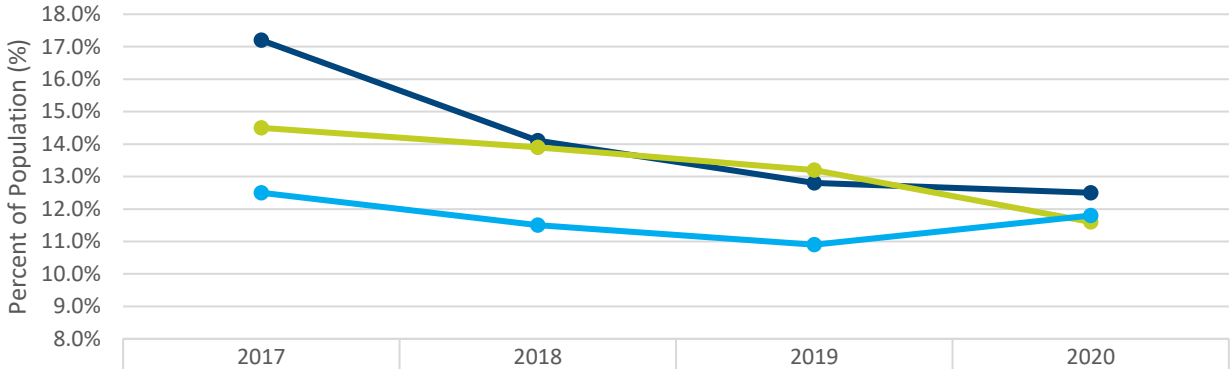
Figure 29: K-12 Students Enrolled who are Homeless (%) (2017-2021 School Years)



	2017-2018	2018-2019	2019-2020	2020-2021
Cincinnati Public Schools	7.4%	9.6%	5.5%	5.9%
Hamilton County	3.0%	3.7%	2.5%	2.7%
Ohio	1.4%	1.5%	1.4%	1.3%

Source: Ohio Department of Education, 2017-2021

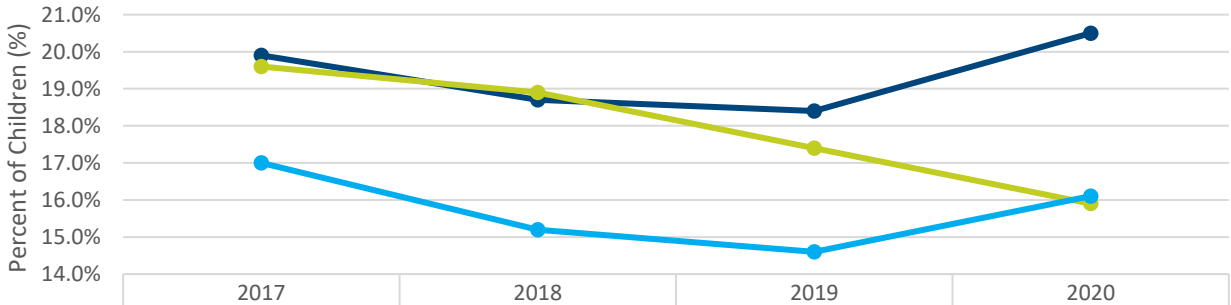
Figure 30: Overall Food Insecurity Rate (%) (2017-2020)



	2017	2018	2019	2020
Hamilton County	17.2%	14.1%	12.8%	12.5%
Ohio	14.5%	13.9%	13.2%	11.6%
United States	12.5%	11.5%	10.9%	11.8%

Source: Feeding America, 2017-2020

Figure 31: Childhood Food Insecurity Rate (%) (2017-2020)



	2017	2018	2019	2020
Hamilton County	19.9%	18.7%	18.4%	20.5%
Ohio	19.6%	18.9%	17.4%	15.9%
United States	17.0%	15.2%	14.6%	16.1%

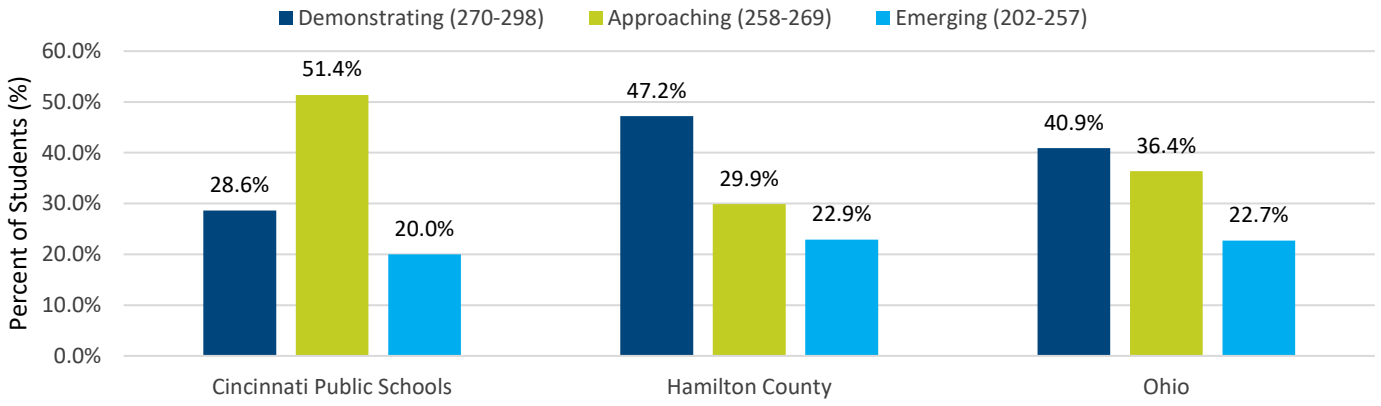
Source: Feeding America, 2017-2020

Education

Public Health Importance: Level of education is one of the greatest predictors of individual health. Early childhood education provides a foundation for children's academic success, health, and general well-being. Higher educational attainment allows for better paying jobs with resources like health benefits, paid leave, retirement accounts, easier access to healthy foods and services, and more time for exercise.

-Healthy People 2030

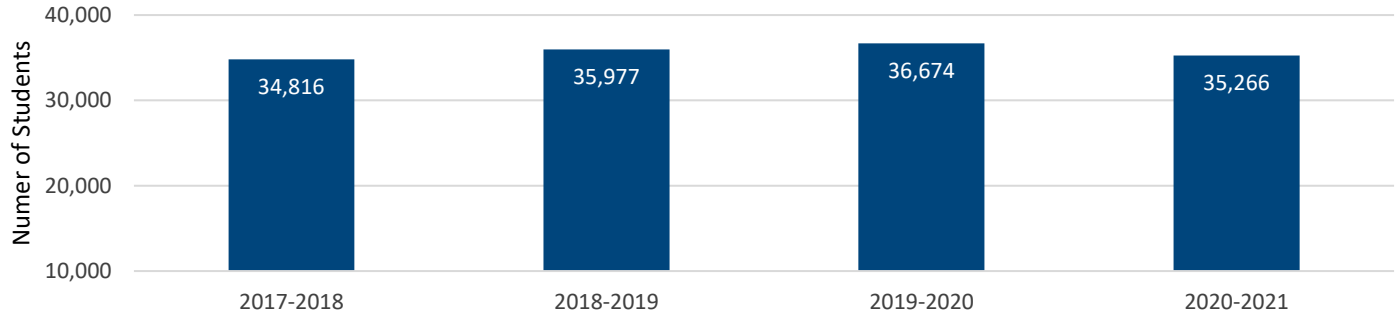
Figure 32: Kindergarten Readiness Assessment (2020-2021 School Years)



Source: Ohio Department of Education, 2020-2021

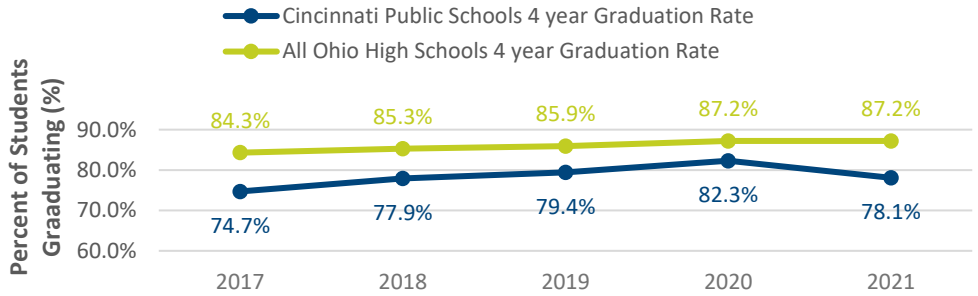
About 28.6% of Cincinnati Public School's kindergartners were assessed as kindergarten ready (demonstrating experience in language and literacy, mathematics, social foundations, physical well-being and motor development); this is low compared to county and state levels (Figure 32).

Figure 33: Cincinnati Public Schools Enrollment K-12 (2017-2021 School Years)



Source: Ohio Department of Education, 2017-2021

Figure 34: Local 4-Year High School Graduation Rate (%) (2017-2021 School Years)

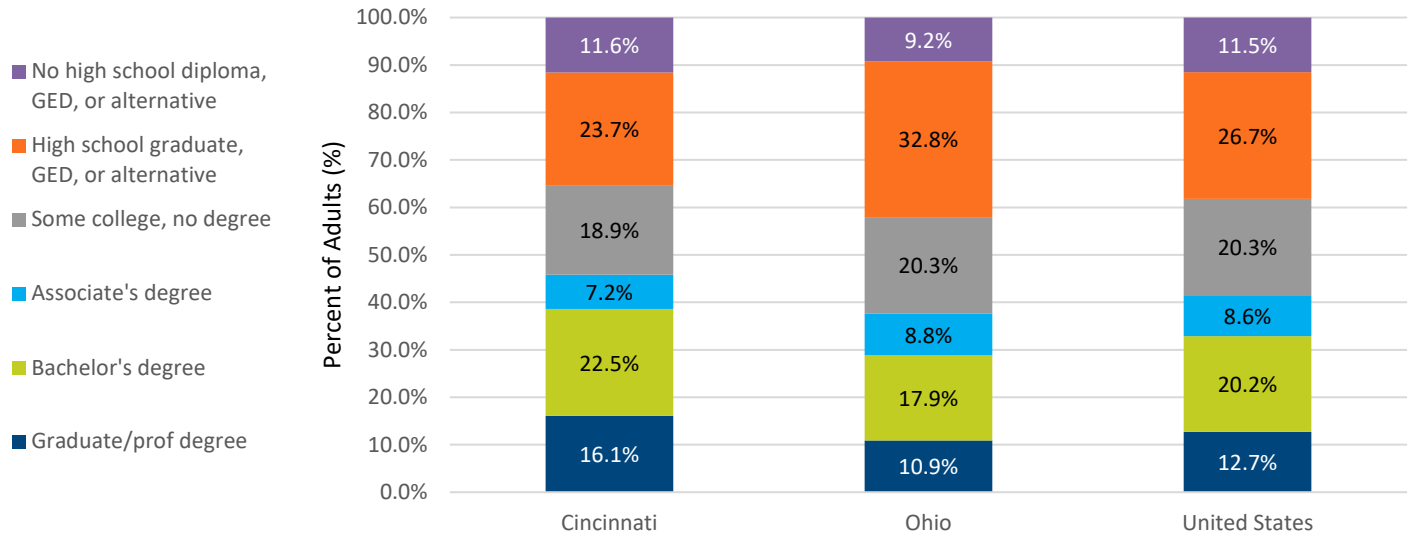


Source: Ohio Department of Education, 2017-2021

Cincinnati Public Schools (CPS) have been working to close the gap in graduation rates compared to Ohio; however, a sharp decrease in graduation rates can be seen from 2020 to 2021 (Figure 34).

A higher proportion of the adult population in Cincinnati has college degrees compared to the average for Ohio and the U.S. (Figure 35).

Figure 35: Educational Attainment for Adults 25+ Years (%) (2020)



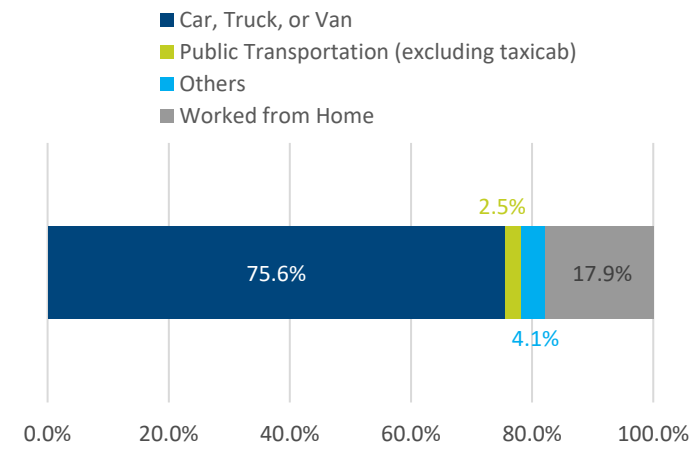
Source: American Community Survey, 2020

Neighborhood and the Built Environment

Public Health Importance: The built environment includes all the physical aspects of where we live and influences a person's level of physical activity. Access to healthy foods, quality of housing, environmental conditions, crime, and violence are all aspects of the built environment that can affect an individual's health.

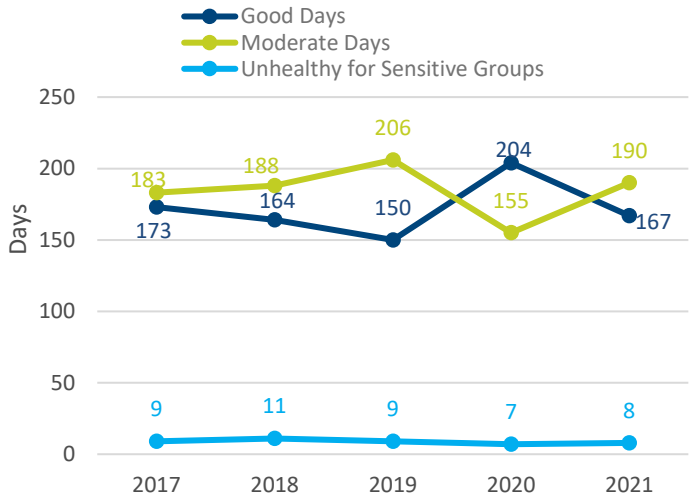
-Healthy People 2020

Figure 36: Cincinnati Means of Transportation (%) (2020)



Source: American Community Survey, 2020

Figure 37: Cincinnati Air Quality Index (2017-2021)

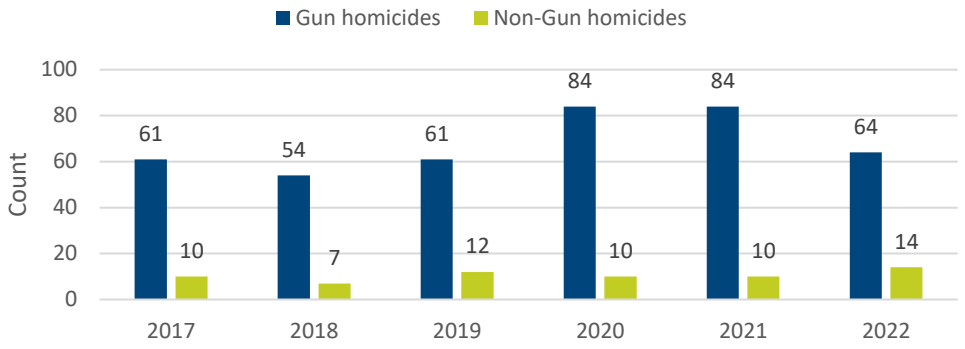


Source: Environmental Protection Agency, 2017-2021

Key Research Findings: An individual's built environment directly impacts their health. Most individuals in Cincinnati rely on cars, trucks, or personal vehicles to get to work, with 6.6% of residents relying on others or public transportation to get to work. making 20,000 people reliant on quality and reliable access to transportation (Figure 36). Cincinnati has mostly good to moderate air quality days with an average of only 2.5% of days over the last five years being unhealthy for sensitive groups (Figure 37).

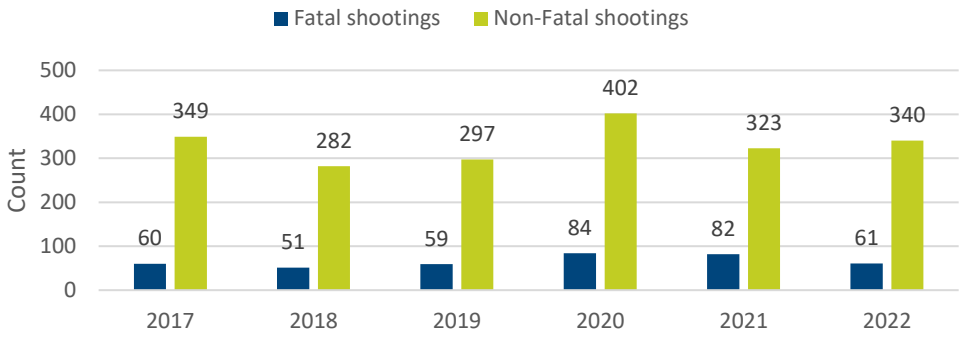
Crime in Cincinnati

Figure 38. Gun vs. Non-Gun Homicides in Cincinnati by Year (2017-2022)



Source: Cincinnati Police Department, 2023

Figure 39. Fatal vs. Non-Fatal Shootings in Cincinnati by Year (2017-2022)



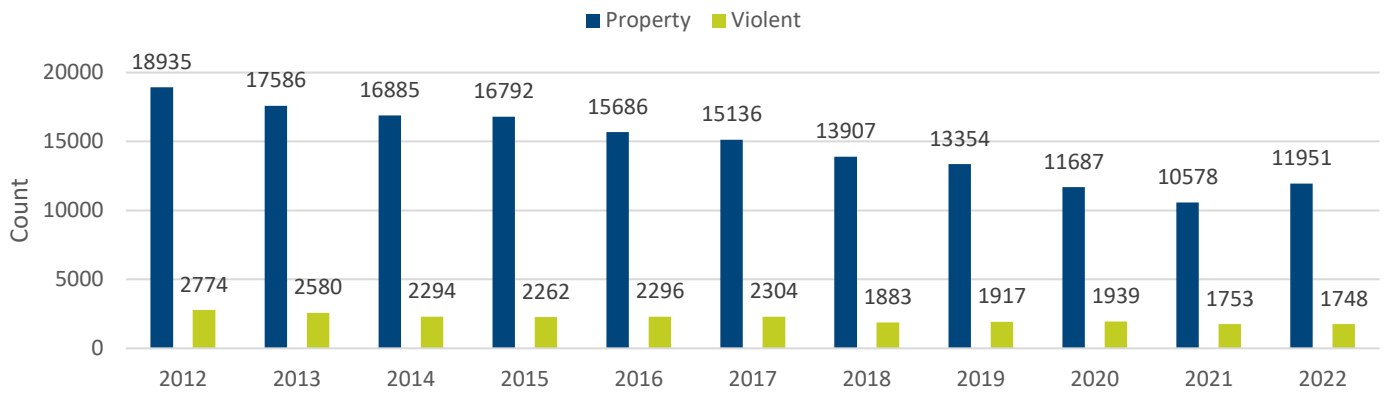
Source: Cincinnati Police Department, 2023

Table 1. Cincinnati Violent Crime by Year and Type (2021-2022)

Type of Crime/Year	2021	2022	% Increase or Decrease
Homicide	94	78	-17.0%
Rape	232	293	+26.3%
Robbery	647	654	+1.1%
Aggravated assault	874	801	-8.4%
Total	1847	1826	-1.1%

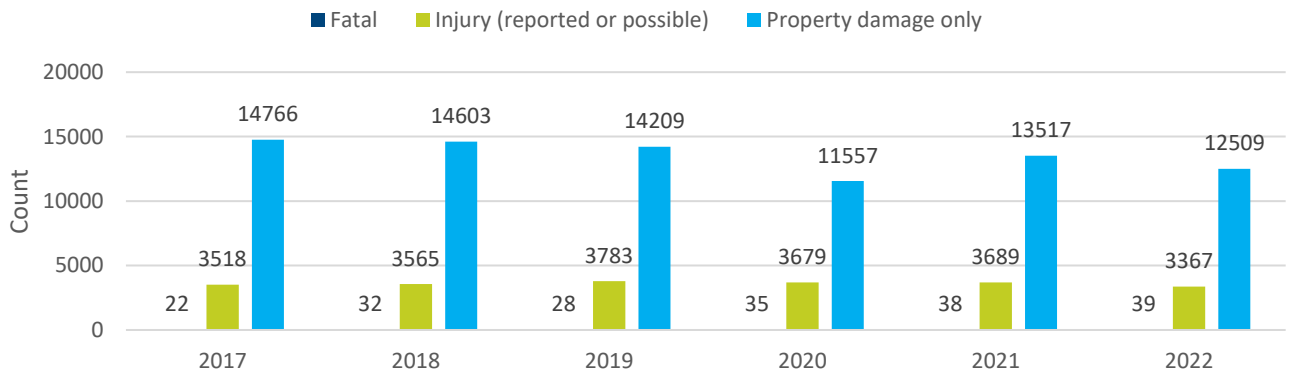
Source: Cincinnati Police Department, 2023

Figure 40. Violent vs. Property Crime in Cincinnati (2012-2022)



Source: Cincinnati Police Department, 2023

Figure 41. Automobile Crashes in Cincinnati by Outcome (2017-2022)



Source: Cincinnati Police Department, 2023

Key Research Findings: Gun violence is a significant and growing public health crisis in the U.S., where it is a leading cause of premature death. In Cincinnati, gun homicides were elevated in 2020 and 2021 with 84 recorded for both years, respectively. In 2022, gun homicides remain slightly raised from pre-pandemic counts (Figure 38). Violent crime, however, has consistently decreased from 2012 to 2022 (Figure 40). Property crime follows a similar decreasing trend but did increase between 2021 and 2022 by approximately 13% (Figure 40).

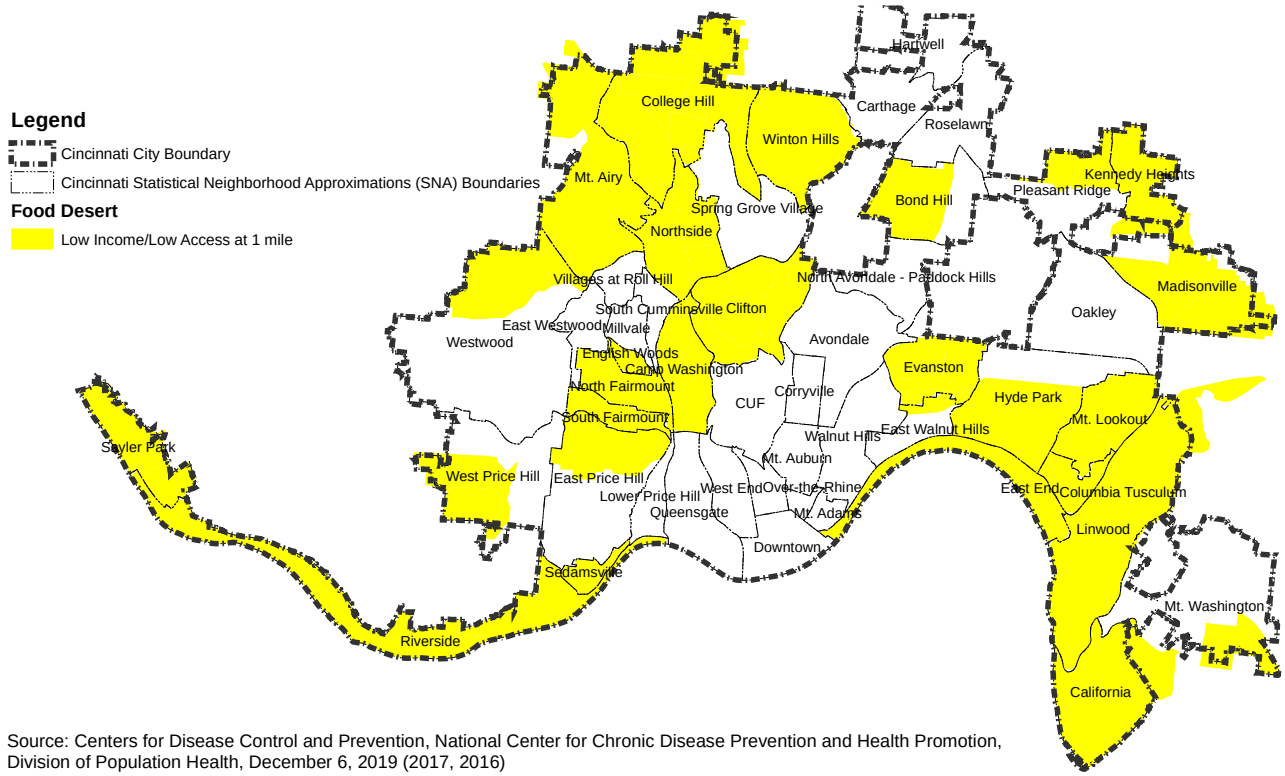
In the U.S., there are striking health disparities related to violence, poverty, the built environment, and crime. On a neighborhood level, residential segregation, particularly along racial and economic lines, is linked to higher crime rates.[5] Inadequate housing and limited access to healthcare services, healthy food, quality education, and economic opportunity contribute to poor health outcomes in segregated neighborhoods.[6] Marginalized populations often encounter a higher burden of violence and may be more susceptible to health inequities resulting from stress and trauma.[7]

[5] Harcourt, B. E., & Ludwig, J. (2019). "Reducing crime through environmental design: Evidence from a randomized experiment of street lighting in New York City." The Review of Economics and Statistics, 101(4), 609-618.
[6] Braveman, P., et al. (2017). "Social determinants of health: An Institute of Medicine consensus statement." JAMA, 315(16), 1675-1686.
[7] Macy, R. J., et al. (2019). "Violence against women: Advancing the role of trauma-informed care." Journal of Women's Health, 28(9), 1177-1184.

Factors that contribute to poorer health outcomes: Neighborhoods without access to quality, healthy food frequently rely on what is available at local convenience stores. Many of the foods provided in convenience stores are high in calories and low in nutrition, contributing to future health complications such as obesity, diabetes, heart disease, and hypertension.

- Healthy People 2020

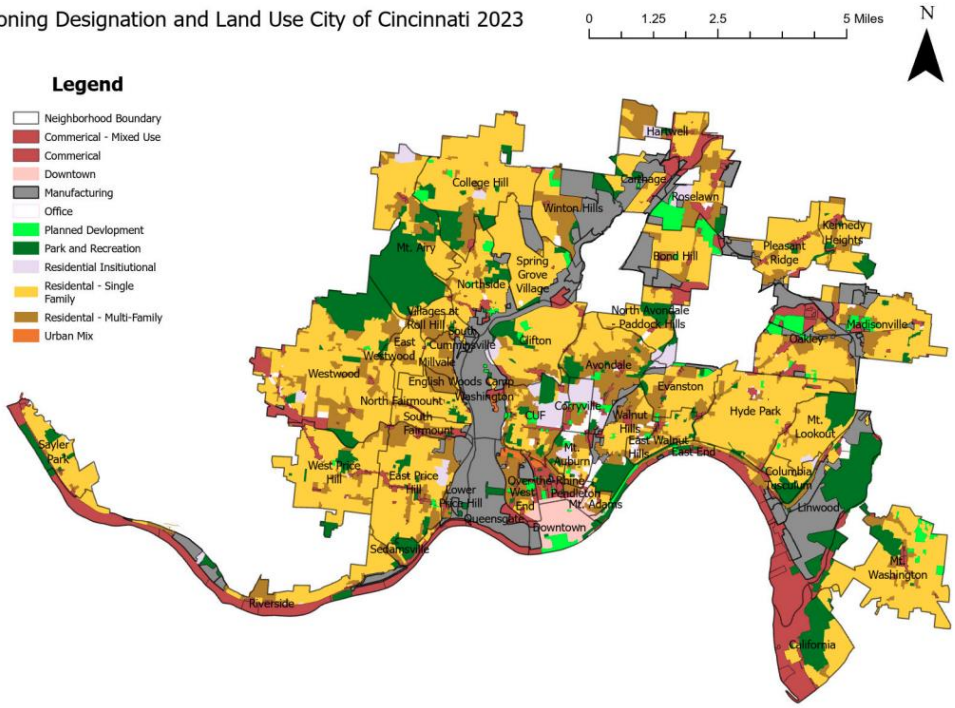
Map 8: Cincinnati Food Deserts by Census Tracts (2017)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 6, 2019 (2017, 2016)

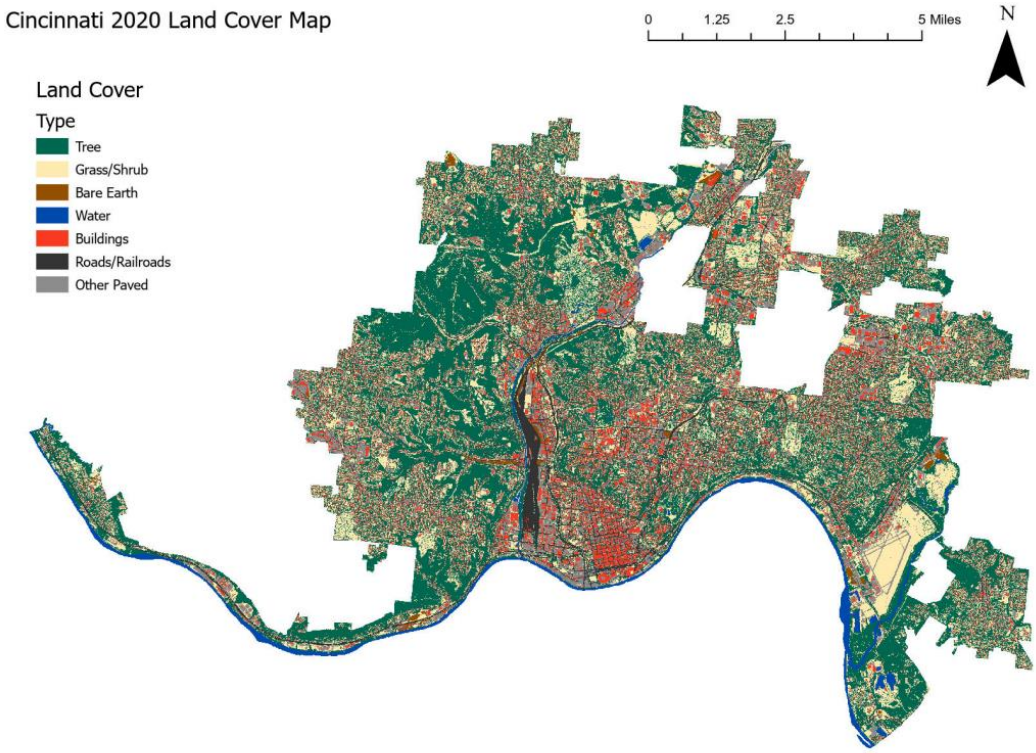
Key Research Findings: Low-income census tracts often have a significant number or share of residents living more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket. There are 31 Low Income/Low Access Census Tracts highlighted on the map (Map 8). These food deserts lack stores that sell healthy and affordable food. The lack of store access in these communities may contribute to poor diet, obesity, and other diet-related illnesses. Unfortunately, CHD does not have updated information about the spatial distribution of food deserts for this CHA and therefore this information may be out of date (Map 8).

Map 9: Cincinnati Land Use (2023)



Data Source: CAGIS & City of Cincinnati Planning Department // CINC_CINC_ZONING.gbd
2023

Map 10: Cincinnati Land Cover (2020)

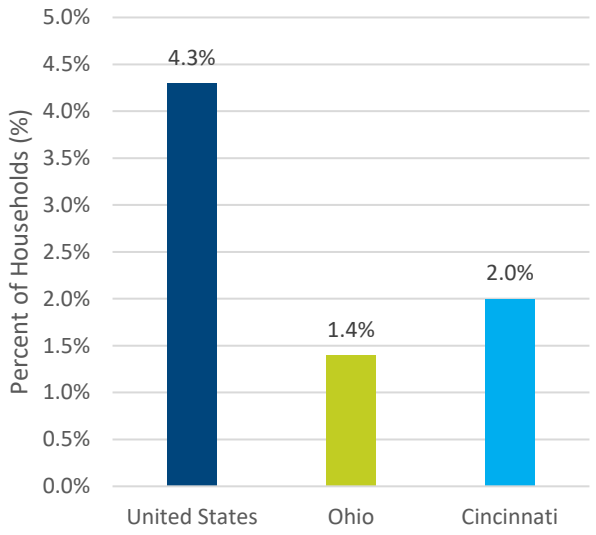


Data Source: CAGIS & Cincinnati Park Board 2020 Tree Canopy Assessment

Public Health Importance: Social isolation predicts morbidity and mortality from cancer, cardiovascular disease, and a host of other causes. Civic participation, incarceration, and social cohesion are the main elements for this determinant.
- U.S. Department of Health and Human Services, Administration for Children and Families 2010

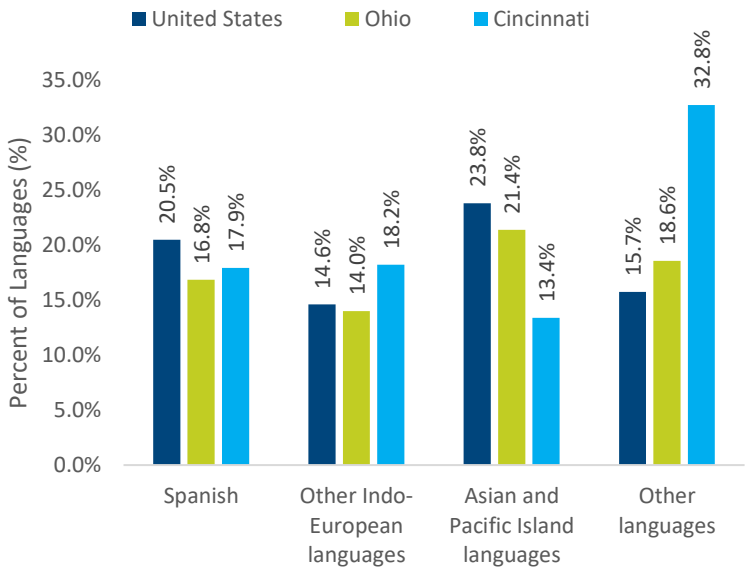
Social and Community Context is part of the Social Determinants of Health definition. This section looks at households that may experience isolation due to language barriers, and incarceration trends as a measure of community safety.

Figure 42: Limited-English Proficiency Households (%) (2016-2020)



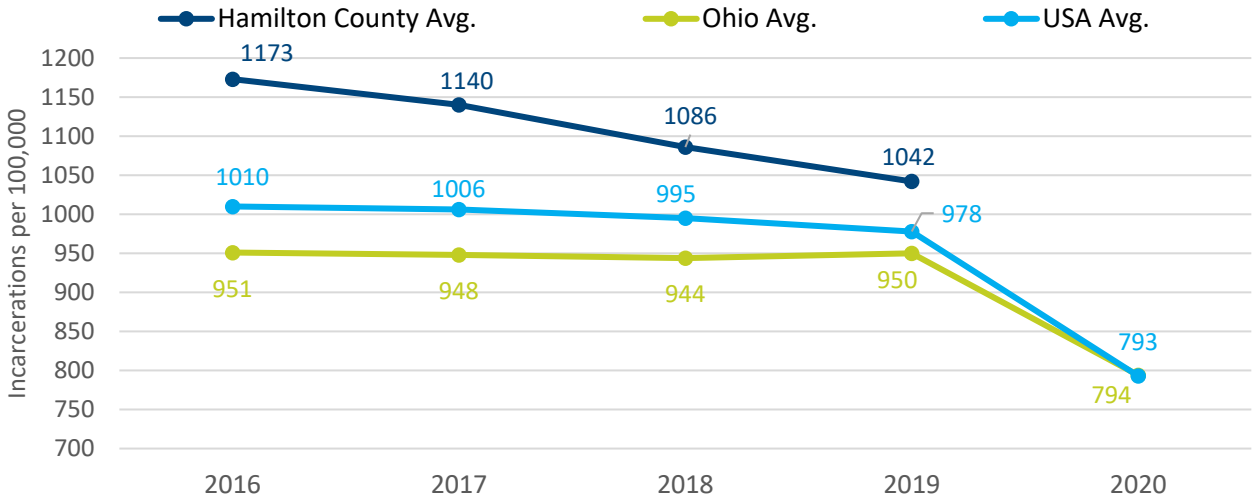
Source: American Community Survey, 2016-2020

Figure 43: Language Spoken at Limited-English Proficiency Homes (2016-2020)



Source: American Community Survey, 2016-2020

Figure 44: Incarceration Rate for Adults 18-64 Years (2016-2020)



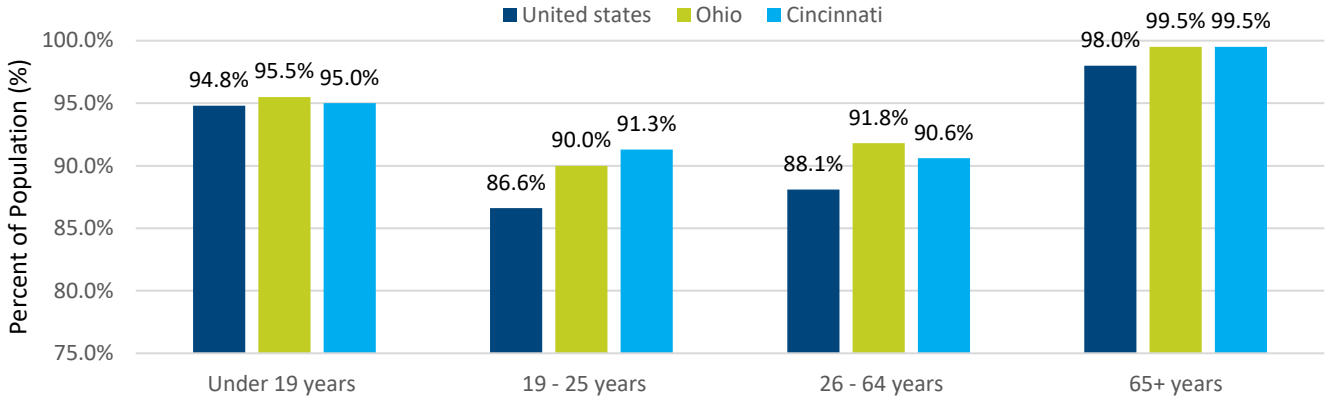
Source: Vera Institute, 2020

Health and Health Care

Public Health Importance: Uninsured people receive less medical care and less timely care, they have worse health outcomes, and lack of insurance is a financial burden for them and their families.

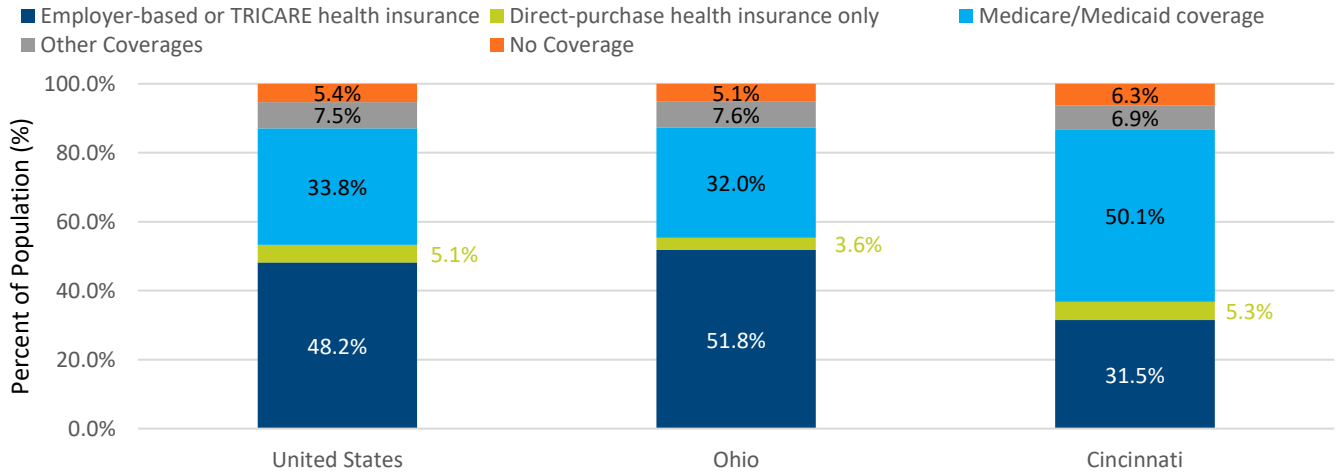
- Urban Institute

Figure 45: Health Insurance Coverage by Age Group (2020)



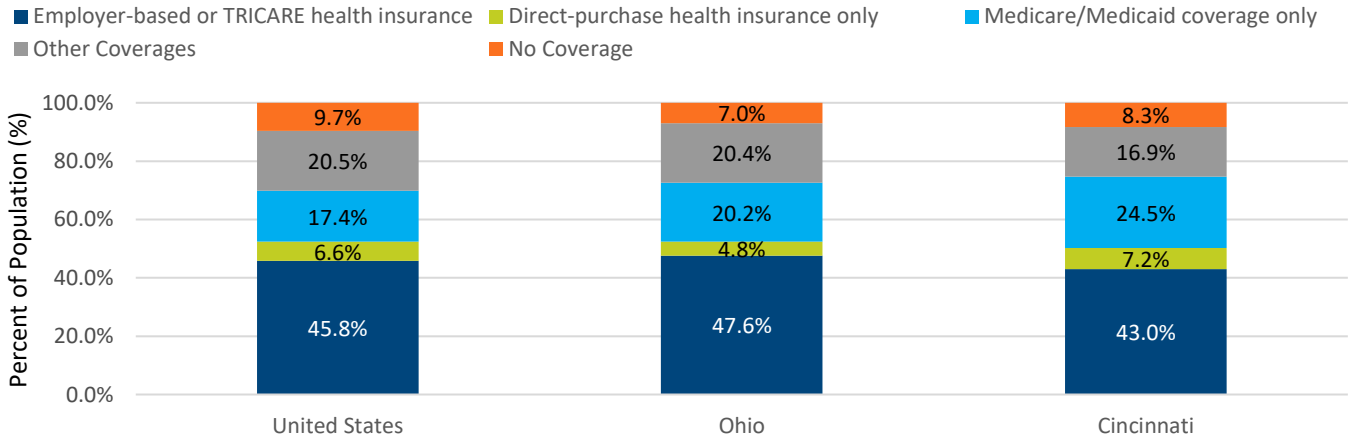
Source: American Community Survey, 2016-2020

Figure 46: Cincinnati Health Insurance Coverage of Youth <18 Years (2020)



Source: American Community Survey, 2016-2020

Figure 47: Cincinnati Health Insurance Coverage of Adults 18+ Years (2020)



Source: American Community Survey, 2016-2020

Chapter 4: Population Health

Population health is defined as the health outcomes of a group of individuals, including the distribution of such outcomes within the group. This section of the report will present health outcomes for groups of individuals in Cincinnati, Hamilton County, Ohio, and the United States. The distribution within these groups is also examined by demographics.

