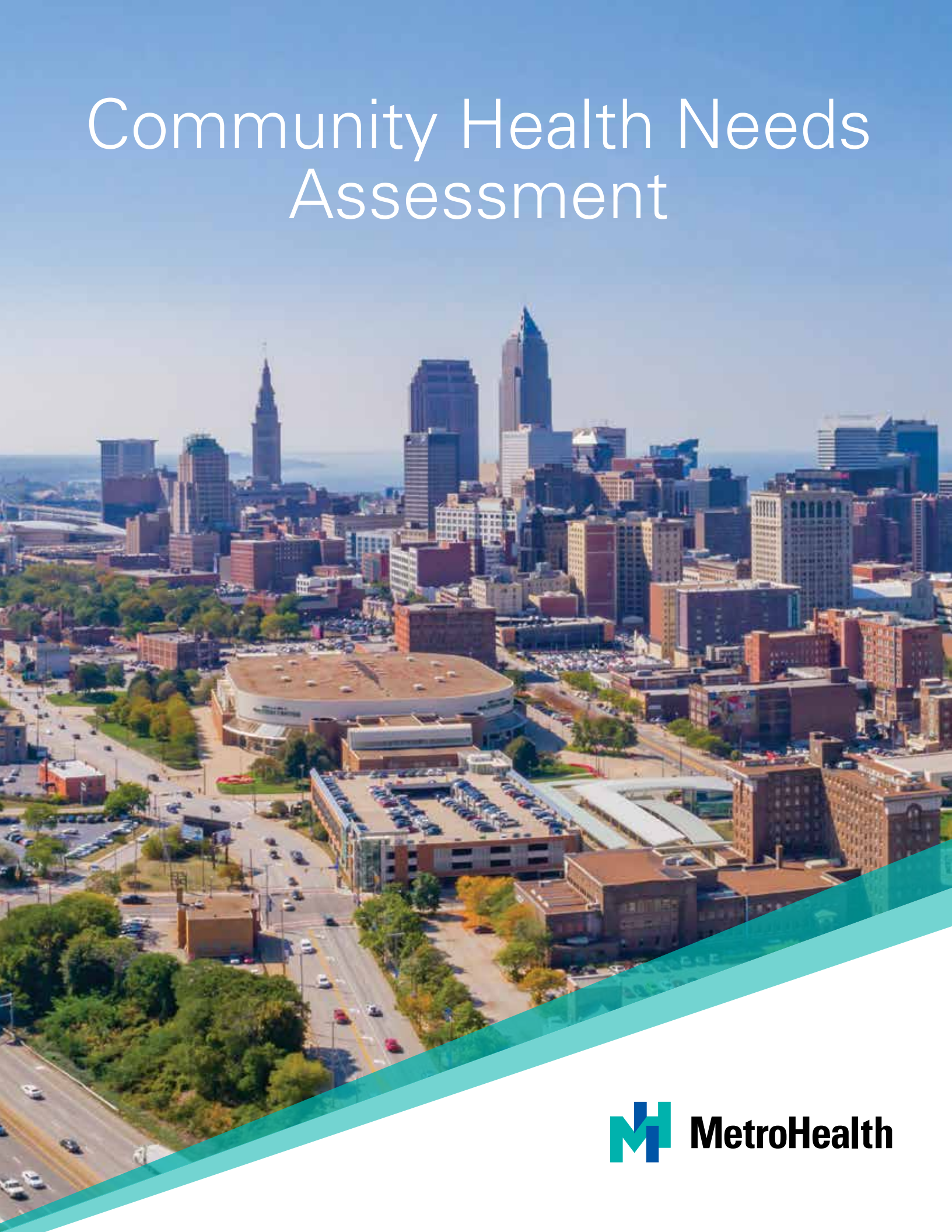
Community Health Needs Assessment



MetroHealth

Community Health Needs Assessment

January 2018

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Letter to the Community

In 2017, with leadership from the Community Engagement Committee of our Board of Trustees, MetroHealth completed a community health needs assessment. Because we are a public health system, we are not required by federal law to conduct such an assessment. We chose to undertake this process to be certain that we understand the needs of our community and how they impact our overall health. As importantly, we want to make sure that we are doing all we can to respond to those needs.

Working with the Center for Community Solutions, we analyzed health data and a long list of social and environmental factors that contribute to individual and community health. And we listened to residents and professionals working in the community. In keeping with our commitment to collaboration, we also searched for ways to align our priorities with those outlined by HIP-Cuyahoga and in Ohio's State Health Improvement Plan and other community assessments. Finally, we engaged the Healthy Communities Institute to review our findings and to provide national perspective.

The following pages provide details on the five health issues that the MetroHealth Board of Trustees, upon the recommendation of the Community Engagement Committee, has approved as the areas of focus for the next three years. In some cases, we have already established a leadership role and we have effective programs and services in place. And we will continue to devote ourselves to those efforts. In other cases, we will forge new ground. But our goal will always be to improve the health of the residents of Cuyahoga County.

Over the coming months we will develop strategies to address these priorities as well as tools to measure our success. We look forward to sharing our progress with you as we continue to fulfill our mission of creating a healthier community for everyone in Cuyahoga County.

We won't stop there. In the future, our hope is to join with other health systems and local health departments to create a shared community health needs assessment and find ways to work together. As a team, we can do even more to solve our community's most pressing health concerns and make Northeast Ohio an even better place to live.

Warm regards,

Akram Boutros, MD, FACHE
President and CEO
The MetroHealth System

MetroHealth

Acknowledgments

The Community Engagement Committee of The MetroHealth System Board of Trustees provided leadership for this community health needs assessment and the selection of the five areas of focus. Committee members include:

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Special thanks to Reverend Tony Minor who served as Chair of the Community Engagement Committee through the initiation of this project and provided guidance and leadership for the community trauma priority.

This report and the five identified areas of focus were approved by The MetroHealth System Board of Trustees on December 20, 2017.

The MetroHealth System contracted with the Center for Community Solutions to conduct the assessment. The Center for Community Solutions is a nonprofit, non-partisan think tank with offices in Cleveland and Columbus, that identifies, analyzes, and explains key health, social, and economic data and issues, and proposes non-partisan solutions to improve the lives of Ohioans. Emily Campbell, Associate Director and Williamson Family Fellow for Applied Research, served as their lead for this project.

To provide a national perspective on this project, MetroHealth worked with Conduent Healthy Communities Institute, a multi-disciplinary team of public health experts, including healthcare information technology veterans, academicians and former senior government officials, all committed to help health-influencing organizations be successful with their projects. Rebecca Yae provided consultation.

We are grateful to Better Health Partnership for providing data and mapping of our patients with uncontrolled diabetes and hypertension.

Many individuals participated in focus groups to help us better understand community conditions and needs. We thank each of them for their time and for contributing their insights and experiences.

Please visit metrohealth.org for more information about The MetroHealth System.

The full report is available electronically at metrohealth.org/community-health-needs-assessment

For information about this report, contact Karen Cook, Manager, Community Health Advocacy Initiative, at kcook@metrohealth.org or (440) 592-1306.

Our Mission

Leading the way to a healthier you and a healthier community through service, teaching, discovery and teamwork.

About Us

The MetroHealth System is an essential health system committed to providing health care to everyone in Cuyahoga County, Ohio, and improving the health of the community overall. Its 7,500 employees deliver care to everyone at its main campus, just west of downtown Cleveland, and at more than 20 other MetroHealth locations. Two new hospitals have recently opened in Cleveland Heights and Parma, and MetroHealth also provides health care at more than 40 additional sites in Cuyahoga County through community partnerships.

MetroHealth is home to Cuyahoga County's most experienced Level I Adult Trauma Center, verified since 1992 by the Committee on Trauma of the American College of Surgeons, and one of two adult and pediatric burn centers in the state of Ohio verified by the American Burn Association. MetroHealth also is home to a verified Level II Pediatric Trauma Center.

In the past year, MetroHealth provided more than 1.3 million patient visits in its hospital and health centers. MetroHealth is also an academic medical center committed to teaching and research; each of its active physicians holds a faculty appointment at Case Western Reserve University School of Medicine. MetroHealth has earned Magnet status, which places it in the top six percent of all hospitals nationwide for nursing excellence.

About This Report

In 2017, with leadership from the Community Engagement Committee of the Board of Trustees, MetroHealth completed a community health needs assessment to better understand the health needs of the community, and to ensure that our community engagement activities are responsive to those needs.

Working with The Center for Community Solutions, a nonprofit, nonpartisan policy and research organization, MetroHealth analyzed existing data on health outcomes and those factors that influence health, looked at patient data and heard from residents and professionals working in the community. The assessment included a review of the health improvement plans of other local organizations, to identify where they might align and where there might be gaps. An examination of unmet health and health-related needs in the community was also conducted.

The assessment was used to help identify five community health priority areas, around which MetroHealth will focus efforts for the next three years.

These priorities are:

- **Reducing infant mortality** – This affirms MetroHealth's existing commitment and leadership to reduce infant mortality, through excellent clinical programs, outreach initiatives and community partnerships, like First Year Cleveland of which MetroHealth is a founding member.
- **Addressing the opioid epidemic** – MetroHealth is a leader in addressing this epidemic through education, advocacy, risk management and treatment, through our Office of Opioid Safety and the Know the Risks campaign. Naming this as a community health priority underscores our ongoing commitment to save lives and reduce the burden of this epidemic.
- **Eliminating racial and ethnic disparities in chronic disease outcomes for MetroHealth patients** – With support from Better Health Partnership, MetroHealth has made significant progress to eliminate racial and ethnic disparities in the standards of care provided to our patients, particularly those with diabetes and hypertension. Despite this, disparities in health outcomes persist. We will explore new ways to improve outcomes, with an emphasis on bridging clinical care and community programs.
- **Community building in the Clark-Fulton neighborhood** –As we transform our main campus, an anchor institution on West 25th Street in Cleveland, we aim to positively influence the surrounding community. This priority upholds our commitment to the many initiatives already underway in the Clark-Fulton neighborhood, while also pointing us toward additional opportunities for community health improvement and economic development.
- **Addressing community trauma in east side neighborhoods** – As an emerging area of focus, we will develop ways to address adverse community conditions and experiences in an effort to build community resilience. We will do this in partnership with faith-based leaders and communities in the Buckeye, Mount Pleasant and Lee Miles neighborhoods of Cleveland.

Secondary Data Sources
County Health Rankings and Roadmaps
Community Health Status Indicators
Ohio Department of Health
National Vital Statistics Report
Summit County Public Health Data Dashboard
CDC 500 Cities Project
Youth Risk Behavior Survey
The Center for Community Solutions
U.S. Census Bureau American Community Survey

Introduction

This report examines secondary data relating to various aspects of health including health conditions, health behaviors, and social determinants. The information was utilized to identify gaps, which were used by MetroHealth to identify potential priorities. Primary data was collected, via focus groups and an analysis of MetroHealth patient data, to further examine several of these priorities. The Center for Community Solutions compiled, analyzed, and reported on secondary data and conducted the gaps analysis and primary data collection.

The geography of interest for this study was Cuyahoga County, Ohio. The county is comprised of over 50 municipalities and has at its center the City of Cleveland. It is a diverse county in terms of racial and ethnic background; socioeconomic status; access to high-quality educational opportunities, jobs, and transportation; and health outcomes. Significant disparities in health outcomes exist by geographic location. In fact, Cuyahoga County Board of Health previously found a 24-year difference in life expectancy between the Hough neighborhood in the City of Cleveland and the community of Lyndhurst, just a short 8.5 miles away. In order to attempt to capture this diversity, data is presented at the smallest meaningful geography. Throughout this report, indicators are presented for the county only, Cleveland versus the rest of the county, municipality and, at times, by census tract. Because of the lack of local health data broken down by race/ethnicity, national indicators of health disparities among these groups are included.

Indicators were selected based on data availability and quality, recommendations from the Centers for Disease Control and Prevention (CDC), and use in other community assessments. Additional indicators were sought which reflect a population health model and the priorities of MetroHealth's Community Engagement Committee. As the chart to the right shows, the largest category of indicators examined relate to health conditions.