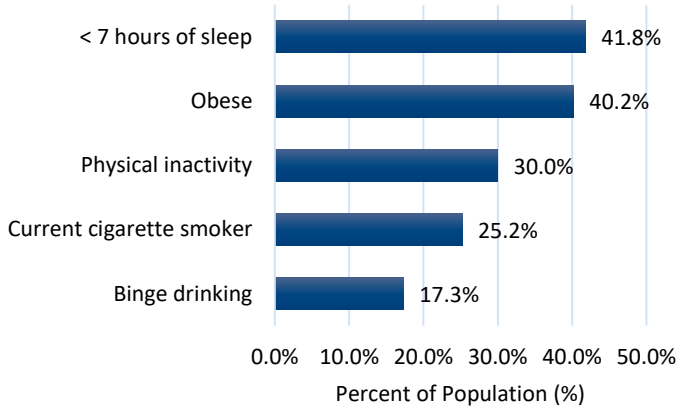
Behavioral Risk Factors

Examples of behavioral risk factors include tobacco use, alcohol consumption, obesity, physical inactivity, and unsafe sexual activity.

Public Health Importance: Risk factors include any particular behavior or behavior pattern which strongly yet adversely affects health. it increases the chances of developing a disease, disability, or syndrome.

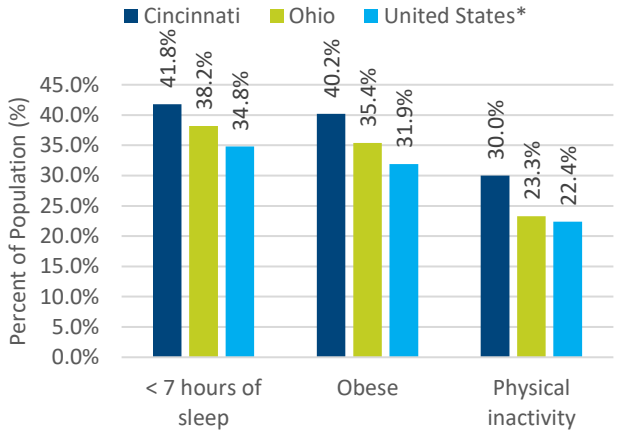
- Centers for Disease Control and Prevention

Figure 48: Cincinnati Adults 18+ Years Behavioral Risk Factors (2020)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Figure 49: Comparison of the Top 3 Adult Behavioral Risk Factors (2020)

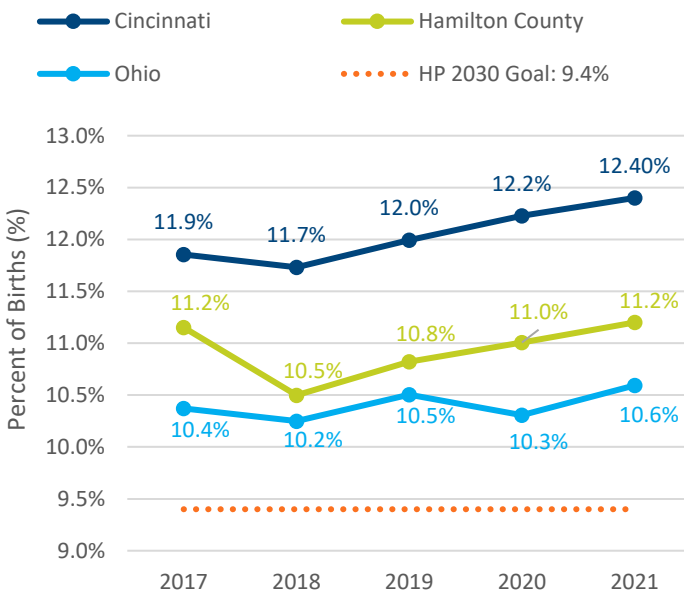


*U.S. values are crude rates
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Key Research Findings: Behavioral risk factor data is from 2020. Sleep deprivation is more prevalent among Cincinnati adults than in Ohio and the U.S. (Figures 48 and 49). As for physical activity and obesity, Cincinnati has a higher prevalence of birth relative to Ohio and the U.S (Figure 49).

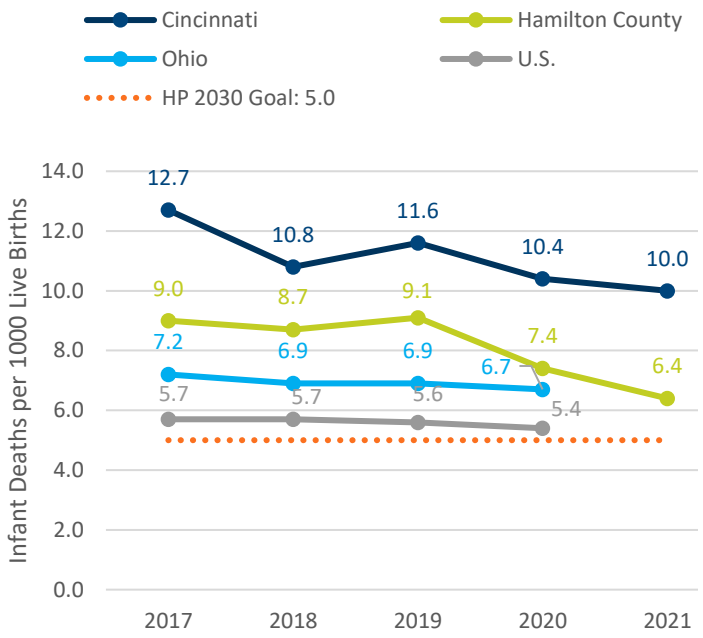
Maternal, Infant, and Child Health Issues

Figure 50: Preterm Live Births (<37 weeks gestation) (%) (2017-2021)



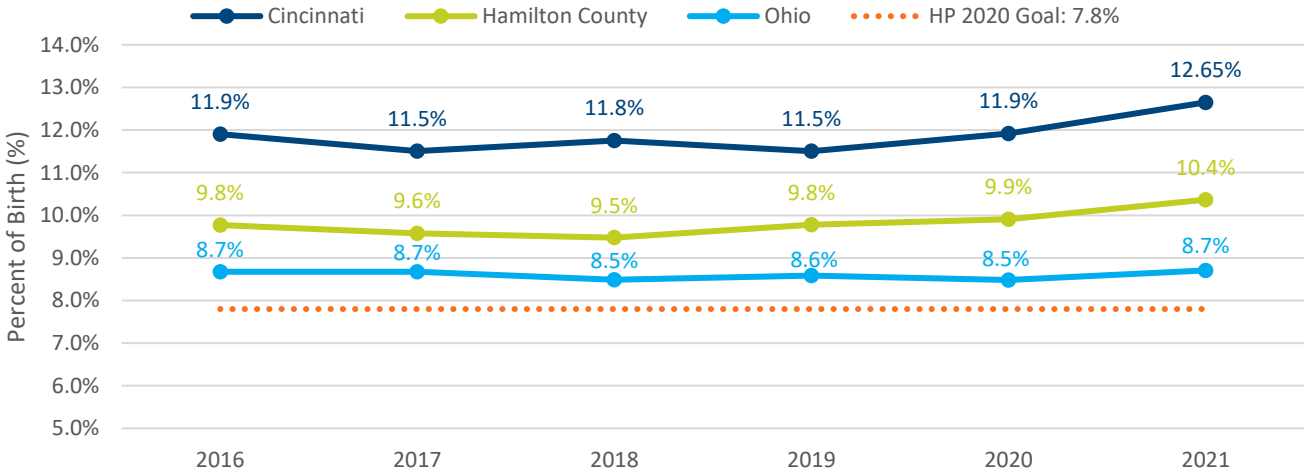
Source: Ohio Department of Health, Office of Vital Statistics, 2017-2021

Figure 51: Infant Mortality Rate (2017-2021)



Source: Ohio Department of Health, Office of Vital Statistics, 2017-2021

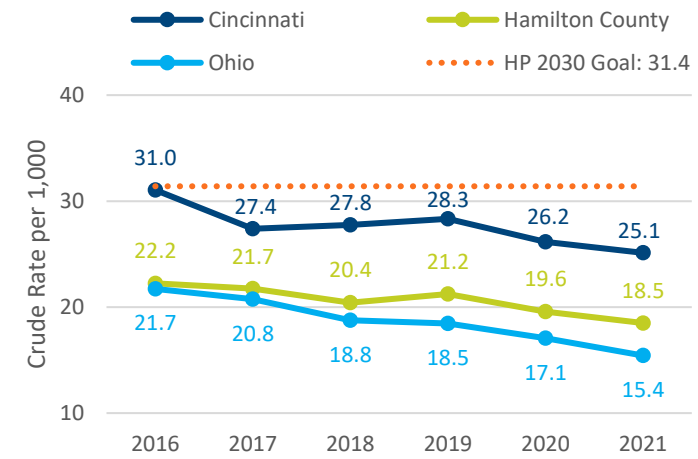
Figure 52: Low Birth Weight (<5lbs 8oz or 2500g) (2016-2021)



Source: Ohio Department of Health, 2016-2021

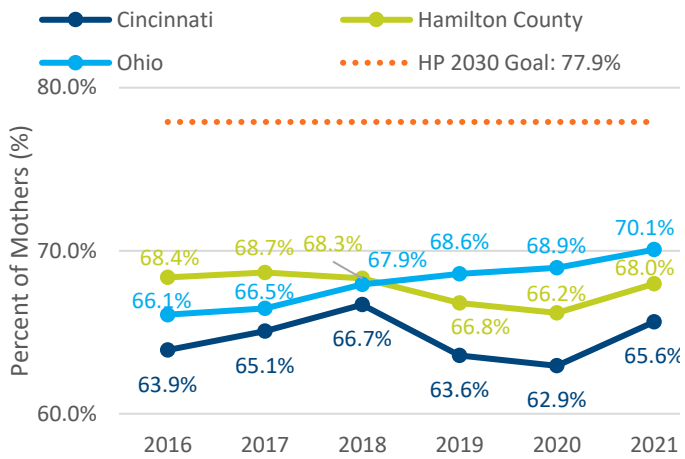
Key Research Findings: Prevalence of preterm births has consistently increased in Cincinnati and Hamilton County from 2018 to 2021. In 2021, Cincinnati and Hamilton County's preterm percentages are 12.4% and 11.2%, respectively. Cincinnati, Hamilton County, and Ohio all exceed the 2030 target of 9.4% (Figure 50). Cincinnati also has a higher infant mortality rate (IMR) relative to Hamilton County and Ohio at 10 per 1000 live births – this is double the Healthy People 2030 goal (Figure 51). Since 2017, IMR in Cincinnati has decreased approximately 21% (Figure 51). In Cincinnati and in Ohio, low birth weight is more common among births to Black/African American mothers and women aged 40 years and older (Figure 7). Breastfeeding and receiving prenatal care are protective factors for infant mortality (Figure 51).

Figure 53: Births to Teen Mothers Aged 15-19 Years (2016-2021)



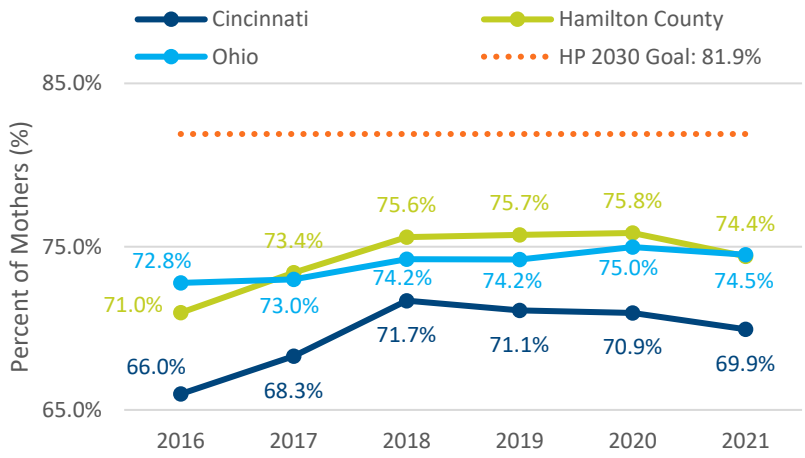
Source: Ohio Department of Health, 2016-2021

Figure 54: Birth Rates of Mothers who Received First Trimester Care (%) (2016-2021)



Source: Ohio Department of Health, 2016-2021

Figure 55: Breast Feeding at Hospital Discharge (2016-2021)



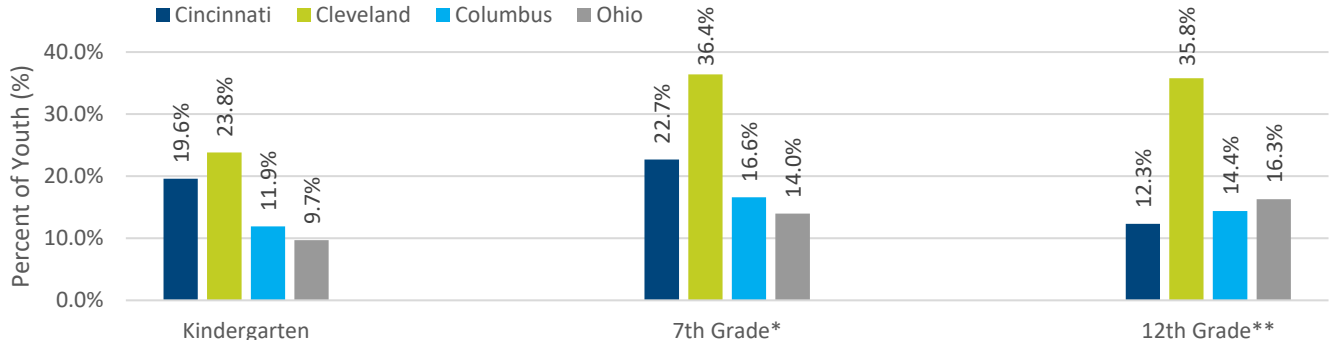
Source: Ohio Department of Health, 2016-2021

Image Source: 5540867 from Pixabay

Key Research Findings: Cincinnati has a higher rate of births to teen moms than Hamilton County but is below the target set by HP 2030 (Figure 53). This metric continues to improve, however there is still much room for improvement for linking expectant mothers to prenatal care. Cincinnati lags Hamilton County and Ohio by approximately 3 and 5% respectively (Figure 54). HP 2030 target is 77.9% and Cincinnati is at 65.6% (Figure 54).

Childhood Immunizations

Figure 56: Youth <18 Years with Incomplete Immunizations and No Exemption on File (2022-2023)



**ODH assesses only MMR, Hep B, Tdap, and Meningococcal for 7th grade*
***ODH assesses only Meningococcal for 12th grade*
Source: Ohio Department of Health, 2022-2023

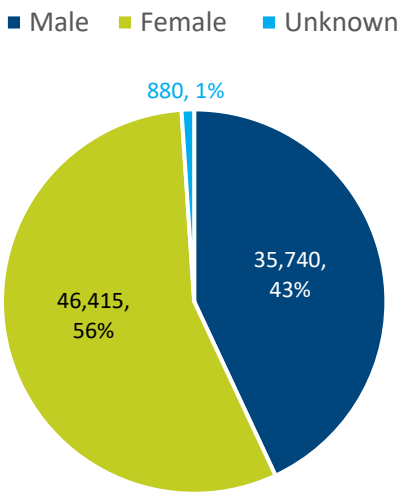
Public Health Importance: On-time vaccination throughout childhood is essential because it helps provide immunity before children are exposed to potentially life-threatening diseases.
- Centers for Disease Control and Prevention

Infectious and Chronic Diseases

Infectious Diseases: COVID-19

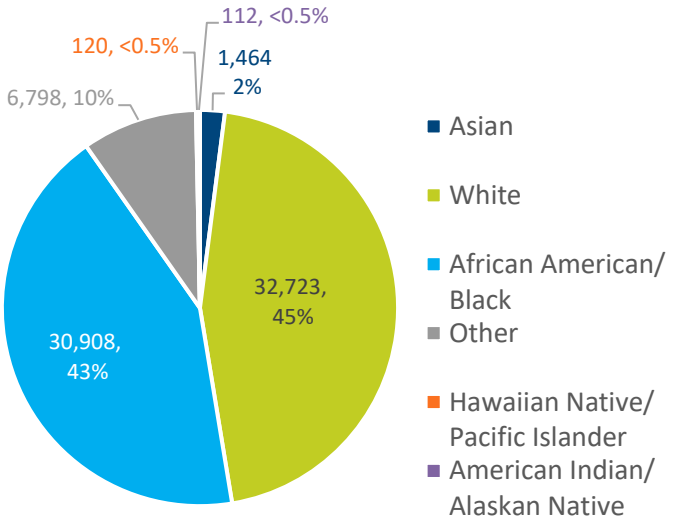
COVID-19 is a respiratory disease caused by a new coronavirus identified in 2019, called SARS-CoV-2. COVID-19 caused a global pandemic which impacted all populations regardless of race, sex, and geographic location. The virus can induce a wide variety of symptoms including loss of taste or smell, fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea.

Figure 57: Cincinnati COVID-19 Cases by Sex (2020-2023)



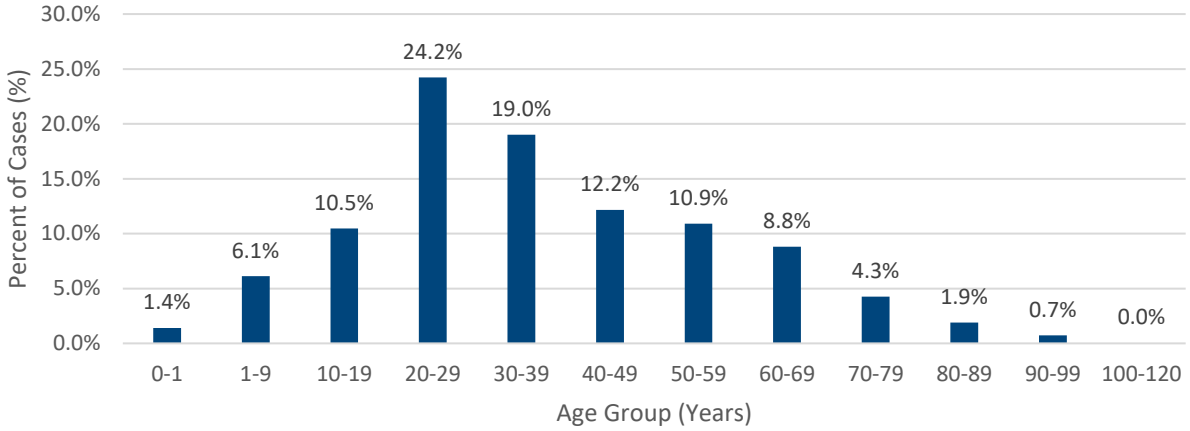
Source: Ohio Department of Health, 2020-2023

Figure 58: Cincinnati COVID-19 Cases by Race (2020-2023)



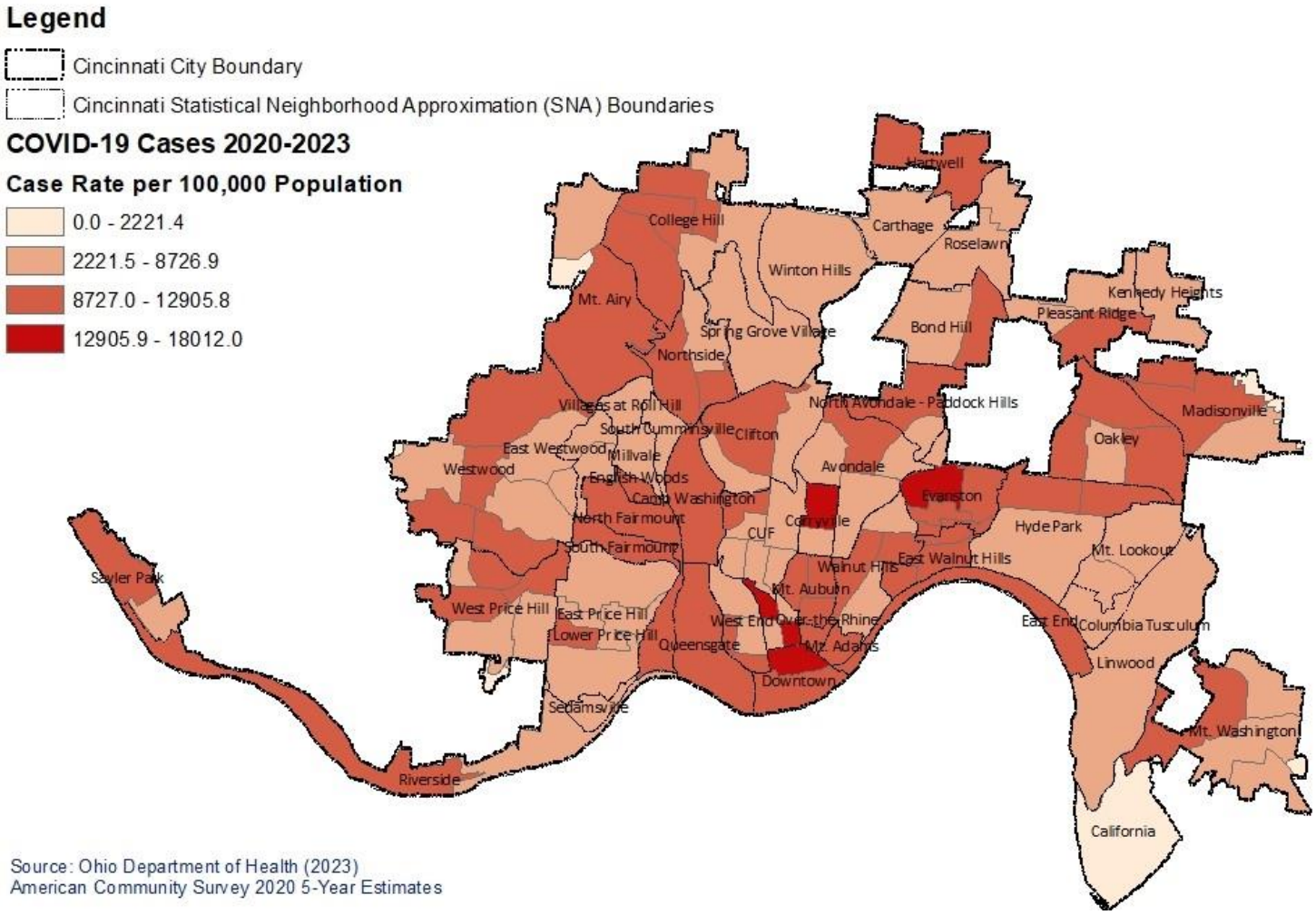
Source: Ohio Department of Health, 2020-2023

Figure 59: Cincinnati COVID-19 Cases by Age Group (2020-2023)



Source: Ohio Department of Health, 2020-2023

Map 11: Cincinnati COVID-19 Rate by Census Tract (2020-2023)



COVID-19 Cases

In March 2020, the first case of COVID-19 infection was reported to the Cincinnati Health Department. Three years later in March 2023, the City of Cincinnati had a total of 83,608 cases reported. There have been 3,220 total hospitalizations and 759 total deaths reported. COVID-19 testing options varied throughout the pandemic. Cincinnati residents previously may have received testing in the hospital, clinic, or pharmacy settings. Widespread use of home testing kits became available soon after.

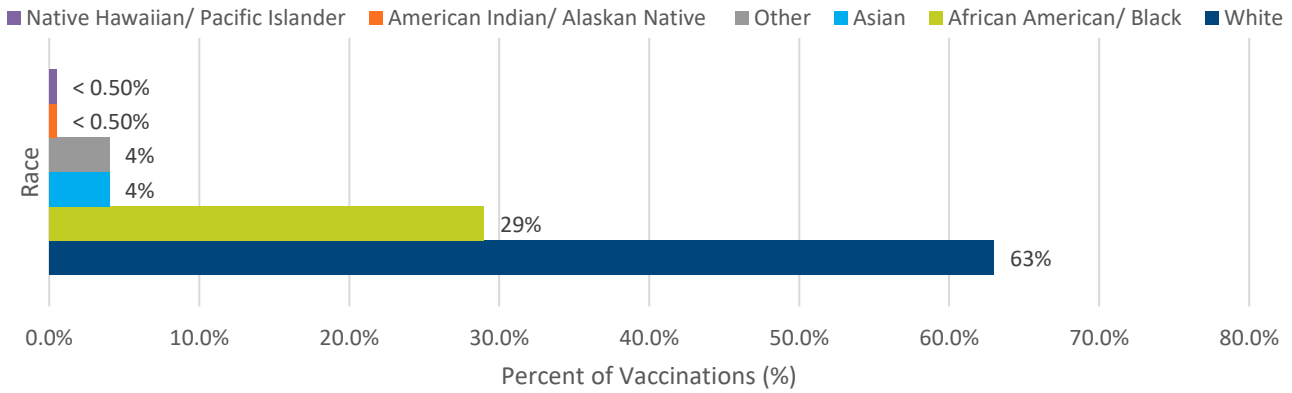
Based on Cincinnati reported cases, females were 56% of total cases and males made up 43% (Figure 57). White individuals were the majority of cases at 45% and closely after are Black individuals at 43% (Figure 58). Additionally, the 20-29 age range experienced more cases of COVID-19 infection (Figure 59).

The neighborhoods that experienced the highest case rates are Roselawn with 18,012 cases per 100,000 individuals. Following is Corryville with a case rate of 17,784.5 per 100,000 and Over-the-Rhine with a case rate of 15,773.3 per 100,000 individuals (Map 11). Case rates for COVID-19 infection are subject to potential limitations due to socioeconomic disparities relative to geographic location. Impacts on case rates may include lack of testing in under-resourced areas and reduced case reporting for positive at-home testing.

COVID-19 Vaccinations

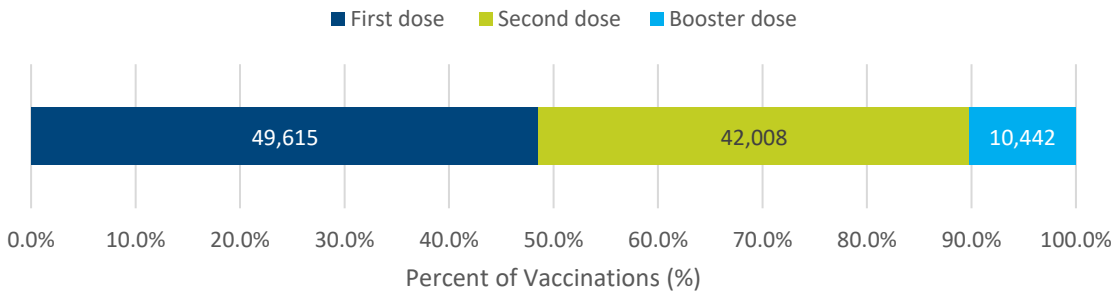
In December 2020, COVID-19 vaccine rollout began in the United States. Since the initial introduction of the vaccine, the series has been updated to include a primary and secondary dose along with follow up booster doses. Individuals who are immunocompromised are eligible for additional doses relative to the public.

Figure 60: Cincinnati Health Department COVID-19 Vaccinations Given by Race (2020-2023)



Source: Ohio Department of Health, 2020-2023

Figure 61: Cincinnati Health Department COVID-19 Vaccinations Given by Dose (2020-2023)



Source: Ohio Department of Health, 2020-2023

Map 12: Cincinnati COVID-19 Vaccination Rate by Census Tract (%) (2020-2023)

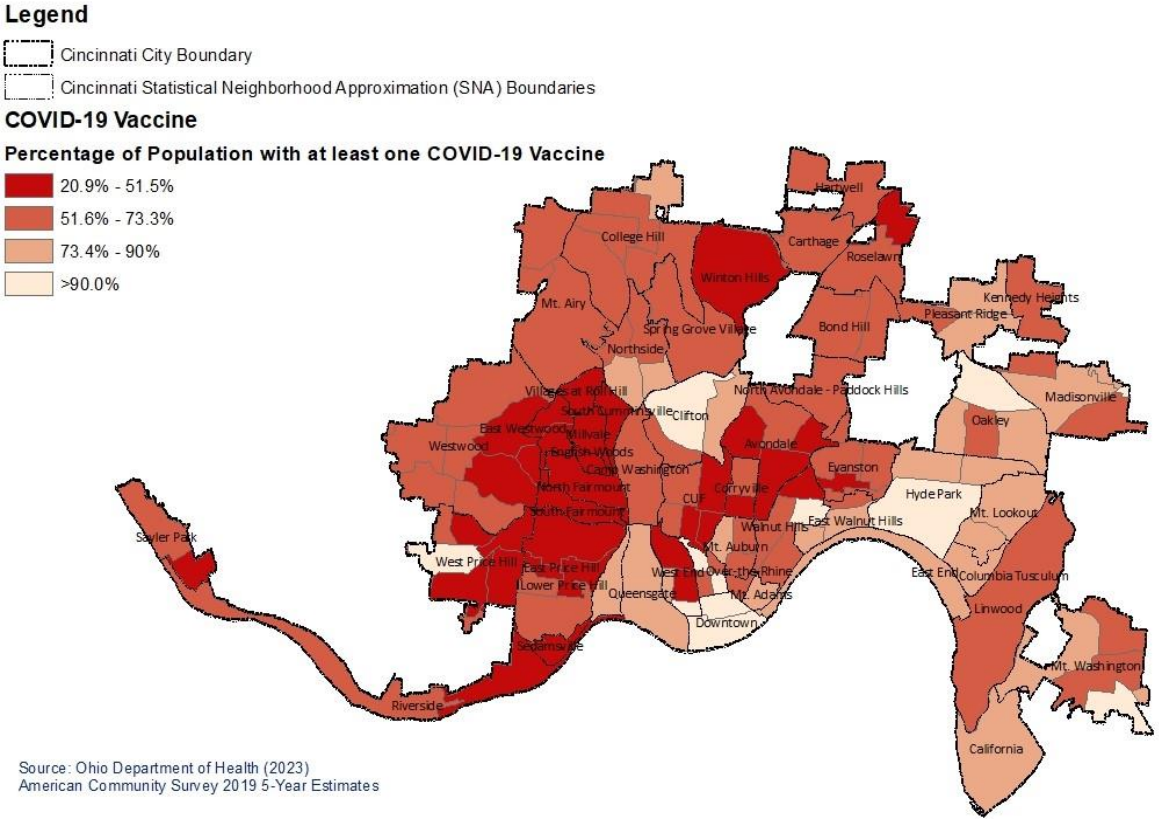
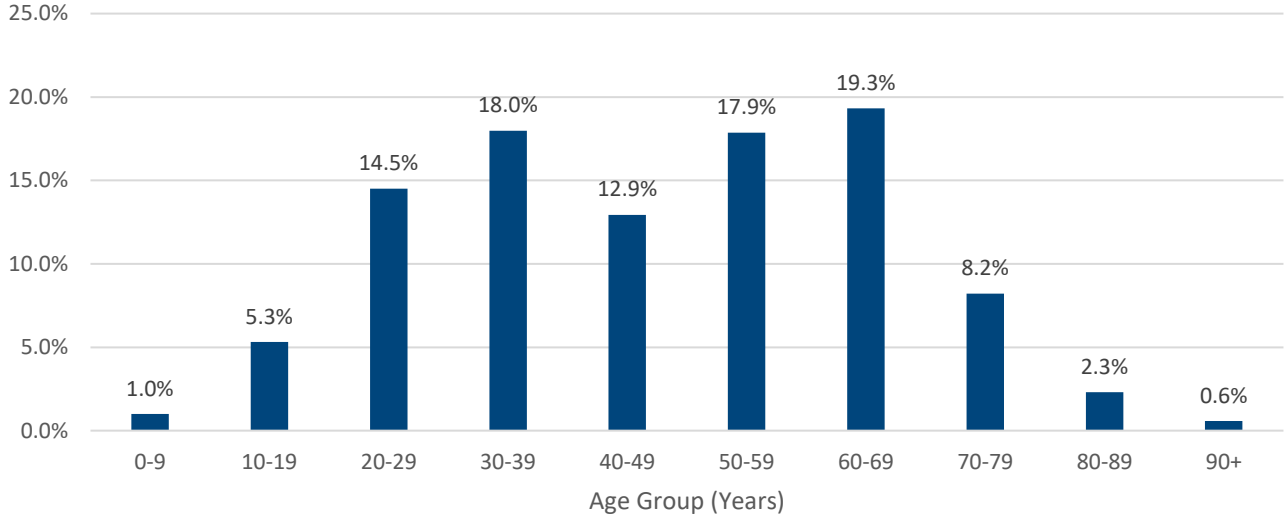


Figure 62: Cincinnati Health Department COVID-19 Vaccinations by Age Group (2020-2023)



Source: Ohio Department of Health, 2020-2023

Key Finding: The Cincinnati Health Department administered a total of 102,065 total vaccinations. Of these total doses, 49,615 are first doses, 42,008 second doses and 10,442 booster doses (Figure 61). Generally, eastern areas of the city have higher vaccination uptake. The Clifton and Downtown area have higher rates relative to the surrounding areas. Downtown, Oakley, and Over the Rhine had the highest uptake, with each exceeding 90% of the population with at least one vaccine. The neighborhoods with the lowest vaccine uptake are Roll Hill (20.9%), Winton Hills (26.9%), and CUF (31.1%) (Map 12).

Infectious Diseases: Sexually Transmitted Disease

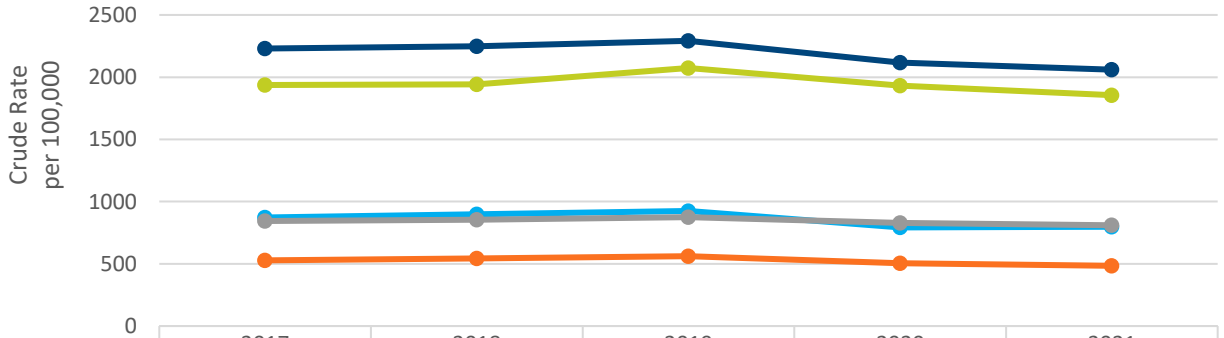
Sexually transmitted diseases (STDs) are a large public health concern. In 2019, more than 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported in the US. This was the sixth consecutive year where reported STDs have reached an all-time high and comprises an approximately 30% increase in cases between 2015-2019[8]. The burdens, costs, and complications associated with STDs were exacerbated by the COVID-19 pandemic as funding and resources shifted from STD prevention and control to COVID-19. STDs cause many harmful, often irreversible, and costly clinical complications, such as:

- Reproductive health problems
- Fetal and perinatal health problems
- Cancer
- Facilitation of the sexual transmission of HIV infection[9]

STDs, including HIV, are preventable and treatable.

> ***Public Health Importance:*** STDs go undetected and untreated, but STDs that do not show symptoms can still cause harm and spread to others. Untreated STDs can lead to infertility in women; they can also complicate pregnancy and lead to serious health consequences for a mother and her baby. Having an STD also increases a person's risk of contracting HIV through sexual contact.
>
> - Healthy People 2020

Figure 63: Chlamydia Case Rates by Health Jurisdiction (2017-2021)



	2017	2018	2019	2020	2021
Cincinnati	2231.3	2248.8	2291.9	2116	2060.3
Cleveland	1937.9	1943	2073.7	1933	1855.5
Columbus	872.7	898.3	924.8	792.6	797.7
Hamilton County	844	853.9	875	828.2	809.9
Ohio	526.8	543.1	561.3	504.8	484.1

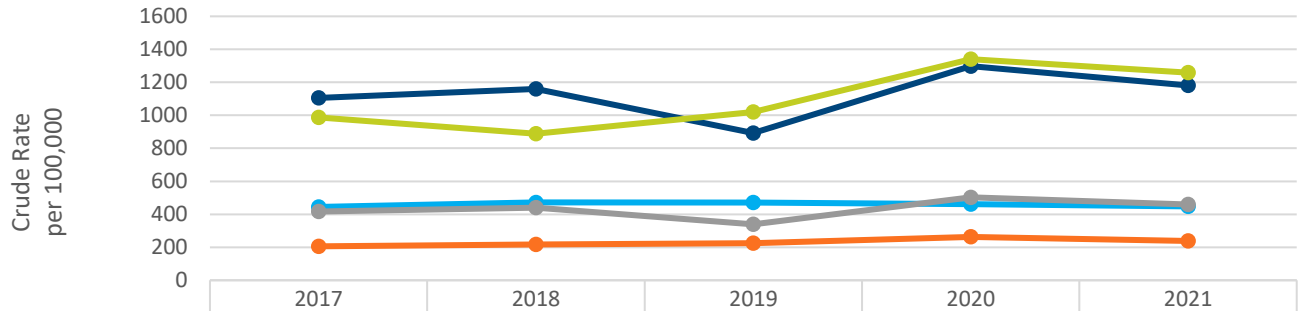
Source: Ohio Department of Health, 2017-2021

Overall, chlamydia rates increased from 2017 to 2019, but decreased in 2020. The decrease in chlamydia cases may be due to the reduction in screening that occurred during the onset of the COVID-19 pandemic. Chlamydia is often asymptomatic, particularly in males, so less screening means that many may not be aware they are infected. Cincinnati has a higher rate of chlamydia compared to Cleveland and Columbus (Figure 63).

[8] Centers for Disease Control and Prevention. (2021, April 13). New CDC study: STDs continue to rise in the U.S. [Press release]. Retrieved from https://www.cdc.gov/media/releases/2021/p0413-stds.html.

[9] St. Louis ME, Wasserheit JN, Gayle HD, editors. Janus considers the HIV pandemic: Harnessing recent advances to enhance AIDS prevention. Am J Public Health. 1997; 87:10-12. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases.

Figure 64: Gonorrhea Case Rates by Health Jurisdiction (2017-2021)

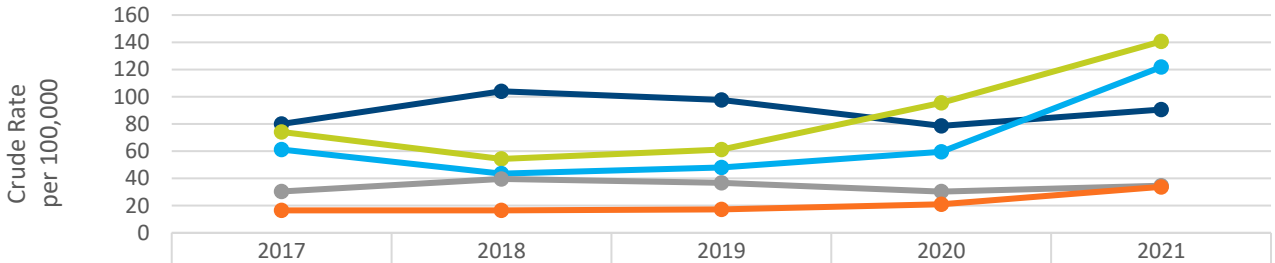


	2017	2018	2019	2020	2021
Cincinnati	1105.5	1159.1	892.6	1298	1181
Cleveland	987.5	888.4	1020.1	1340.2	1259.2
Columbus	444.5	472	471.2	461.5	448.7
Hamilton County	415.9	440.6	339.1	502.7	459.4
Ohio	205.7	216.2	223.8	262.6	238.8

Source: Ohio Department of Health, 2017-2021

Gonorrhea cases in Cincinnati saw a significant decrease from 2018 to 2019 but rebounded sharply in 2020. An increase in cases between 2019 and 2020 was also recorded in Cleveland, Hamilton County, and Ohio generally. Cases in Columbus have consistently decreased from their 2019 peak. Cleveland has a slightly higher rate of gonorrhea cases in 2021 at 1,259 per 100K relative to Cincinnati at 1181 per 100K in 2021. Gonorrhea generally presents with uncomfortable symptoms in both males and females, leading people to seek care; this may be why gonorrhea cases did not drop off in the same way that chlamydia cases did during the onset of the pandemic (Figure 64).

Figure 65. Syphilis Case Rates by Health Jurisdiction (2017-2021)



	2017	2018	2019	2020	2021
Cincinnati	80	104	97.7	78.6	90.5
Cleveland	74.2	54.3	61.2	95.5	140.6
Columbus	61.2	43.5	48.1	59.5	121.8
Hamilton County	30.4	39.6	36.8	30.3	34.6
Ohio	16.5	16.5	17.2	20.9	33.8

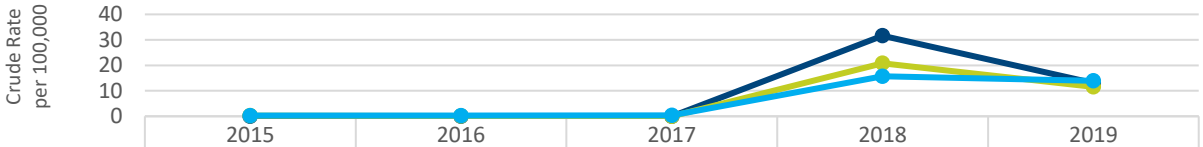
Source: Ohio Department of Health, 2017-2021

Syphilis cases have slowly decreased from 2018 to 2020 in Hamilton County and Cincinnati but have started to increase from 2020 to 2021. However, Cleveland and Columbus began seeing sharp increases in Syphilis cases starting in 2019, ultimately exceeding Cincinnati's higher initial rate. Hamilton County and Cincinnati appear to be lagging just behind the large rise in cases in Cleveland and Columbus (Figure 65). The rise in syphilis cases in recent years is largely among MSM, although cases have increased in among all demographic groups. Congenital syphilis, where a pregnant mother infected with the disease passes it to their child, is increasing in the US (CDC).[10]

[10] Impact of COVID-19 on Sexually Transmitted Diseases (cdc.gov)

Other Infectious Diseases

Figure 66. Hepatitis A Virus Case Rate by Health Jurisdiction (2015-2019)

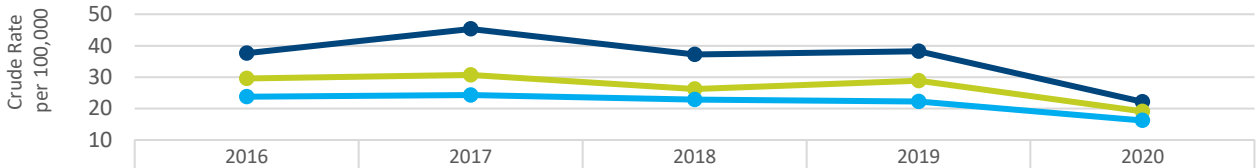


	2015	2016	2017	2018	2019
Cincinnati	0	0	0	31.6	13.1
Hamilton County	0.2	0.1	0	20.8	11.6
Ohio	0.3	0.3	0.4	15.7	13.9

Source: Ohio Department of Health, 2015-2019

Key Research Findings: In 2018, there was a Hepatitis A outbreak that affected many regions of Ohio. CHD targeted interventions to the populations most affected in Cincinnati by opening Hepatitis A vaccine clinics in soup kitchens, homeless shelters, parks, faith-based institutions, substance abuse centers, and correctional centers. CHD also hosted syringe exchange events and conducted training for several groups of homeless shelter workers.

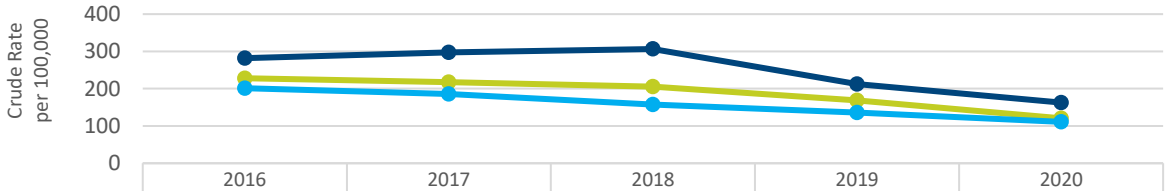
Figure 67. Hepatitis B Virus Case Rate by Health Jurisdiction (2016-2020)



	2016	2017	2018	2019	2020
Cincinnati	37.6	45.3	37.2	38.3	22.1
Hamilton County	29.6	30.7	26.2	28.9	19.1
Ohio	23.8	24.3	22.9	22.2	16.2

Source: Ohio Department of Health, 2016-2020

Figure 68. Hepatitis C Virus Case Rate by Health Jurisdiction (2016-2020)



	2016	2017	2018	2019	2020
Cincinnati	282.2	297.6	306.4	212.4	162.7
Hamilton County	228	217.9	205.7	168.8	120.6
Ohio	201.3	186	157.5	135.6	111

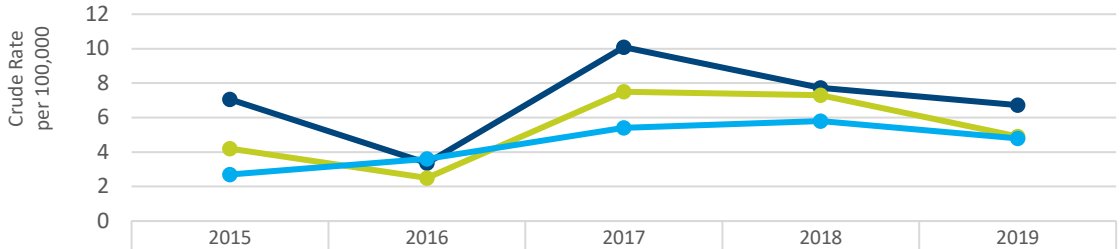
Source: Ohio Department of Health, 2016-2020

Hepatitis B is caused by the Hepatitis B Virus (HBV), which infects the liver. A perinatal case of HBV occurs when an infection occurs in a pregnant person and the infant is born infected with HBV. The decrease in 2020 of HBV and HCV is likely due to a reduction in screening efforts that occurred during the pandemic (Figure 67 and 68).

Hepatitis C is caused by the Hepatitis C Virus (HCV), which also causes liver infection. HCV cases are classified into two categories: acute and chronic. Cases are indicated as “acute” when an individual has short term illness within the first 6 months of exposure. Chronic cases are categorized as infections that last longer than 6 months. Rates of HCV remain higher in Cincinnati than in Hamilton County and Ohio but follow the same decreasing pattern (Figure 68).

Infection with any viral hepatitis increases the risk of developing complications such as liver cancer. Hepatitis A and B have vaccines that can prevent infection. HCV, while not having an approved vaccine available, is one of the only viral infections that is curable through treatment.

Figure 69. Invasive Streptococcus Group A Case Rate by Health Jurisdiction (2015-2019)

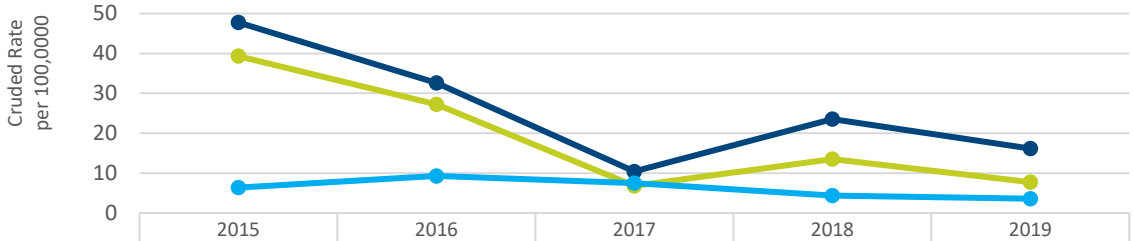


	2015	2016	2017	2018	2019
Cincinnati	7.1	3.4	10.1	7.7	6.7
Hamilton County	4.2	2.5	7.5	7.3	4.9
Ohio	2.7	3.6	5.4	5.8	4.8

Source: Ohio Department of Health, 2015-2019

Invasive Streptococcus Group A can result in several different types of bacterial infections such as strep throat, scarlet fever, or rheumatic fever. This category of Streptococcal Group A is severe and can be life threatening. Strep A cases increased in 2017 and have remained relatively consistent through 2019 (Figure 69).

Figure 70. Shigellosis Case Rate by Health Jurisdiction (2015-2019)



	2015	2016	2017	2018	2019
Cincinnati	47.7	32.6	10.4	23.5	16.1
Hamilton County	39.3	27.2	6.8	13.5	7.7
Ohio	6.4	9.3	7.5	4.4	3.6

Source: Ohio Department of Health

Shigellosis is an infection caused by the bacteria *Shigella*. This bacterium is spread person to person through high-touch surfaces, food, or water contaminated with the *Shigella* bacteria. From 2017 to 2018 the sudden increase rate of Shigellosis is due to several different outbreaks in daycare settings around Cincinnati (Figure 70). In more recent years, there has been an increase in shigellosis cases in MSM where sexual contact has been identified as the primary mode of transmission.

Figure 71. *Candida auris* Case Rate by Health Jurisdiction (2020-2021)

Source: Ohio Department of Health

Key Findings: *Candida auris* is a fungal disease that was first diagnosed in Cincinnati in 2020. It is most often spread in healthcare facilities or long-term care nursing facilities where individuals generally have weaker immune systems. *Candida auris* is often multidrug resistant in addition to being difficult to treat and identify. It causes outbreaks quickly in healthcare facilities and requires several infection prevention techniques to control it.

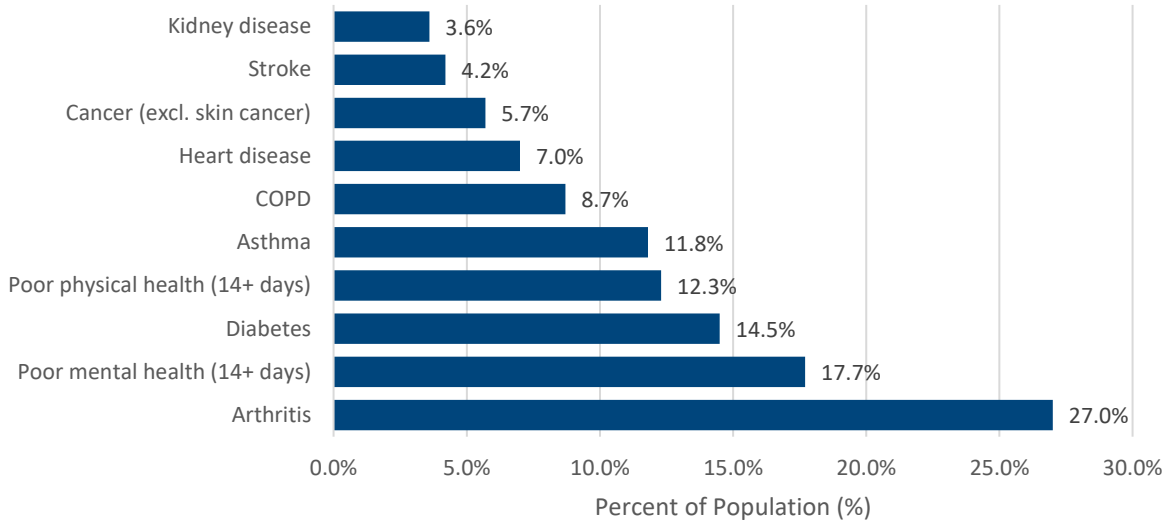
Chronic Diseases

Chronic disease includes heart disease, stroke, diabetes, cancer, chronic obstructive pulmonary disease/chronic lower respiratory disease, asthma, and arthritis. It also includes related clinical risk factors (obesity, hypertension, and high cholesterol), as well as behaviors closely associated with these conditions and risk factors (nutrition, physical activity, and tobacco use). Refer to the Behavioral Risk Factors section earlier in the chapter for more information.

Public Health Importance: About half of all adults in the U.S. have one or more chronic health condition and one in four adults have two or more chronic health conditions. Two of the top ten causes of death account for almost half (48%) of deaths in the U.S. – heart disease and cancer.

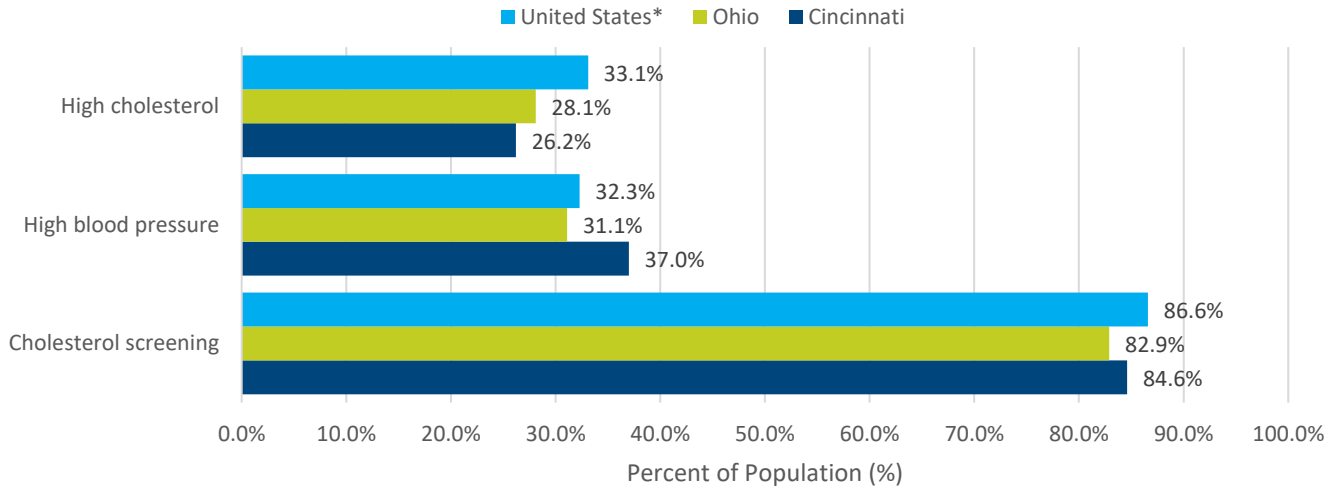
- Centers for Disease Control and Prevention

Figure 72: Cincinnati Age-Adjusted Prevalence of Chronic Disease in Adults 18+ Years (2020)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

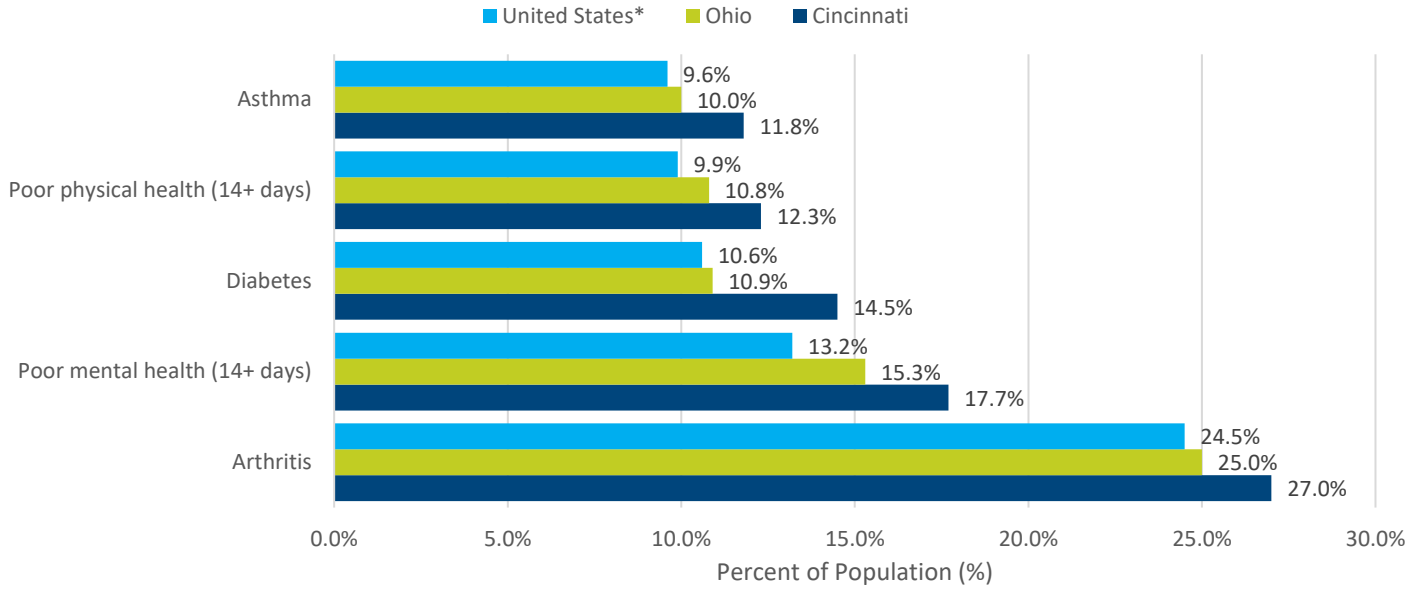
Figure 73: Age-Adjusted Prevalence of Cholesterol Indicators in Adults 18+ Years (2019)



*U.S. values are crude rates

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Figure 74: Age-Adjusted Prevalence of Top Five Chronic Conditions (2020)



*U.S. values are crude rates

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Key Research Findings: Cincinnati residents have comparatively higher rates of high blood pressure, poor physical health, and poor mental health than the rates for Ohio and the U.S. (Figure 73 and 74). The percentage of Cincinnati residents with high cholesterol is lower than Ohio and the US – however, Cincinnati does have a lower percentage of individuals screened for high cholesterol (Figure 73). Disparities are also consistently evident among residents in Census Tracts of the Roselawn, Bond Hill, College Hill, West End, and Avondale neighborhoods.

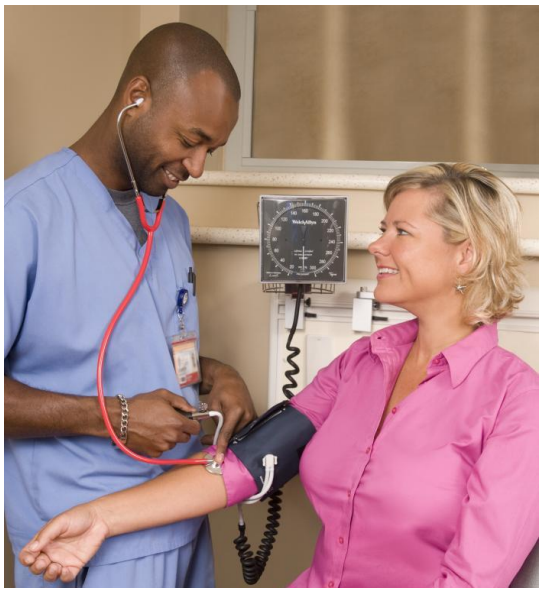


Image Source: CDC/ Amanda Mills

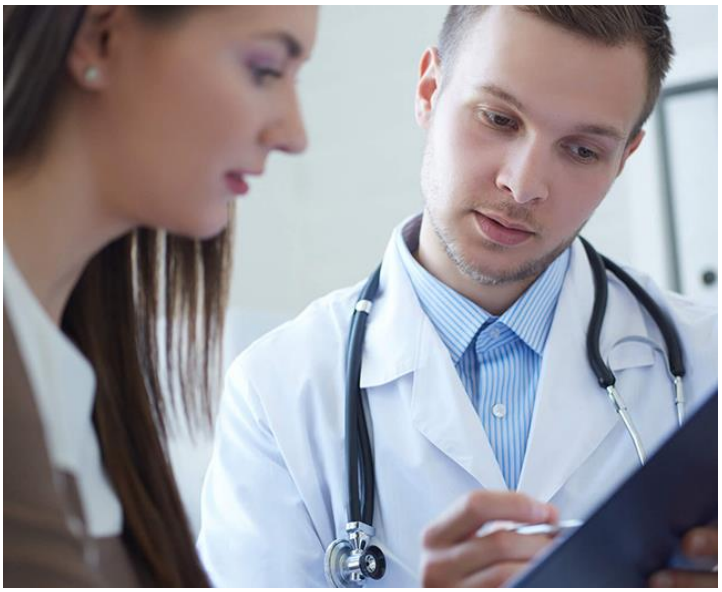
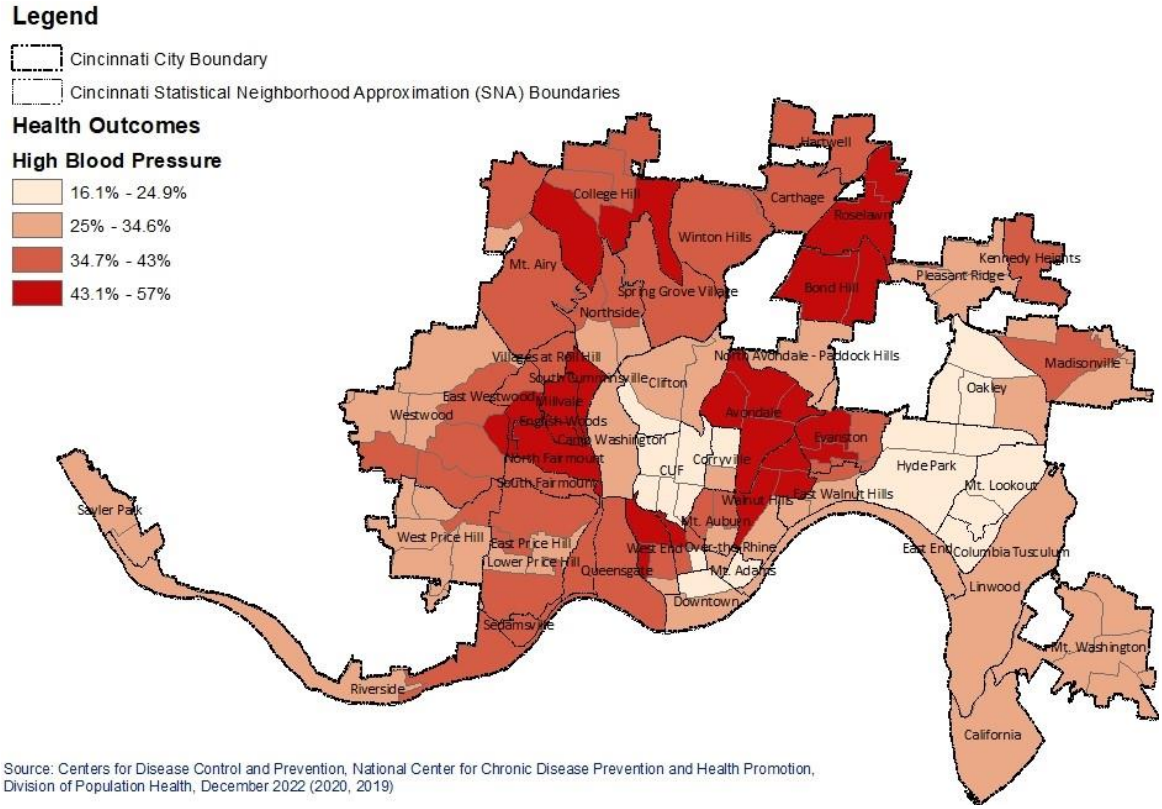


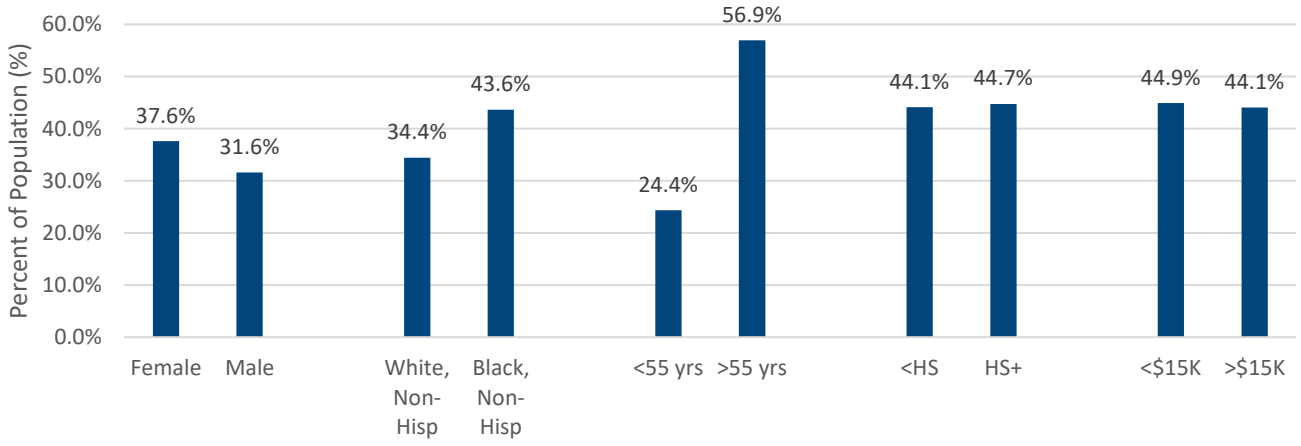
Image Source: American Heart Association

Map 13: Cincinnati High Blood Pressure (>130-139/80-89 mmHg) in Adults 18+ Years (2019)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Figure 75: Ohio High Blood Pressure (>130-139/80-89 mmHg) in Adults 18+ Years by Demographics (2019)*



*Local data not available
Source: Centers for Disease Control and Prevention, 2019

Key Research Findings: Individuals over the age of 55 and Black Non-Hispanic individuals are more commonly diagnosed with high blood pressure (Figure 75). Neighborhoods with higher blood pressure incidence include Walnut Hills (57.0%), Avondale (53.3%) and Roselawn (52.6%) (Map 13).

Map 14: Cincinnati High Blood Cholesterol (>200 mg/dL) in Adults 18+ Years (2019)

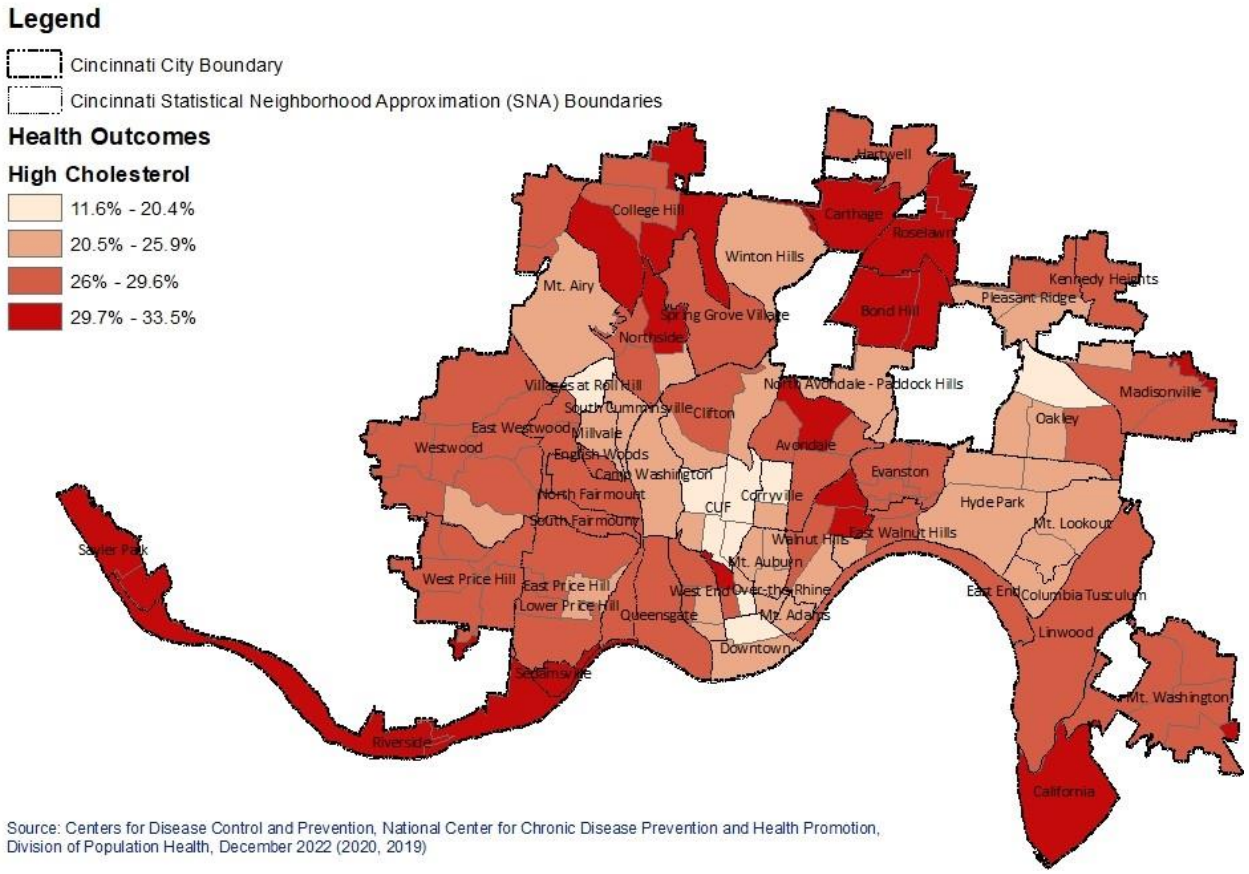
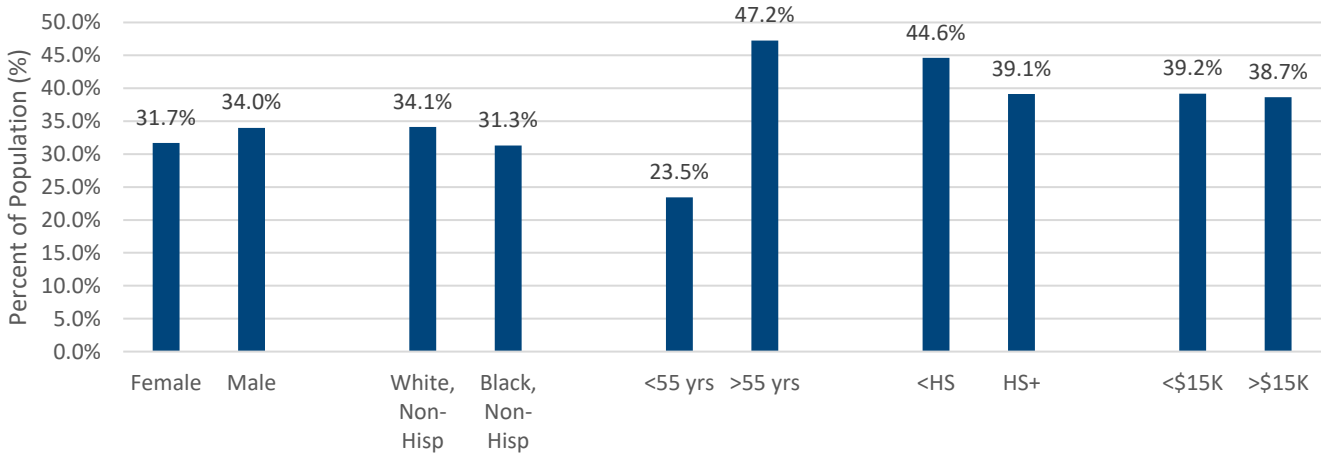


Figure 76: Ohio High Blood Cholesterol (>200 mg/dL) in Adults 18+ Years by Demographics (2019)*



*Local Data not available
Source: Centers for Disease Control and Prevention, 2019

Key Research Findings: Individuals over the age of 55 are more commonly diagnosed with high blood cholesterol (Figure 76). Neighborhoods with higher blood cholesterol incidence include College Hill (33.5%), Roselawn (33.2%), and Walnut Hills 32.9% (Map 14).

Map 15: Cincinnati Arthritis in Adults 18+ Years (2020)

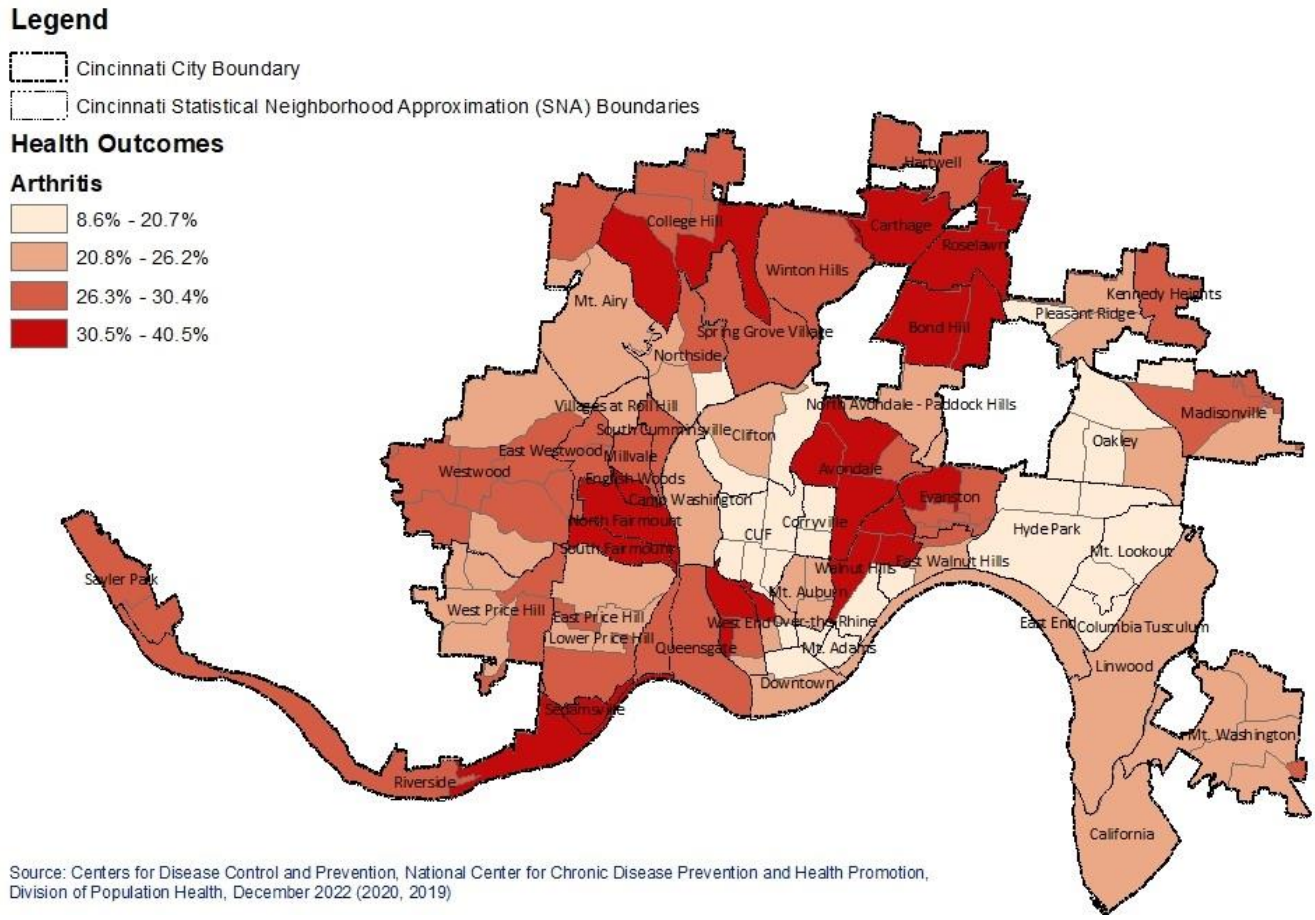
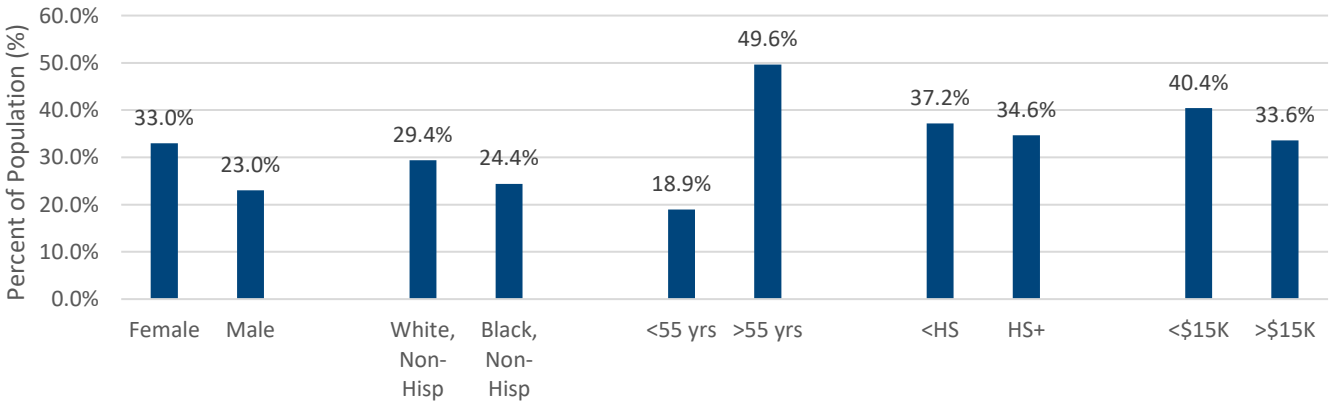


Figure 77: Ohio Arthritis in Adults 18+ Years by Demographics (2020)*



*Local Data was not available
Source: Centers for Disease Control and Prevention, 2020

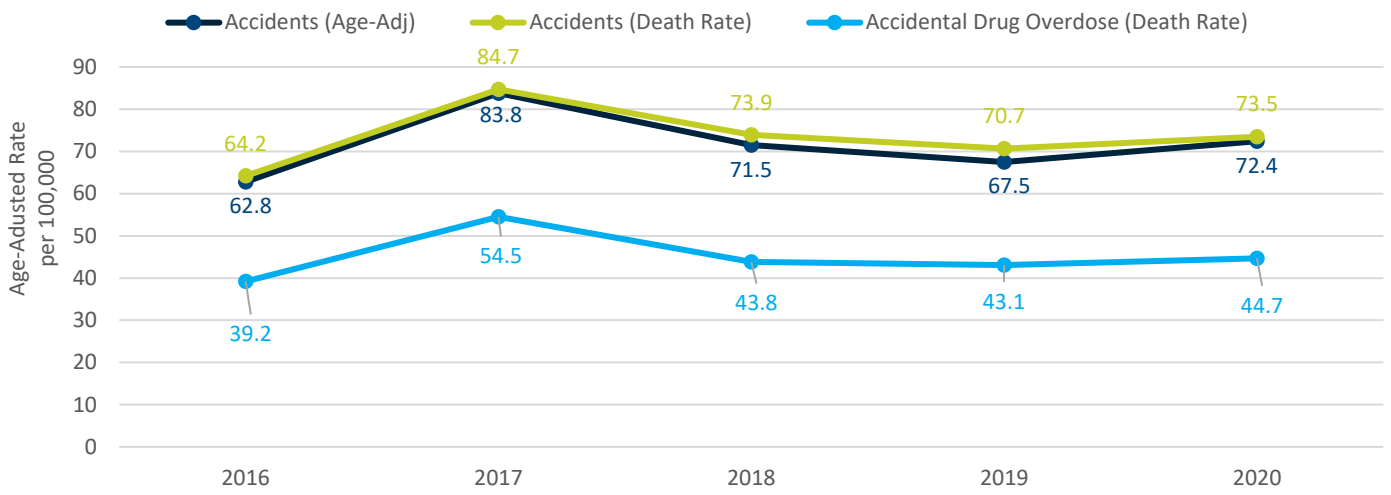
Key Research Findings: When reviewing arthritis diagnoses, females and White, Non-Hispanic residents have a higher rate of arthritis incidence (Figure 77). Most arthritis occurs among those over the age of 55 (Figure 76). Neighborhoods with higher arthritis incidence include Walnut Hills (40.5%), Roselawn (37.6%), and College Hill (37.5%) (Map 12).

Injury and Injury Prevention

Public Health Importance: Injuries result in more deaths than all other cases for people aged 1 to 44 years. Injuries are an enormous threat to our communities, a threat for which we have an array of effective prevention strategies.

- Centers for Disease Control and Prevention

Figure 78: Hamilton County Accidents (Unintentional)* and Accidental Drug Overdoses in Adults Age 20+ Years (2016-2020)**



Accidents includes (from highest to lowest rate): Accidental poisoning and exposure to noxious substances, falls, motor vehicle accidents, other and unspecified non-transport accidents, accidental drowning and submersion, accidental exposure to smoke fire and flames, water/air and space, other land transport accidents, accidental discharge of firearms.

**Accidental poisoning and exposure to noxious substances (drug overdoses) account for 59% of total accidents.

Source: Ohio Department of Health, 2016-2020

Key Research Findings: Accidental deaths include motor vehicle accidents, falls, and poisoning are all completely preventable. Drug overdoses are also considered accidental deaths and the rate of mortality from drug overdoses drives the accidental death rate in Cincinnati (Figure 78).

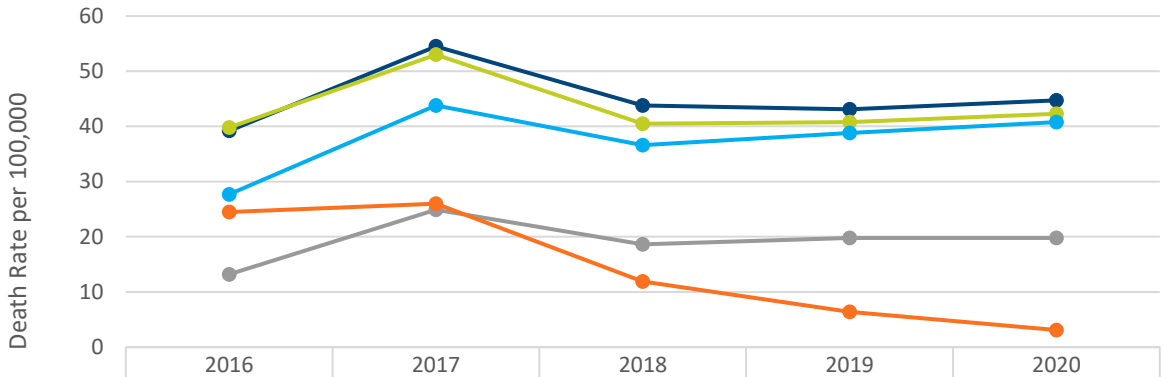
Mental Health and Substance Use Disorders

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices.

Public Health Importance: Linked to physical health, mental health can affect work productivity, quality of life, social interaction, diseases, treatments, and outcomes. People who maintain positive mental health are more likely to succeed in life, and more likely to increase their chances of living longer, healthier lives.

- U.S. Department of Health & Human Services

Figure 79: Hamilton County Accidental Drug Overdose of Selected Substances in Adults 20+ Years (2016-2020)



	2016	2017	2018	2019	2020
Accidental Drug Overdose	39.2	54.5	43.8	43.1	44.7
Opiates (all)	39.8	53	40.5	40.8	42.3
Fentanyl	27.7	43.8	36.6	38.8	40.8
Cocaine	13.2	24.9	18.6	19.8	19.8
Heroin	24.5	26	11.9	6.4	3.1

Source: Ohio Department of Health, 2016-2020

Key Research Findings: Accidental drug overdoses from 2018-2020 remained below the 2017 level. Heroin has continued to decrease to 3.1 deaths per 100,000 since the height of its rate in 2017 of 24.5 deaths per 100,000. Other accidental drug overdose deaths (from all opiates, fentanyl, and cocaine) have remained relatively steady or slowly increasing from 2018-2020 (Figure 79).

Alcohol Use: Excessive alcohol consumption is associated with numerous health problems. Unintentional injuries, such as motor vehicle crashes, falls, burns, and drowning are often tied to alcohol use. Intentional injuries associated with alcohol use include firearm injuries, sexual assaults, and domestic violence. Long-term health risks include liver disease, depression, anxiety, high blood pressure, stroke, heart attack, cancer, and uncontrollable diabetes. Pregnant women who drink risk having a child born with fetal alcohol spectrum disorders.

Tobacco use: Smoking is linked to almost half a million deaths each year in the U.S. Smoking can cause cancer almost anywhere in the body and increases the risk of developing heart disease and stroke. Women who smoke while pregnant are at an increased risk for having a preterm baby, stillbirth, and infant death.

Addiction: Drug use and misuse continue to create public health challenges in the United States, leading to overdose deaths, HIV and hepatitis C infections, and other chronic health conditions (APHA Policy Statement).

Chapter 5: Description of Health Disparities and High-Risk Populations

Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.[11] Populations can be defined by factors such as race or ethnicity, gender, education or income, disability, geographic location (e.g., rural or urban), or sexual orientation. Health disparities are inequitable and are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.