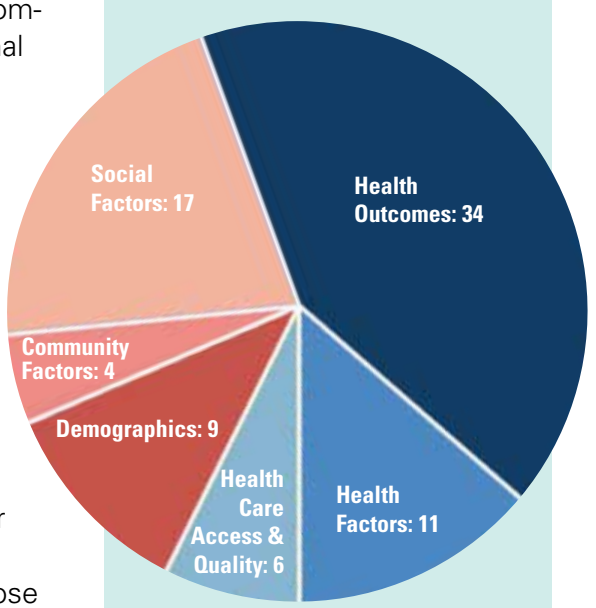
The following data sources were used for the Secondary Data and Gaps Analysis. Other sources used for individual indicators are noted where those data are presented.

County Health Rankings and Roadmaps (CHR): Maintained by the University of Wisconsin Population Health Institute with support from the Robert Wood Johnson Foundation, this database compiles health indicators for all counties in the United States. Counties are ranked within each state on a number of health categories, including environmental and social determinants of health.

Community Health Status Indicators (CHSI): Until recently, this database was maintained by the Centers for Disease Control and Prevention. It provided health profiles for all counties in the United States and compared counties in peer groupings of similar demographic and urban/rural characteristics. As of August 31, 2017, CHSI has been incorporated into the County Health Rankings and Roadmaps system and enables the latter to continue the peer comparisons.

Ohio Department of Health (ODH): In addition to maintaining birth and death records, ODH maintains a statewide cancer registry and provides a number of other state- and county-level health reports, such as lead poisoning data and the Impact of Chronic Disease in Ohio (ICDO), from which some data in the analysis were obtained.

Composition of the Secondary Data Analysis by Number of Indicators



Note: Categories displayed in blue relate directly to health. Those in red are factors which can influence health.

National Vital Statistics Reports (NVSR): Produced by the National Center for Health Statistics, these provided official national benchmarks against which local birth and death data were compared.

Summit County Public Health (SCPH): As a supplement to the death data from ODH, SCPH provides a data dashboard giving more detailed analysis of drug overdoses in Ohio counties. While hosted by Summit County, data is provided for the entire state.

Centers for Disease Control and Prevention – 500 Cities Project (CDC500): The 500 Cities Project is a collaboration between CDC, the Robert Wood Johnson Foundation, and the CDC Foundation. Its purpose is to provide city- and census tract-level small area estimates for chronic disease risk factors, health outcomes, and clinical preventive service use for the largest 500 cities in the United States. The data used are from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), the nation's premier system of health-related telephone surveys. They collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.

Youth Risk Behavior Survey (YRBS): Conducted locally by the Prevention Research Center at Case Western Reserve University, the YRBS is a survey of high school students focusing on their health and risk behaviors.

The Center for Community Solutions (CCS): The Ohio Department of Health has given CCS access to its raw birth certificate data, which was used to compute customized local birth outcomes.

U.S. Census Bureau American Community Survey (ACS): All demographic data in this report are derived from the ACS 2015 five-year sample, unless noted otherwise.

Throughout the report, the breakdown of inner-ring suburbs and balance of county suburbs is as follows (see chart below), unless noted otherwise.

The Gaps Analysis identifies several significant health needs within The MetroHealth System service area. These include disparities in health outcomes especially related to diabetes, heart disease, and asthma; issues facing young children such as infant mortality and elevated blood lead levels; barriers to accessing care (transportation, lack of health insurance); social determinants of health (poverty, unemployment, housing issues); and emerging issues (opioids, older adults, community trauma).

After reviewing the Secondary Data and Gaps Analysis, the Community Engagement Committee identified five potential priorities: reducing infant mortality; addressing the opioid epidemic; eliminating racial disparities in care provided for chronic disease; mitigating community trauma in neighborhoods on the East Side of Cleveland; and community building in the Clark-Fulton neighborhood. Primary data analysis focused on a few of these topic areas. MetroHealth patient data was examined, three key informant focus groups were conducted, and a round table discussion with faith leaders was held.

Inner-Ring	Balance of County			
Berea	Bay Village	Glenwillow	Newburgh Heights	Seven Hills
Brooklyn	Beachwood	Highland Heights	North Olmsted	Solon
Cleveland Heights	Bedford	Highland Hills	North Randall	South Euclid
Cuyahoga Heights	Bedford Heights	Hunting Valley	North Royalton	Strongsville
East Cleveland	Bentleyville	Independence	Oakwood	University Heights
Euclid	Bratenahl	Linndale	Olmsted Falls	Valley View
Fairview Park	Brecksville	Lyndhurst	Olmsted Township	Walton Hills
Garfield Heights	Broadview Heights	Maple Heights	Orange	Westlake
Lakewood	Brook Park	Mayfield Heights	Parma Heights	Woodmere
Parma	Brooklyn Heights	Mayfield	Pepper Pike	
Shaker Heights	Chagrin Falls	Middleburg Heights	Richmond Heights	
Warrensville Heights	Gates Mills	Moreland Hills	Rocky River	

Health Outcomes

Prevalence of various diseases and health conditions, mortality, and underlying health factors are the most direct indicators of the health of a community.

Chronic Disease Prevalence

Alzheimer's Disease: In 2012, 14.4 percent of Medicare fee-for-service beneficiaries in Cuyahoga County were diagnosed with Alzheimer's or other dementias, almost 50 percent higher than the U.S. county median of 10.3 percent. The county fell into the least favorable quartile of peer counties, whose rates ranged from 7.9 to 15.5 percent. (CHSI)

Adult asthma: In 2012, 14.8 percent of Cuyahoga County adults 18 and over reported currently having asthma, higher than both the statewide prevalence (10.5 percent) and the U.S. median of 8.9 percent. (ICDO)

In 2012, 5.2 percent of Medicare fee-for-service beneficiaries age 65 and over in Cuyahoga County were diagnosed with asthma, higher than the U.S. county median of 3.6 percent. The county fell into the least favorable quartile of peer counties, whose rates ranged from 3.0 to 5.6 percent. (CHSI)

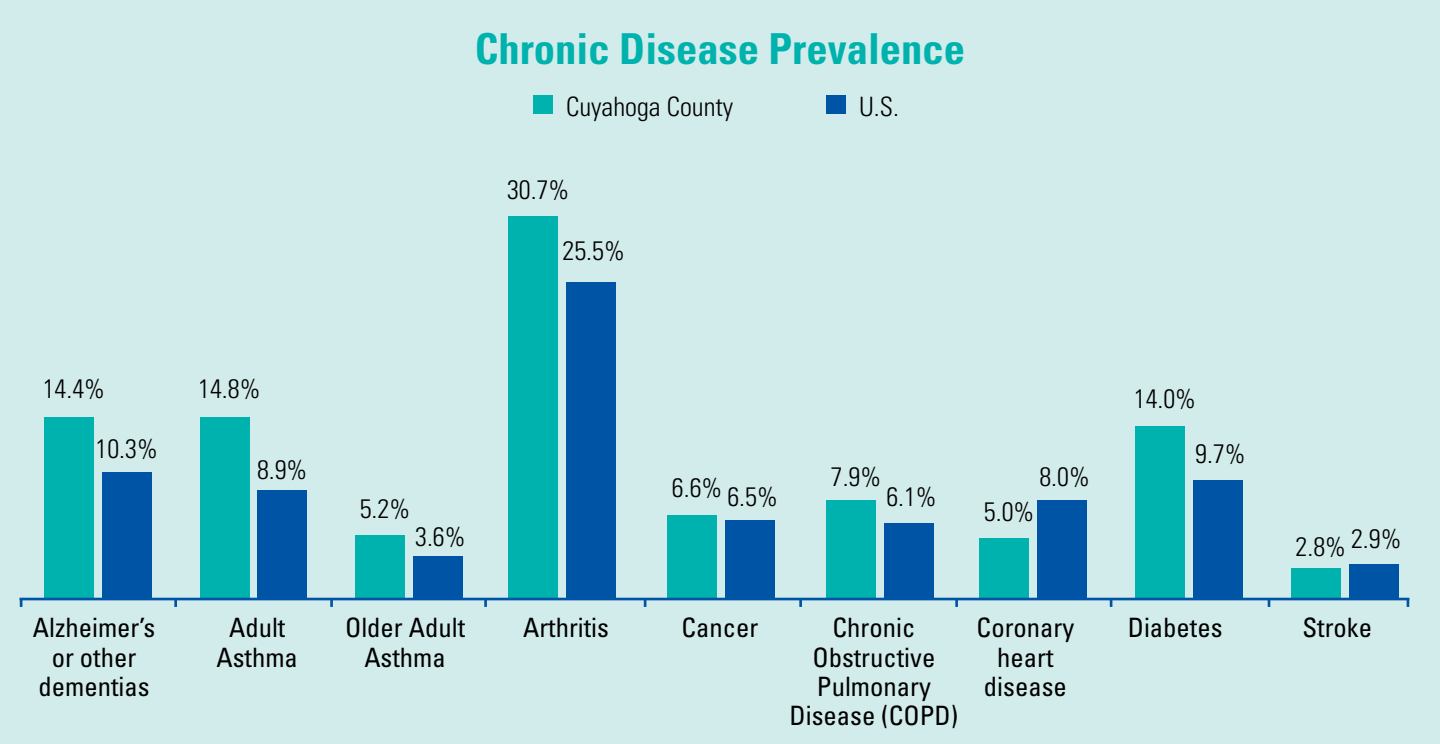
Arthritis: In 2012, almost one-third (30.7 percent) of Cuyahoga County adults reported having been diagnosed with arthritis, close to the Ohio prevalence of 30.0 percent, but higher than the national median rate of 25.5 percent. (ICDO)

Cancer: In 2012, 6.6 percent of Cuyahoga County adults reported having been diagnosed with cancer (excluding skin cancer), identical to the statewide prevalence and close to the national median of 6.5 percent. (ICDO)

Chronic kidney disease: In 2013-2014, an age-adjusted 4.1 percent of Cleveland adults 18 and over and 2.7 percent of Parma adults had chronic kidney disease. These compare to both Ohio and national rates of 2.6 percent. (CDC500)

Chronic obstructive pulmonary disease (COPD): In 2012, 7.9 percent of Cuyahoga County adults reported having been diagnosed with COPD, not significantly different from the Ohio prevalence of 8.6 percent, but higher than the U.S. median of 6.1 percent. (ICDO)

Coronary heart disease: In 2012, 5.0 percent of Cuyahoga County adults reported having been diagnosed with coronary heart



disease or myocardial infarction, lower than the statewide prevalence of 8.0 percent. (ICDO)

Diabetes: In 2012, 14.0 percent of Cuyahoga County adults reported having been diagnosed with diabetes, not significantly different from the statewide prevalence of 11.7 percent, but higher than the national median of 9.7 percent. (ICDO)

Sexually transmitted infections (gonorrhea, syphilis, HIV): In 2012, Cuyahoga County's rate of syphilis infection was 3.4 cases per 100,000 population, putting it in the most favorable quartile of peer counties, whose rates ranged from 0.8 to 61.0. However, the county's gonorrhea rate was 291.9 per 100,000, putting it in the least favorable quartile; peer counties' gonorrhea rates ranged from 32.3 to 363.3. (CHSI)

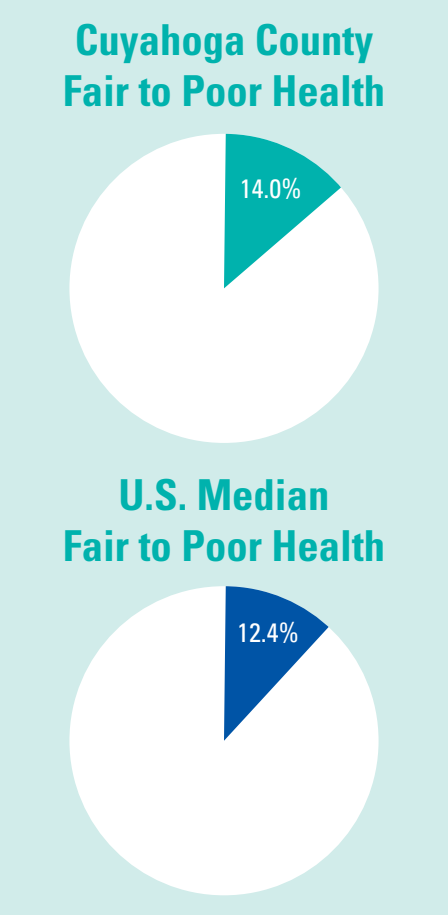
As of 2013, there were 4,122 people living in Cuyahoga County with a diagnosis of HIV, which is a prevalence rate of 385 per 100,000 population. Cuyahoga County has the third highest HIV prevalence rate in the state, after Pickaway and Franklin counties, and the second highest number of people living with HIV. (CHR)

Stroke: In 2012, 2.8 percent of Cuyahoga County adults reported having been diagnosed with a stroke, not significantly different from the Ohio prevalence of 3.1 percent, and close to the national median of 2.9 percent. (ICDO)

Underlying factors

Adult overall health status (fair/poor): In 2005-2011, 14.8 percent of Cuyahoga County adults reported fair to poor health, slightly lower than the national median of 16.5 percent. Peer counties ranged from 8.9 to 19.5 percent of adults in fair to poor health. (CHSI)

Frequent physical distress: In 2015, Cuyahoga County adults reported an average of 3.8 physically unhealthy days in the past month, close to the statewide average of 3.7 days. Ohio counties ranged from 2.7 to 5.1 average unhealthy days. (CHR)

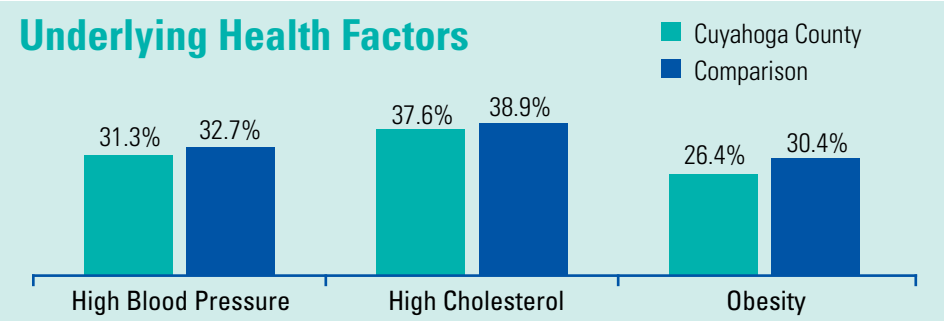


High blood pressure: In 2011, one-third (31.3 percent) of Cuyahoga County adults reported being diagnosed with hypertension, not significantly different from the Ohio rate of 32.7 percent or the national median of 30.8 percent. (ICDO)

High cholesterol: In 2011, 37.6 percent of Cuyahoga County adults reported being diagnosed with high cholesterol, not significantly different from the Ohio prevalence of 38.9 percent or the national median of 38.3 percent. (ICDO)

Adult obesity: In 2006-2012, 26.4 percent of Cuyahoga County adults 20 and over had a body mass index of 30 or more, based on reported height and weight. This is lower than the national median of 30.4 percent; peer counties had rates ranging from 13.1 to 32.1 percent. (CHSI)

Older adult preventable hospitalizations: In 2011, the hospitalization rate for ambulatory-care sensitive conditions in Cuyahoga County was 74.5 per 1,000 Medicare enrollees, slightly higher than the national median of 71.3. However, this placed Cuyahoga in the most unfavorable quartile of peer counties, whose rates ranged from 34.1 to 80.6 per 1,000. (CHSI)



NOTE: The Comparison geography for High Blood Pressure and High Cholesterol is Ohio. For Obesity, the U.S. average is shown.

Mortality

Life expectancy (male/female): Life expectancy at birth in 2010 was 74.9 years for Cuyahoga County males and 79.9 years for females, slightly lower than the national averages of 76.2 for males and 81.0 for females. (CHSI/NVSR)

Leading cause of death: Age-adjusted death rates for the seven leading causes of death in 2014 are as follows (rates are per 100,000 population) (ODH/NVSR)

Death Rates for Chronic Diseases: Cuyahoga County fares worse than the state on nearly all death rates for major chronic diseases. Cuyahoga County's death rate for diabetes is marginally better than the state and the nation. The death rate for heart disease in Cuyahoga County is particularly alarming, as it is worse than the state and national rates by a wide margin.

Leading Cause of Death

	Cuyahoga County	Ohio	United States
1. Heart Disease	193.9	186.2	167.0
2. Cancer	179.0	177.6	161.2
3. Chronic Lower Respiratory Disease	36.8	47.2	40.5
4. Accidents	41.0	50.6	40.5
5. Stroke	34.8	40.0	36.5
6. Alzheimer's	18.9	27.7	25.4
7. Diabetes	22.1	25.6	20.9

Mortality by age group
(includes child, infant mortality) (ODH/NVSR)
Age-specific death rates per 100,000 population in 2014:

Age	Cuyahoga County	United States
< 1	808.4	588.0
1 - 4	24.1	24.0
5 – 14	10.7	12.7
15 – 24	60.4	65.5
25 – 34	133.5	108.4
35 – 44	221.7	175.2
45 – 54	450.2	404.8
55 - 64	987.2	870.3
65 – 74	1,988.8	1,786.3
75 – 84	4,646.6	4,564.2
85+	13,978.9	13,407.9

Motor Vehicle deaths: There were 5.7 motor vehicle deaths per 100,000 population in Cuyahoga County in the 2005-2011 period, one-third the median rate for U.S. counties (19.2). Cuyahoga's rate was in the lowest quartile among peer counties, which ranged from 4.3 to 17.5. (CHSI)

Alcohol-impaired driving deaths: 45 percent of driving deaths in the county involved alcohol in 2011-2015, one-third higher than the statewide rate of 34 percent. The rate in all Ohio counties ranged from 12 to 56 percent.(CHR)

Death Rate for Chronic Diseases, per 100,000 Population

	Cuyahoga	Ohio	U.S.
Heart Disease	213.9	191.4	192.7
Cancer	187.1	177.8	161.2
Chronic Lower Respiratory Disease	51.2	47.2	40.5
Stroke	53.2	40	36.5
Diabetes	23.3	26.1	24
Kidney Disease	20	14.1	13.2

(Cuyahoga County Board of Health, Health Data Portal; National Cancer Institute; CDC; Ohio Department of Health) Note: Measurement periods vary, but most recent data available are included.

Deaths by despair (intentional self-harm, chronic liver disease, accidents): There were 964 "deaths by despair" in the county in 2016, constituting 5.3 percent of all deaths. The median age for these deaths was 49.6. Cuyahoga's rate was in the lowest quartile among Ohio counties, which ranged from 2.7 to 8.1 percent. (ODH/SCPH)

Premature age-adjusted mortality: Cuyahoga County counted 7,800 years of potential life lost (before age 75) per 100,000 population in 2012-2014, slightly higher than the statewide rate of 7,600. Among Ohio counties, the rate ranged from 4,100 to 12,100. (CHR)

Drug overdose deaths: The rate of drug overdose deaths in the county was 23 per 100,000 in 2013-2015. The statewide rate was 24, and county rates ranged from 8 to 46. (CHR)

Behavioral Health

Drug overdose emergency room visits: In 2016, there were 3,396 emergency room visits for drug overdoses in Cuyahoga County, 50 percent higher than in 2015. In 2017, there were already 2,937 visits for overdoses from January through July. (ODH/SCPH)

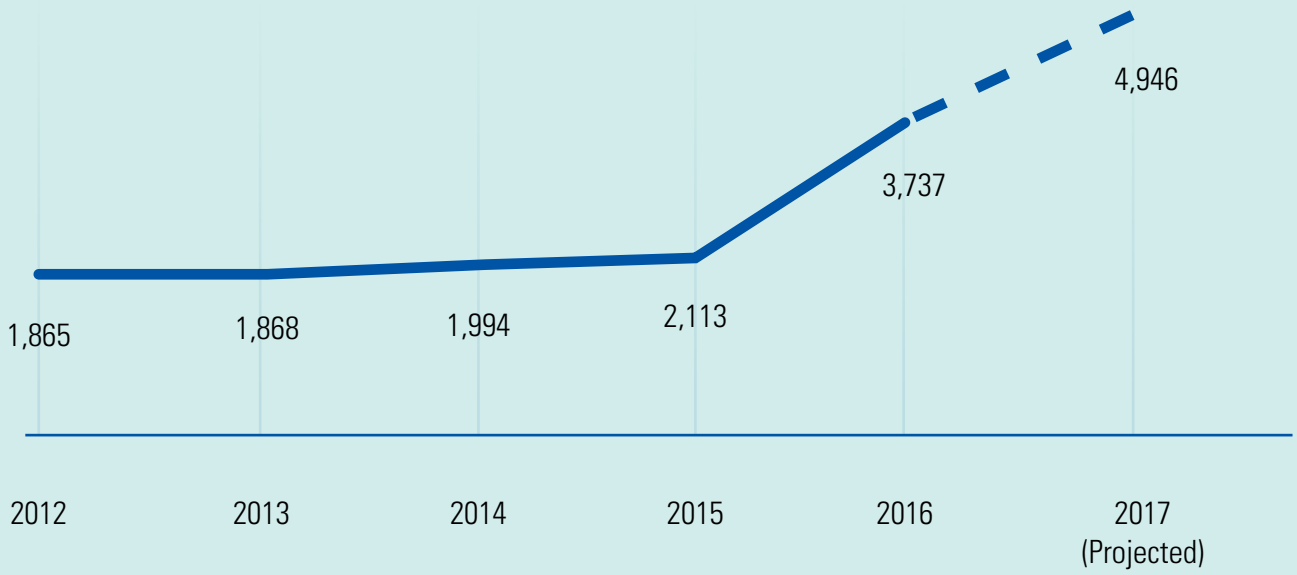
Estimated drug overdoses: In 2016, the estimated overdose rate in the county was 2.7 per 1,000 population, three times the rate of 0.8 in 2015. (ODH/SCPH)

Frequent mental distress: In 2015, Cuyahoga County adults reported an average of 4.0 mentally unhealthy days in the past month, identical to the statewide rate. Ohio counties ranged from 3.2 to 4.7 average mentally unhealthy days. (CHR)

Youth mental health: In 2013, 25.6 percent of 9th to 12th graders in Cuyahoga County reported feeling so sad or hopeless for two or more weeks that they stopped doing some usual activities. This is similar to the statewide rate of 25.8 percent, but lower than the national rate of 33.3 percent. (YRBS)

Older adult depression (65+): In 2012, 14.0 percent of Medicare fee-for-service beneficiaries in Cuyahoga County were diagnosed with depression, slightly higher than the U.S. county median of 12.4 percent. Among peer counties, the rate ranged from 8.6 to 17.0 percent. (CHSI)

Estimated Drug Overdoses – Cuyahoga County



Note: Projected figure for 2017 is based on the actual number of overdoses through the end of August, if the current trend continues for the rest of the year.