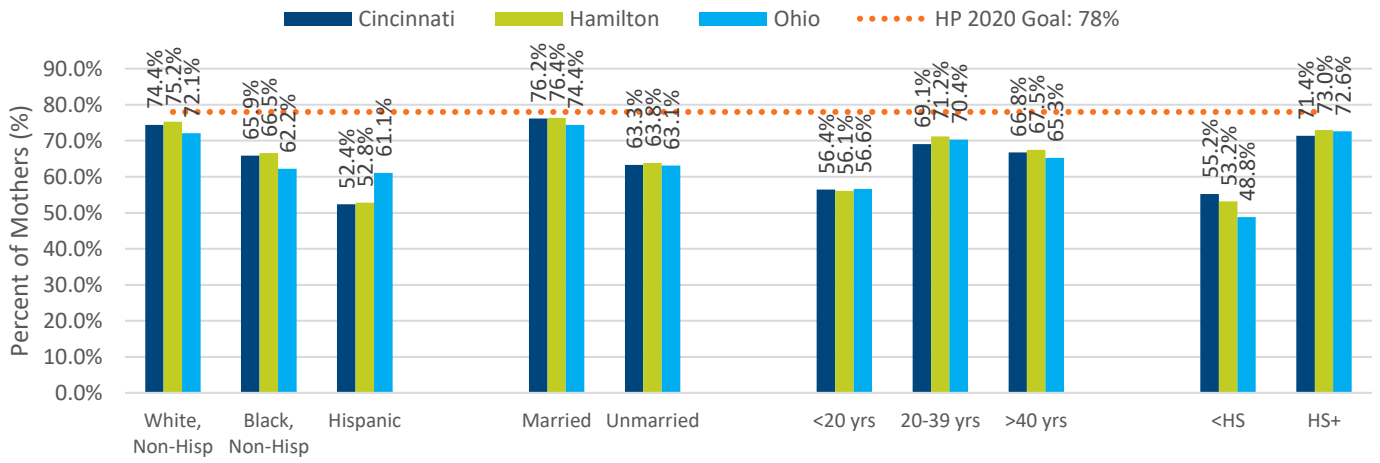
Maternal and Infant Health Disparities

Premature Birth

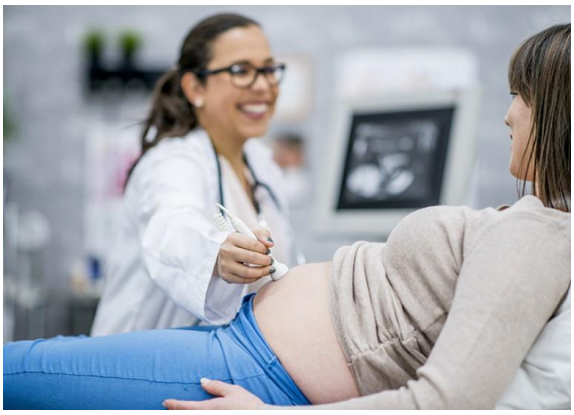
Public Health Importance: Factors that contribute to poorer health outcomes: babies born prematurely can suffer from many lifelong medical conditions that affect their heart, lungs, intestines, kidneys, and eyes. As these babies mature, developmental delays and learning disabilities often appear.

- March of Dimes

Figure 80: Mothers Receiving First Trimester Care by Demographics (%) (2016-2020)



*Note: Healthy People 2030 does not have a specific objective goal for first trimester care.
Source: Ohio Department of Health, Office of Vital Statistics, 2016-2020



Key Research Findings: Although there is little difference between Cincinnati and the county when securing first trimester care, differences in trends can be seen for Black and Hispanic populations. This is also true for young mothers, unmarried mothers, and mothers without higher education (Figure 80). Disparities also exist in Cincinnati's neighborhoods, where mothers in the neighborhoods of Carthage, East Price Hill, Corryville, and Winton Hills are the least likely to obtain first trimester prenatal care (Map 16).

Image Source: Community health Network, 2023

[11] CDC. Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations. Atlanta: U.S. Department of Health and Human Services; 2008

Map 16: Cincinnati Mothers Receiving First Trimester Care (%) (2017-2021)

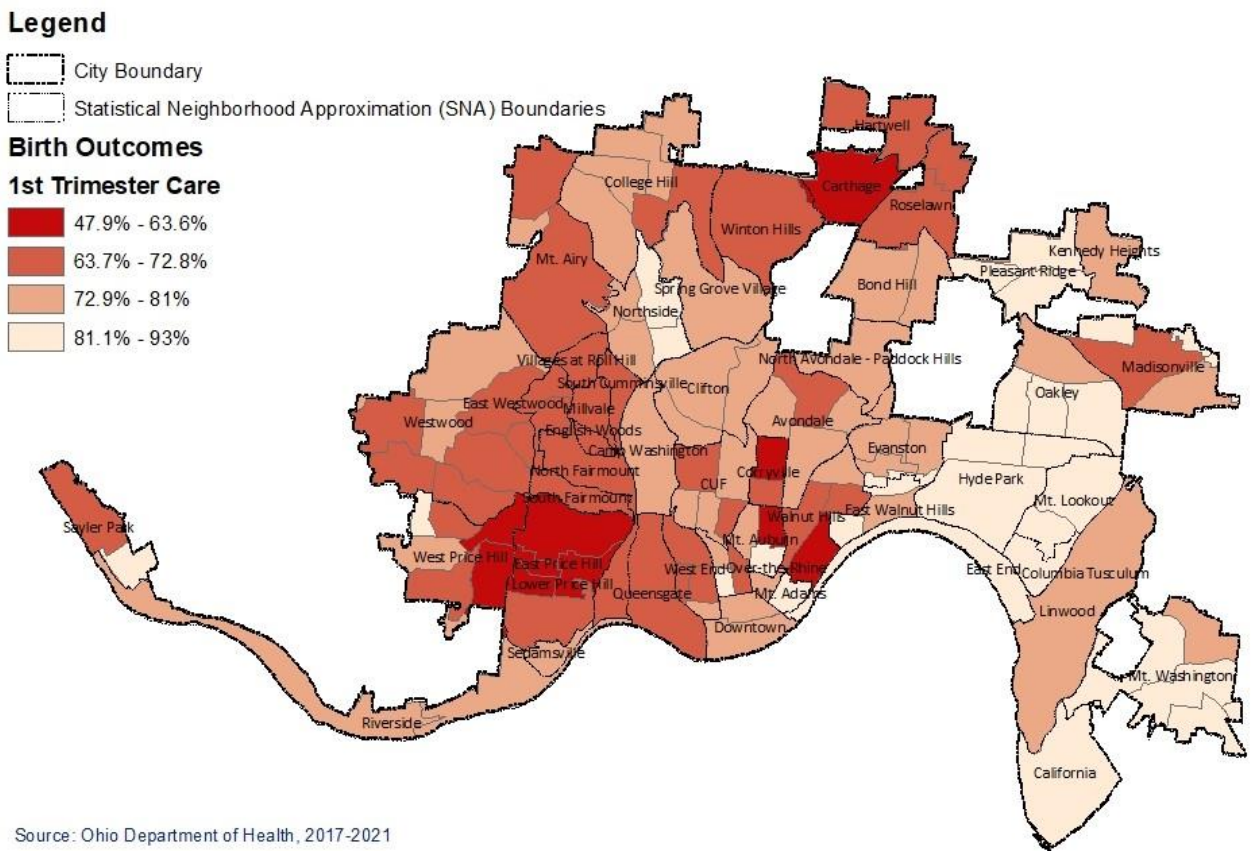
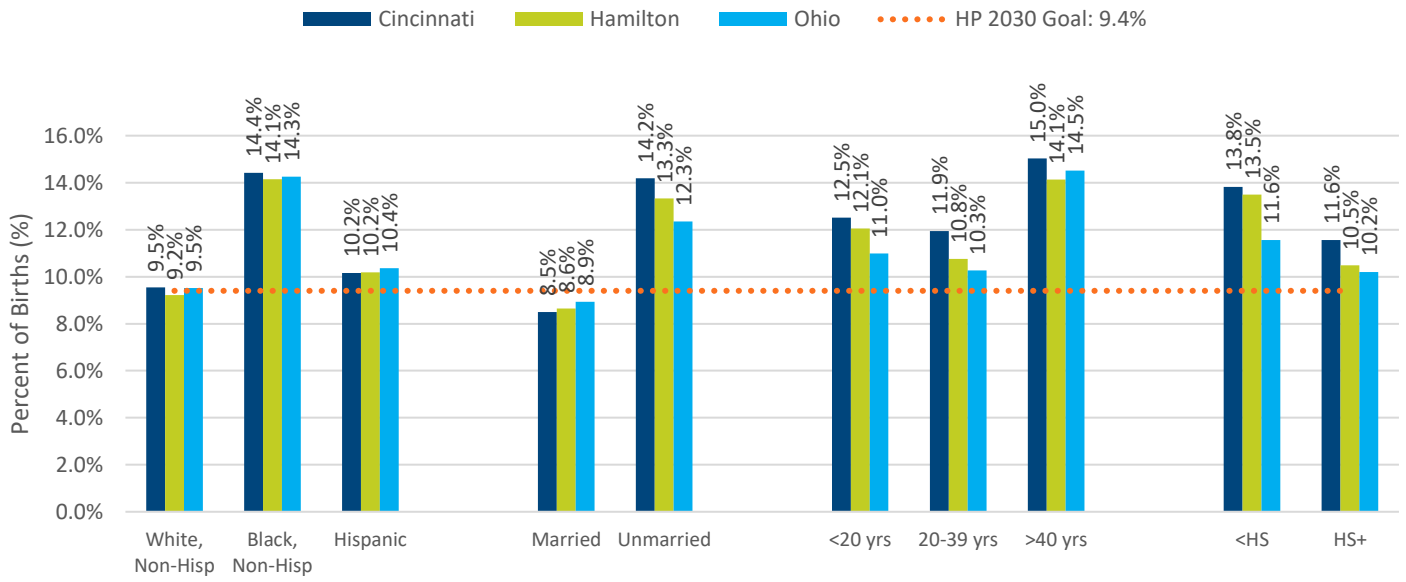
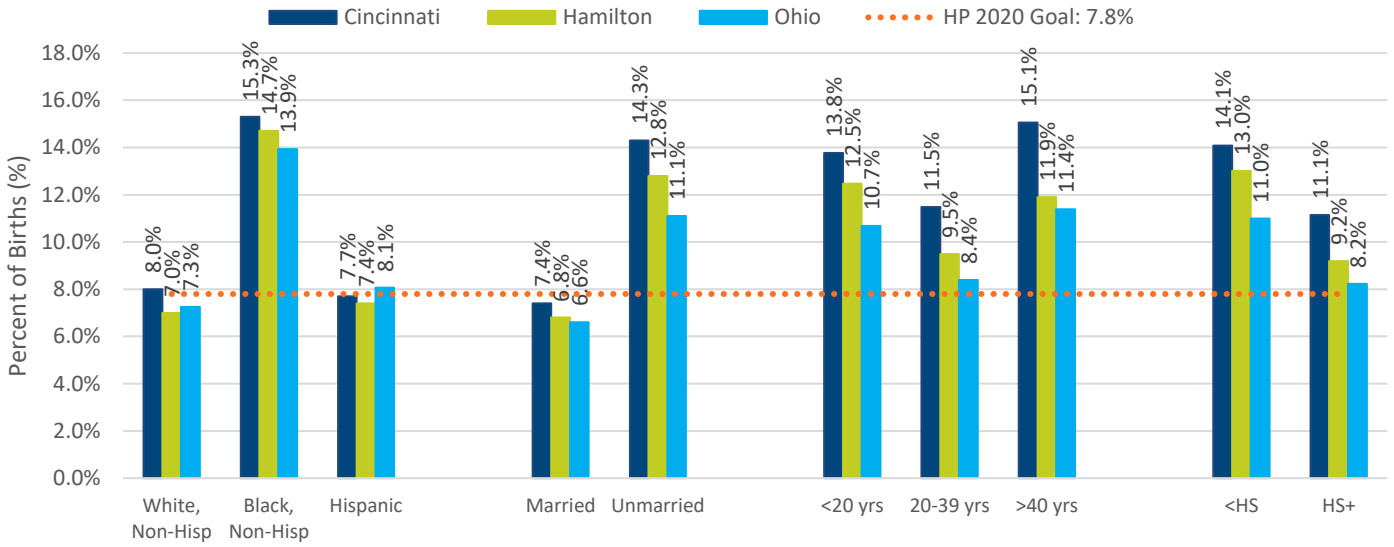


Figure 81: Preterm Live Births (<37 weeks gestation) (%) (2017-2021)



Source: Ohio Department of Health, Office of Vital Statistics, 2017-2021

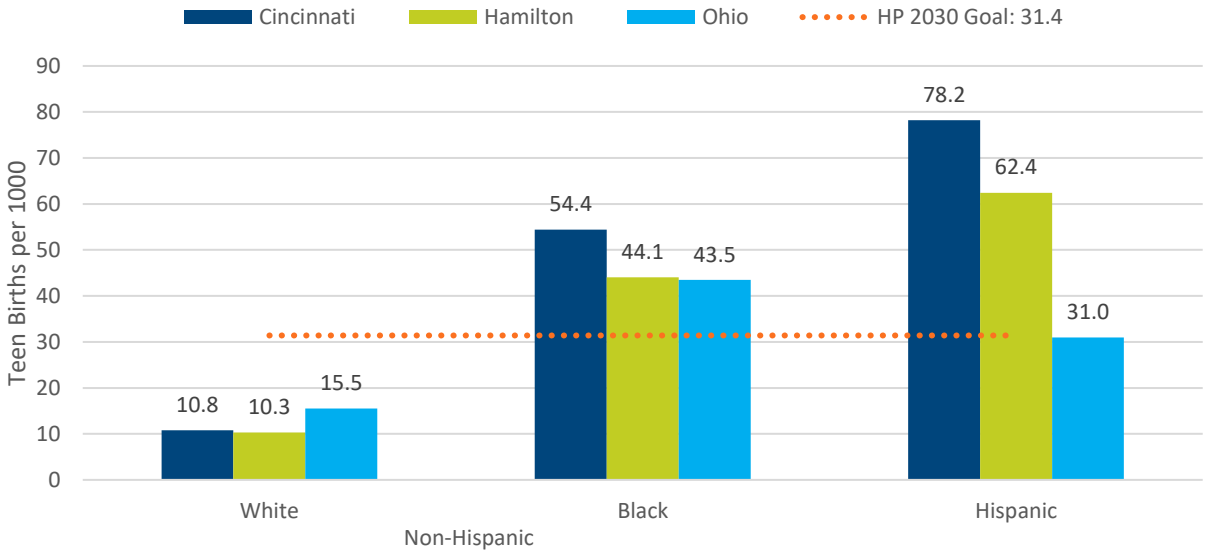
Figure 82: Low Birth Weight (<5lbs 8oz or 2500g) by Demographics (%) (2016-2020)



Source: Ohio Department of Health, Office of Vital Statistics, 2016-2020

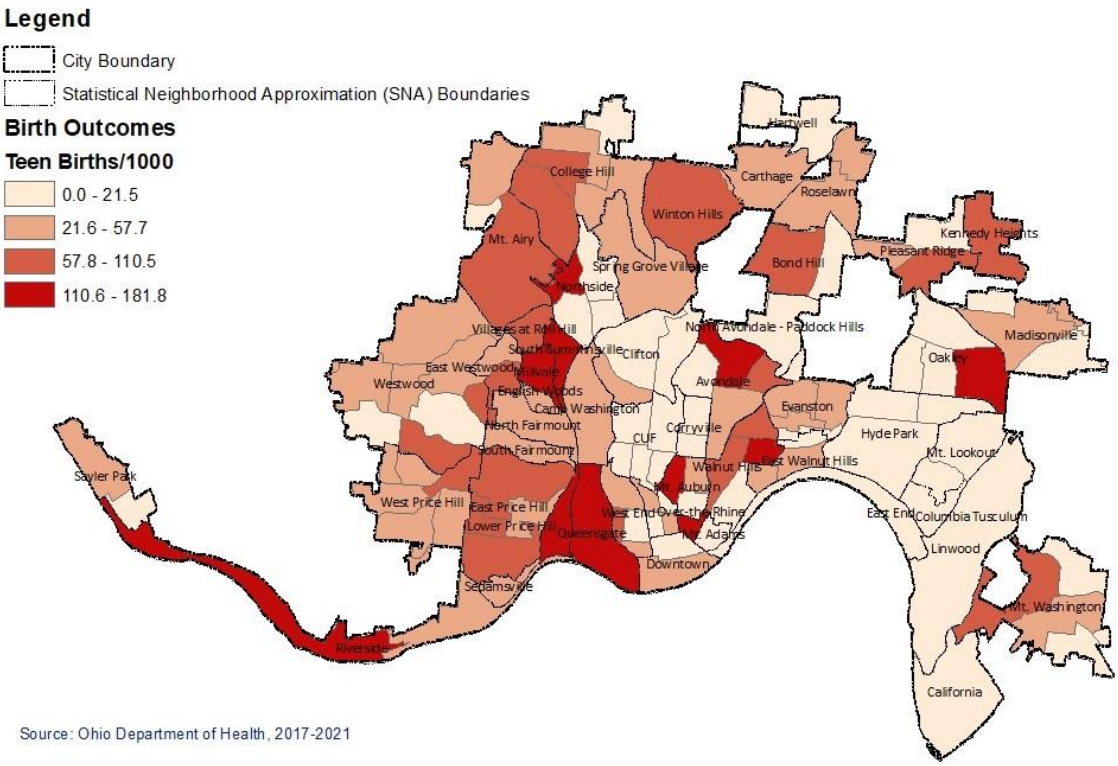
Key Research Findings: Studying health disparities for maternal and infant health reveals trends of wider prevalence of preterm birth and low birth weight for Black mothers and for mothers over the age of 40 (Figure 80, 81). Breastfeeding and first trimester care are less common for Black mothers, unmarried mothers, and younger mothers (Figure 79, 83).

Figure 83: Births to Teen Mothers Aged 15-19 by Race and Ethnicity (2016-2020)



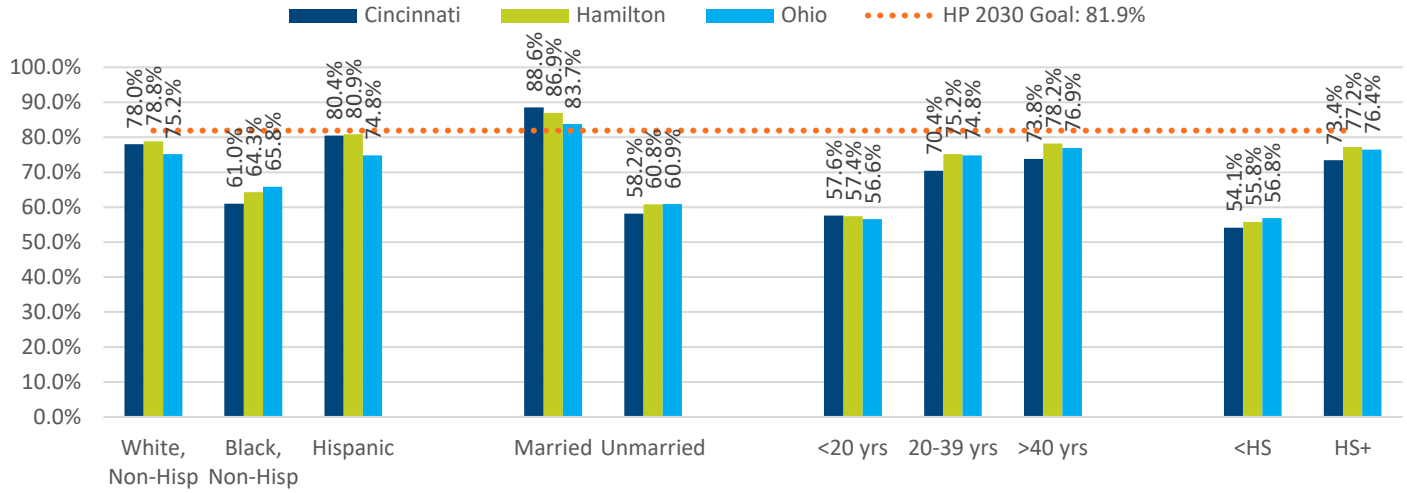
Source: Ohio Department of Health, Office of Vital Statistics, 2016-2020

Map 17: Cincinnati Births in Teen Mothers Aged 15-19 Years (2017-2021)



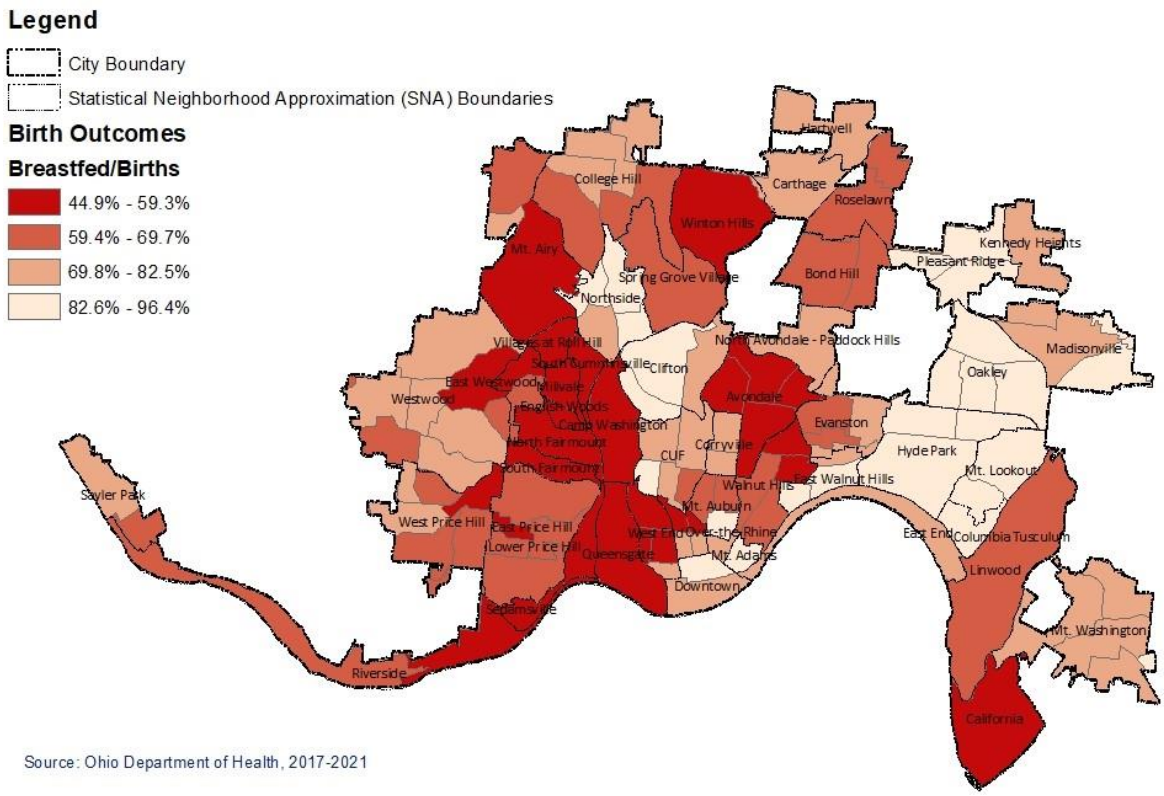
Key Research Findings: Teenage mothers are more likely to experience complications during pregnancy. Disparities exist at a higher rate for Black and Hispanic mothers compared to White mothers. The highest rates (per 1000 live births) of births to teen mothers occur in the neighborhoods of Pendleton (150), Lower Price Hill (139.2), Millvale (126.4), and Roll Hill (110.5) (Map 17).

Figure 84: Mothers Breastfeeding at Hospital Discharge by Demographics (2016-2020)



Source: Ohio Department of Health, Office of Vital Statistics, 2016-2020

Map 18. Cincinnati Infants Breastfed at the Time of Hospital Discharge (%) (2017-2021)

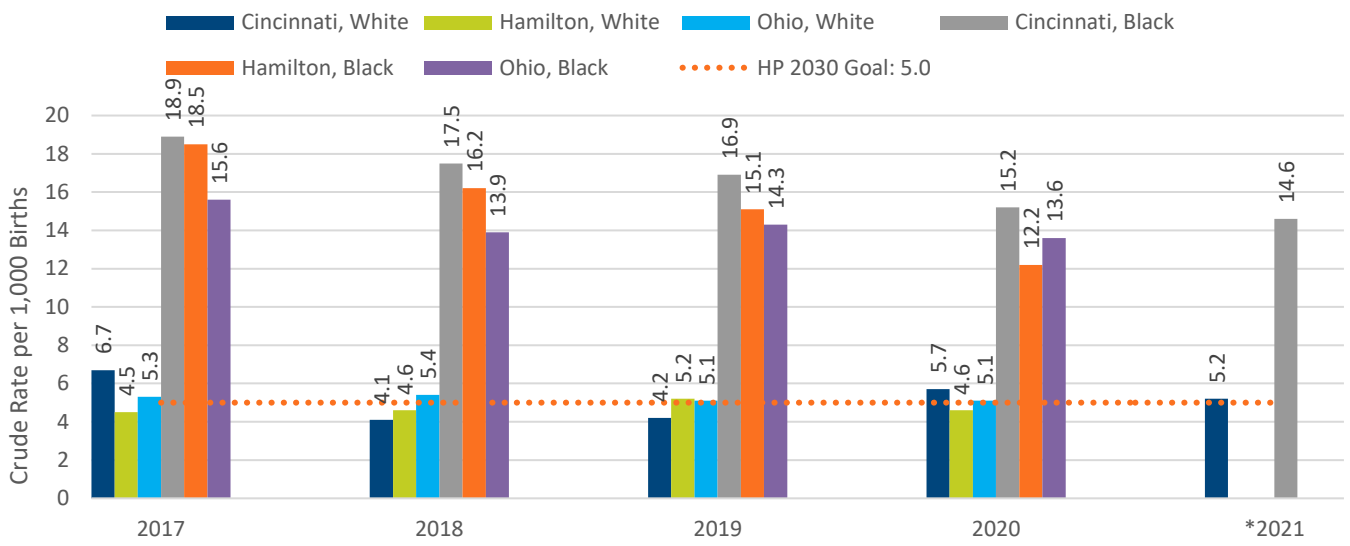


Key Research Findings: Hispanic mothers have the highest percentage of breastfeeding at hospital discharge in Cincinnati and Hamilton County relative to White and Black non-Hispanic mothers (Figure 84). Black mothers in Cincinnati have a lower proportion of breastfeeding at hospital discharge than both White and Hispanic mothers by nearly 20%, and lower than Hamilton County and Ohio by about 4% (Figure 84). Generally, mothers who have higher education and those who married are more likely to breastfeed (Figure 84).

Breastfeeding offers a range of benefits to babies which has been demonstrated by numerous scientific studies. Overall, breastfeeding promotes healthy growth, as it contains vital nutrients and offers immunological protection that reduces risk of infection.[12] It also offers benefits for mothers, with research has demonstrating a protective effect against risk of breast and ovarian cancers.[12]

[12] Victora, C. G., et al. (2016). "Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect." The Lancet, 387(10017), 475-490.

Figure 85: Infant Mortality Rate by Race (2017-2021)*



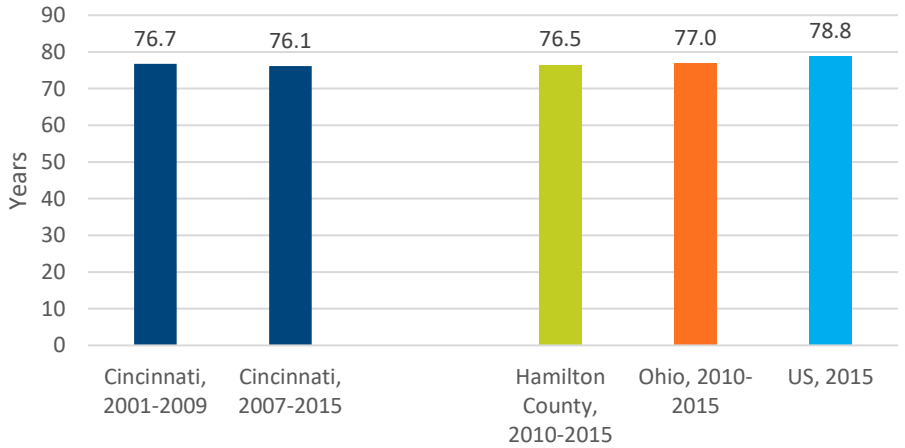
*2021 data for Ohio and Hamilton County not available
Source: Ohio Department of Health, 2017-2021

Key Research Findings: Infant mortality among Black babies in Cincinnati has decreased by 22.7% from 2017 to 2021 (Figure 85). However, 14.6 per 1,000 live births is still roughly 3 times higher than white babies and the HP 2030 goal.

Life Expectancy

According to Healthy People 2020, life expectancy is a summary mortality measure often used to describe the overall health status of a population and as presented below is the average number of years a population from birth would be expected to live.

Figure 86: Life Expectancy (in Years) by Jurisdiction (2001-2015)

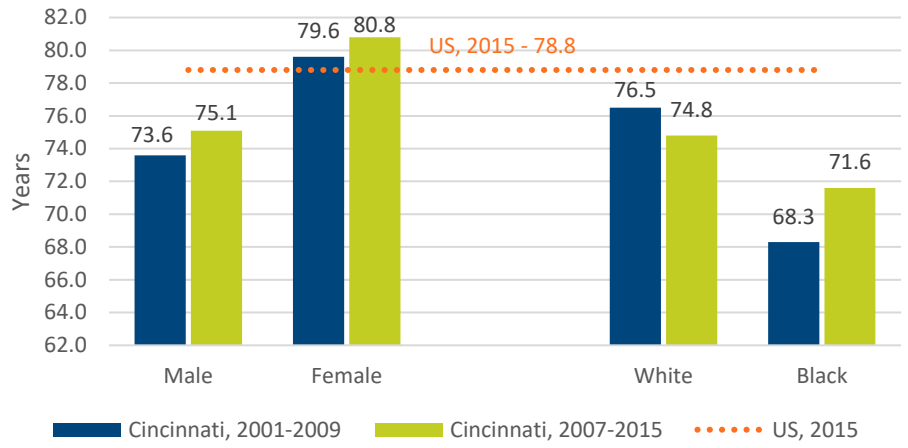


Hamilton County and Ohio Life Expectancy – Source: National Center for Health Statistics - Mortality Files. Pulled from: 2020 County Health Rankings, Life expectancy.

Cincinnati Life Expectancy – Source: Updated Life Expectancy by Neighborhood in Cincinnati, 2007-2015. Pulled from Source: Ohio Department of Health, Vital Statistics and Cincinnati Health Department Office of Vital Records and Statistics, 2007-2015; National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017.

Key Research Findings: In Cincinnati, an infant born between 2007-2015 is expected to live on average 76 years and 1 month (Figure 86). Females are expected to outlive males in Cincinnati by 5.85 years on average (Figure 87). The life expectancy for African American residents in Cincinnati is expected to be 3.2 years shorter than White counterparts (Figure 87).

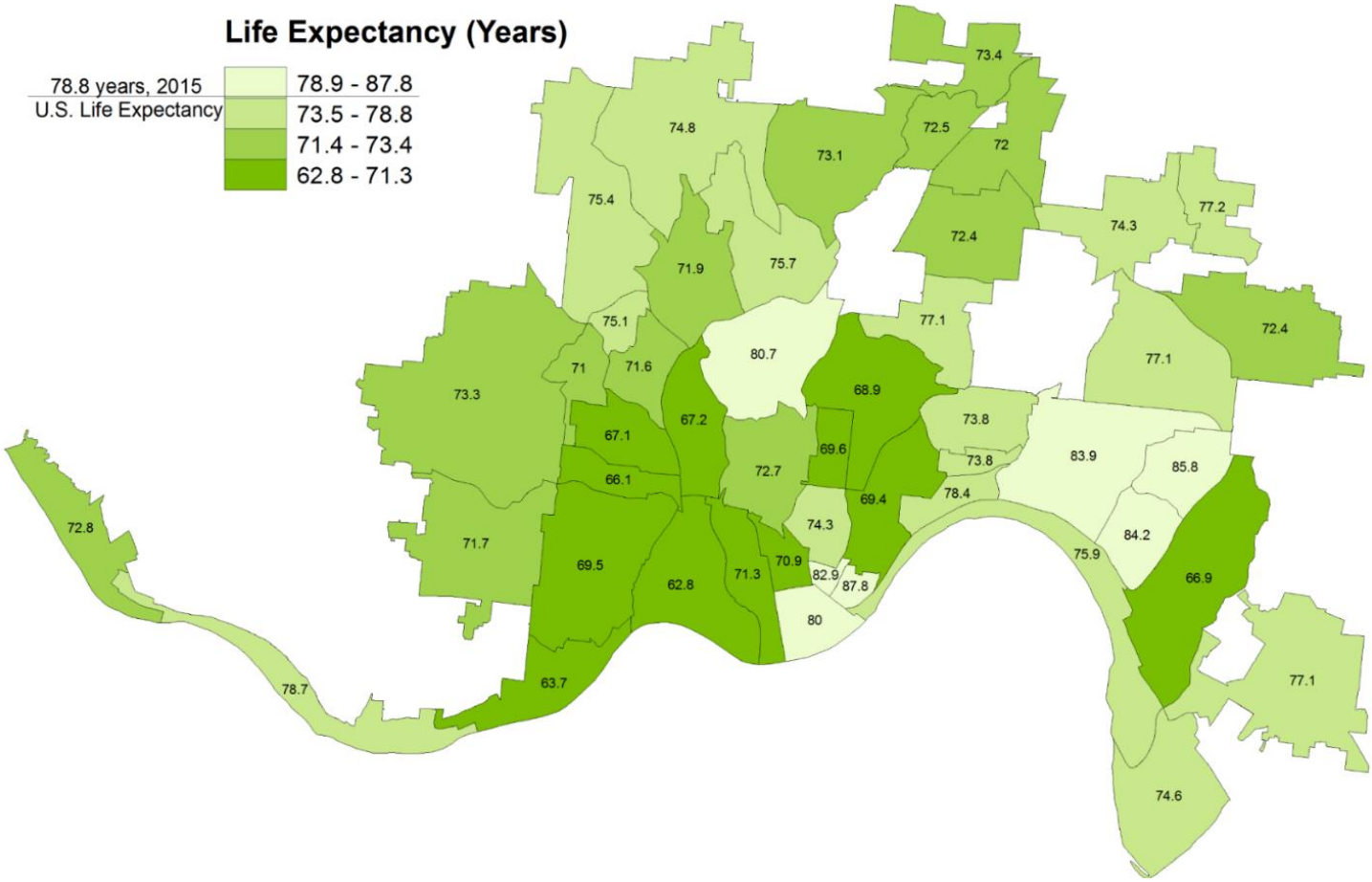
Figure 87: Life Expectancy (in Years) by Demographics (2007-2015)



Source: Updated Life Expectancy by Neighborhood in Cincinnati, 2007-2015. Pulled from Source: Ohio Department of Health, Vital Statistics and Cincinnati Health Department Office of Vital Records and Statistics, 2007-2015; National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017.

Life Expectancy in Cincinnati neighborhoods varies greatly, from 62.8 to 87.8 years. The neighborhoods with the poorest life expectancy outcomes are clustered around the downtown and southern industrial areas of the city and include Over-the-Rhine, Corryville, East Price Hill, Walnut Hills, Avondale, Camp Washington, North Fairmont, English Woods, Linwood, South Sedamsville/Riverside, Lower Price Hill, Fairmont, and Queensgate (Map 19).

Map 19: Cincinnati Life Expectancy (2007-2015)



Source: Ohio Department of Health, Vital Statistics and Cincinnati Health Department Office of Vital Records and Statistics, 2007-2015.

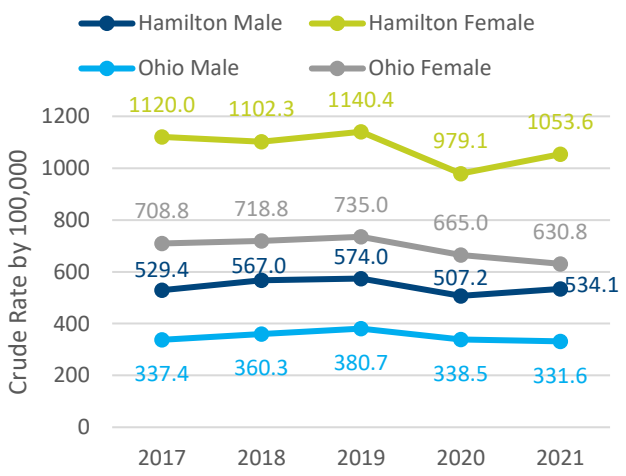
Infectious and Chronic Disease Health Disparities

Infectious Diseases

Public Health Importance: CDC estimates that there are approximately 20 million new sexually transmitted infections (STIs) each year – almost half among young people ages 15 to 24. Reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the burden of STIs in the U.S due to many STIs not being diagnosed, and common viral infections, such as Human Papillomavirus (HPV) and genital herpes not being reported.

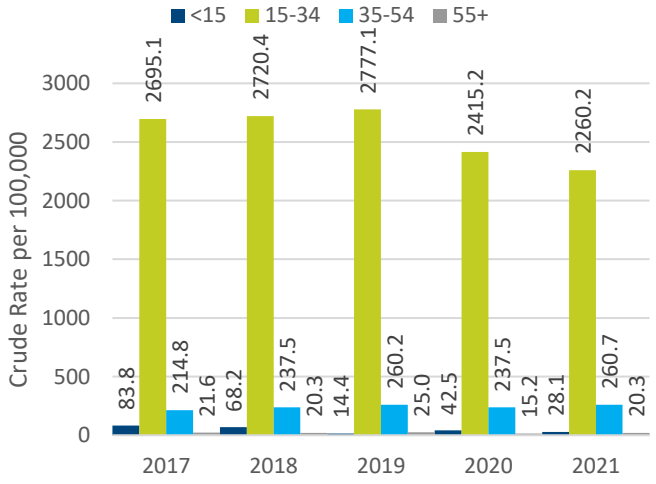
- HP 2030

Figure 88: Hamilton County Chlamydia Case Rate by Sex (2017-2021)



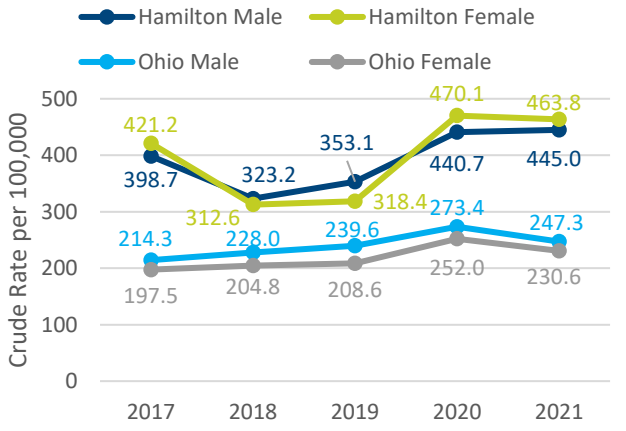
Source: Ohio Department of Health, 2017-2021

Figure 89: Hamilton County Chlamydia Case Rate in by Age Group (2017-2021)



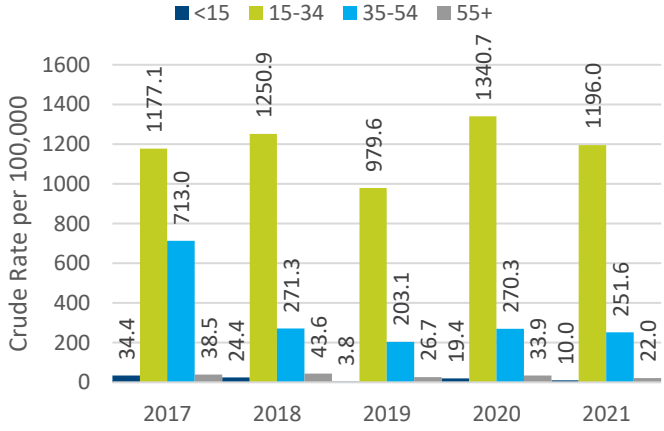
Source: Ohio Department of Health, 2017-2021

Figure 90: Hamilton County Gonorrhea Case Rate by Sex (2017-2021)



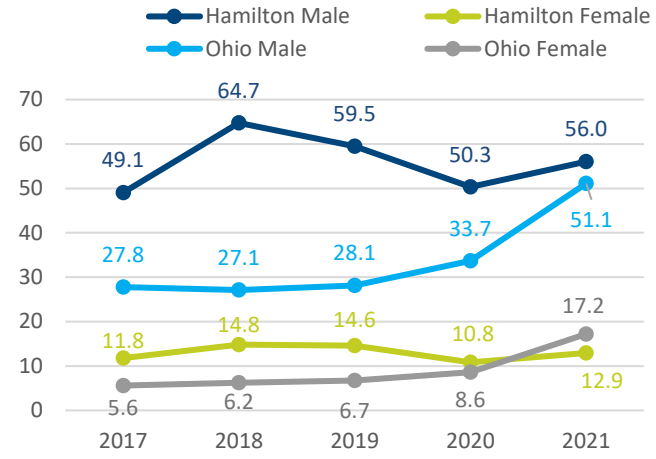
Source: Ohio Department of Health, 2017-2021

Figure 91: Hamilton County Gonorrhea Case Rate by Age Group (2017-2021)



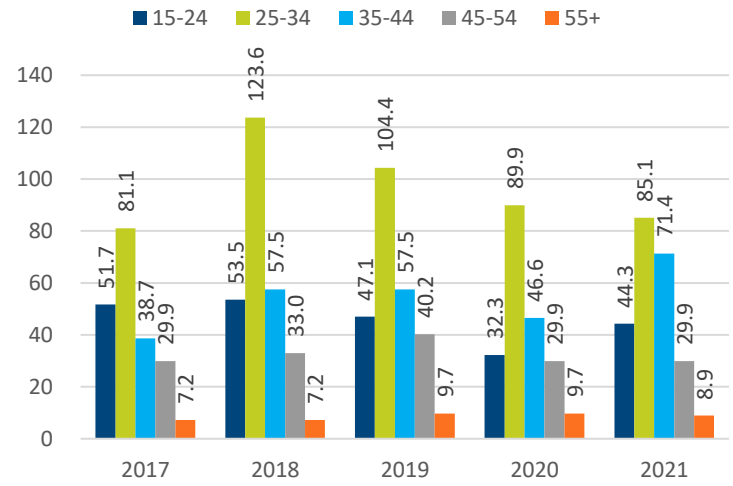
Source: Ohio Department of Health, 2017-2021

Figure 92: Hamilton County Syphilis Case Rate by Sex (2017-2021)



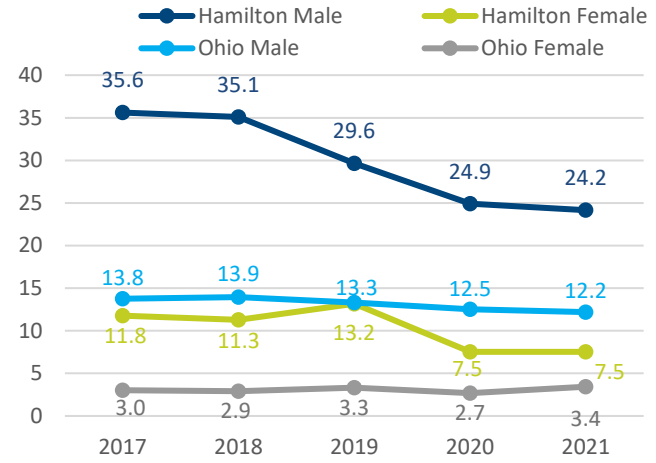
Source: Ohio Department of Health, 2017-2021

Figure 93: Hamilton County Syphilis Case Rate by Age Group (2017-2021)



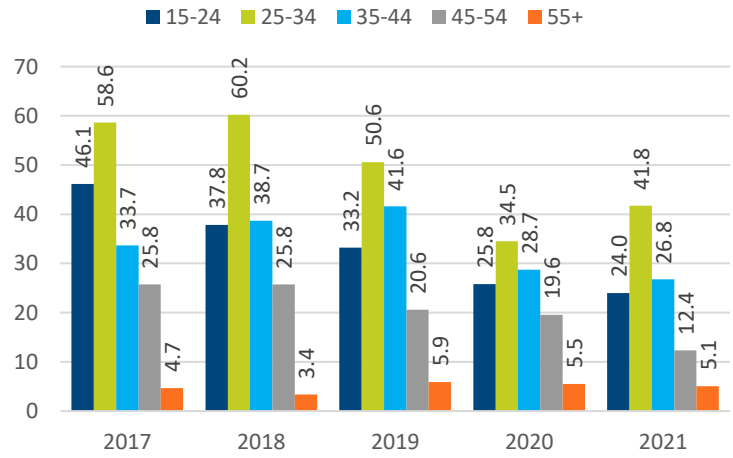
Source: Ohio Department of Health, 2017-2021

Figure 94: Hamilton County HIV Case Rate by Sex (2017-2021)



Source: Ohio Department of Health, 2017-2021

Figure 95: Hamilton County HIV Case Rate by Age Group (2017-2021)



Source: Ohio Department of Health, 2017-2021

Image Source: stdcheck.com

Key Research Findings: Health disparities for STI's are present at the county and state level. Females and individuals 15-34 have higher rates of STI's (Figures 88, 90, 92, and 94). Both Chlamydia and Gonorrhea have shown decreases in the total number of new cases in recent years (Figures 88 and 90).