Birth Outcomes

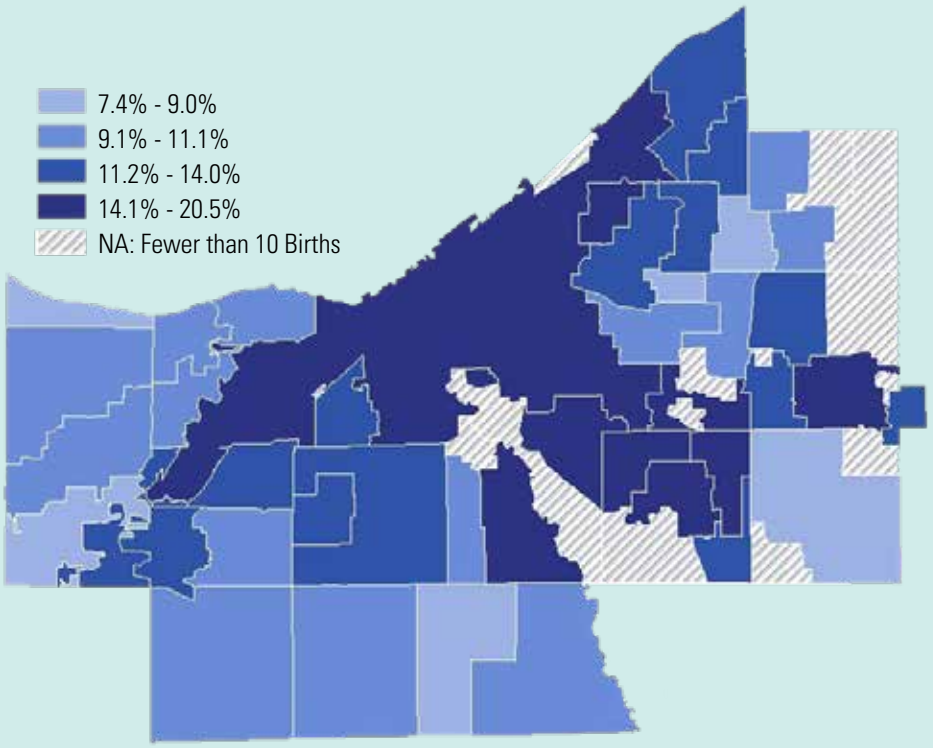
Births to unmarried mothers: In 2015, 51.7 percent of births in Cuyahoga County were to unmarried mothers, compared to 43.3 percent in Ohio, and 40.3 percent nationally. (CCS/ODH/NVSR)

Births to teen mothers: There were 25.9 births per 1,000 females 15 to 19 in the county in 2015, compared to 23.1 in Ohio and 22.3 in the United States. (CCS/ODH/NVSR)

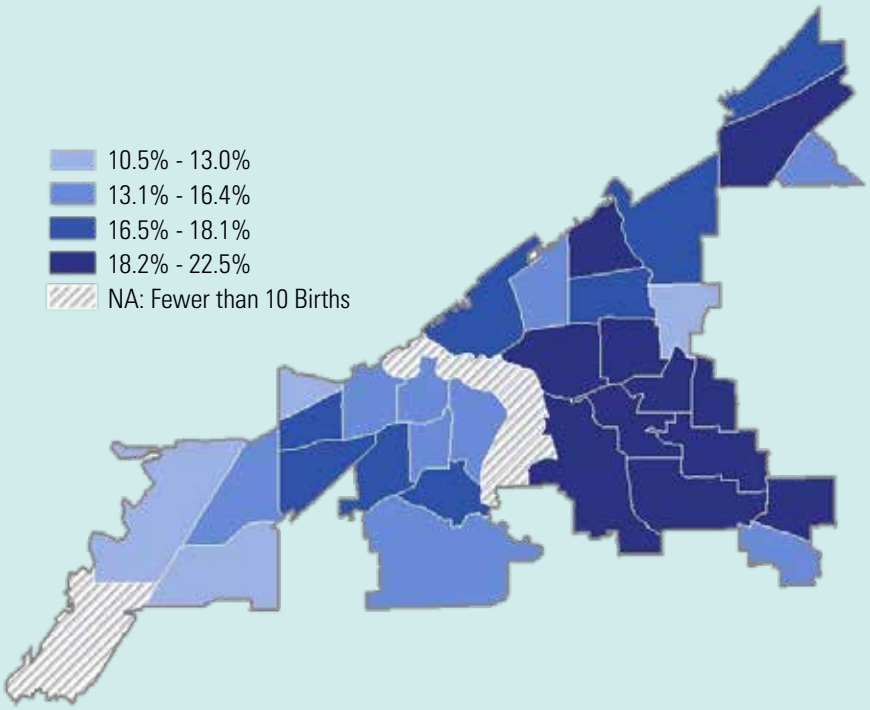
Low birth weight (< 2,500g): 10.7 percent of births in Cuyahoga County were low-weight in 2015, compared to 8.5 percent in Ohio and 8.1 percent nationally. (CCS/ODH/NVSR)

Preterm births (<37 weeks): In 2015, 14.1 percent of births in Cuyahoga County were premature, compared with 12.2 percent in Ohio and 9.6 percent in the United States. (CCS/ODH/NVSR)

Percent Preterm Births (Less than 37 weeks) Cuyahoga County Municipalities, 2010-2014



Percent Preterm Births (Less than 37 weeks) Cleveland Neighborhoods, 2010-2014



Source: Ohio Department of Health

Racial/Ethnic Disparities

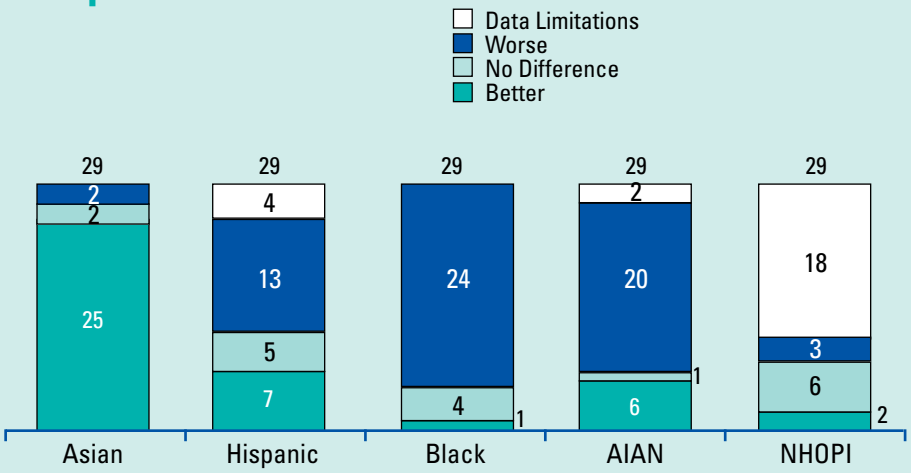
Unfortunately, very little health data is available broken down into smaller geographies or for population categories, such as by race/ethnicity. This makes it difficult to examine the disparities for various groups within the community. However, both local specialized studies and national data show stark differences in the impact of health outcomes and health factors on individuals based on race/ethnicity.

Standards of Diabetes Outcomes: Better Health Partnership, a Regional Health Care Improvement Collaborative, examined records from 79 practices in nine health systems for 195,897 adults with chronic conditions. They found that individuals who were African-American were less likely to meet standards of diabetes outcomes (43 percent) than Hispanics or Whites (49 percent).

Kaiser Analysis: After examining national data from the CDC, Kaiser Family Foundation found that Blacks fared worse than Whites on more than 80 percent of health status and outcome measures. These differences were statistically significant. Blacks and Hispanics were also more likely to report having Asthma and having been told by a doctor that they have Diabetes.

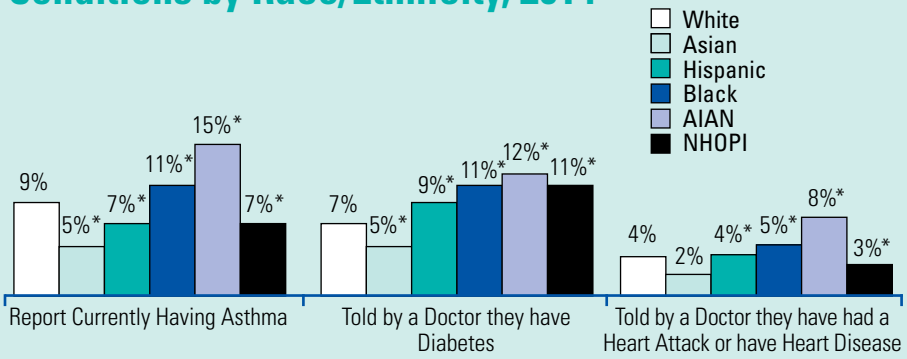
The disparities between Whites and Blacks persist to mortality rates. The age-adjusted death rates for diabetes, heart disease, and cancer are significantly higher for Blacks than for Whites. One contributing factor could be the fact that a greater share of Black or Hispanic non-elderly patients said that they delayed seeking or receiving care, both for cost and other reasons.

Number of Health Status and Outcome Measures Which Groups Fared Better, the Same or Worse Compared to Whites



Note: Better or Worse indicates a statistically significant difference from White population at the p<0.05 level. No difference indicates there was no statistically significant difference. Data limitations indicates data are not available separately for a racial/ethnic group, insufficient data for a reliable estimate, or comparison not possible to Whites due to overlapping samples. AIAN refers to American Indians and Alaska Natives. NHOPI refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic.

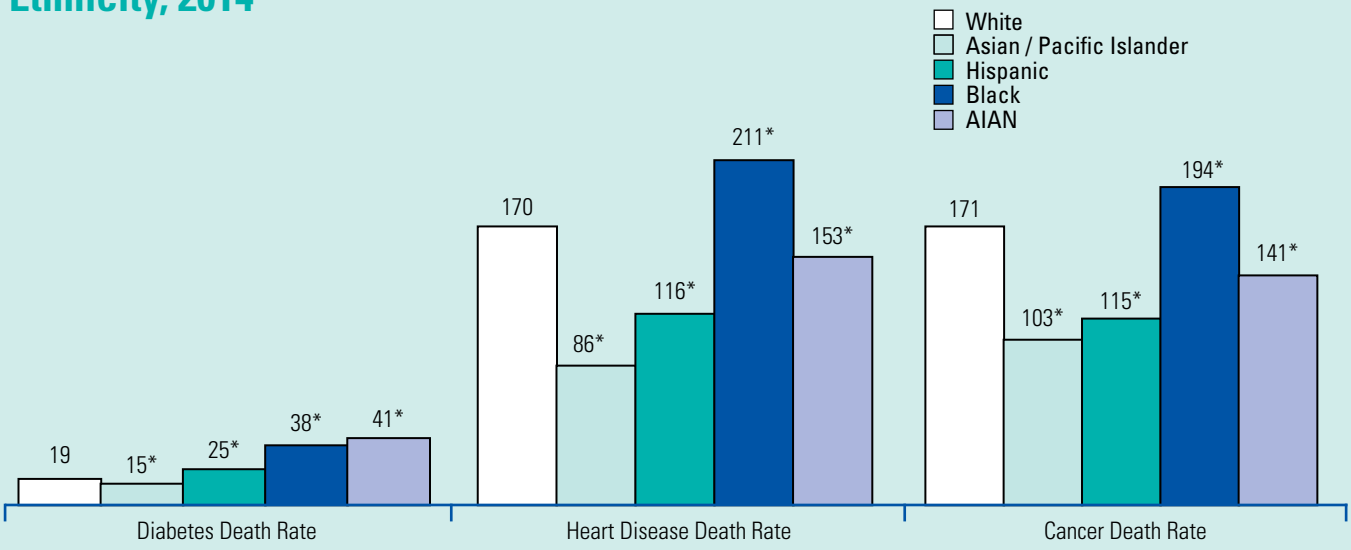
Percent of Nonelderly Adults with Selected Health Conditions by Race/Ethnicity, 2014



**Indicates statistically significant difference from White population at the p<0.05 level.*
Note: AIAN refers to American Indians and Alaska Natives. NHOPI refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Includes nonelderly individuals 18-64 years of age. N/A: Point estimates do not meet minimum standards for statistical reliability.

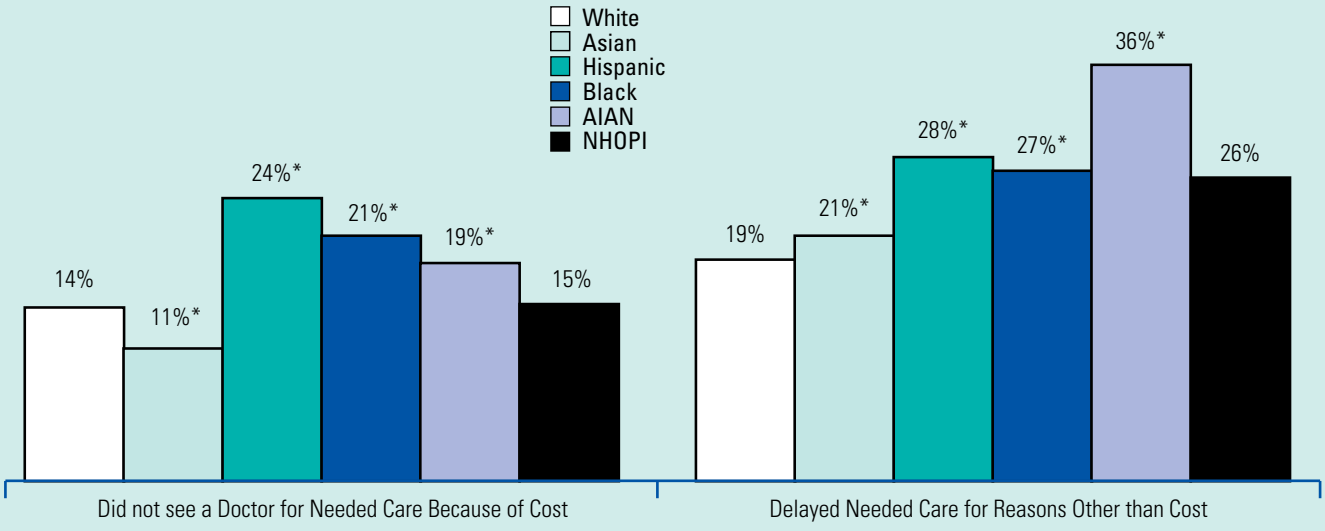
Source of graphics: Disparities in Health and Health Care: Five Key Questions and Answers (The Henry J. Kaiser Family Foundation, August, 2016)

Age-Adjusted Death Rates per 100,000 for Selected Diseases by Race/ Ethnicity, 2014



**Indicates statistically significant difference from White population at the p<0.05 level.*
Note: AIAN refers to American Indians and Alaska Natives. NHOPI refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Data for native Hawaiians and Other Pacific Islanders were not separated from Asians. Data for some groups should be interpreted with caution; see wonder.cdc.gov/wonder/help/ucd.html#Racial. Source: Centers for Disease Control and Prevention, National Center for Health Statistics, WONDER Online Database, Underlying Cause of Death, 2014.

Percent of Nonelderly Adults who did not Receive or Delayed Care in the Past 12 Months by Race/Ethnicity, 2014



**Indicates statistically significant difference from White population at the p<0.05 level.*
Note: AIAN refers to American Indians and Alaska Natives. NHOPI refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Includes nonelderly individuals 18-64 years of age. Source: Kaiser Family Foundation analysis of CDC, Behavioral Risk Factor Surveillance System, 2014.

Source: Disparities in Health and Health Care: Five Key Questions and Answers (The Henry J. Kaiser Family Foundation, August, 2016)

Geographic Disparities

The 500 Cities project provides high-quality small area estimates for chronic disease factors, health outcomes, and clinical preventive services for the largest 500 cities in the United States. Two communities in Cuyahoga County, Cleveland and Parma, are included, so census tract data on these factors are available for those communities. 500 Cities is a collaboration of the CDC, Robert Wood Johnson Foundation, and CDC Foundation.

Compared to age-adjusted state prevalence, Parma residents fare well on most indicators included in the 500 Cities project. Exceptions are binge drinking among adults (21.3 percent for Parma and 19.5 percent for Ohio), and no leisure-time activity among adults (22.6 percent for Parma and 24.1 percent for Ohio).

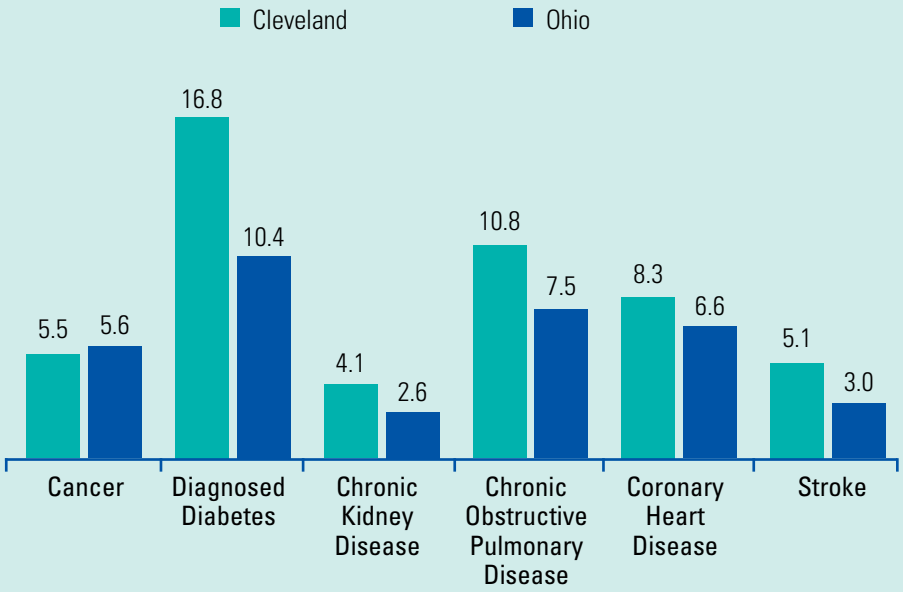
For Cleveland, adult obesity, high blood pressure among adults, and diagnosed diabetes prevalence are all well above state prevalence.

In addition, residents of Cleveland are more likely to engage in many unhealthy behaviors than their peers across the state. Cuyahoga County is also above state averages for most unhealthy behaviors.

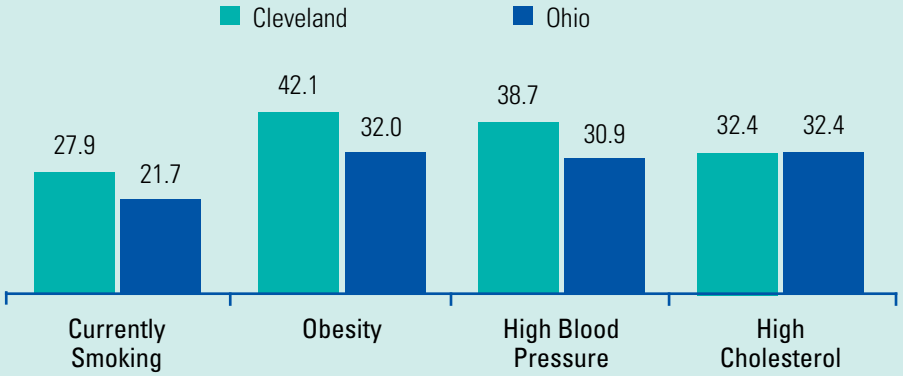
The census tracts where prevalence of certain chronic diseases are highest tend to align with areas of the City of Cleveland with the greatest share of African-American residents. This suggests that racial disparities observed at the national level are reflected in local trends. An example is provided below.

Of particular concern was the share of adults reporting 14 or more days where their mental health or physical health was not good. Cleveland's rate for mental health is 17.2 percent, compared to 13.1 percent for the state and the national prevalence of 11.5. The physical health prevalence for Cleveland was 18.4 percent versus 11.9 percent for Ohio and 11.6 percent for the U.S.

Health Outcomes, Age-Adjusted Prevalence among adults 18 years and older

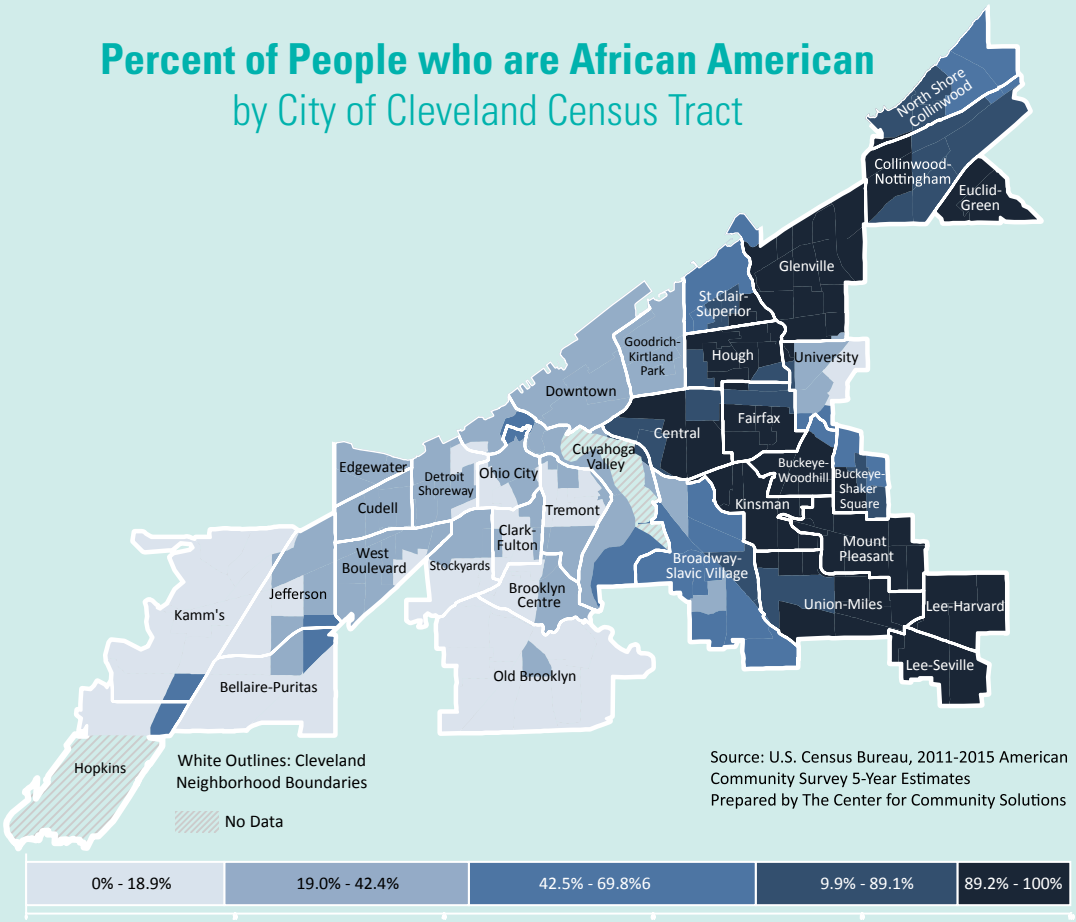


Unhealthy Behaviors and Related Outcomes, Age-Adjusted Prevalence among adults 18 years and older

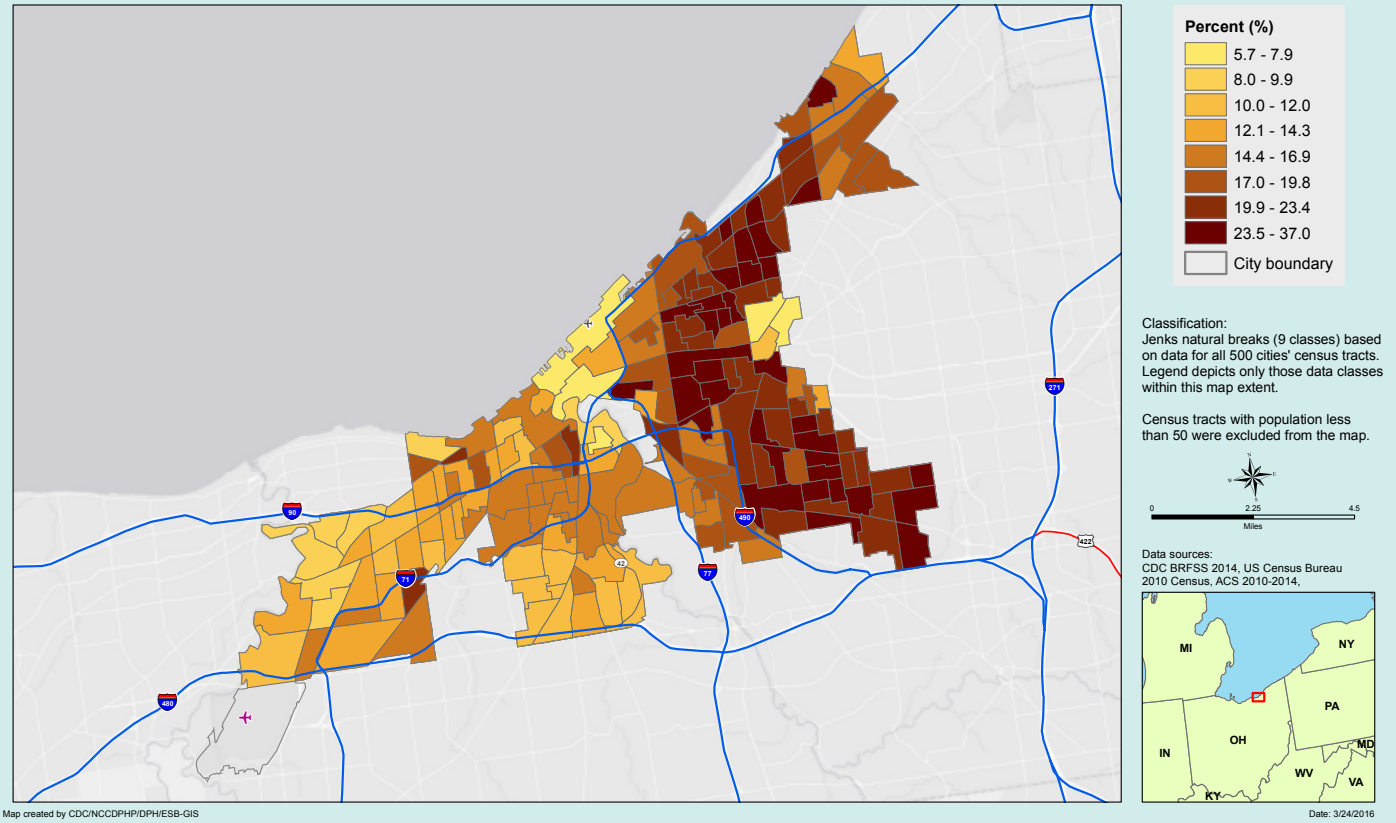


Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. 500 Cities Project Data, 2016