Chronic Diseases

Several protective factors that have registered substantial average increases (e.g., physical activity among adults, high blood pressure control, and human papillomavirus vaccination among adolescent females) have stalled in recent years.[13] Many protective factors, even those with impressive relative gains, still represent only a minority of the U.S. population (e.g., control of high cholesterol at 29.5%).

> ***Factors that contribute to poorer health outcomes:*** Age-adjusted rates for most of the leading causes of death are declining, but in some cases, the number of deaths is increasing-heart disease, cancer, or accidents are the leading causes of premature death.
>
> - Gardner JW, et al. Epidemiology

Map 20: Cincinnati Adults 18+ Years with Obesity (2020)

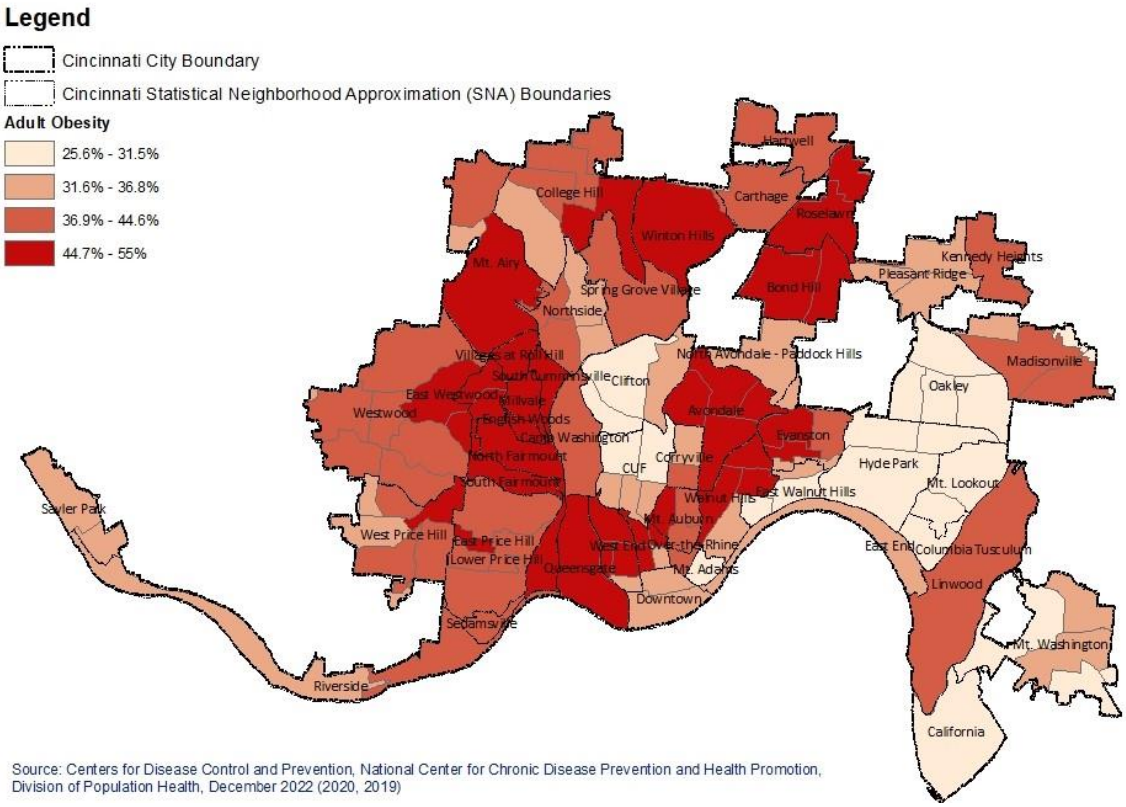
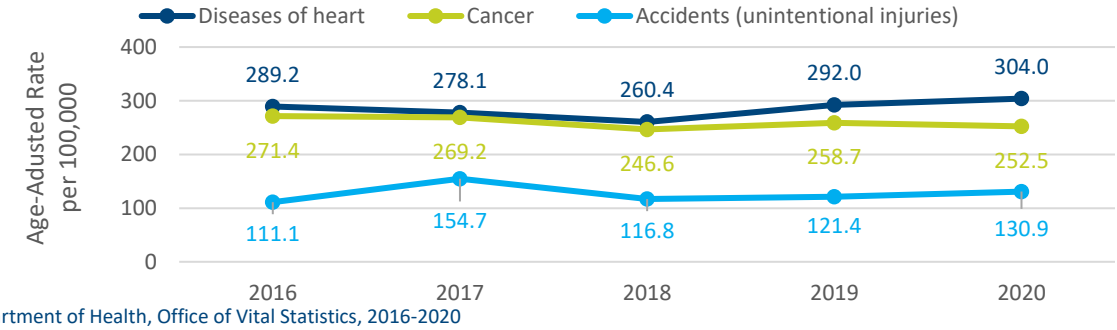


Figure 96: Cincinnati Adults 18+ Leading Causes Death (2016-2020)



Source: Ohio Department of Health, Office of Vital Statistics, 2016-2020

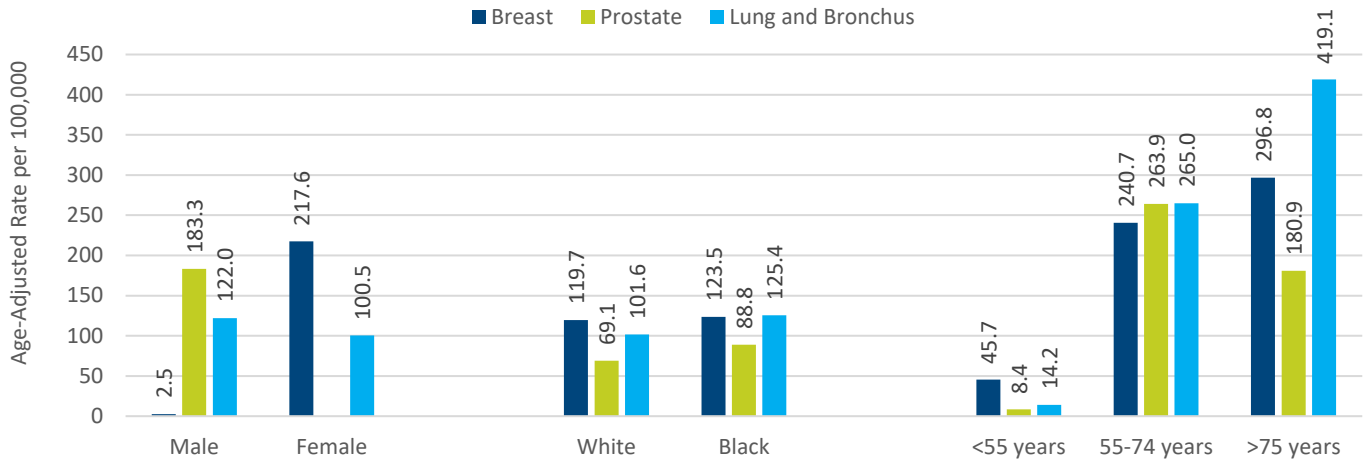
[13] CDC National Health Report: leading causes of morbidity and mortality and associated behavioral risk and protective factors--United States, 2005-2013.

Cancer

Factors that contribute to poorer health outcomes: Daily habits like smoking, poor diet, and little physical activity increase the risk for cancer. Education, housing, income, and occupation are factors that can contribute to cancer. For example, stomach and cervical cancers are higher in lower socioeconomic groups, as is lung cancer.

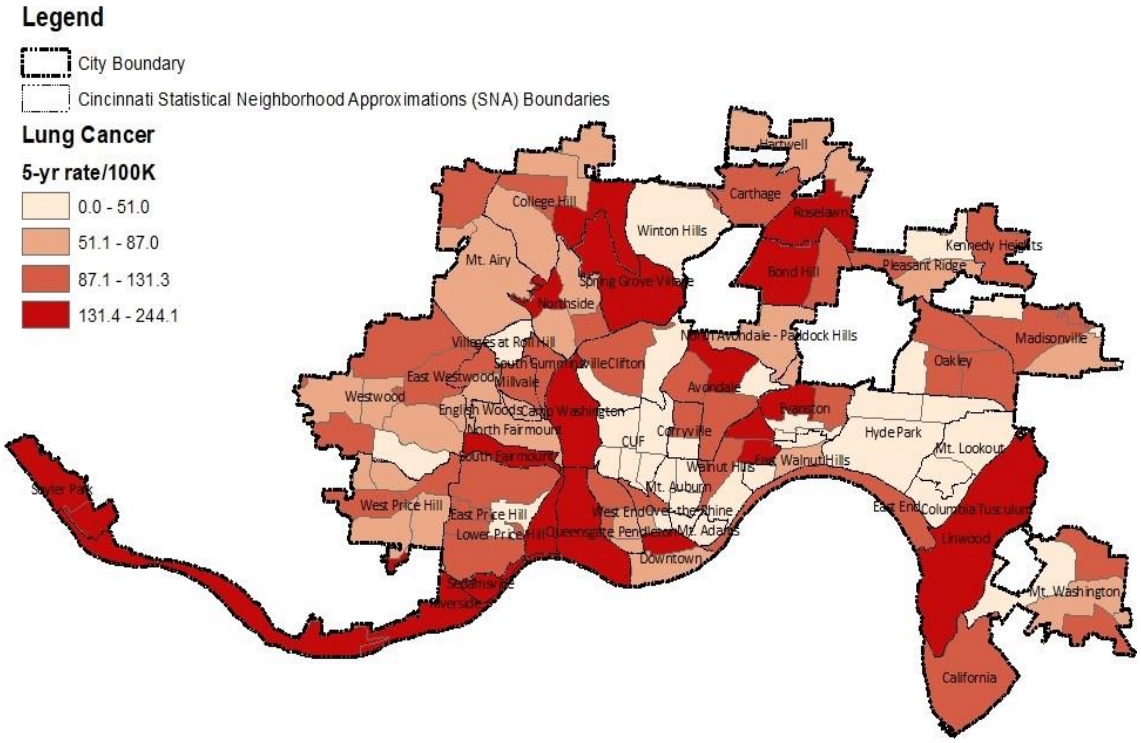
- American Cancer Society

Figure 97: Cincinnati Adults 18+ Years Top 3 Cancers by Demographics (2017-2021)



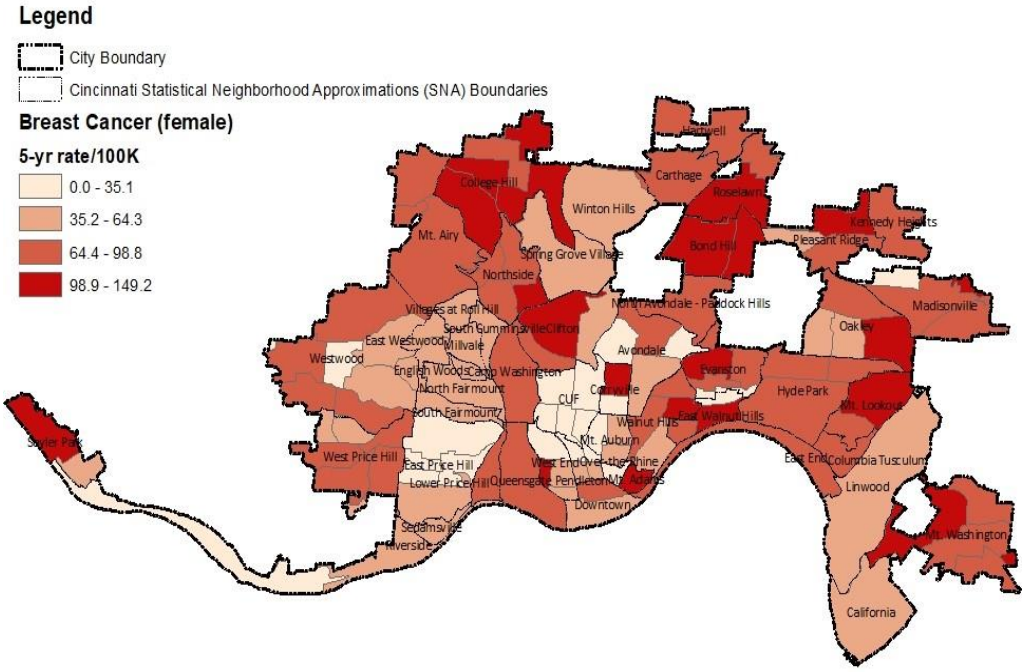
Source: Ohio Department of Health, 2017-2021

Map 21: Cincinnati Adults 18+ Years with Lung Cancer (2016-2020)



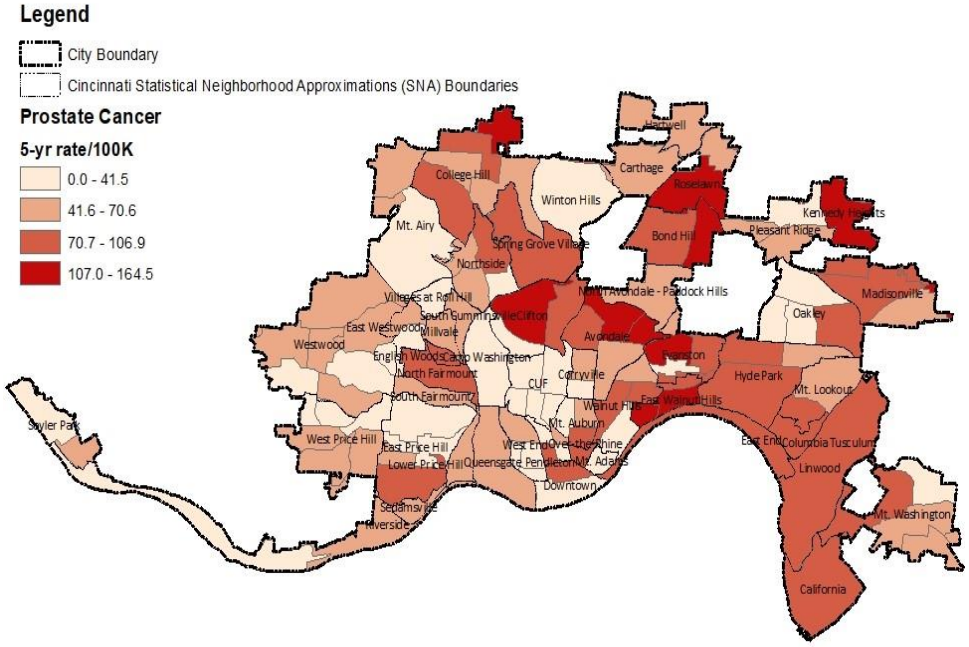
Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System (OCISS), 2016-2020

Map 22: Cincinnati Adult Females 18+ Years with Breast Cancer (2016-2020)



Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System (OCISS), 2016-2020

Map 23: Cincinnati Adult Males 18+ Years with Prostate Cancer (2016-2020)



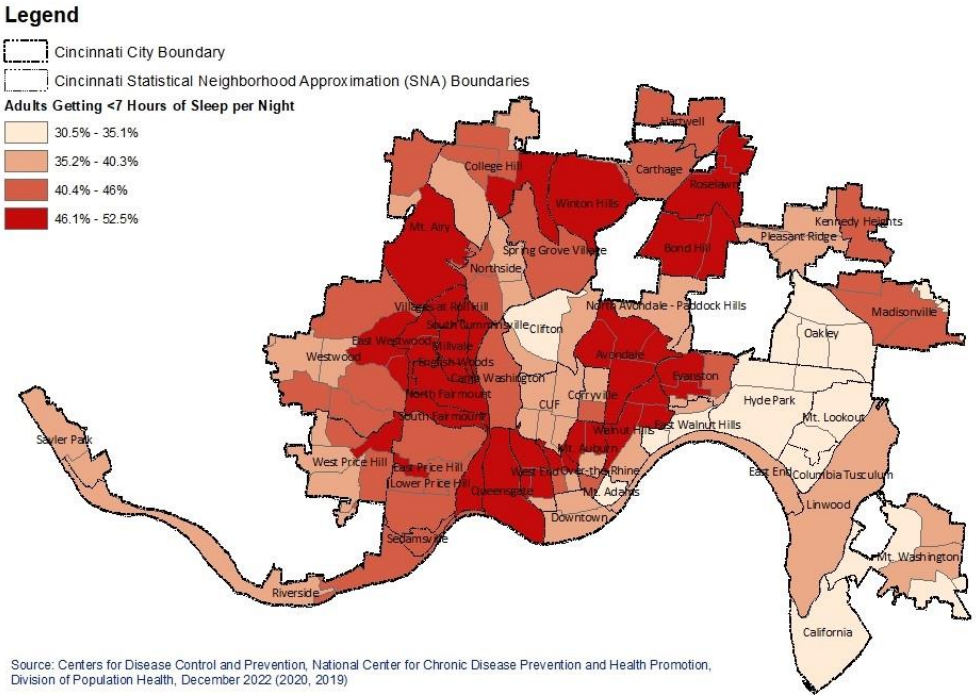
Source: Ohio Department of Health, Ohio Cancer Incidence Surveillance System (OCISS), 2016-2020

Key Research Findings: Cancer rates are much higher among older adults. Lung and bronchus cancer is more common among males. Prostate Cancer is more prevalent on the east side of Cincinnati which can most likely be explained by the higher elderly population. (Figure 97).

Mental Health and Addiction Disparities

Mental Health

Map 24: Cincinnati Adults 18+ Years Sleeping Fewer than 7 Hours per Night (2020)



Addiction

Map 25: Cincinnati Adults 18+ Years Current Smoking (2020)

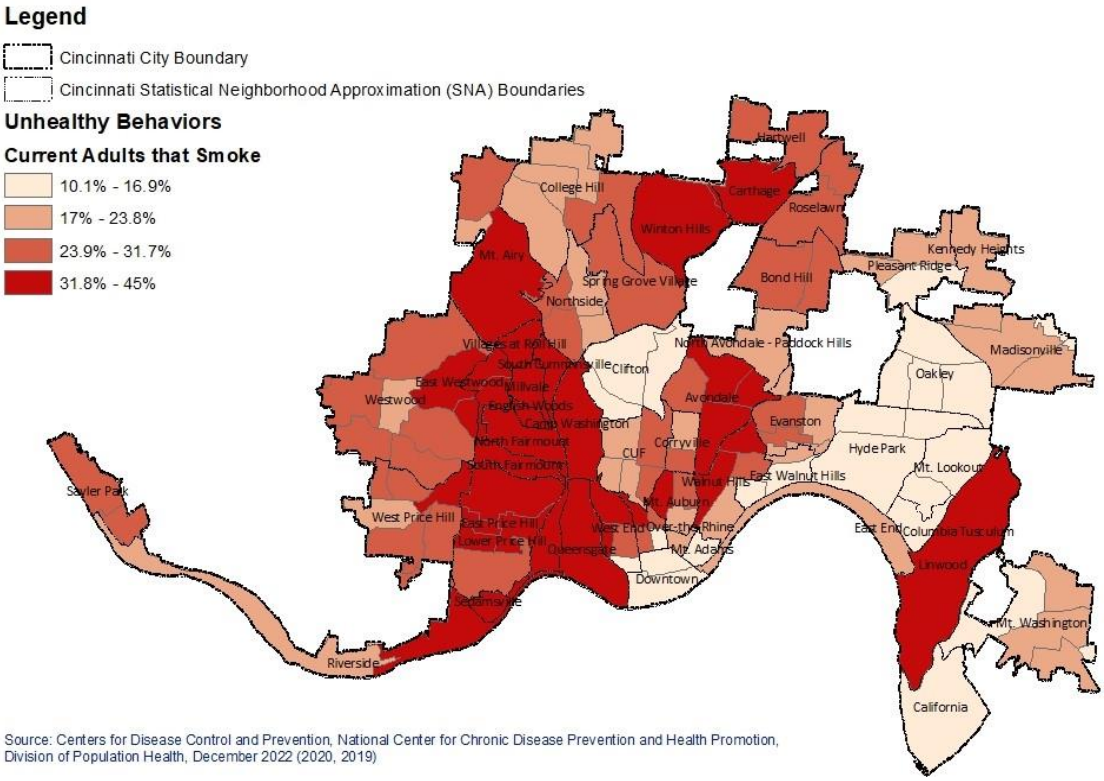
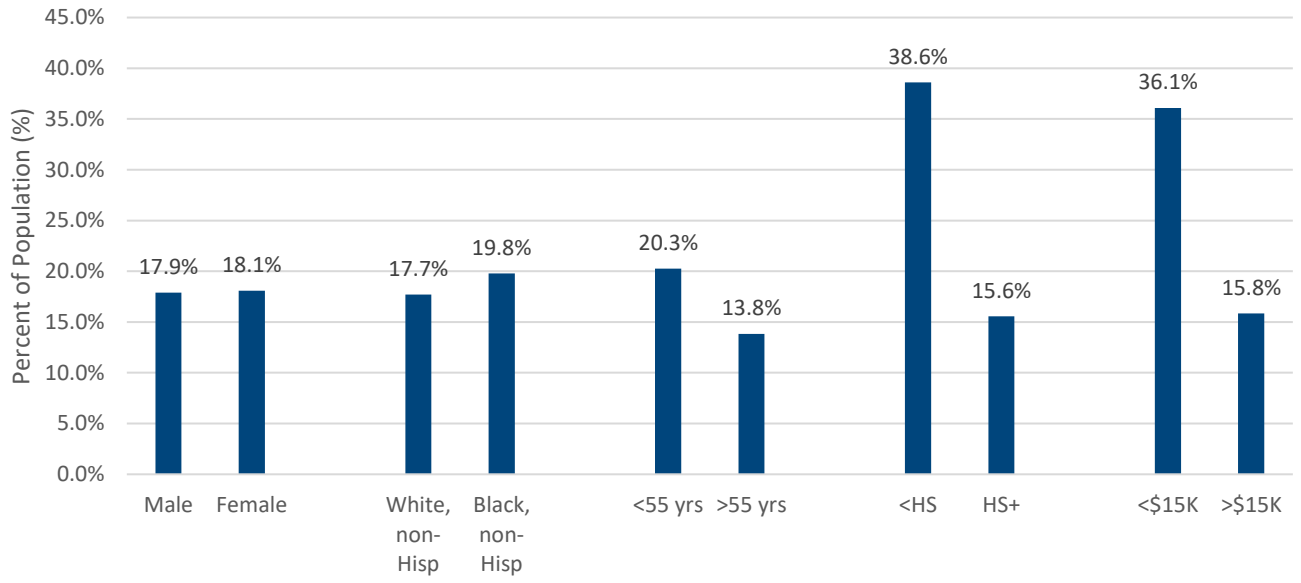
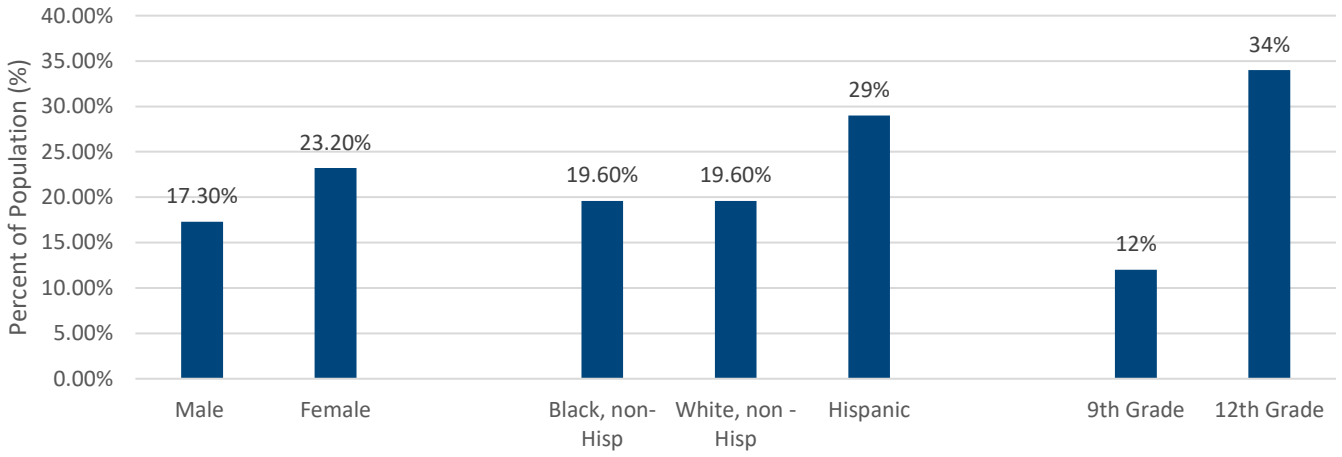


Figure 98: Ohio Tobacco Use in Adults 18+ Years by Demographics (2021)



Source: Centers for Disease Control and Prevention, 2021

Figure 99: Ohio Tobacco or Vape Use in Youth <18 Years by Demographics (2021)

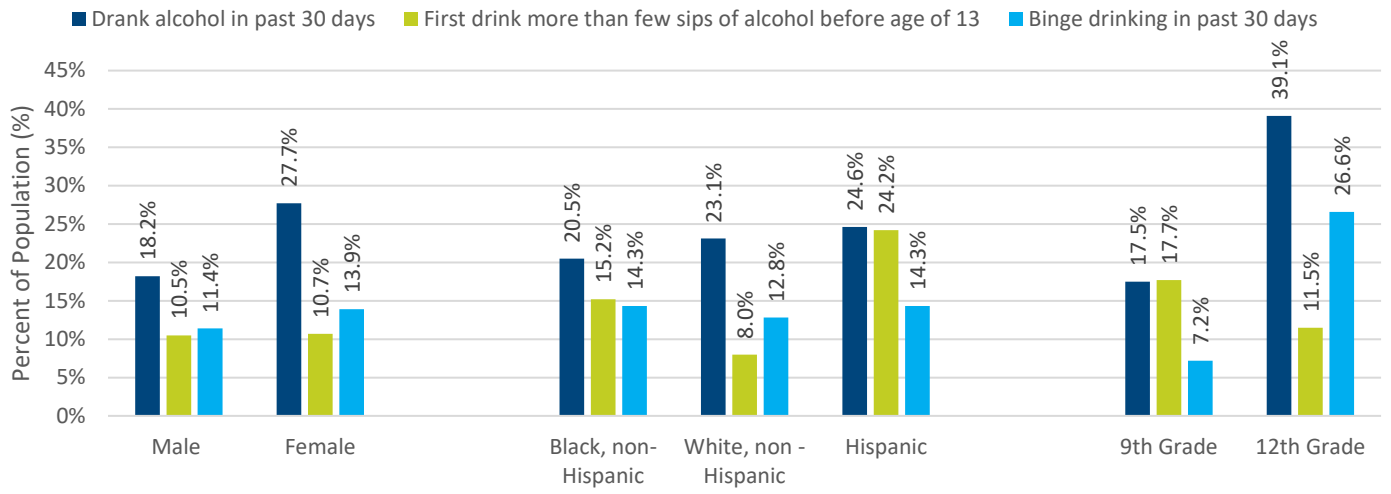


Source: Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, 2021

Image by Gerd Altmann from Pixabay

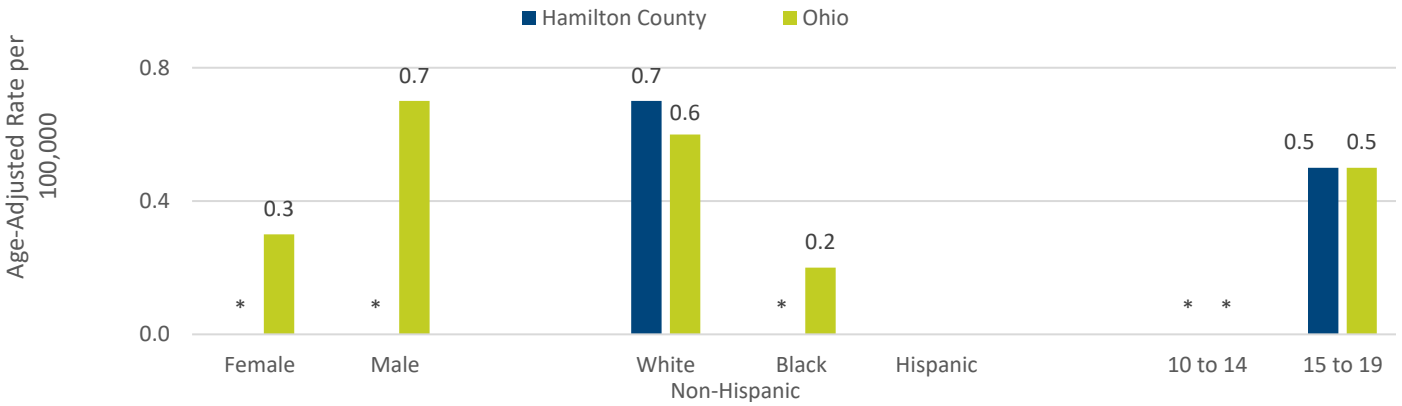
Key Research Findings: A study of the mental health and addiction disparity patterns shows that minorities, younger adults, those with lower educational attainment, and lower income have higher rates of sleep deprivation, tobacco use, and binge drinking.

Figure 100: Ohio Alcohol Use in Youth <18 Years by Demographics (2021)



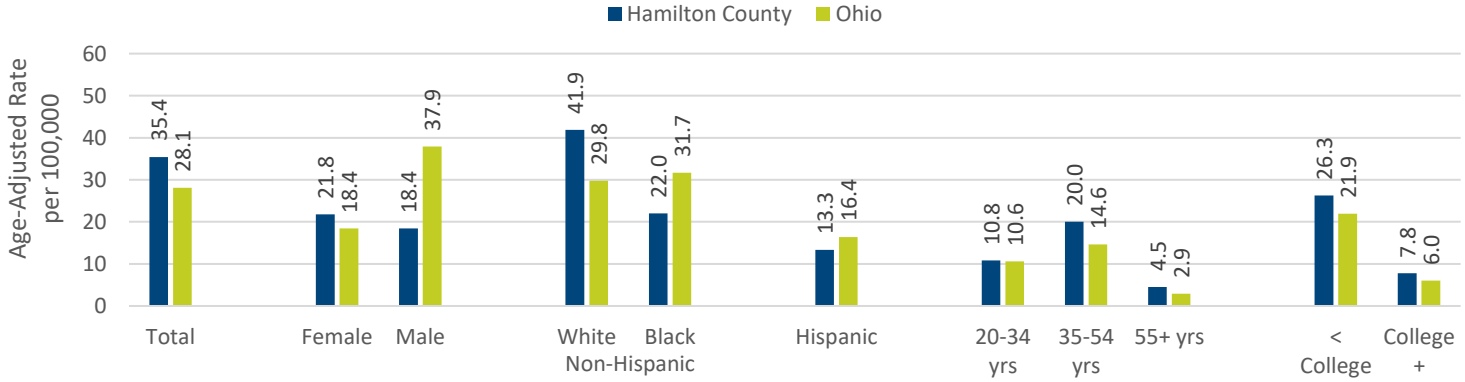
Source: Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, 2021

Figure 101: Hamilton County Unintentional Drug Overdoses in Youth 10-19 Years by Demographics (2010-2019)



* Indicates rates have been suppressed for counts < 10 or where population counts are not avail., rates based on counts <20 are considered unreliable.
Source: Ohio Department of Health, 2010-2019

Figure 102: Hamilton County Unintentional Drug Overdoses in Adults 20+ Years by Demographics (2010-2019)



Source: Ohio Department of Health, Office of Vital Statistics
*Data has not changed from previous publication

Chapter 6: Resource Distribution and Community Assets

Access to Health Care

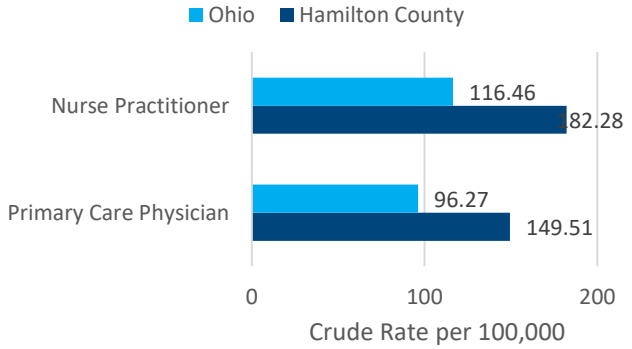
Access to quality medical professionals and facilities is crucial in maintaining and promoting good health, preventing, and managing various disease states, reducing avoidable and preventable sickness and death, and providing equality in health care for all. Perceived and true barriers to accessing providers and care may include geographic location, socioeconomic status, insurance coverage status, high cost of treatment, lack of service availability, sex, race, ethnicity, disability status, sexual orientation, and lack of cultural competence in care. These barriers exacerbate unmet health, contributing to future health complications.

Figure 103: Hamilton County Healthcare Professional Shortage Areas

Source: HRSA.gov

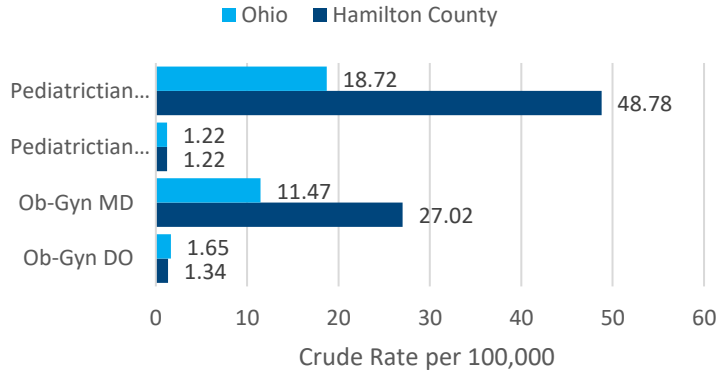
Healthcare professional shortage areas (HPSA) can be geographic areas, populations, or facilities. These areas have a shortage of primary, dental, or mental health care providers.

Figure 104: Clinicians per Population (2020-2021)



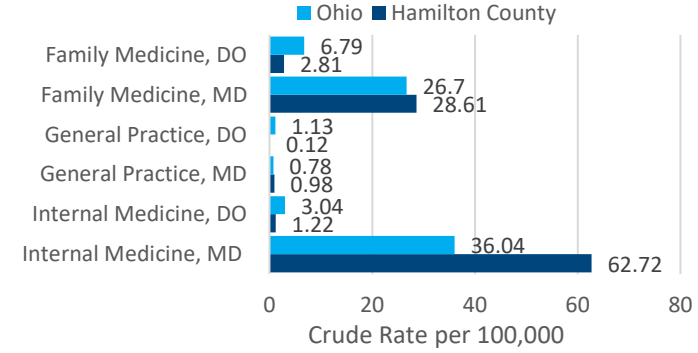
Source: HRSA.gov, 2020-2021

Figure 105: Ob-Gyn & Pediatricians per Population (2020-2021)



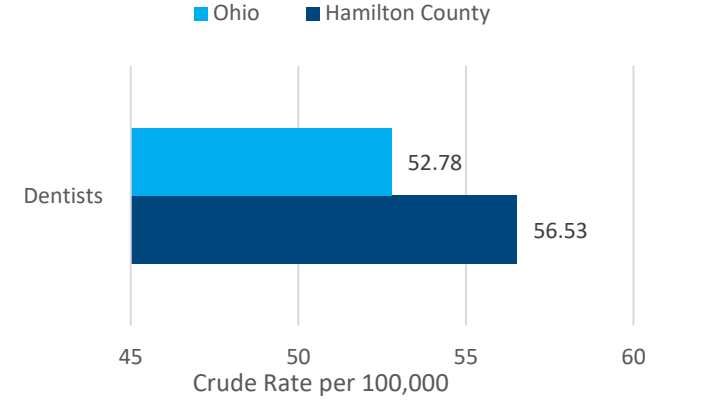
Source: HRSA.gov, 2020-2021

Figure 106: Adult Care Clinicians per Population (2020-2021)



Source: HRSA.gov, 2020-2021

Figure 107: Dentists per Population (2020-2021)



Source: HRSA.gov, 2020-2021

Key Research Findings:

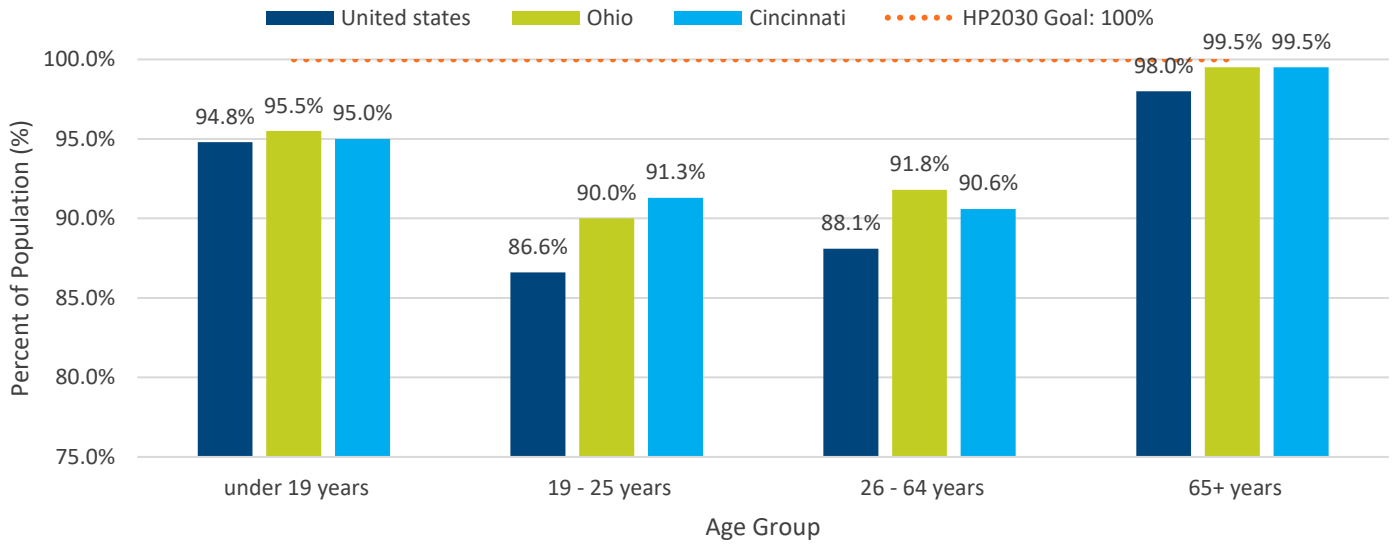
Hamilton County has a higher rate of nurse practitioners and primary care physicians than the state of Ohio (Figure 104). In the categories of Ob-Gyn, pediatricians, adult care clinicians, and dentists Hamilton County has a higher rate of health professionals per the population than Ohio. The only category where the rate of health professionals is higher in Ohio are adult care clinicians who are Doctors of Osteopathic Medicine (D.O) (Figures 104, 105, 106, and 107).

Health Insurance

The increasing size and prevalence of high deductibles and copayments in private health plans, including employer-based plans, are leading many people with low and moderate incomes to avoid or delay needed health care.

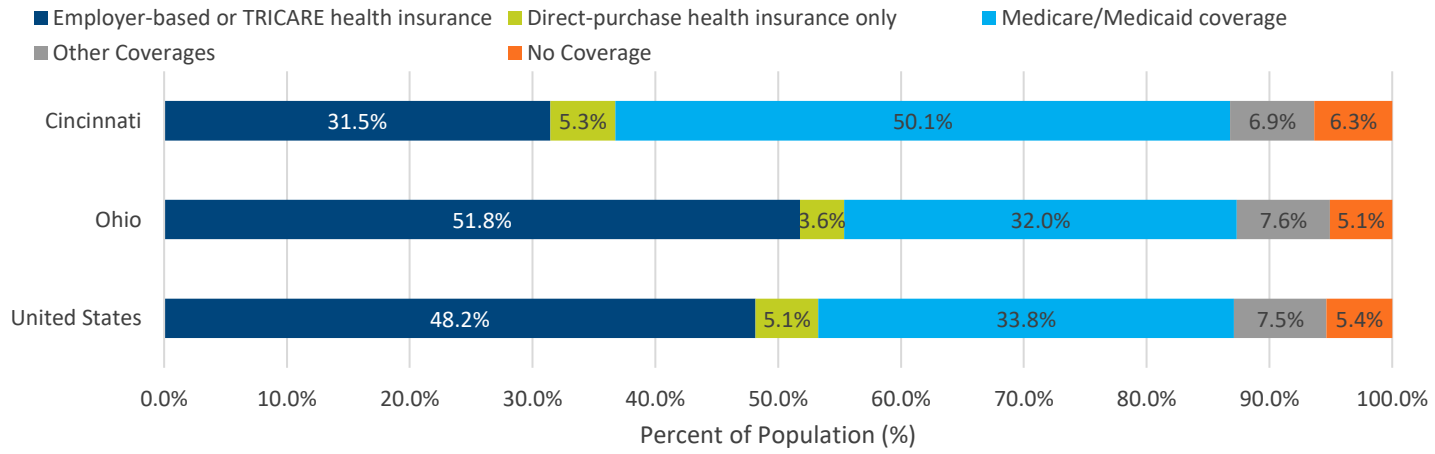
Public Health Importance: Health Insurance is important for several reasons. Uninsured people receive less medical care and less timely care, they have worse health outcomes, and lack of insurance is a financial burden for them and their families.