Percent of People who are African American
by City of Cleveland Census Tract

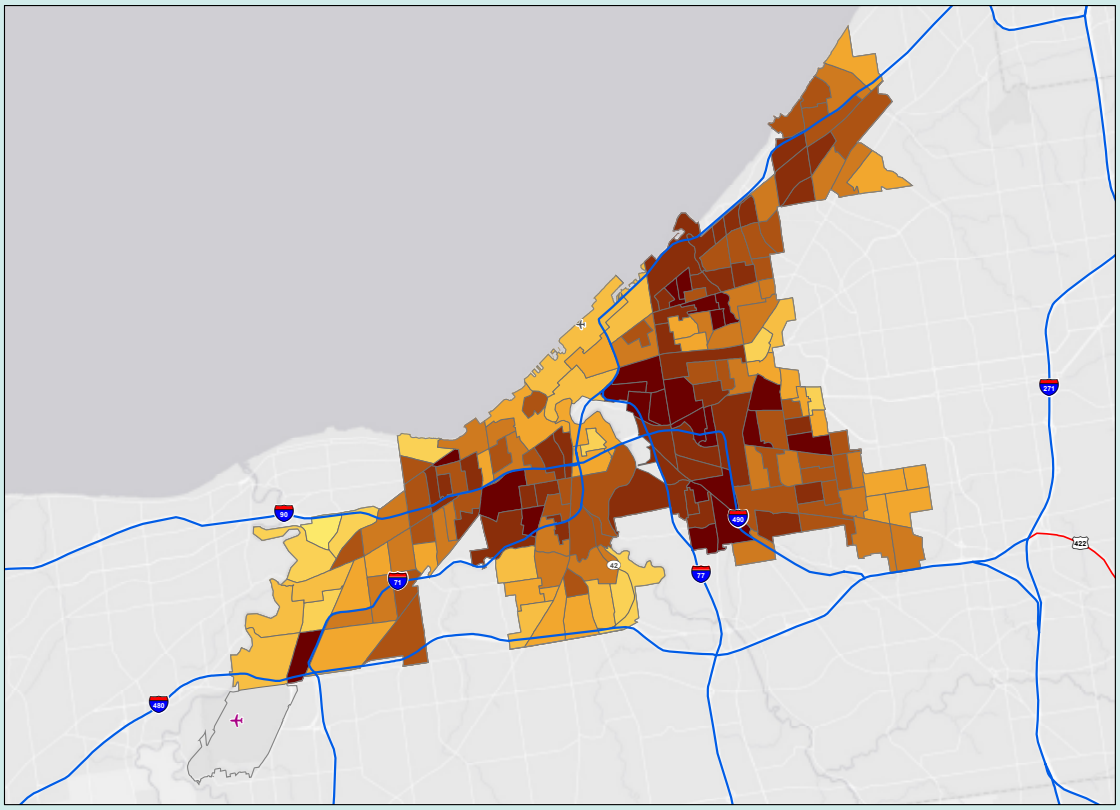


Diagnosed diabetes among adults aged ≥ 18 years
by Census Tract, Cleveland, OH, 2014



Mental health not good for ≥ 14 days among adults aged ≥ 18 years

by Census Tract, Cleveland, OH, 2014



Percent (%)

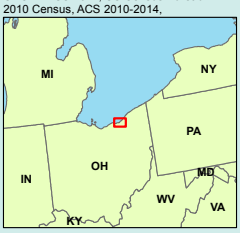
- 8.5 - 10.1
- 10.2 - 11.8
- 11.9 - 13.6
- 13.7 - 15.4
- 15.5 - 17.2
- 17.3 - 19.1
- 19.2 - 21.5
- 21.6 - 30.3
- City boundary

Classification:
Jenks natural breaks (9 classes) based on data for all 500 cities' census tracts. Legend depicts only those data classes within this map extent.

Census tracts with population less than 50 were excluded from map.

0 2.25 4.5
Miles

Data sources:
CDC BRFSS 2014, US Census Bureau 2010 Census, ACS 2010-2014,

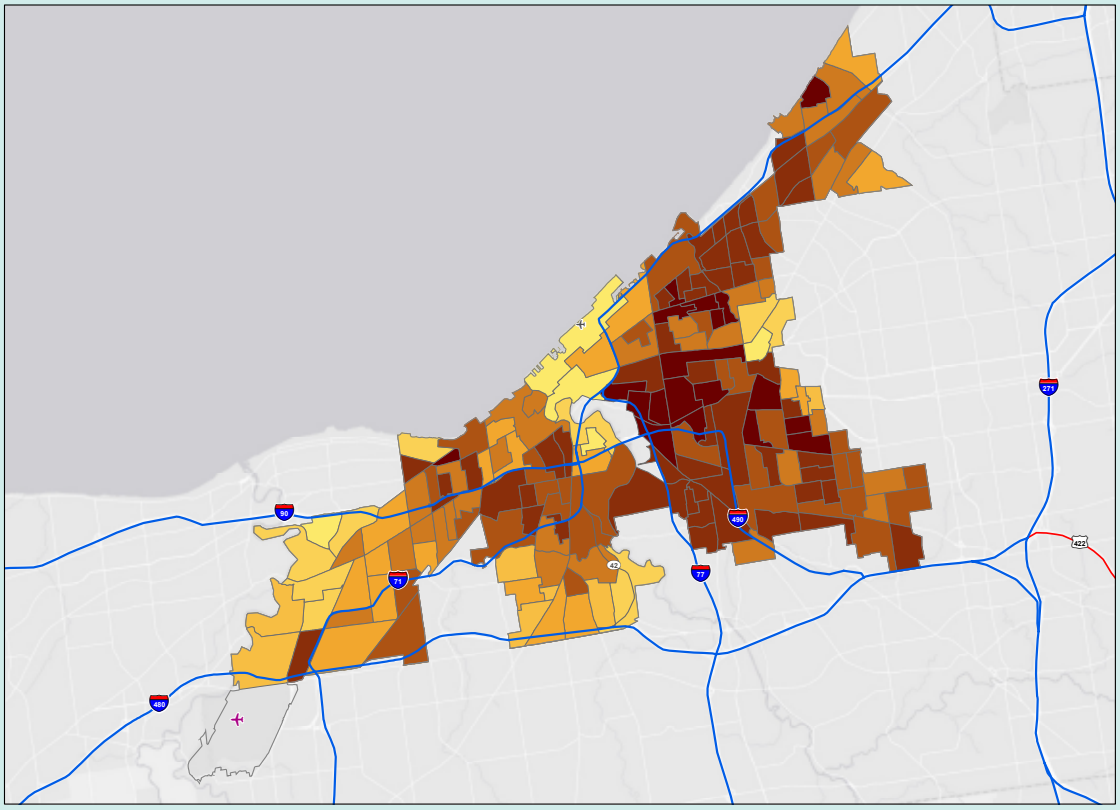


Map created by CDC/NCCDPHP/DPH/ESB-GIS

Date: 3/25/2016

Physical health not good for ≥ 14 days among adults aged ≥ 18 years

by Census Tract, Cleveland, OH, 2014



Percent (%)

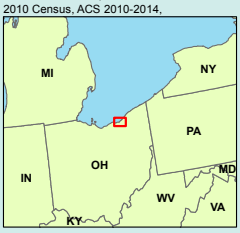
- 7.9 - 9.9
- 10.0 - 11.9
- 12.0 - 14.0
- 14.1 - 16.2
- 16.3 - 18.5
- 18.6 - 21.0
- 21.1 - 24.2
- 24.3 - 37.1
- City boundary

Classification:
Jenks natural breaks (9 classes) based on data for all 500 cities' census tracts. Legend depicts only those data classes within this map extent.

Census tracts with population less than 50 were excluded from map.

0 2.25 4.5
Miles

Data sources:
CDC BRFSS 2014, US Census Bureau 2010 Census, ACS 2010-2014,



Map created by CDC/NCCDPHP/DPH/ESB-GIS

Date: 3/29/2016

Health Factors

Health Factors include measures of health and healthy behaviors as well as rates of preventive screenings. Cuyahoga County adults reported slightly higher rates of unhealthy behaviors than the state or nation as a whole.

Healthy/ Unhealthy Living

Adult Binge Drinking: In 2015, 18 percent of Cuyahoga County adults reported binge drinking (five or more drinks for men or four or more drinks for women) on one or more occasions in the past 30 days. This is close to the statewide rate of 19 percent; for counties across the state, the rates ranged from 15 to 23 percent. (CHR)

Adult physical inactivity: In 2006-2012, 24.5 percent of Cuyahoga County adults reported no leisure time activity in the past month, close to the national median of 25.9 percent. Peer counties ranged from 14.5 to 30.0 percent. (CHSI)

Adult smoking: In 2015, 19 percent of Cuyahoga County adults reported smoking most every day, slightly lower than the statewide rate of 22 percent. Ohio counties ranged from 14 to 25 percent. (CHR)

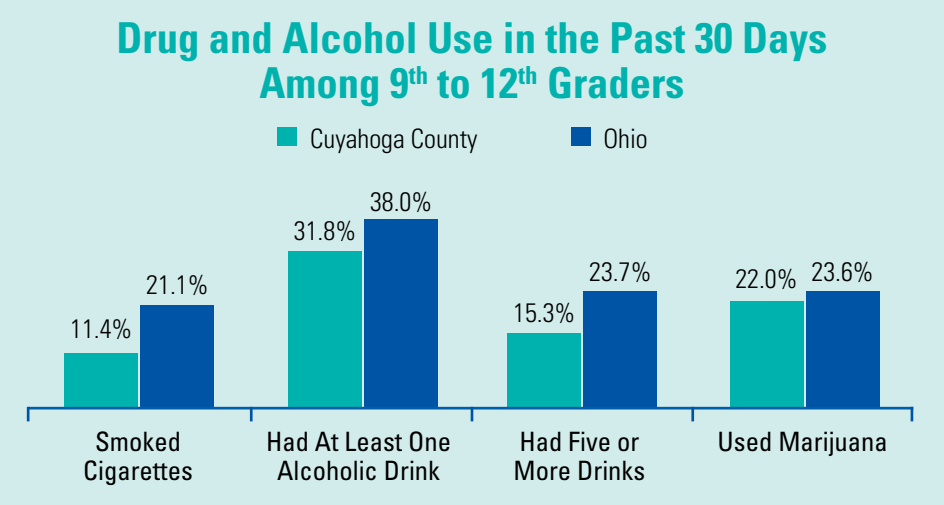
Insufficient sleep: In 2014, 38 percent of Cuyahoga County adults reported averaging fewer than seven hours of sleep, close to the Ohio rate of 37 percent. The rates for Ohio counties ranged from 32 to 41 percent. (CHR)

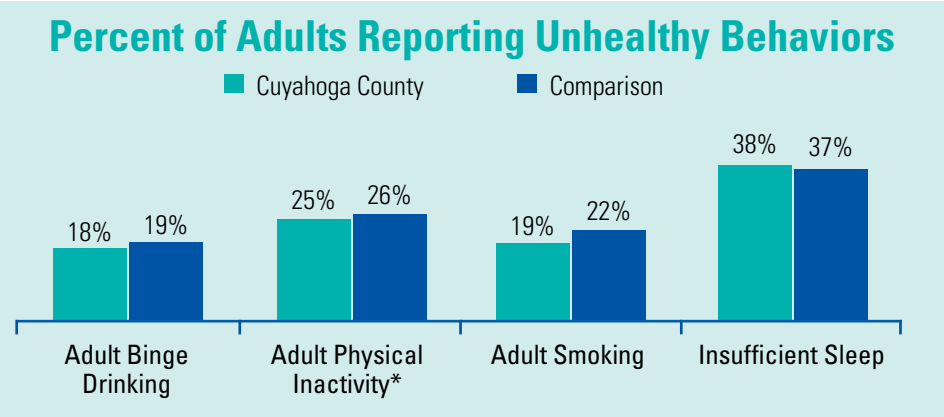
Youth drug & alcohol use: In 2011, of 9th to 12th graders in Cuyahoga County:

- 11.4 percent had smoked cigarettes at least once in the past 30 days, compared to 21.1 percent statewide
- 31.8 percent had at least one alcoholic drink in the past 30 days, compared to 38.0 percent statewide
- 15.3 percent had five or more drinks on at least one occasion in the past 30 days, compared to 23.7 percent statewide
- 22.0 percent had used marijuana at least once in the past 30 days, compared to 23.6 percent statewide. (YRBS)

Youth sexual behavior: In 2011, of 9th to 12th graders in Cuyahoga County:

- 33.0 percent had sexual intercourse with one or more persons in the past three months, compared to 41.8 percent statewide
- 7.4 percent had sexual intercourse for the first time before age 13, compared to 6.1 percent statewide
- Among those currently sexually active, 64.7 percent used a condom before their most recent sexual intercourse, compared to 50.8 percent statewide (2013)
- 92.1 percent had been taught in school about AIDS or HIV infection, compared to 85.2 percent statewide. (YRBS)





**NOTE: The Comparison geography for Binge Drinking, Smoking, and Insufficient Sleep is Ohio. For Physical Inactivity, the U.S. average is shown.*

Preventive Screenings

Female routine PAP tests: In 2006-2012, 81.9 percent of adult women in Cuyahoga County reported having had a pap test in the past three years, higher than the national median of 77.3 percent, and in the most favorable quartile of peer counties. The rates for all peer counties range from 69.1 to 86.3 percent. (CHSI)

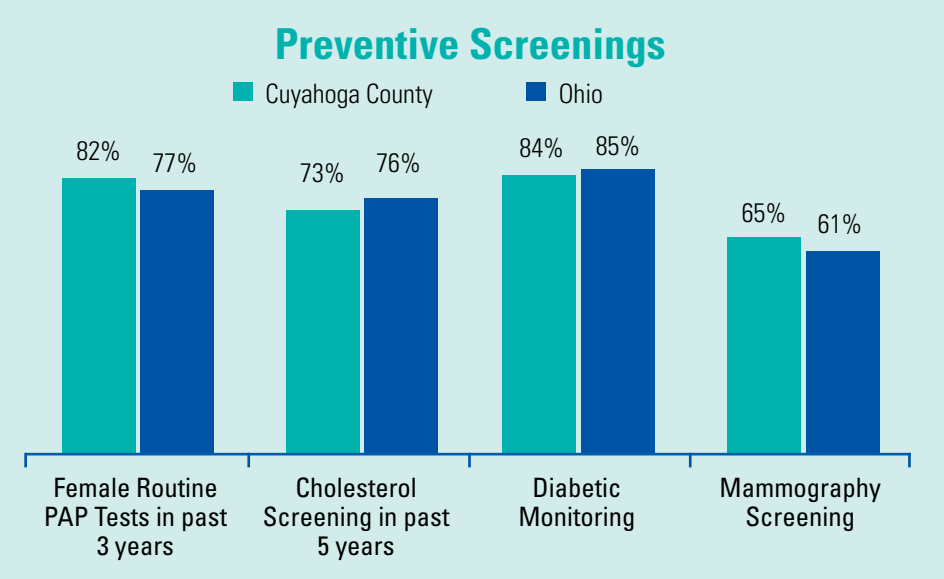
Cholesterol screening: In 2013-2014, an age-adjusted 72.8 percent of Cleveland adults 18 and over and 76.2 percent of Parma adults had a cholesterol screening within the past five years. These compare to an Ohio rate of 76.0 percent and a national rate of 74.8 percent. (CDC500)

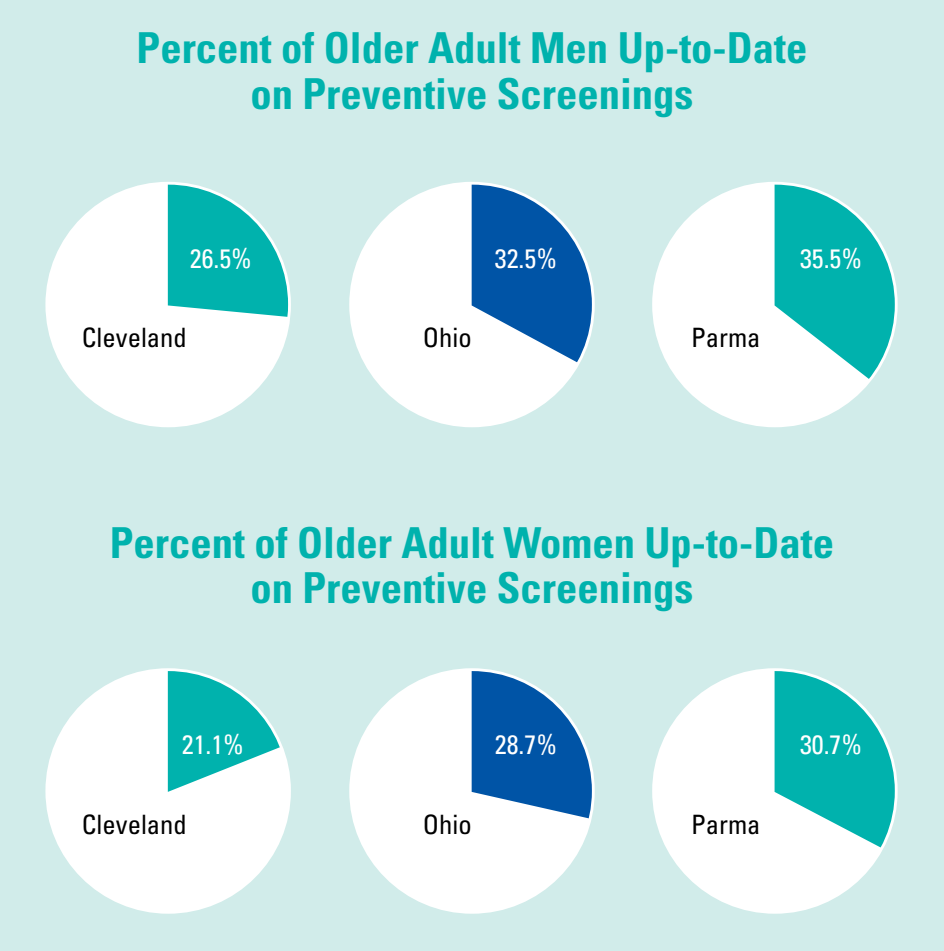
Diabetic monitoring: In 2014, 84 percent of Cuyahoga County Medicare enrollees 65 to 75 who have been diagnosed with diabetes received HbA1c monitoring. This is similar to the Ohio rate of 85 percent. Across all counties in Ohio, the rate ranged from 74 to 93 percent. (CHR)

Mammography screening: In 2014, 65 percent of Cuyahoga County female Medicare enrollees received mammograms. This was slightly higher than the statewide rate of 61 percent. Across all Ohio counties, the rate ranged from 48 to 69 percent. (CHR)

Older adults up to date on preventive screening: In 2013-2014, an age-adjusted 26.5 percent of Cleveland men age 65 and over and 35.5 percent of older men in Parma were up to date on a core set of clinical preventive services, compared to 32.5 percent statewide and 32.9 percent nationally. These services include: a flu shot in the past year, a pneumococcal shot ever, and colorectal cancer screening. (CDC500)

In 2013-2014, an age-adjusted 21.1 percent of Cleveland women age 65 and over and 30.7 percent of older women in Parma were up to date on a core set of clinical preventive services, compared to 28.7 percent statewide and 30.7 percent nationally. These services include a mammogram in the past two years in addition to the preventive services recommended for men. (CDC500)





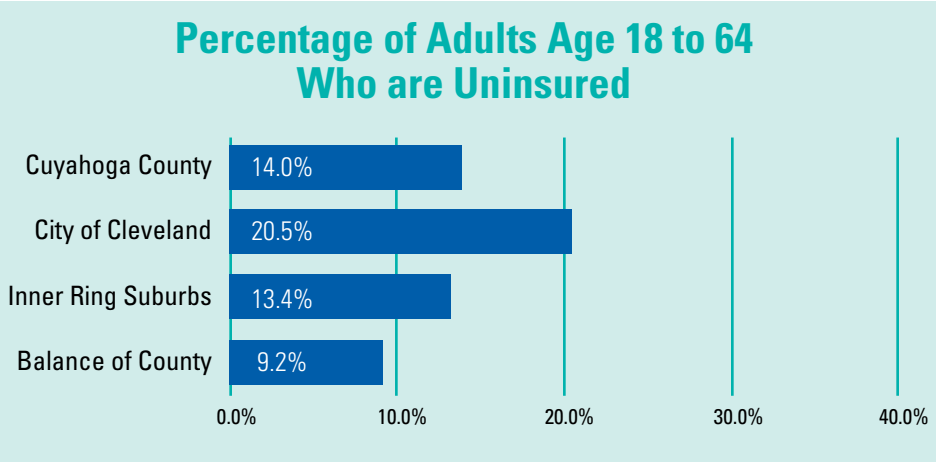
Health Care Access and Quality

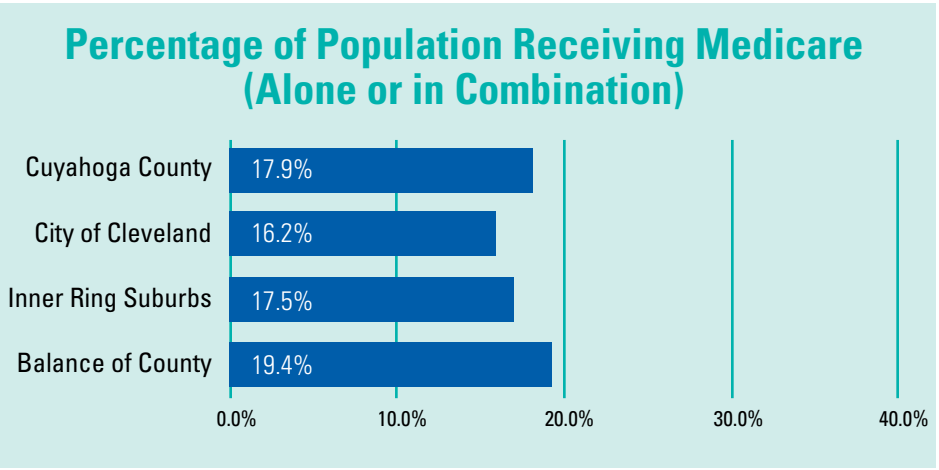
Cost barrier to care: In Cuyahoga County, 13.6 percent of adults 18 and over reported not getting needed care because of cost in 2006-2012. This was slightly lower than the national county median of 15.6 percent. Peer counties had rates ranging from 9.3 to 22.2 percent. (CHSI)