Figure 108: Health Insurance Coverage by Age (2021)



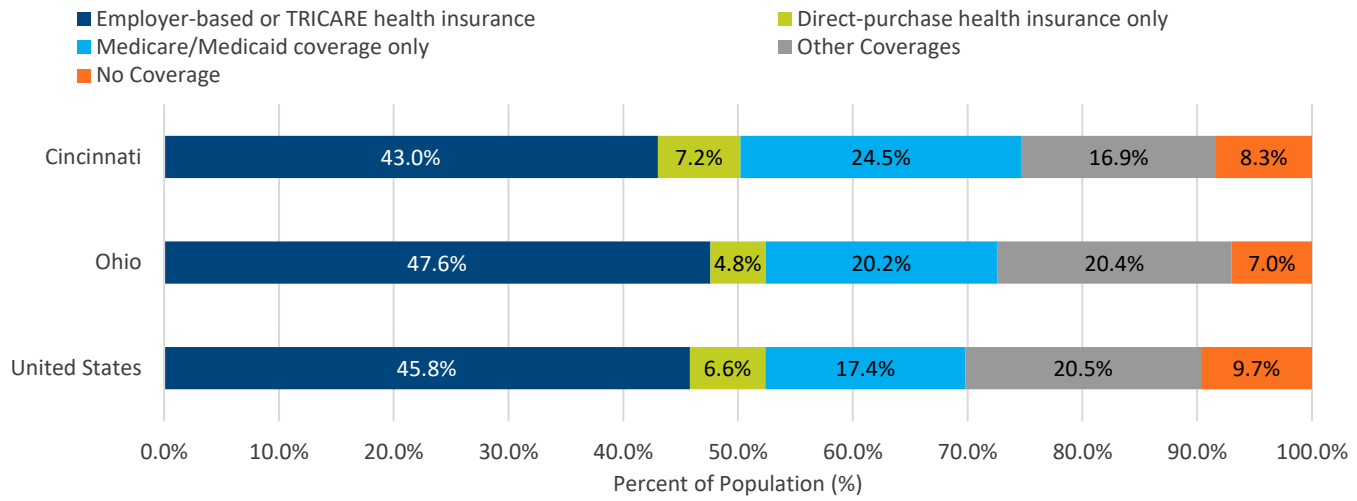
Source: American Community Survey, 2017-2021

Figure 109: Health Insurance Coverage for Youth <19 Years (2021)



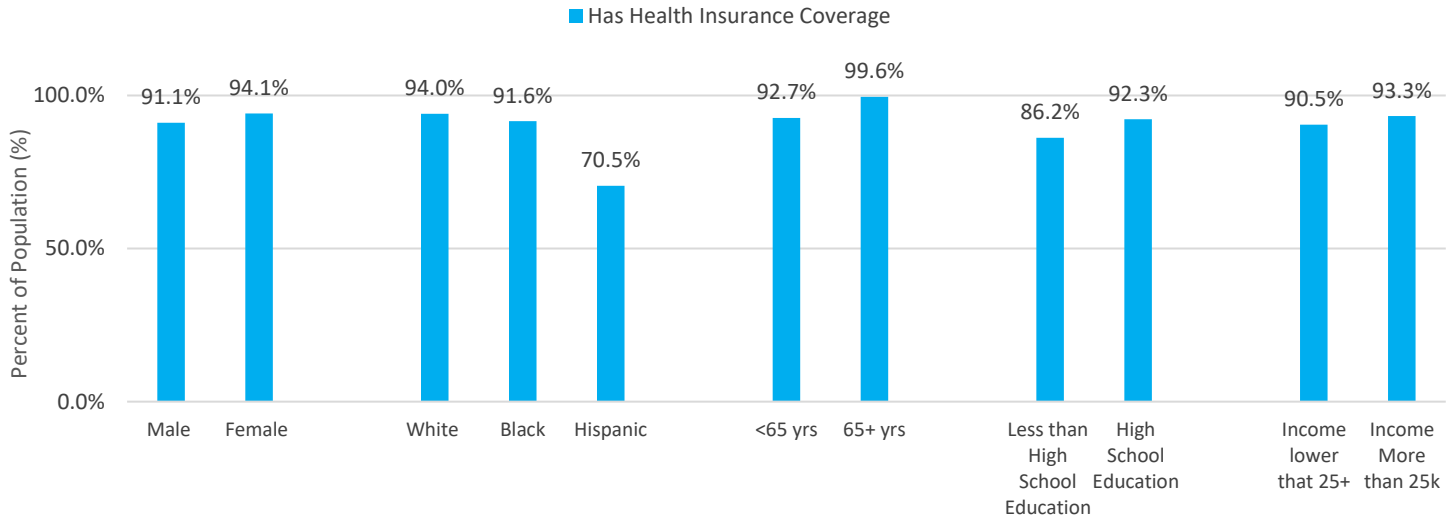
Source: American Community Survey, 2017-2021

Figure 110: Health Insurance Coverage for Adults 19+ Years (2021)



Source: American Community Survey, 2017-2021

Figure 111: Cincinnati Health Insurance Coverage by Demographics (2021)

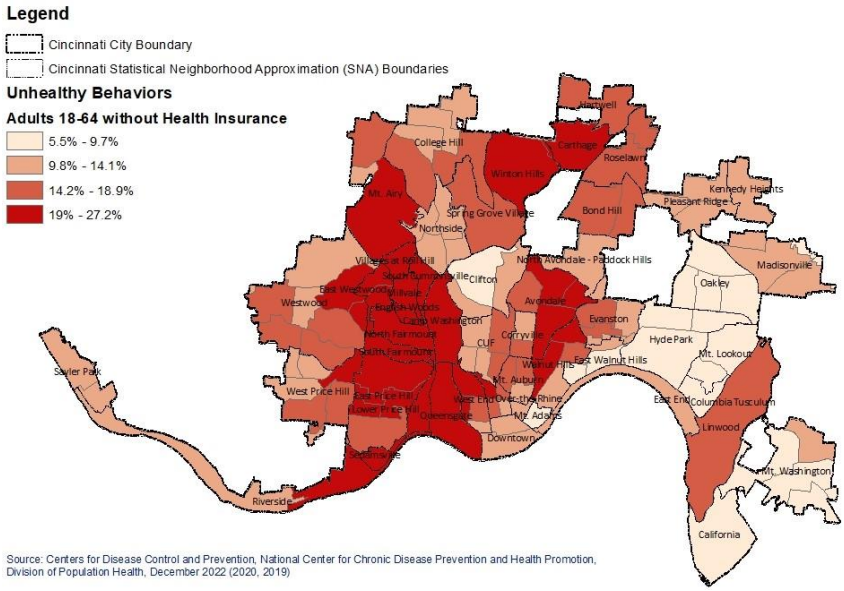


Source: American Community Survey, 2017-2021

Key Research Findings:

In Cincinnati there is an overall high number of people with health insurance, the percentage of age groups covered matches the percentage of the population with health insurance in Ohio, the only significant difference in percent of the population with health insurance coverage is age 26–64 years in Cincinnati is 1.2% less than the rest of Ohio (Figure 110). In Cincinnati, less of the population under the age of 19 is covered by employer provided health insurance (parent employers insurance) and 50.1% of the population covered by either Medicare or Medicaid (Figure 109). In Cincinnati only 70.5% of the Hispanic population have health insurance, compared to 94% of white and 91.6% of the Black population who have health insurance (Figure 111).

Map 26: Cincinnati Adults 18-64 Years Lacking Health Insurance (2020)



Key Research Findings: According to the Census Bureau, City challenges in health insurance coverage occur for Hispanics, non-citizens those with less than a high school education, those who have below a high school education, those with lower income, and adults under the age of 65. Neighborhoods with the highest non-coverage include Villages at Roll Hill (27.2%), Lower Price Hill (26.8%) and Walnut Hills (24.6%) (Map 26).

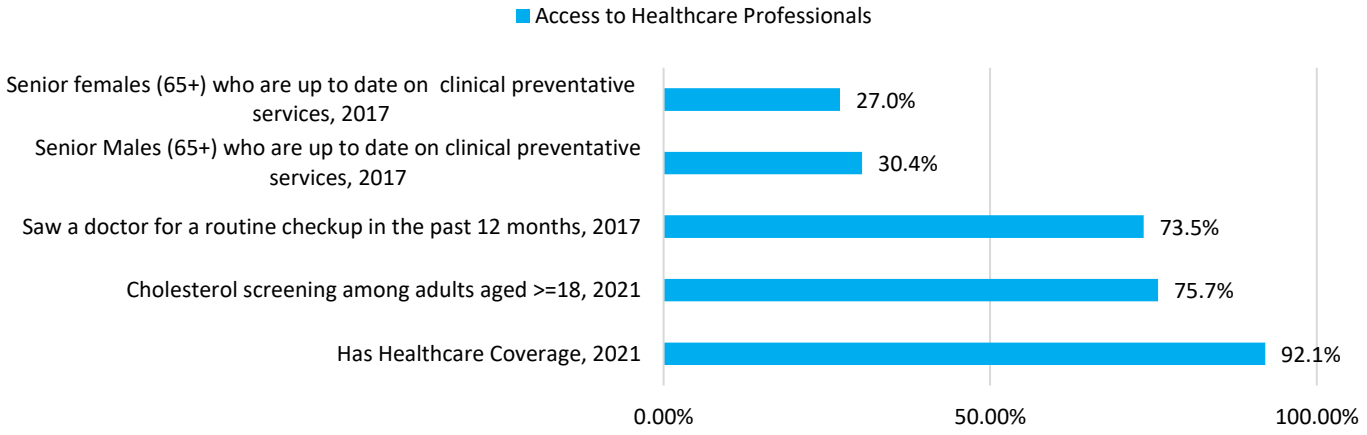
Health Care Utilization

Health Care Facilities and Professionals

Factors that contribute to poorer health outcomes: Health professionals play a central and critical role in improving quality health care for the population. They provide essential services that promote health, prevent diseases, and deliver health care services to individuals, families, and communities. Health care facilities should reflect the needs and values of the communities in and around them. Effective hospitals are designed for their users, with attention to the needs of special populations, such as children and the elderly.

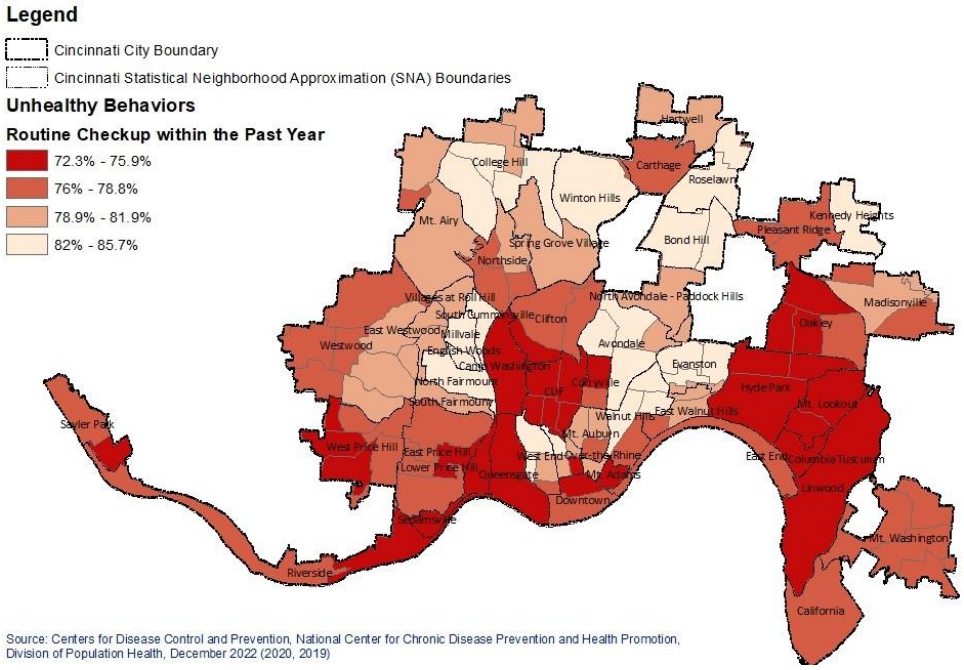
- Healthy People 2030

Figure 112: Cincinnati Adults 18+ Years Access to Health Care Professionals (2017-2021)



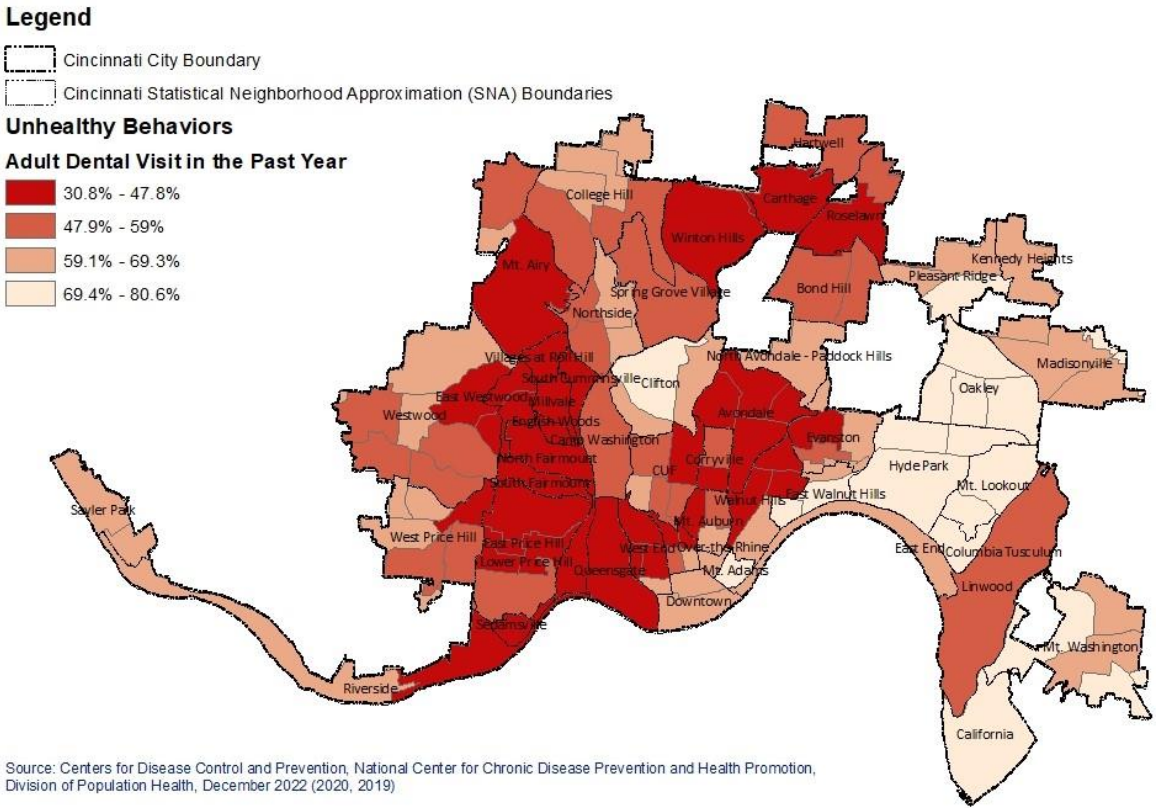
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, 2019

Map 27: Cincinnati Adults 18+ Years Received a Routine Checkup within the Past Year (2020)



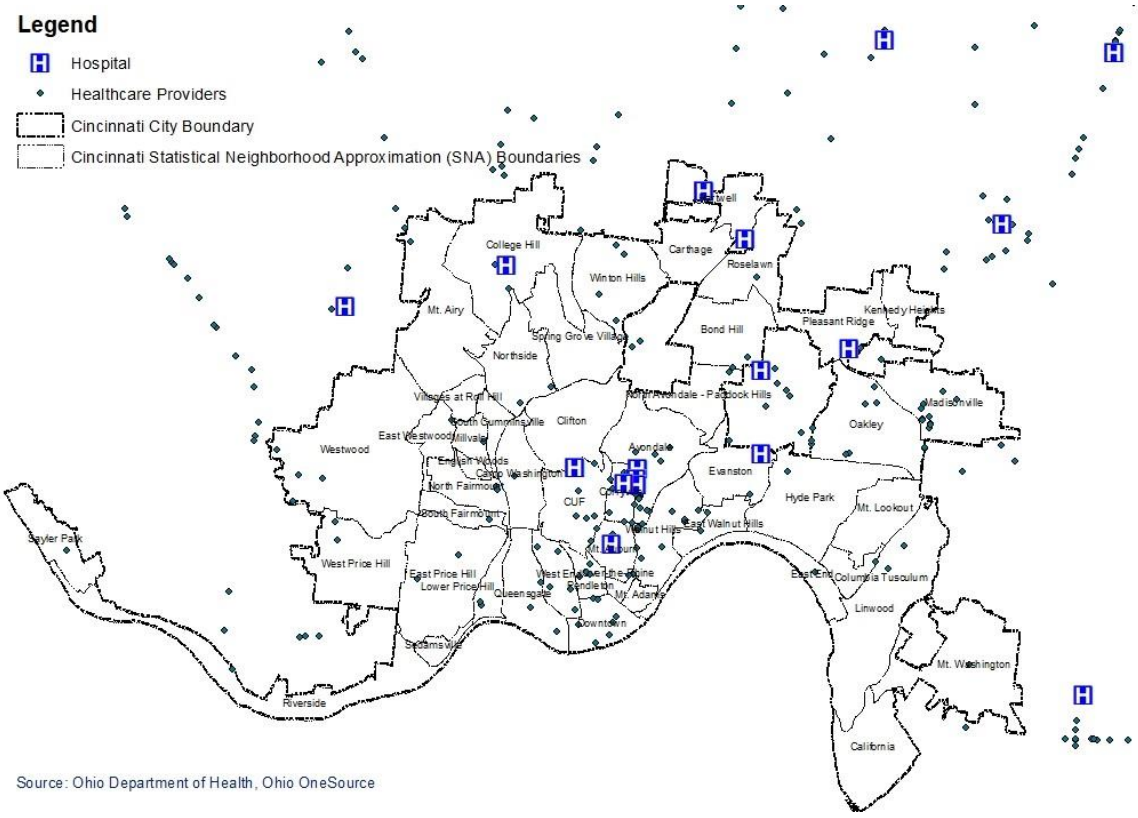
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 28: Cincinnati Adults 18+ Years Received Routine Dental Checkup within the Past Year (2020)

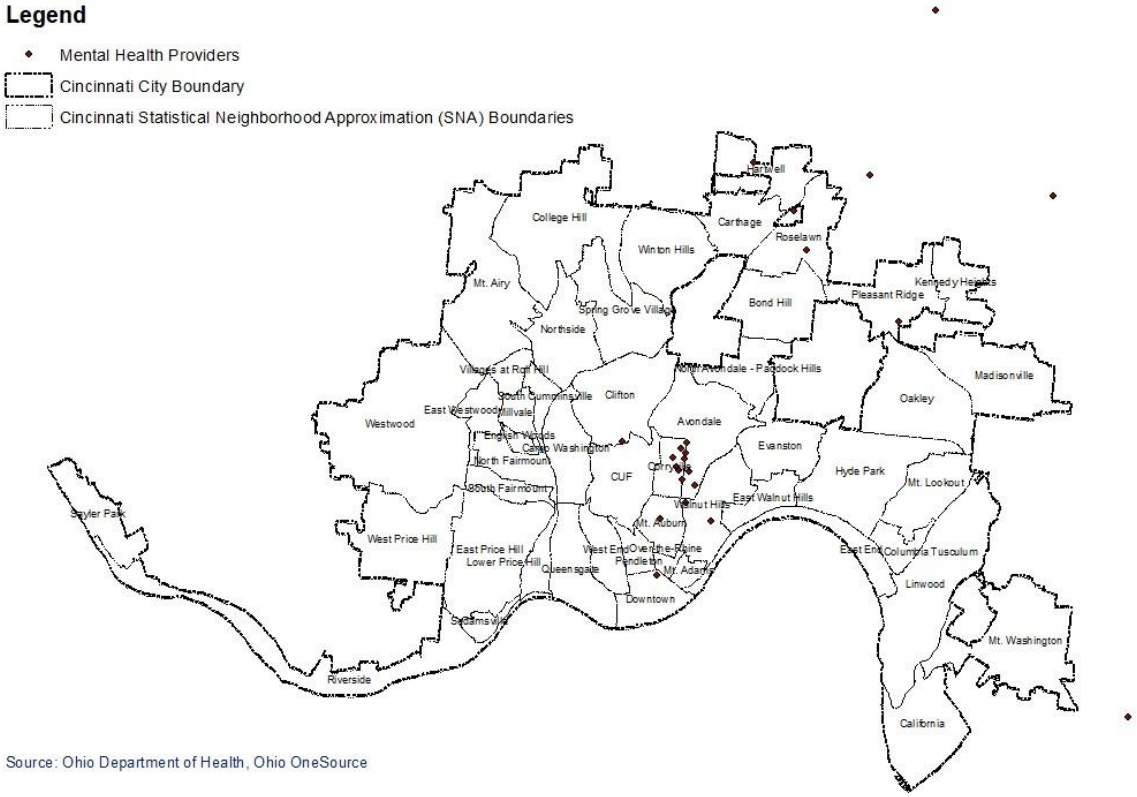


Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 29: Cincinnati Health Care Providers (2023)



Map 30: Cincinnati Licensed Mental Health Service Providers (2023)



Chapter 7: Discussion and Conclusion

Summary of Favorable and Unfavorable Data Trends and Comparisons

City and County Trends or Comparisons to the State and/or Nation (actual data point or HP2030)		
	Unfavorable	Favorable
Maternal and Infant/Child Health	First trimester care Preterm births Low birth weight Infant mortality Breast feeding	Births to mothers ages 15-19 is decreasing School immunization rates
	Maternal and infant/child health has a significant impact on the well-being of the community. Cincinnati has seen unfavorable trends in recent years compared to state and national levels. Amongst city residents, unhealthy birth outcomes are generally higher for Black moms and babies relative to those that are White. One of the most severe disparities in Cincinnati is in infant mortality, where Black babies were nearly three times more likely to die than White babies in 2021. Furthermore, Cincinnati and Hamilton County have seen an increase in the amount of safe sleep-related infant deaths, emphasizing the importance of safe sleep education. Although trends in births to teen mothers have been decreasing in Cincinnati, rates are still higher than Hamilton County and Ohio. Disparities in maternal and infant health are a complex and multifactorial problem that require a wide range of interventions. A few key strategies that can contribute to enhancing the health of both the mom and the baby start with access to quality prenatal care, education and awareness, and community support.	
Chronic Disease	Obesity High blood pressure Cholesterol screening Arthritis, diabetes, asthma Mortality: Heart disease and accidental deaths Poor physical health (14+ days)	High cholesterol

City and County Trends or Comparisons to the State and/or Nation (actual data point or HP2030)		
	Unfavorable	Favorable
	Chronic diseases are defined broadly as conditions that last one year or more and require ongoing medical attention and/or limit activities of daily living. They often develop slowly and can be caused by a combination of factors such as genetics, lifestyle, and environmental factors. Among adults, Cincinnati residents have higher rates of high blood pressure and poor physical health relative to Ohio and the U.S. Also, Cincinnati has lower rates of high cholesterol relative to Ohio and the U.S. Differences in chronic disease metrics by demographics are present and are often disproportionate. For example, among adults with high blood pressure in 2019 in Ohio, 43.6% are Black while 34.4% are White, despite there being a larger White population.	
Mental Health and Addiction	Poor mental health (14+ days) Drug overdoses Risk Factors: Sleep deprivation (adults), obesity, physical inactivity	
	Mental health affects multiple aspects of an individual's life, from quality of life, work productivity, social interaction, and physical wellness. Mental health concerns are seen in a variety of behaviors such as substance abuse, sleep patterns, and persistent days of self-reported poor mental health. Cincinnati residents have higher rates of poor mental health relative to Ohio and the U.S. Additionally, the west side of Cincinnati has a higher quantity of adults who report sleeping fewer than seven hours a night and who report poor mental health in the past 14 days. Additionally, overdose rates are higher for Hamilton County residents compared to Ohio and U.S averages.	
Infectious Disease	STD rates (chlamydia, gonorrhea, and syphilis) Congenital syphilis *Candida auris* Invasive Streptoccus Group A Hepatitis B & C Shigellosis	Hepatitis A

City and County Trends or Comparisons to the State and/or Nation (actual data point or HP2030)		
	Unfavorable	Favorable
Infectious Disease Cont.	Overall, rates of sexually transmitted diseases are increasing in the U.S. From 2017-2021, Cincinnati experienced increased rates of gonorrhea and decreased rates of chlamydia and are both above the rates of Hamilton County and Ohio. The decrease in chlamydia cases may be due to lower screening activities and testing during the pandemic, as chlamydia is often asymptomatic and COVID-19 activities were prioritized by local health authorities. Syphilis cases increased from 2018-2020 in both Hamilton County and Ohio but decreased from 2020-2021. There is a concerning rise in congenital syphilis rates in the U.S., emphasizing the need for regular screening, especially among those who are pregnant. In 2020 the first case of *Candida auris* was reported in Cincinnati and has since increased to the point where Cincinnati reports the most cases in all of Ohio in 2023. Hepatitis B, Hepatitis C, Streptococcal Group A and Shigellosis rates are decreasing in Cincinnati but remain higher than the rest of Hamilton County and Ohio. Hepatitis rates have decreased from 2018 to 2019 in Cincinnati but are still higher than the rest of Hamilton County. COVID-19 Summary: The COVID-19 virus was the fourth leading cause of death in Cincinnati during 2021, with a broad range of negative impacts on Cincinnati residents. Overall, these impacts can be seen in physical health outcomes, unemployment/poverty rates, and reduced healthcare access. Demographically, White residents in Cincinnati comprised the majority of reported COVID-19 cases at 45%. Black/African American residents were the second largest group, making up 43% of total cases. Generally, the west side of Cincinnati had the lowest rates of COVID-19 vaccination. Cincinnati also experienced an elevated unemployment rate of 9.1% in 2020, which was higher than Ohio and the U.S averages.	
Access to Healthcare		Higher rates of OB-GYN adult, pediatrics, and dental care providers in Hamilton County than in Ohio High percentage of health insurance coverage for all age groups
	Access to healthcare is essential for reducing health disparities and ensures that the population can thrive. Since 2021, Hamilton County has had higher rates of practicing OB-GYN, adult, pediatrics, and dental care providers relative to Ohio. Cincinnati is home to several large hospital systems with a broad spectrum of specialty care. Cincinnati also has high health insurance coverage amongst the population, which is comparable to coverage rates seen in Ohio and the United States.	

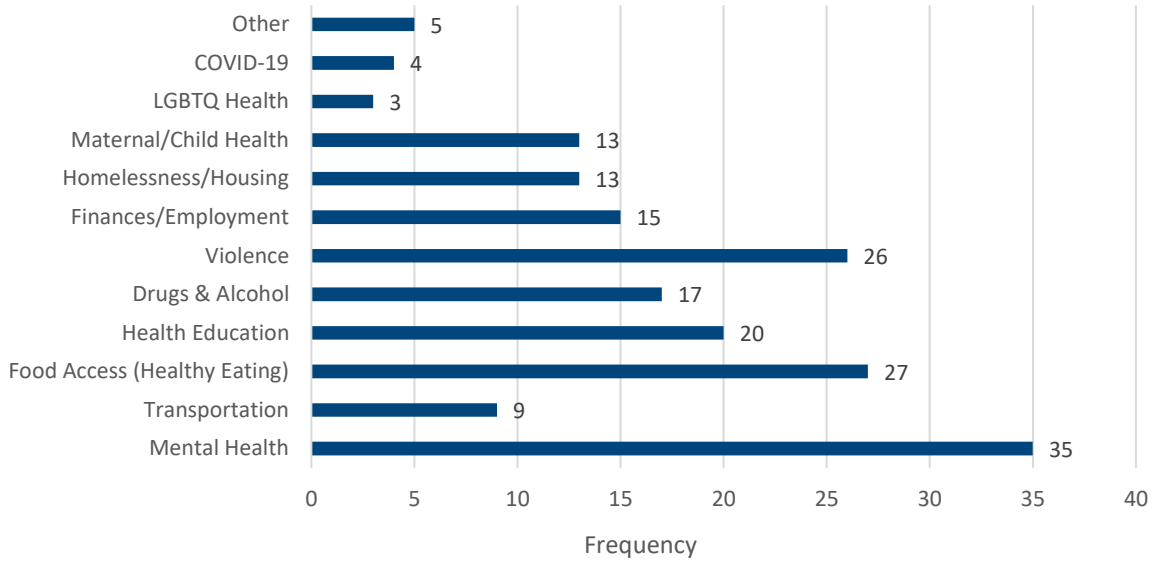
Local Conversations on Minority Health

The Cincinnati Health Department continued their tradition of surveying the community for their opinions on health concerns and services. This survey and associated community events were titled, “Local Conversations on Minority Health” and began in 2008. Data shown in this chapter is compared to data from the 2016 Local Conversations.

A link to the web-based survey hosted through REDCap was placed in each CHD health center and advertised during community events, beginning on February 8th, 2023. The results were analyzed May 26th, 2023. The Local Conversations

on Minority Health event was hosted at the Community Action Agency located at 1740 Langdon Farm Rd, Cincinnati, OH 45237 on Saturday, May 13, 2023, to engage stakeholders in a dialogue around health needs in the community. About half of the questions from the web-based survey were asked during the meeting. A total of 70 people responded via the web-based survey and 12 people responded during the in-person event. Several themes were common throughout the responses and are reviewed in this section. Note that respondents were able to have several responses to the questions.

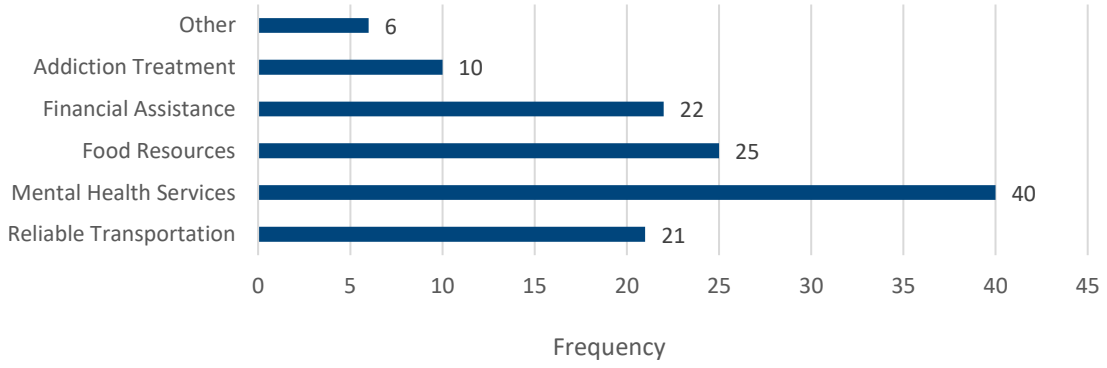
Figure 113. What is the most important health issue to you and your family? (n=70)



Mental health (50%) was the most important health issue to respondents and their families, with food access (38%) and violence (37%) close behind (Figure 113). These main concerns are similar to the top five priorities voiced at the 2016 Local Conversations on Minority Health, which were mental health, healthy eating, childhood poverty, finances/employment, and health insurance.

For participants of the in-person event, “Other” comments were most common (43%) and centered on the issue of prevention and primary care (17%). Another “Other” topic regarded racism in healthcare (9%). Further, access to healthy food was a common topic among in-person respondents (13%) and web-based participants (39%).

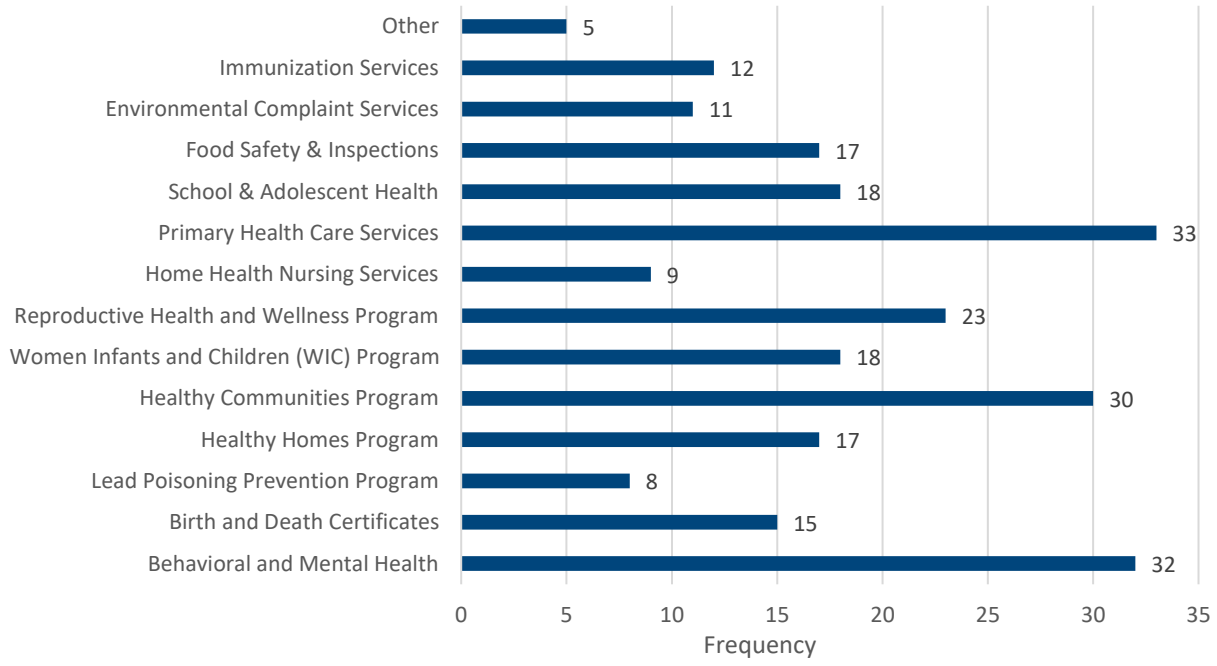
Figure 114. What type of services are most important to you and (or) your family? (n=69)



The most important service to participants and their family was mental health services (58%) (Figure 114). For the Local Conversations event, the most common response was "Other" (67%). Several of these responses revolved around increasing trust and quality of care (20%), as well as job opportunities and trainings (12%). Of the responses that mirror the web-based survey, 12% of responses identified Financial Assistance as most important followed by Food Resources at 9%.

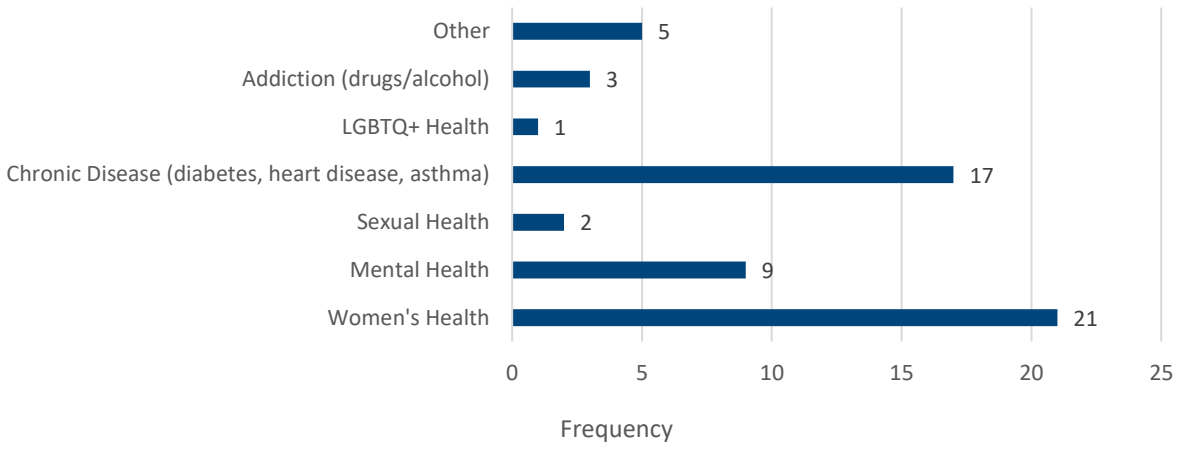
A similar question was asked during the 2016 Local Conversations: "What services are needed or are your health service needs being met by the Cincinnati Health Department?" Like the responses seen in Figure 114, mental health services and food resources were two of the top five priorities at the 2016 Local Conversations.

Figure 115. What services offered by the CHD are most important to you and your family? (n=69)



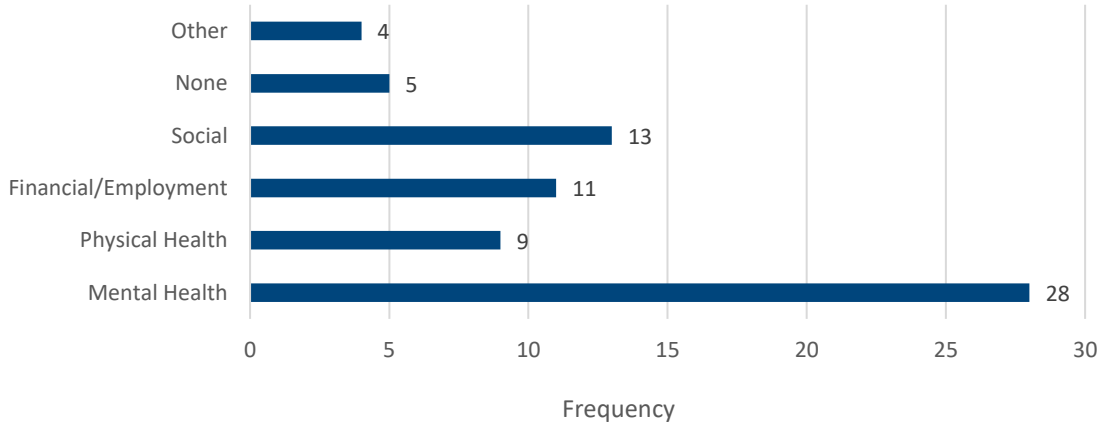
Primary Health Care Services (48%) and Behavioral and Mental Health Services (46%) ranked as the two most important services offered by CHD to the online respondents (Figure 115). The in-person discussion centered on behavioral and mental health services (29%), while also reiterating that increasing trust and quality of care (24%) are important.

Figure 116. What topic within health education is most interesting or useful to you? (n=58)



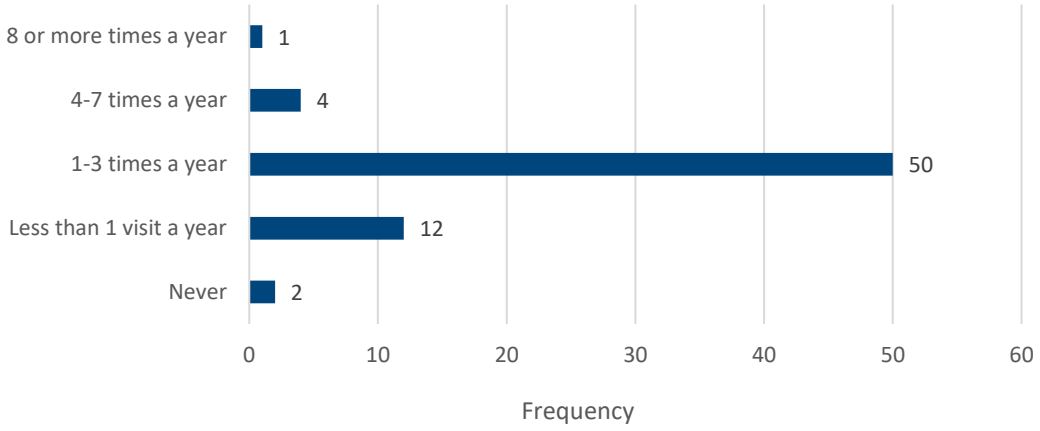
Respondents reported Women's Health (36%) and Chronic Disease (29%) as the top two areas of interest for health education (Figure 116). However, in-person responses to this question, were mainly concentrated on Addiction (20%) and Mental Health (15%).

Figure 117. What aspect of your life was most impacted by the COVID-19 pandemic? (n=70)



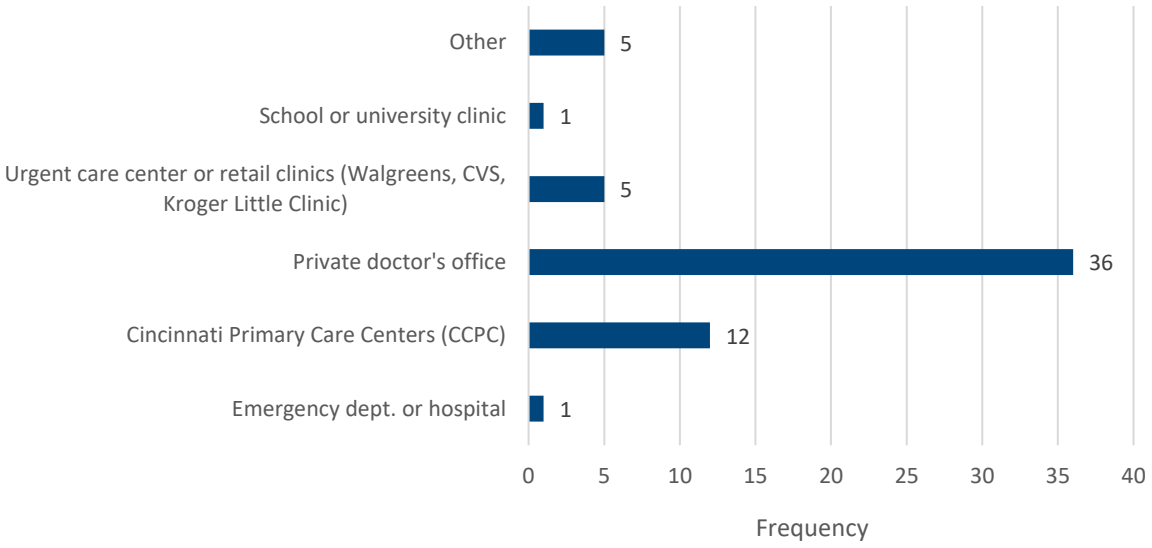
Online survey respondents reported Mental Health (40%) as the aspect of life most impacted by the COVID-19 pandemic. Impact on Social activities (19%) was the second most reported (Figure 117). In-person respondents focused on the mental health and social impacts by discussing not being able to spend time with family (29%).

Figure 118. How often do you visit a primary care provider? (n=69)



Among online survey respondents, most (72%) reported visiting a primary care provider 1-3 times a year (Figure 118). In-person respondents mirrored these results and detailed that in addition to seeing a primary care provider, many also regularly see the dentist, eye doctor, and OB/GYN.

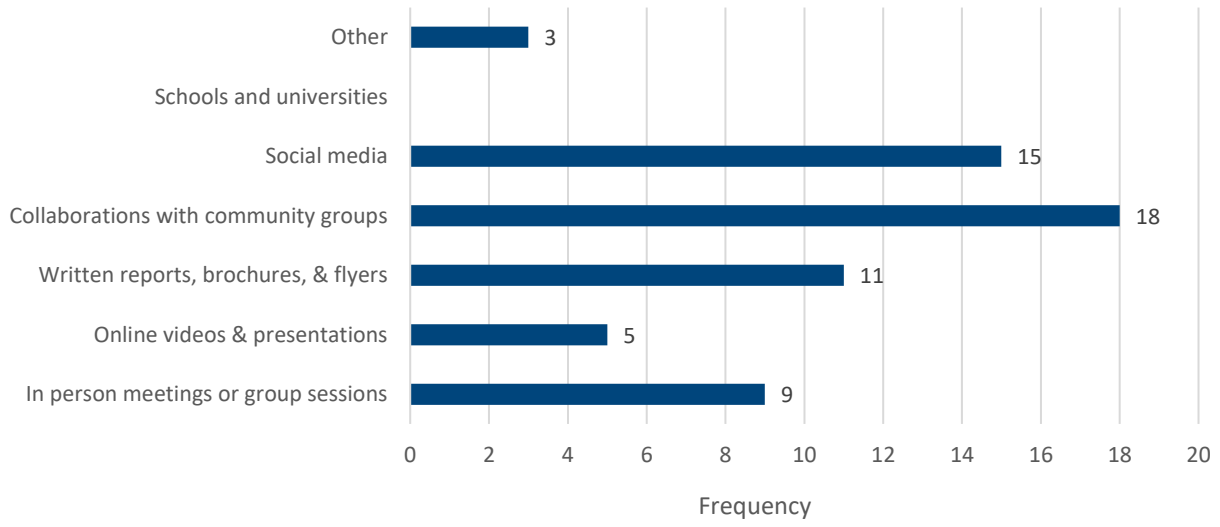
Figure 119. Where do you usually receive your healthcare services from? (n=60)



Among online respondents who listed their primary care provider, 60% indicated they receive care from a private doctor's office while 20% use CCPC clinics (Figure 119).

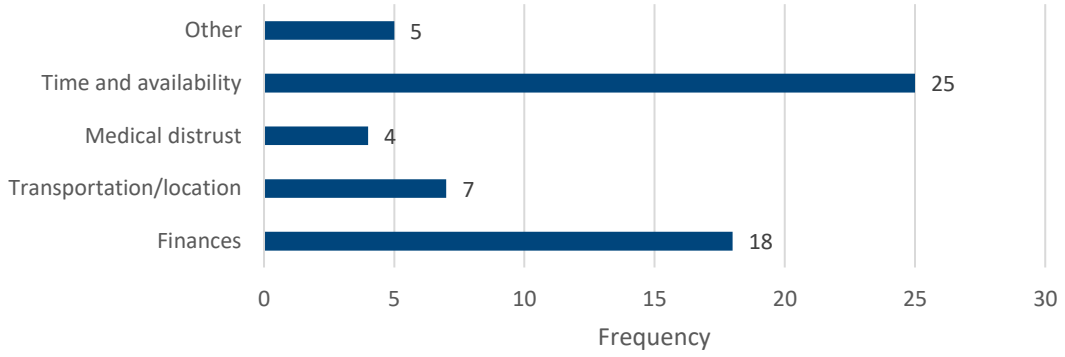
Overall, when asked about the level of trust in the CHD on a scale of zero to 100, online respondents reported a median of 75% and average of 71% trust.

Figure 120. How can CHD best share health information with the community? (n=61)



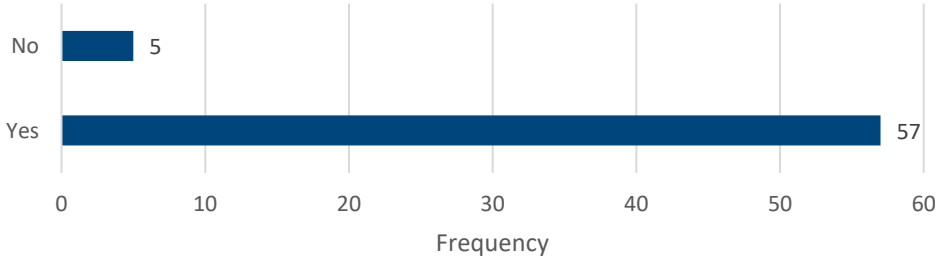
The desired method for the CHD to share health communication varied amongst survey respondents. About 30% suggested the CHD collaborate with community groups. Alternatively, other respondents indicated social media (25%) or written reports, brochures, and flyers (18%) would be the best way to share health information (Figure 120).

Figure 121. What is the largest barrier to receiving healthcare for you and your family? (n=59)



Most survey respondents had difficulty receiving healthcare due to time and availability constraints (42%). Finances were also a common barrier, with approximately 31% of respondents reporting difficulty receiving care due to cost (Figure 121).

Figure 122. Did you receive the COVID-19 vaccination? (n=62)



More than 90% of survey respondents reported receipt of a COVID-19 vaccine (Figure 122).

A few additional questions were asked during the in-person event that were not asked on the web-based survey. When asked what kinds of programs attendees would like to see in the future, the four suggestions were: “Lupus,” a “barbershop trial approach to improve Black and community health,” “generational trauma and how it affects our current generation,” and “how people can become homeowners after being in the system.” The second question assessed whether respondents wanted to learn more about any specific CHD programs. The four responses were as follows: “men’s programs,” “community outreach programs,” “mental/behavioral health programs,” and “food insecurity and advocacy for work programs.” The last in-person question assessed whether there are community health topics they are concerned about. Most responses were surrounding the built environment and affordable healthy housing (44%).

The demographics of the web-based questionnaire respondents showed a variety of age groups were reached who were predominantly non-Hispanic (89%) and female (76%) (Figure 123, Figure 124 & Figure 126). Fifty-four percent were Black, 42% White, 1% Asian, and 3% other (Figure 125). Respondents also recorded their residence ZIP codes, with 45202, 45206, and 45229 having the most representation (Map 31). The reported household income was also varied with $50,000 - $74,999 being selected the most by 20% of respondents (Figure 127).

Map 31. Residence ZIP Code of Community Health Survey Respondents (n=72)

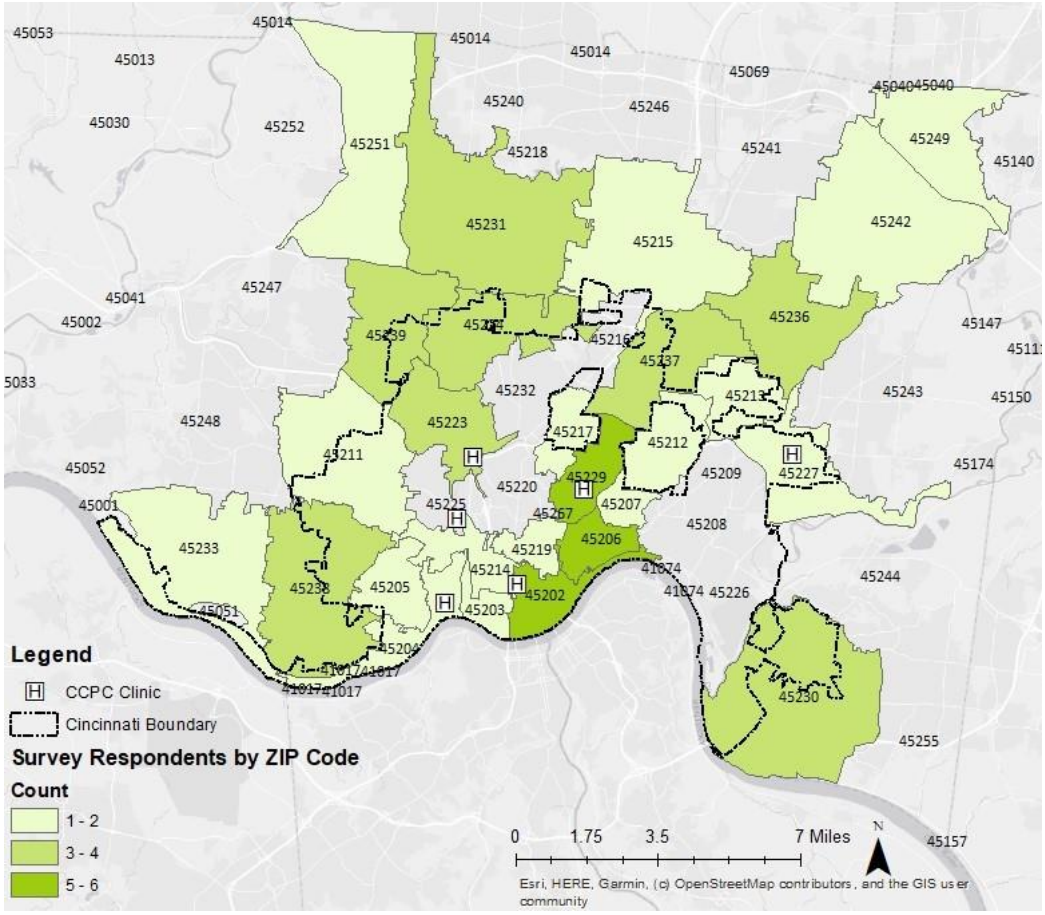


Figure 123. Age Distribution of Community Health Survey Respondents (n=56)

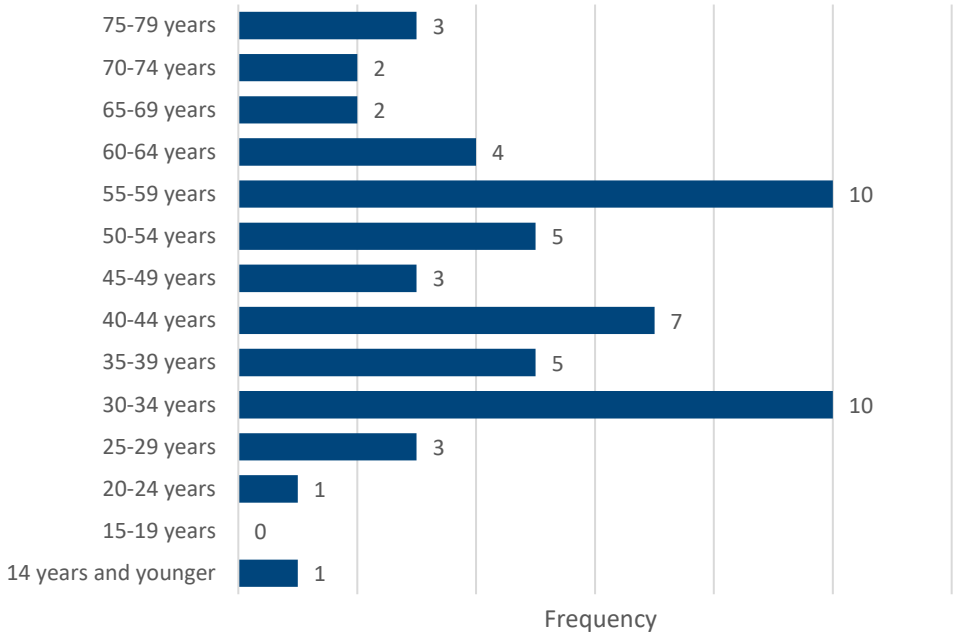


Figure 124. Gender Distribution of Community Health Survey Respondents (n=63)

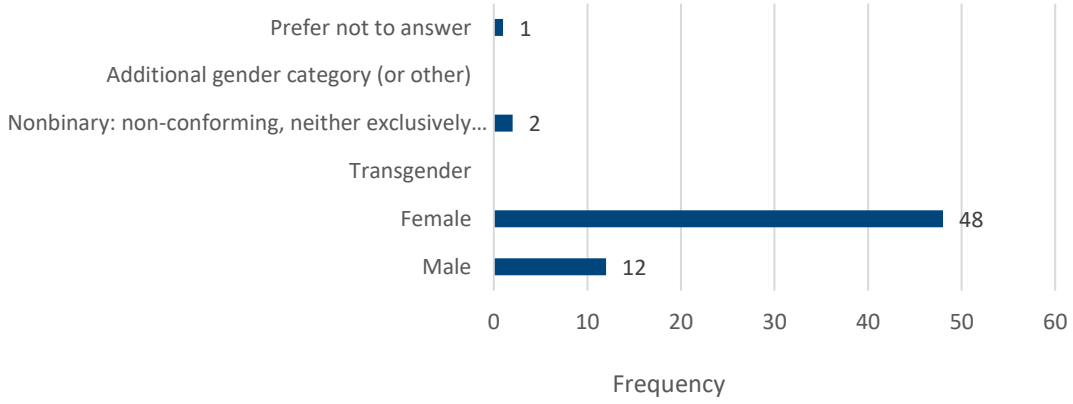


Figure 125. Race Distribution of Community Health Survey Respondents (n=69)

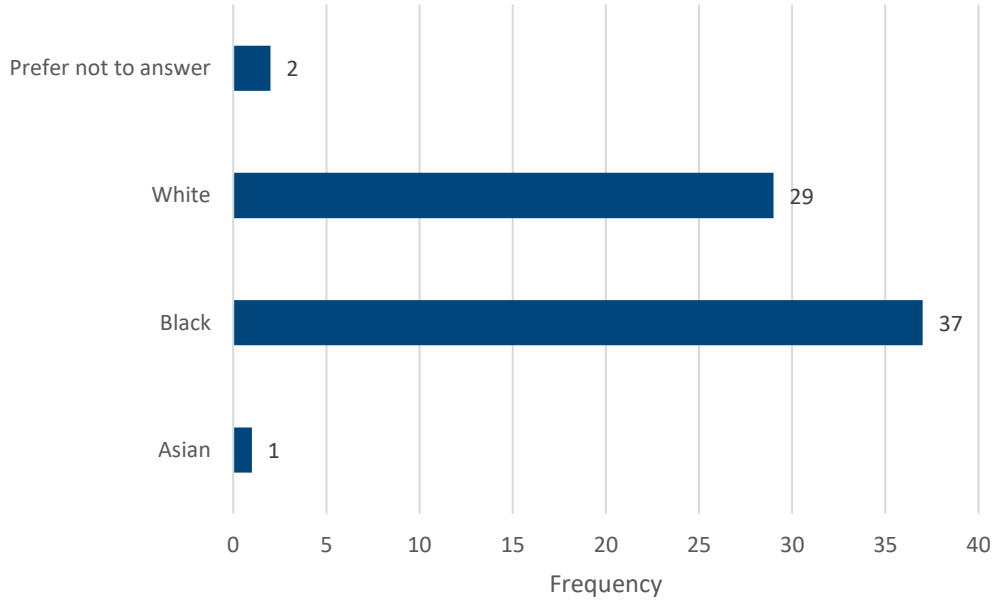


Figure 126. Ethnicity Distribution of Community Health Survey Respondents (n=66)

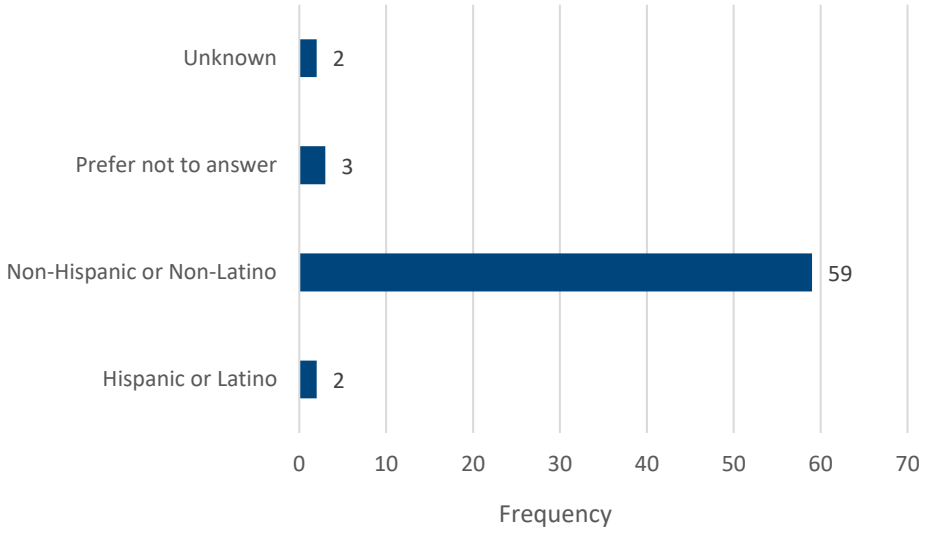
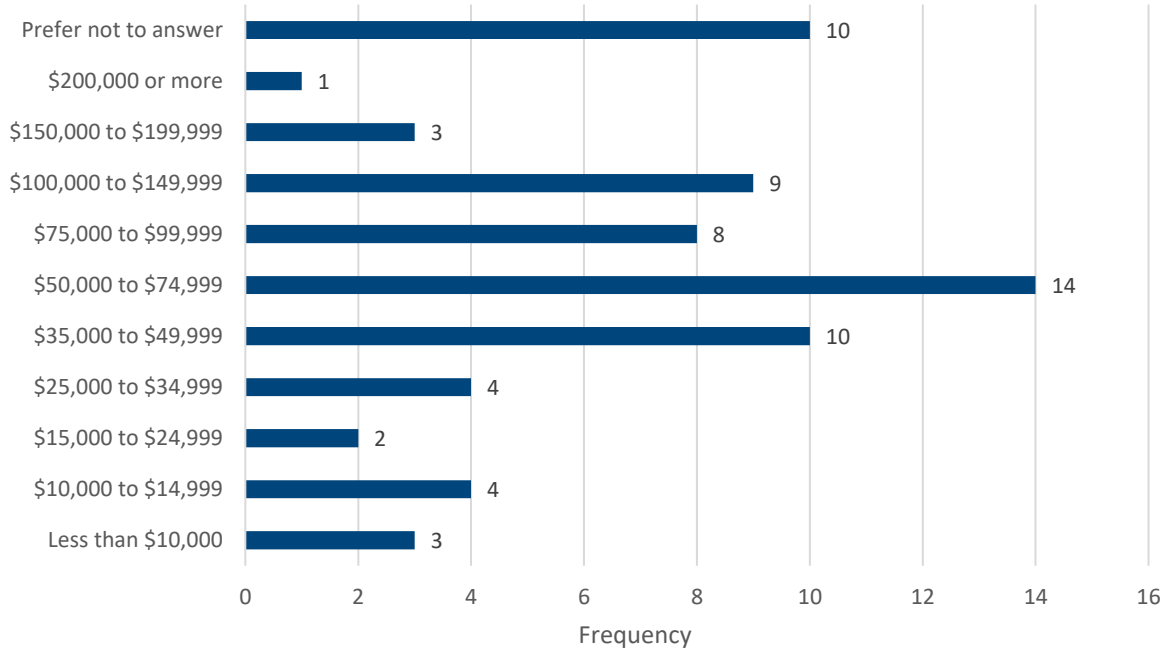


Figure 127. Distribution of Household Income among Community Health Survey Respondents (n=68)



Appendix A: List of Stakeholders

Hospitals and Health Systems

- Bon Secours Mercy Health
  - Bon Secours Mercy Health Anderson Hospital
  - Bon Secours Mercy Health Clermont Hospital
  - Bon Secours Mercy Health Fairfield Hospital
  - Bon Secours Mercy Health Jewish Hospital
  - Bon Secours Mercy Health West Hospital
- Cincinnati Children's Hospital
  - Cincinnati Children's Burnet Campus
  - Cincinnati Children's Liberty Campus
  - Cincinnati Children's College Hill Campus
- The Lindner Center of HOPE
- The Christ Hospital, Mt. Auburn
- TriHealth
  - TriHealth Good Samaritan Hospital
  - TriHealth Good Samaritan Evendale Hospital
  - TriHealth Bethesda North Hospital
  - TriHealth Bethesda Butler Hospital
  - TriHealth McCullough Hyde Memorial Hospital
- UC Health
  - UC Health University of Cincinnati Medical Center
  - UC Health West Chester Hospital
  - UC Health Drake Center for Post-Acute Care
- Greater Dayton Area Hospital Association (GDAHA)
  - Kettering
    - Kettering Medical Center
    - Sycamore Medical Center
    - Kettering Behavioral Medical Center
    - Grandview Medical Center
    - Southview Medical Center
    - Soin Medical Center
    - Greene Memorial Hospital
    - Fort Hamilton Hospital
  - Premier
    - Miami Valley Hospital
    - Atrium Medical Center
    - Upper Valley Medical Center
    - Miami Valley Hospital South
    - Miami Valley Hospital North
  - Wilson Memorial Health
  - Wayne Healthcare
  - Mercy Health Springfield Regional Medical Center
  - Mercy Health Urbana Hospital
- Adams County Regional Medical Center

- Margaret Mary Health

Local Health Departments:

- *City:* Cincinnati, Hamilton (City), Norwood, Piqua, Springdale
- *County:* Adams, Auglaize, Brown, Butler, Champaign, Clark, Clermont, Clinton, Darke, Fayette, Greene, Hamilton, Highland, Miami, Montgomery, Preble, Shelby, Warren

Counties:

- *Indiana:* Franklin, Dearborn, Ohio, Ripley, Union
- *Kentucky:* Campbell, Boone, Grant, Kenton
- *Ohio:* Adams, Auglaize, Brown, Butler, Champaign, Clark, Clermont, Clinton, Darke, Greene, Hamilton, Highland, Miami, Montgomery, Preble, Shelby, Warren

Notes/Limitations:

- 4 Kentucky counties are managed by 1 Northern Kentucky Health Department and did not officially participate. These counties are however in the services areas of participating hospitals (Christ, CCHMC) and therefore are included in the county number.
- 5 Indiana counties do have their own health department/county but did not officially participate. They are included in multiple hospital service areas (GDAHA, MMH, CCHMC) and therefore were included in the county number
- 5 additional city health departments were engaged, all located within participating counties in Ohio

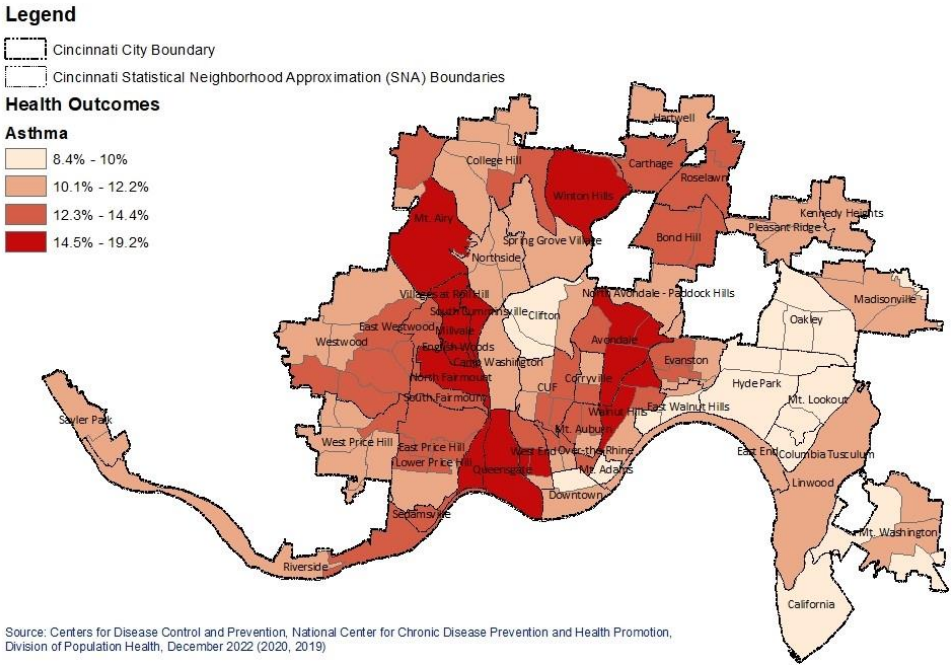
Live-Work-Play Coalition Stakeholders:

Action for Smokefree Multiunit Housing
All Children Thrive
All In Cincinnati
American Cancer Society
American Heart Association
American Lung Association
AmeriHealth Caritas Ohio
Anthem
Area Hospital Association (GDAHA)
Better Bus Coalition
Bi3 (Bethesda Investments, Ideas, Impact)
Care Source
Centene (Medicaid managed care organization)
Cherished Hearts Family Support Services
Childhood Food Solutions
Christ Hospital
Cincinnati Children's Hospital Medical Center
Cincinnati Metropolitan Housing Authority
Cincinnati Public Schools
Cincinnati Recreation Commission
Walgreens
Cincinnati State
Cincy Red Bike
Civic Garden Center
Cradle Cincinnati
Employers Health Co
End Hunger Alliance
Enhanced Healthcare Solutions
ERS Life
Freestore Foodbank
Go Vibrant
Great Parks of Hamilton County
Green Umbrella
Hamilton County Jobs and Family services
Hamilton County Public Health
Health Care Access Now
Healthy Roots Foundation
Healthy Visions
Interact for Health
Mercy Health
Metro
WIC
National Alliance on Mental Illness (NAMI)
Northside Farmers Market
OneSight
Our Harvest
People Working Cooperatively
Prevention First
Price Hill Will
Produce Perks Midwest
Saaf Ministries
Springdale Health department
The Community Builders
The Health Collaborative
Tivity Health
Tri-State Trails
Turner Farm
UC Health
United Health Care
Uniting Arch
University of Cincinnati
Vitality Cincinnati
Xavier University

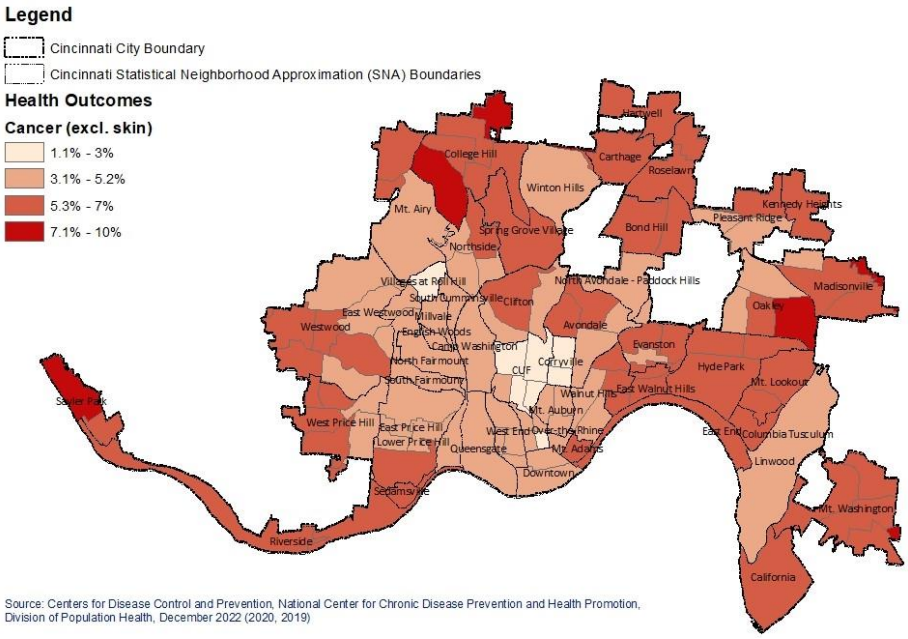
Appendix B: Identifying Geographic Disparities in Adult Health Outcomes

Data were provided by the Centers for Disease Control and Prevention (CDC), Division of Population Health, Epidemiology and Surveillance Branch. There are 27 measures at the census tract level. There are 7 measures (all teeth lost, dental visits, mammograms, Pap tests, colorectal cancer screening, core preventive services among older adults, and sleep less than 7 hours) in this 2022 release from the 2020 BRFSS data for 25 measures and 2019 data for 4 measures (high blood pressure, taking high blood pressure medication, high cholesterol and cholesterol, and cholesterol screening). The census tract shapefile was extracted from the Census 2010 Tiger/Line database and modified to remove portions of census tracts that were outside of city boundaries.

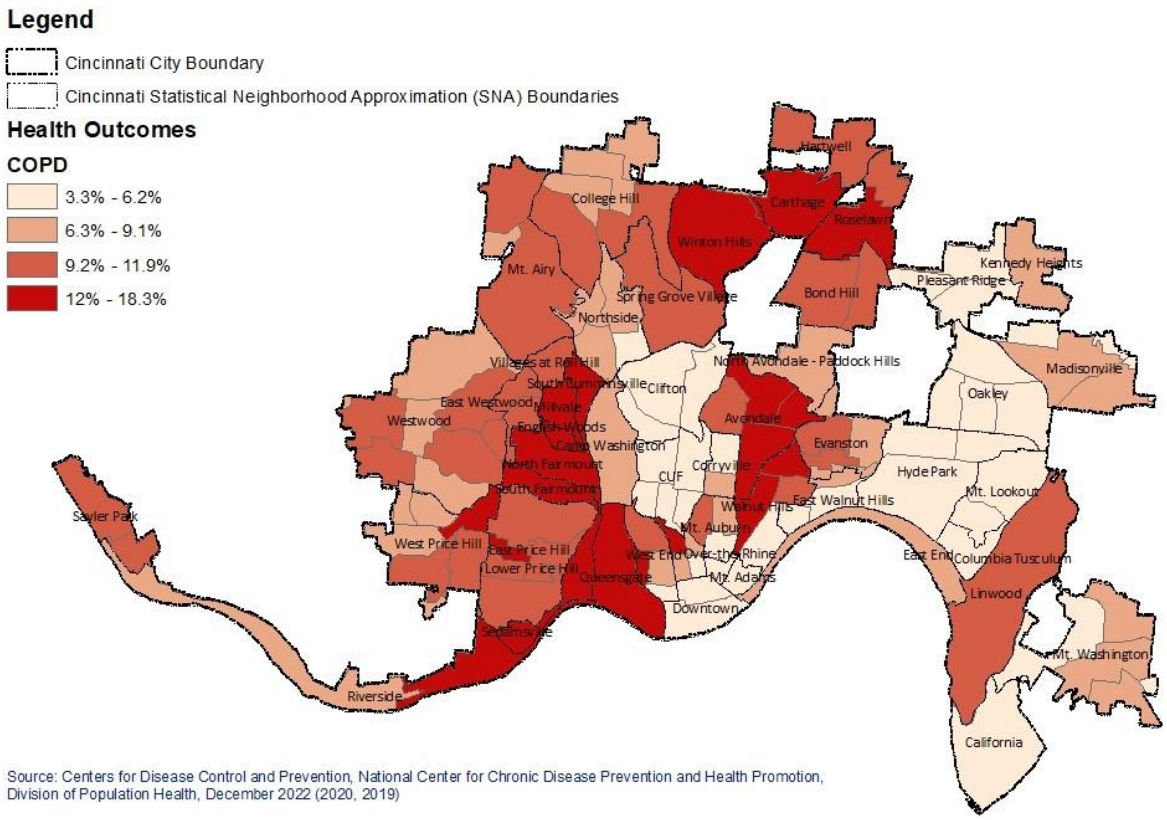
Map 32: Cincinnati Adults 18+ Years with Asthma (2020)



Map 33: Cincinnati Adults 18+ Years with Cancer (2020)

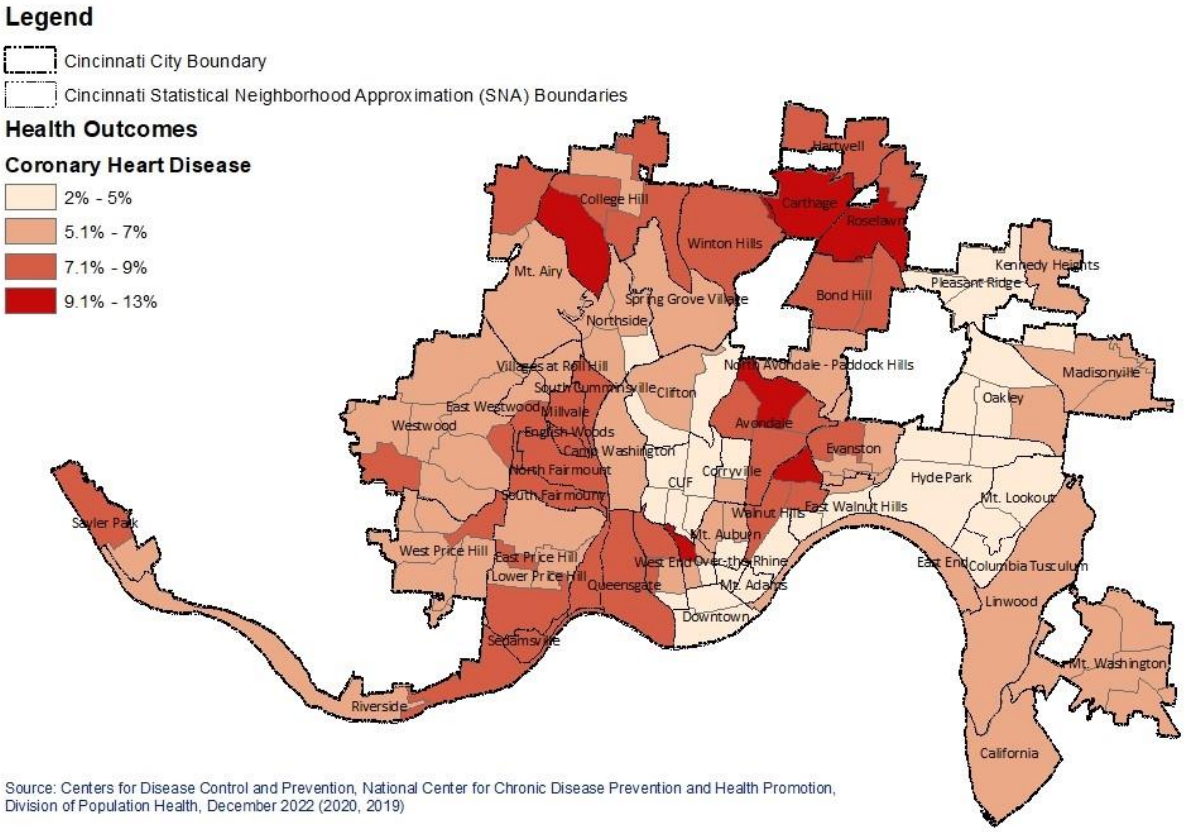


Map 34: Cincinnati Adults 18+ Years with COPD, Emphysema, and Chronic Bronchitis (2020)



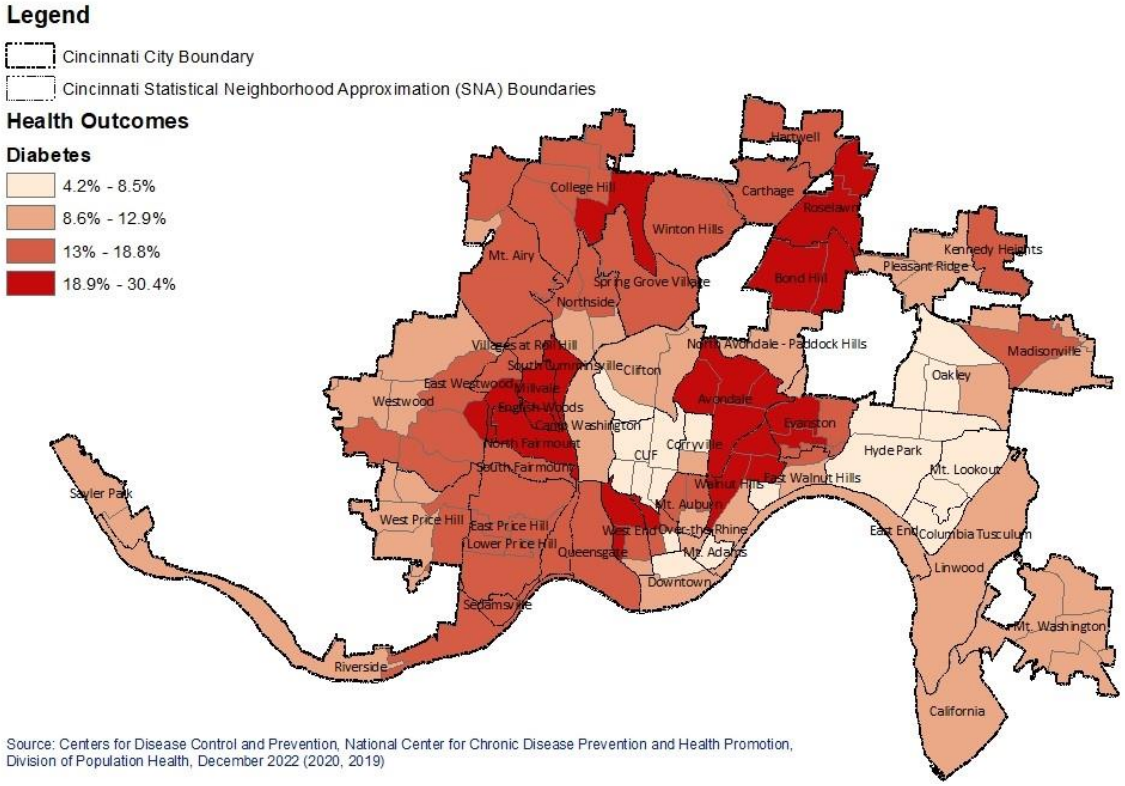
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 35: Cincinnati Adults 18+ Years with Coronary Heart Disease (2020)



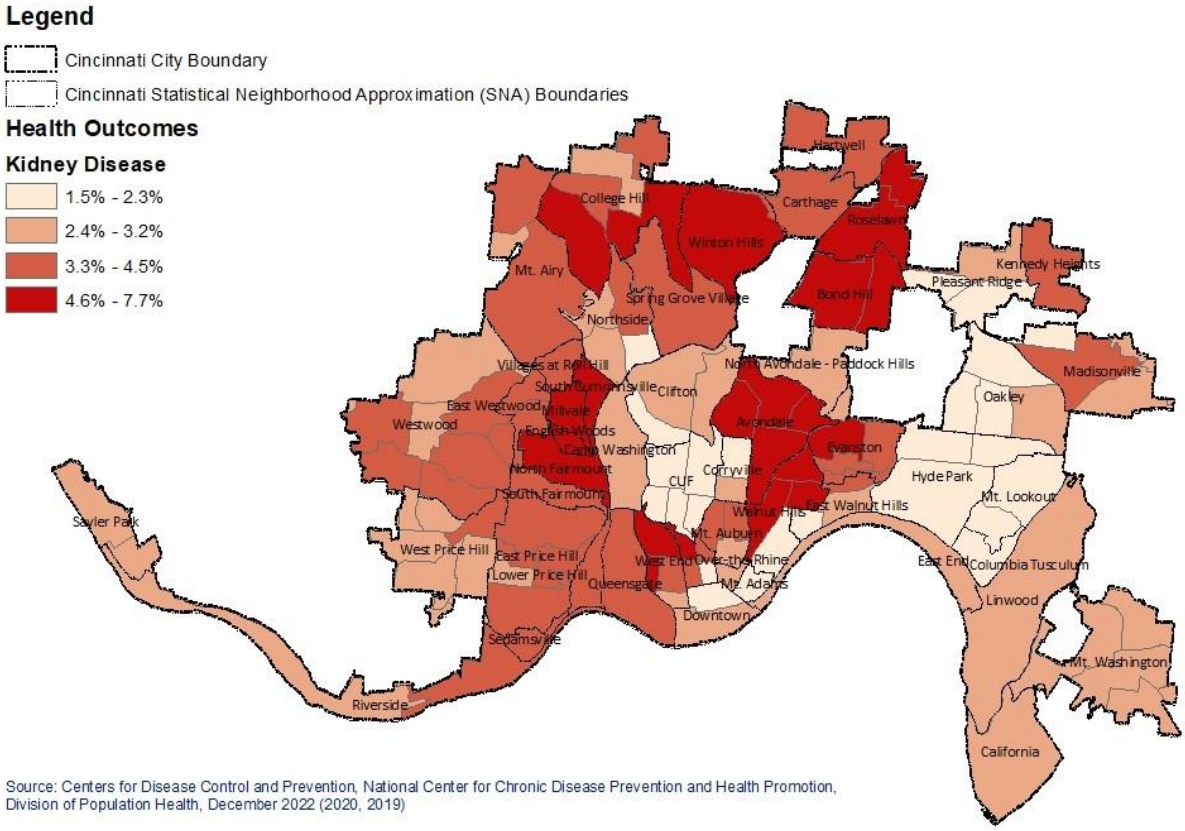
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 36: Cincinnati Adults 18+ Years with Diabetes (2020)



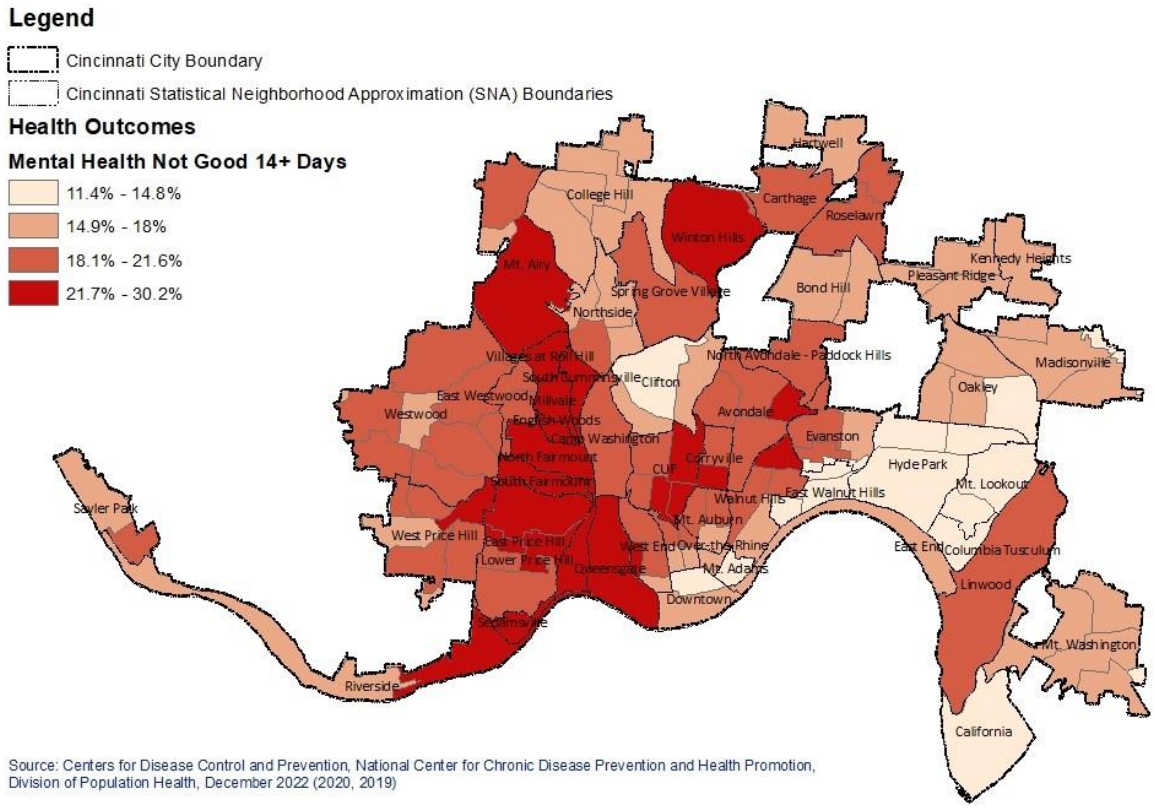
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 37: Cincinnati Adults 18+ Years with Kidney Disease (2020)



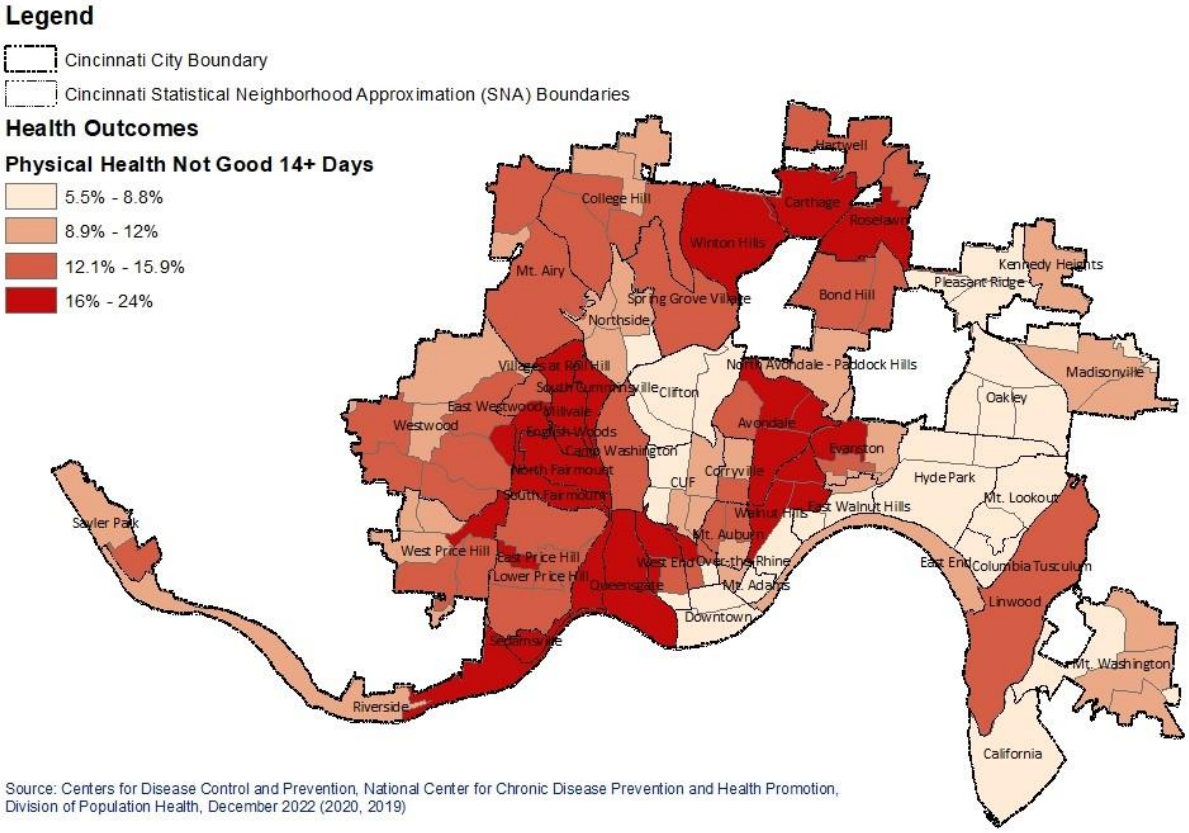
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 38: Cincinnati Adults 18+ Years with Poor Mental Health in the past 14 days (2020)



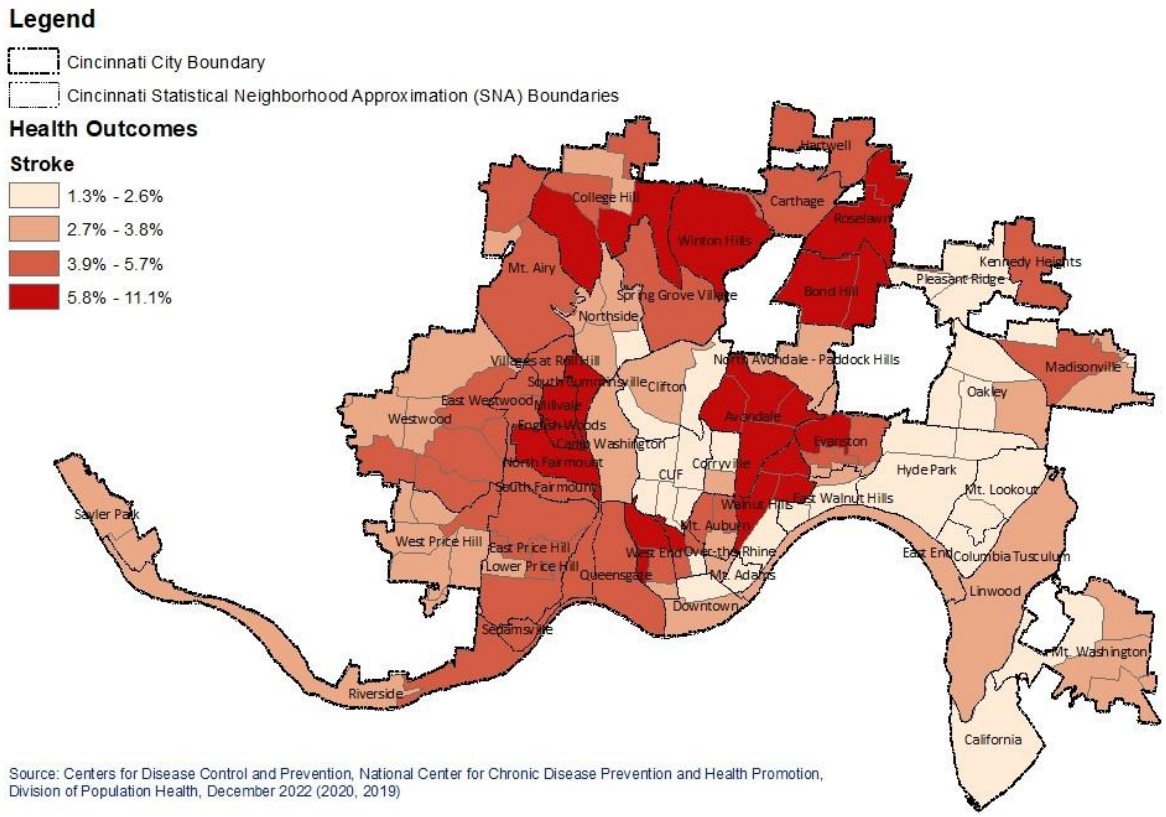
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 39: Cincinnati Adults 18+ Years with Poor Physical Health in the past 14 days (2020)



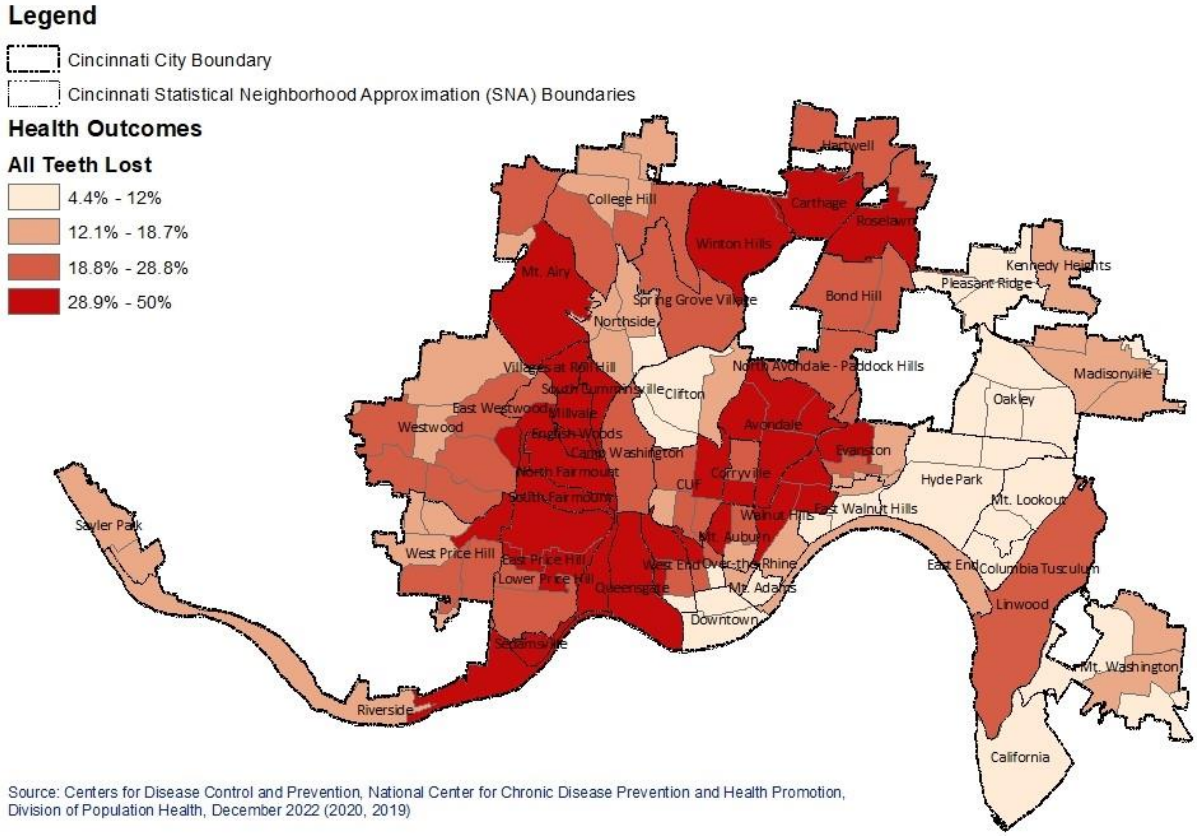
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 40: Cincinnati Adults 18+ Years who have had a Stroke (2020)



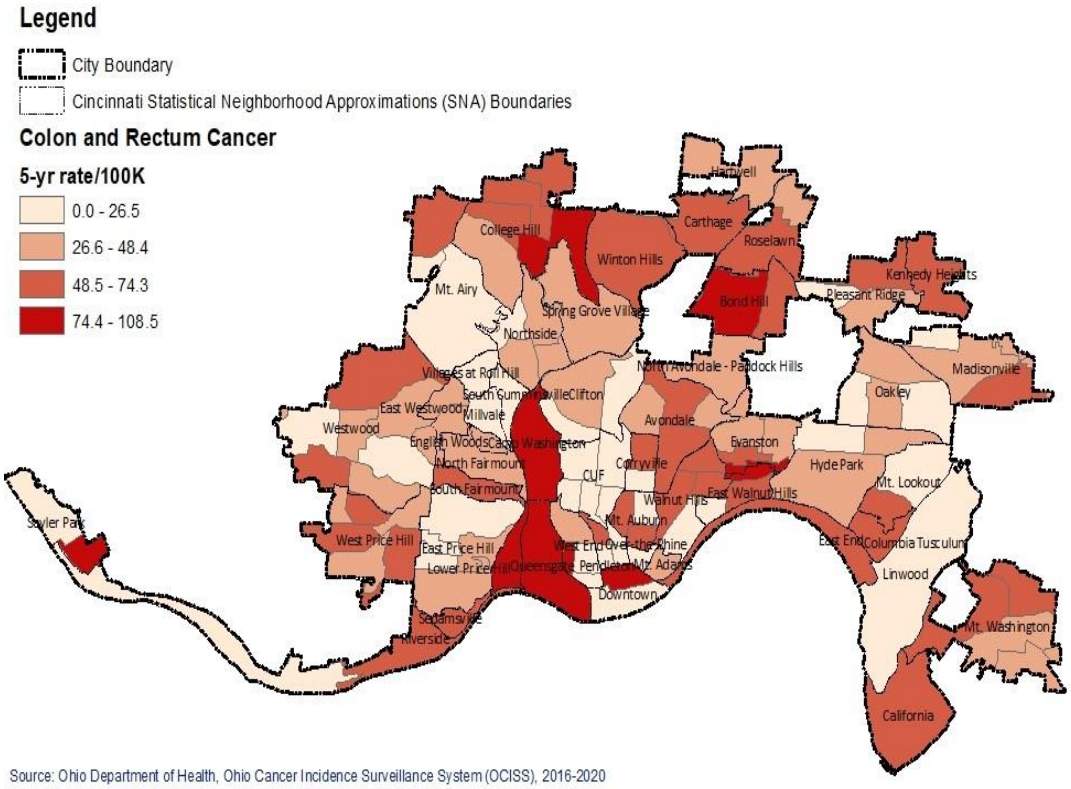
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 41: Cincinnati Adults 18+ Years who Lost or Removed All Teeth (2020)

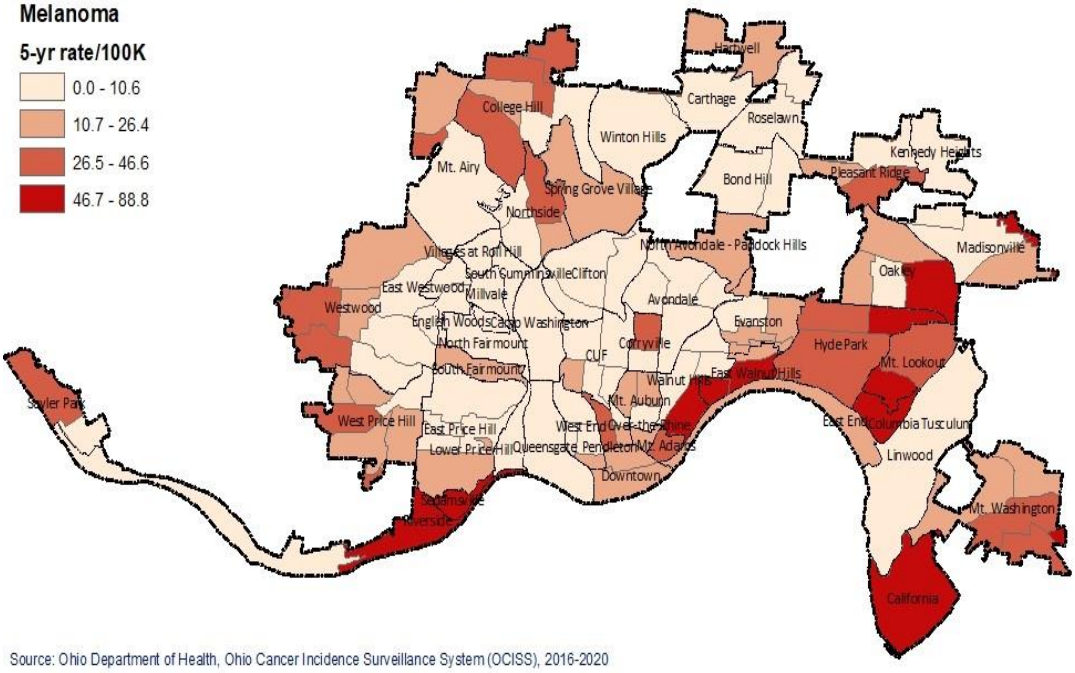


Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

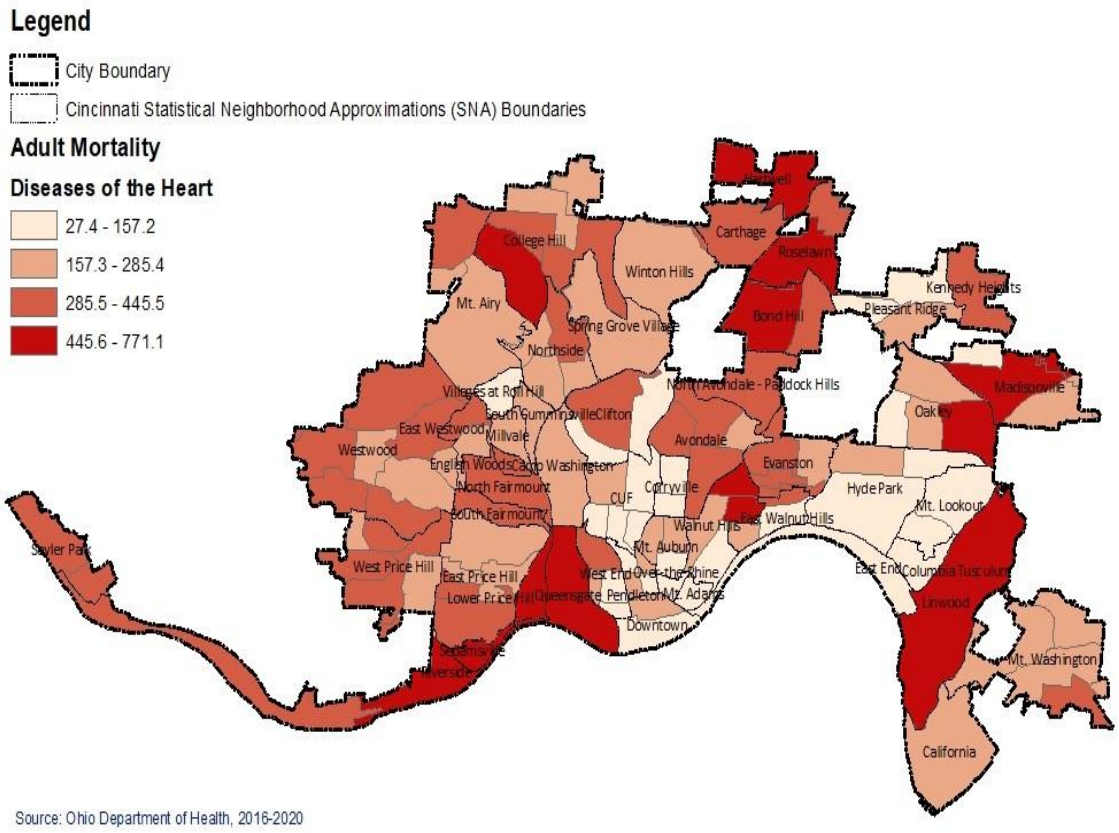
Map 42: Cincinnati Adults 18+ Years with Colon and Rectum Cancer (2016-2020)



Map 43: Cincinnati Adults 18+ Years with Melanoma of Skin (2016-2020)

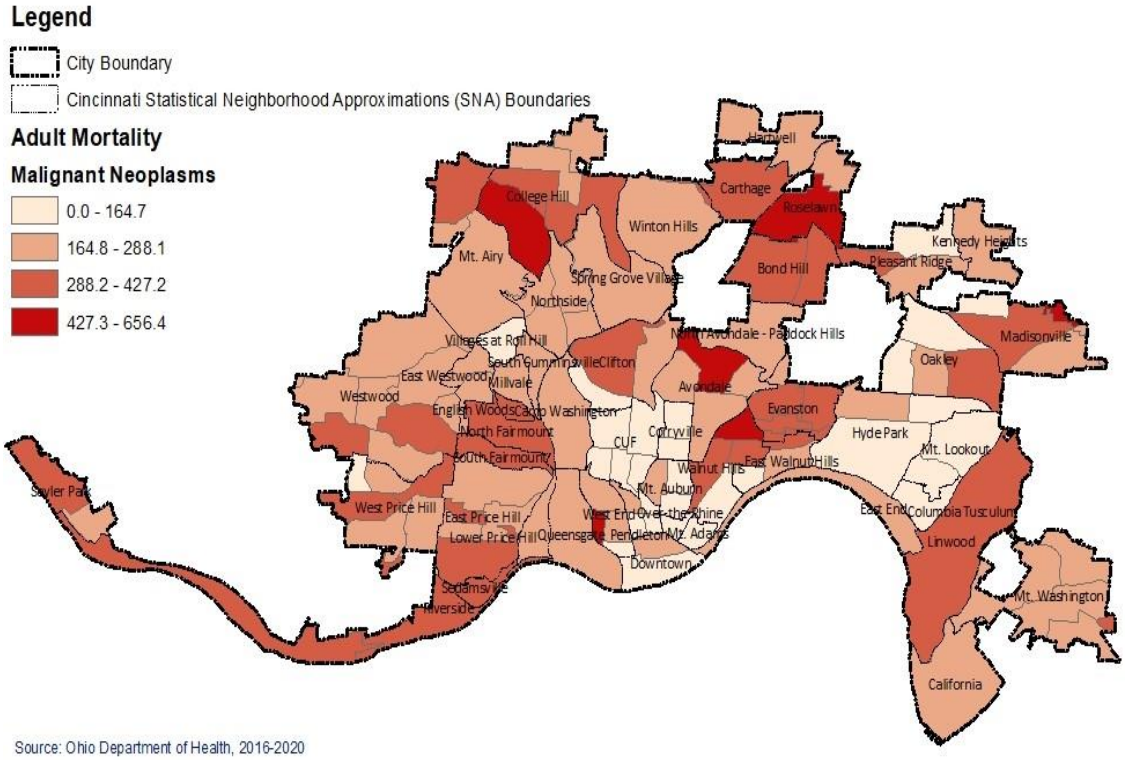


Map 44: Cincinnati Adults 18+ Years Adult Mortality from Diseases of Heart (2016-2020)



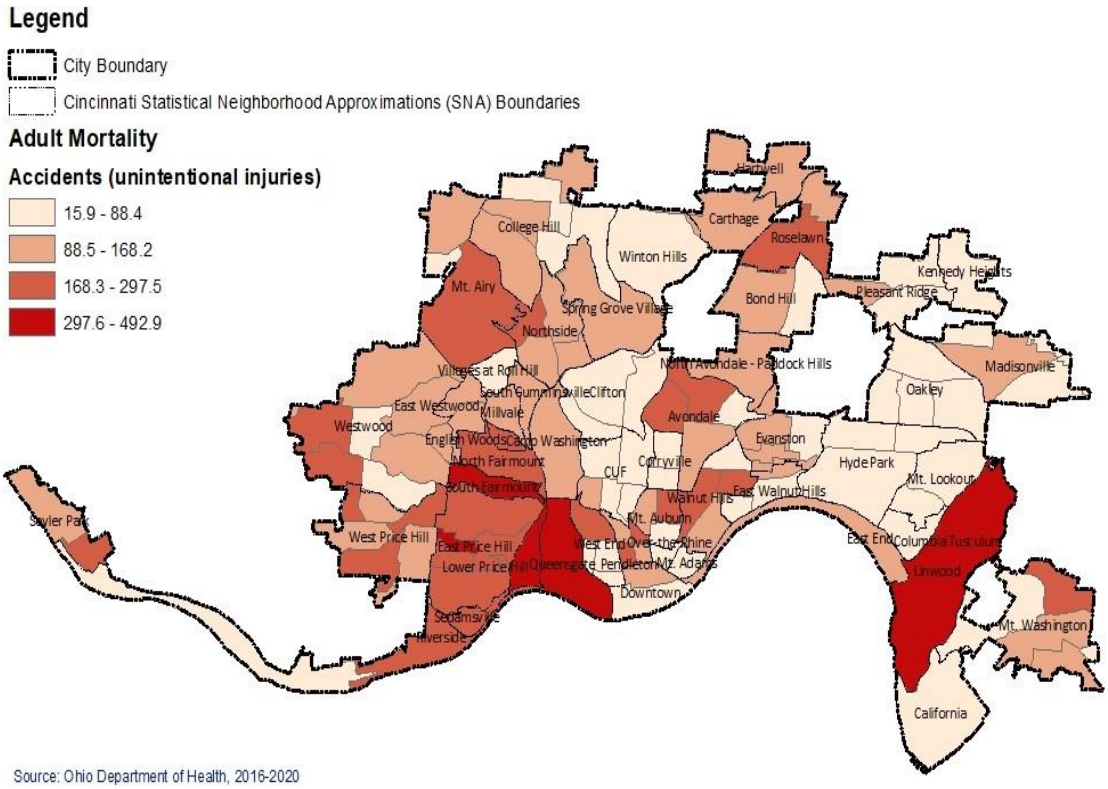
Source: Ohio Department of Health, 2016-2020

Map 45: Cincinnati Adults 18+ Years Mortality from Malignant Neoplasms (Cancer) (2016-2020)



Source: Ohio Department of Health, 2016-2020

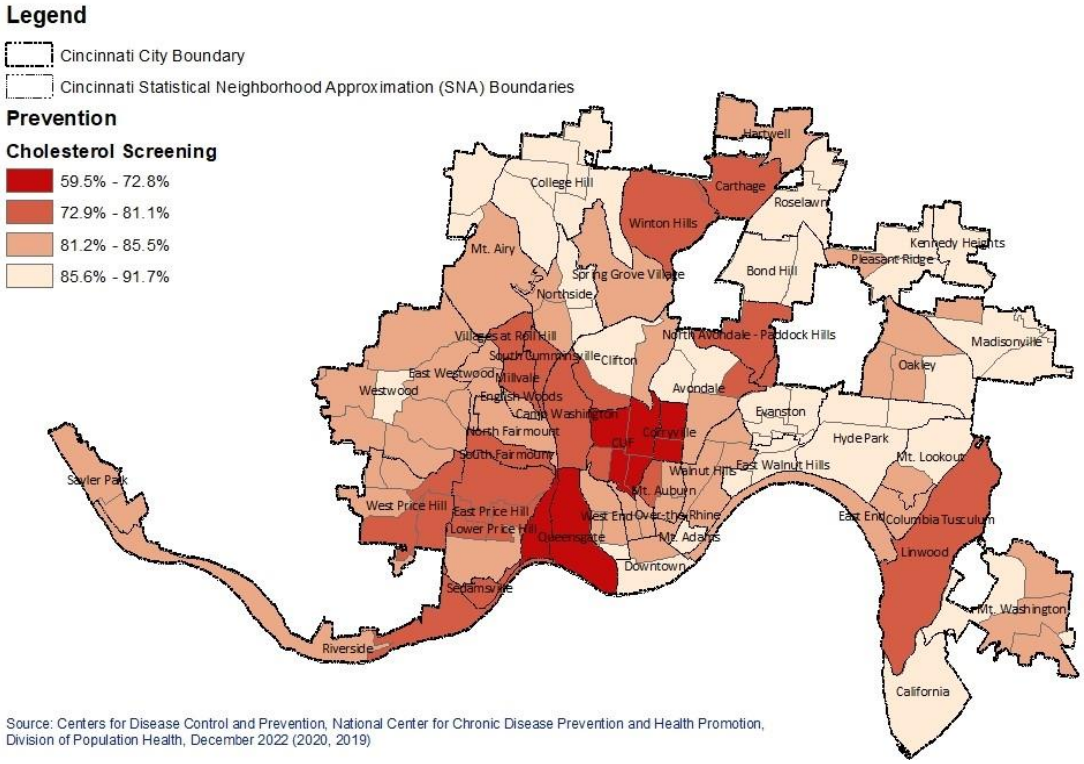
Map 46: Cincinnati Adults 18+ Years Mortality from Accidents (unintentional injuries) (2016-2020)



Source: Ohio Department of Health, 2016-2020

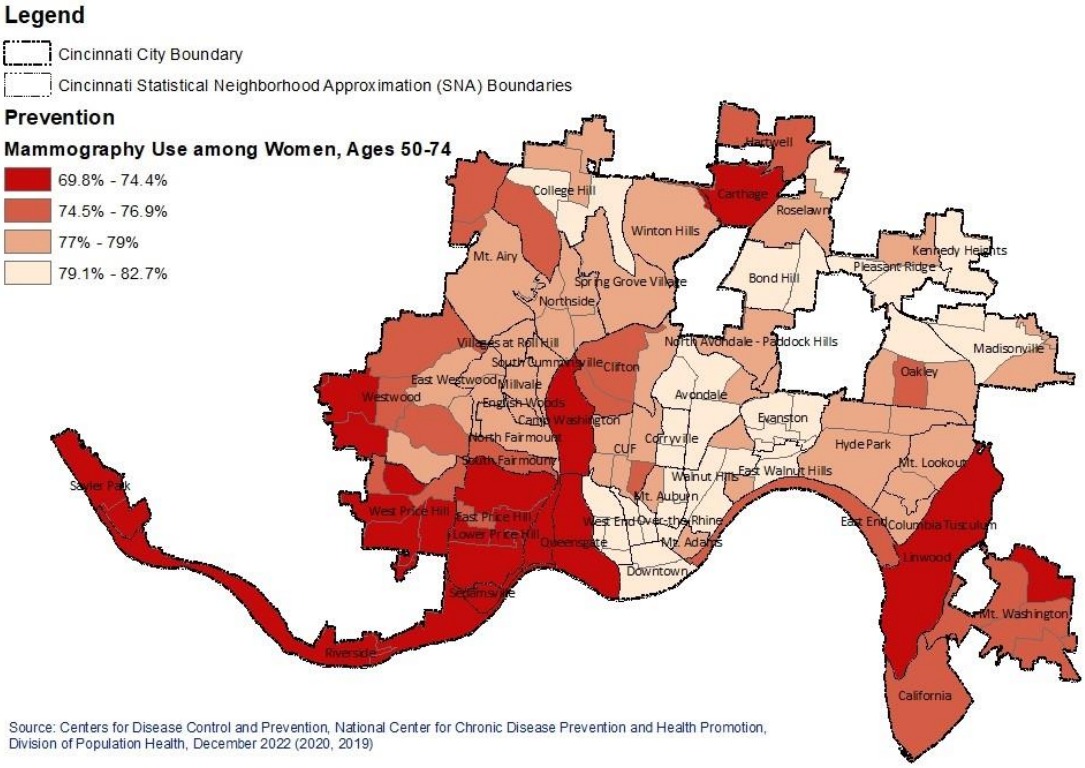
Appendix C: Identifying Geographic Disparities in Adult Chronic Health Prevention

Map 47: Cincinnati Adults 18+ Years with Cholesterol Screening within the Past Year (2019)



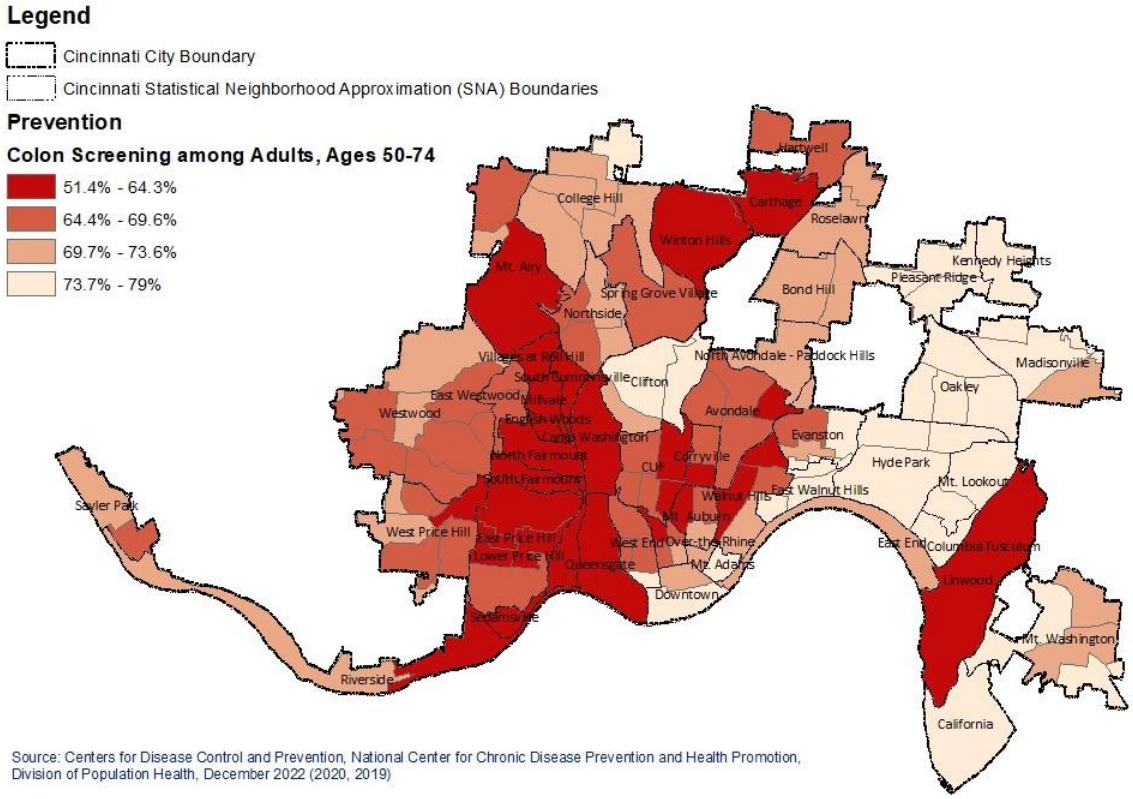
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 48: Cincinnati Adult Females 50-74 Years with Mammography Use (2020)



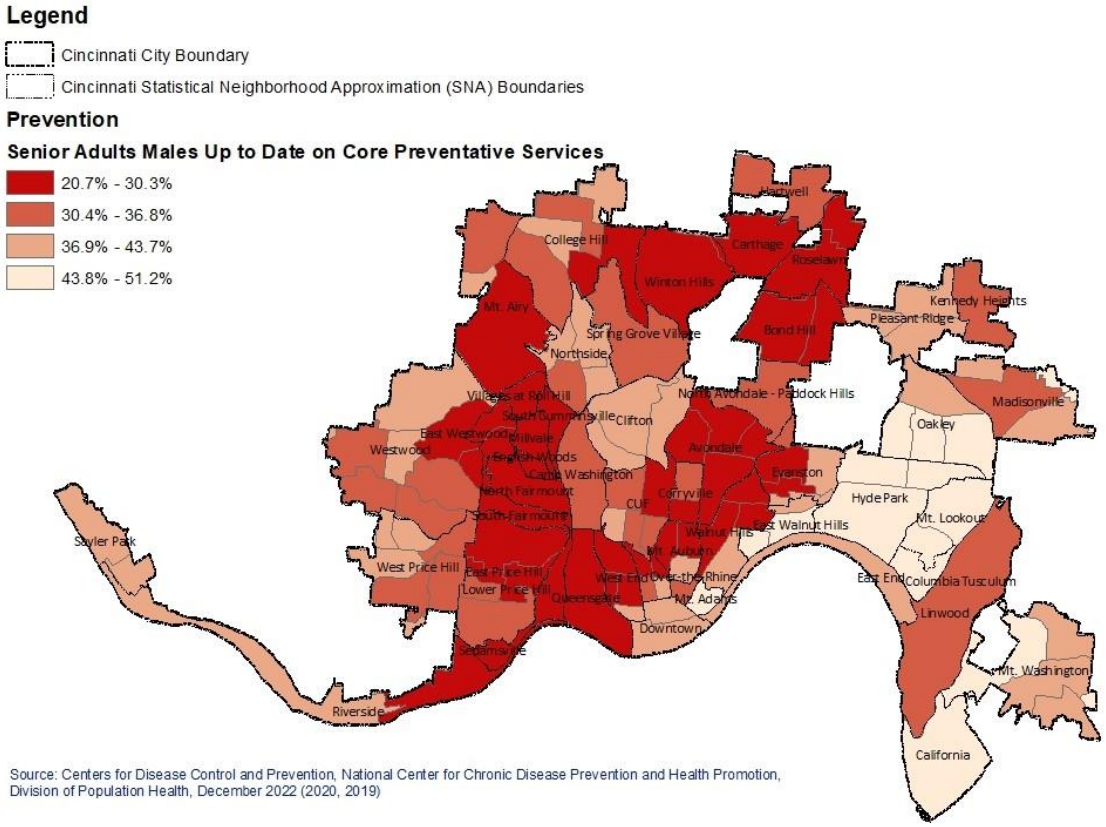
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 49: Cincinnati Adults 50-75 Years with Colon Screening (2020)



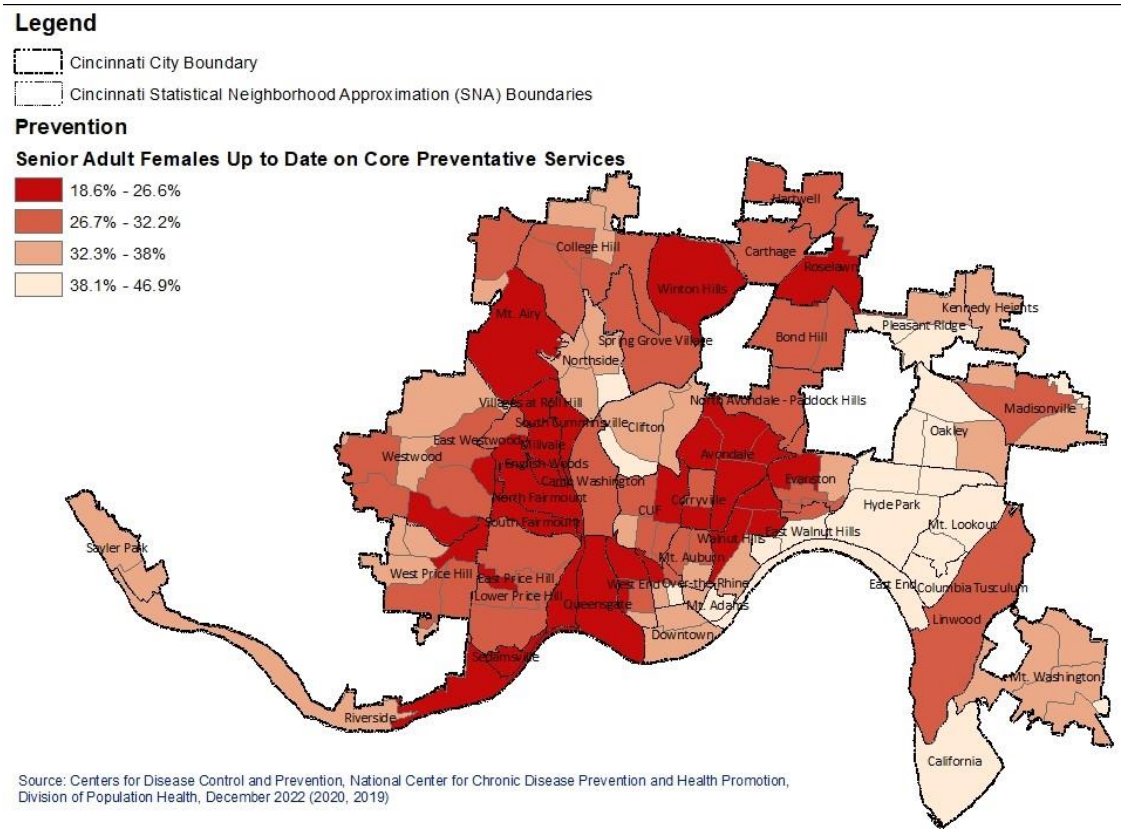
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 50: Cincinnati Senior Adult Males 65+ Years Up to Date on Core Preventative Services (2020)



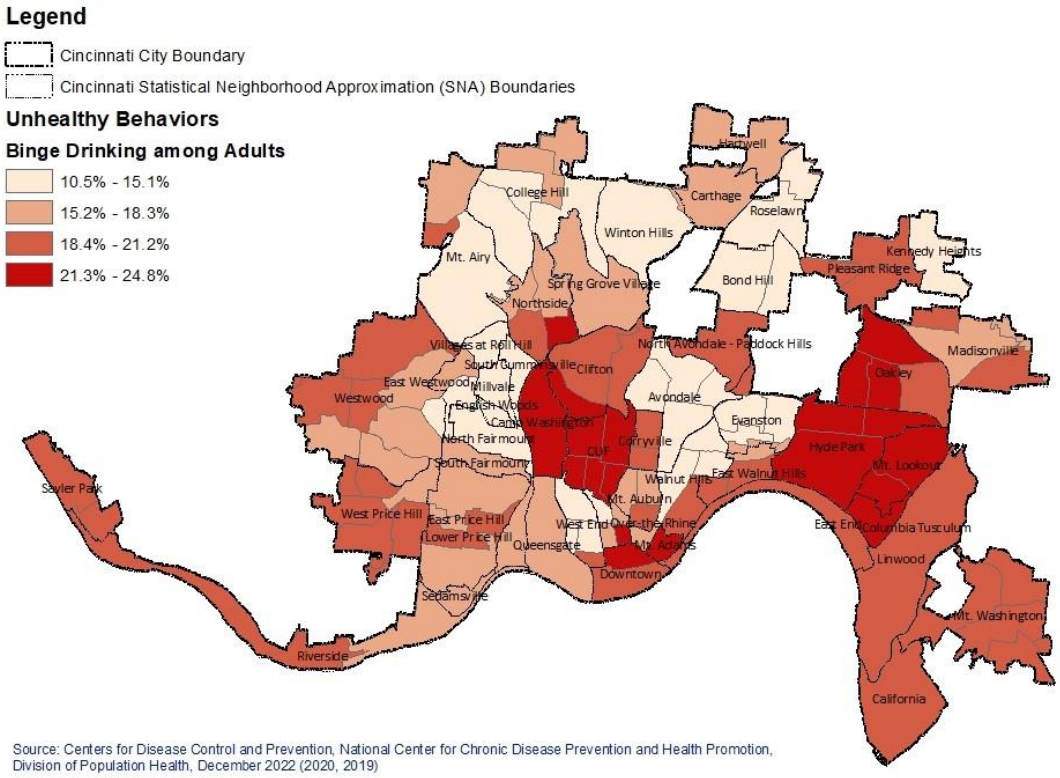
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 51: Cincinnati Senior Adult Females 65+ Years Up to Date on Core Preventative Services (2020)



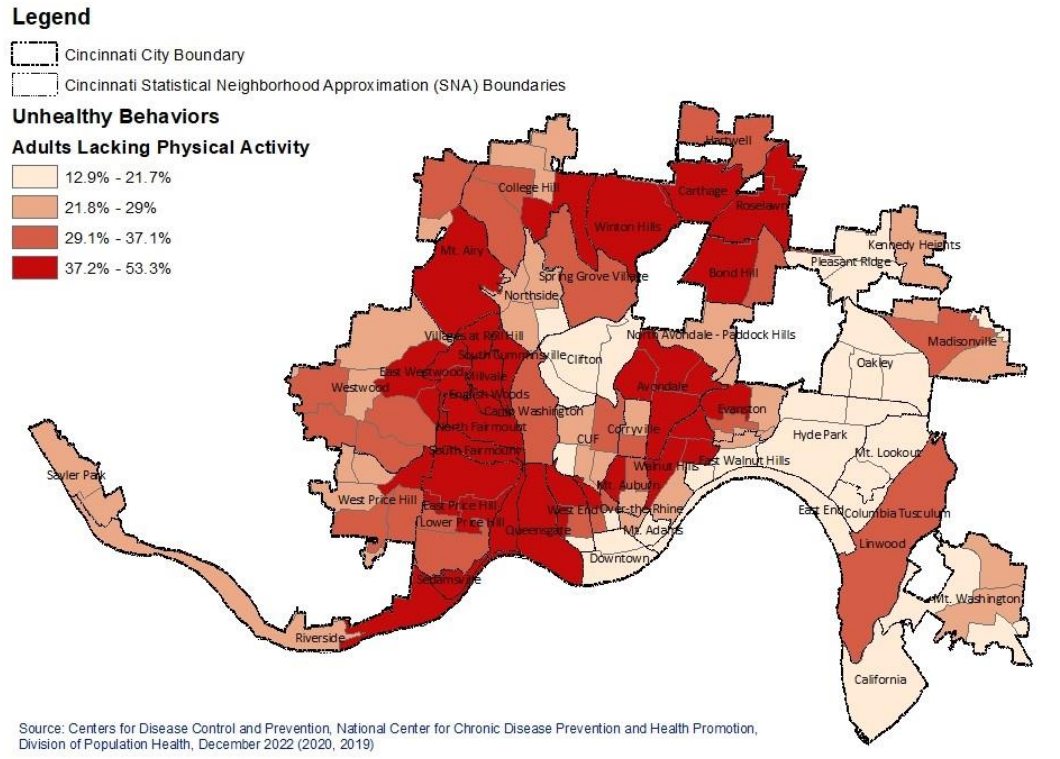
Appendix D: Identifying Geographic Disparities in Adult Unhealthy Behaviors

Map 52: Cincinnati Adults 18+ Years with Binge Drinking (2020)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)

Map 53: Cincinnati Adults 18+ Years with Lack of Leisure-Time Physical Activity (2020)



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health, December 2022 (2020, 2019)