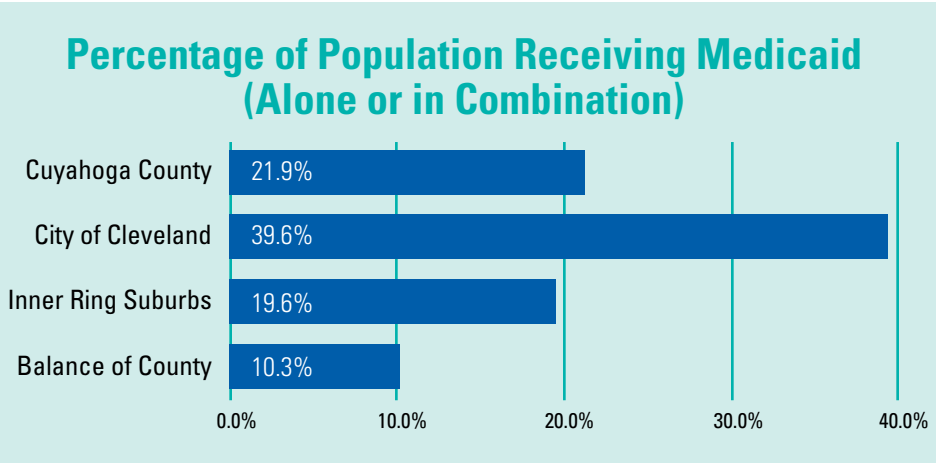
Insurance Coverage: Although uninsured rates throughout the county have continued to decline since the passage of Affordable Care Act and Medicaid Expansion, 119,652 people (9.5 percent) in the county still do not have health insurance coverage. Although Medicaid Expansion has provided coverage to many adults age 18 to 64, they are still the least likely age group to have coverage. In the City of Cleveland, one-in-five adults age 18 to 64 were uninsured. (ACS)

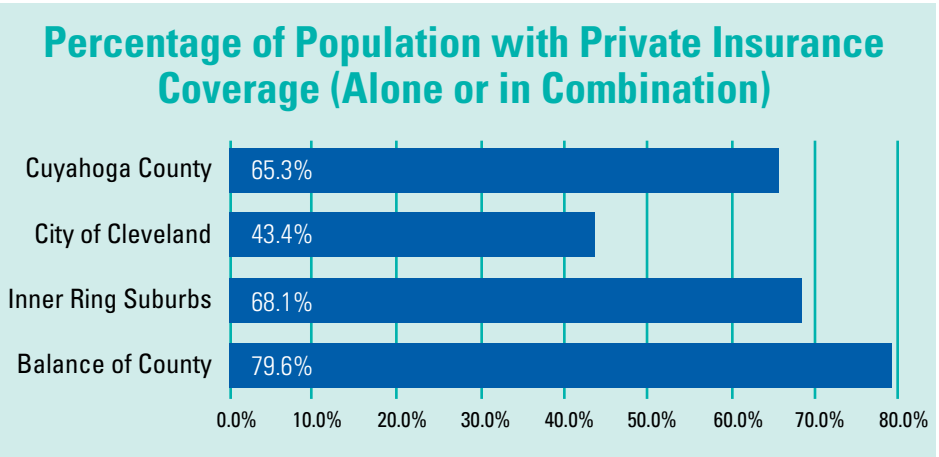
The majority of Cuyahoga County residents (65.3 percent) have private health insurance coverage (which includes plans provided through employers, purchased from a private company, or TRICARE or other military health care), though in the City of Cleveland, the number of residents receiving Medicaid (152,074) is almost as high as the number who have private health insurance coverage (166,702). In addition, 26,615 county residents (2.1 percent) receive health care through the VA. (ACS)

In Cuyahoga County, racial disparities in health care coverage persist, particularly in the suburbs. People of Hispanic/ Latino ethnicity are the least likely to have health insurance, with



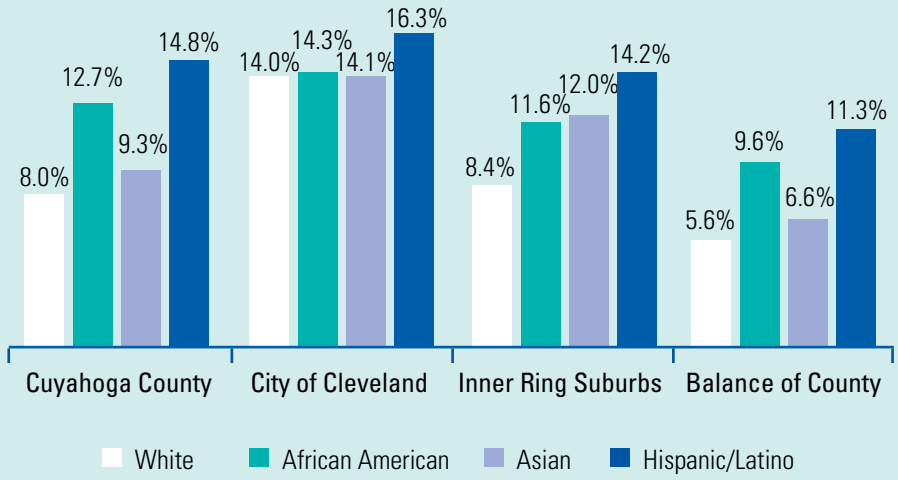






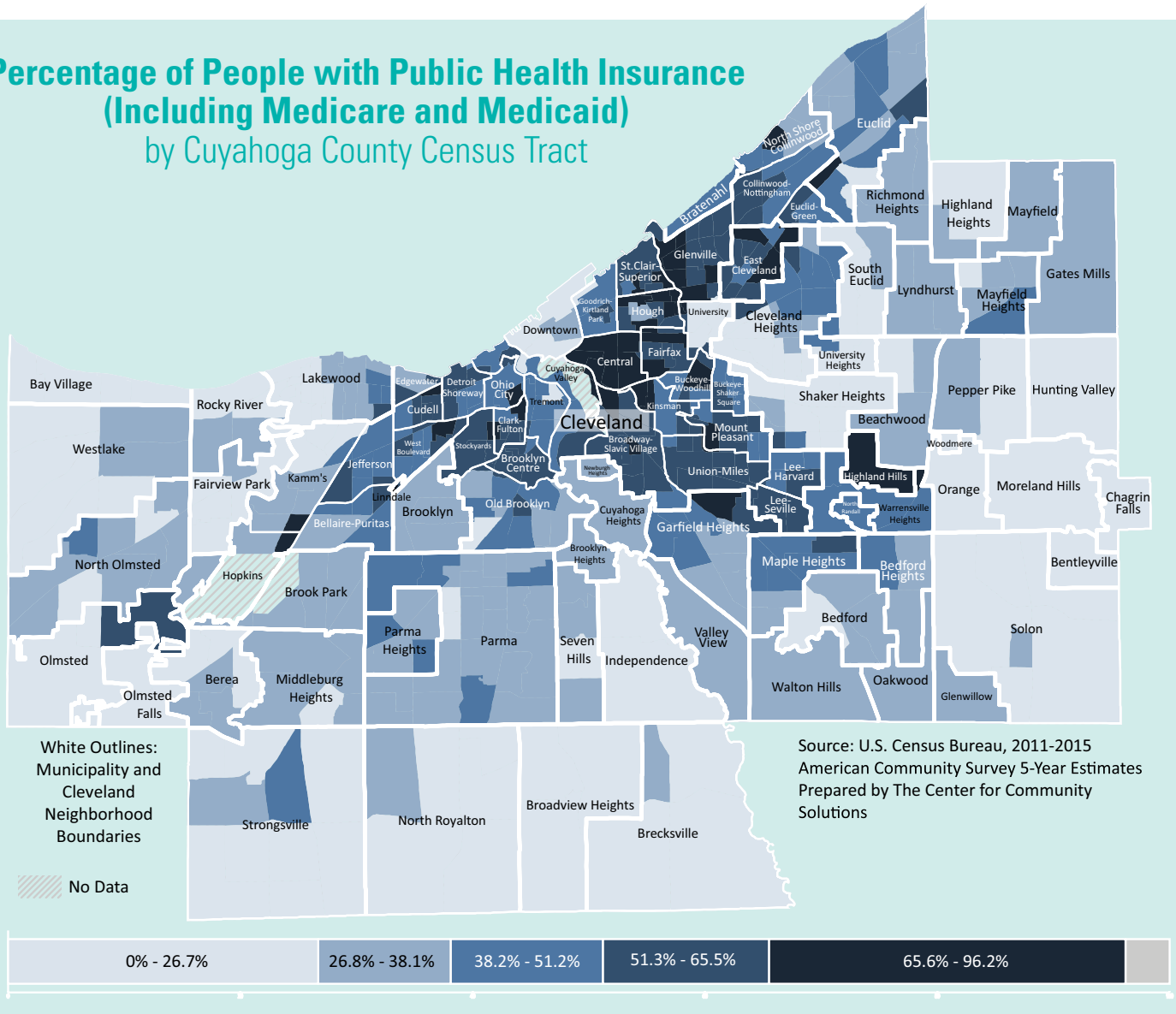
nearly 15 percent of Hispanic/Latino residents still uninsured. The City of Cleveland has higher uninsured rates than the inner-ring or balance of county suburbs, across all racial groups, though it also has the smallest disparities, with White People and Hispanic/Latino people only 2.3 percentage points apart. (ACS)

Percent of People Who are Uninsured, by Race/Ethnicity

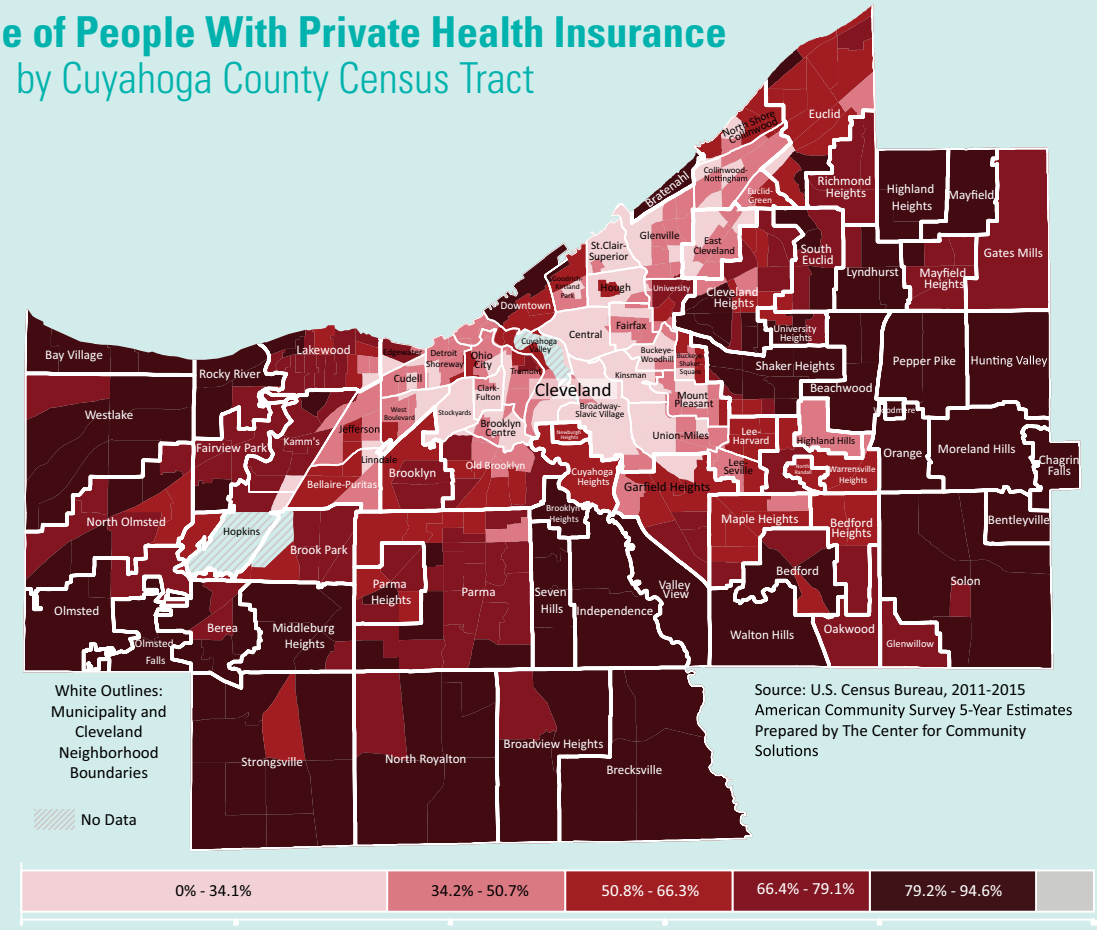


Note: Hispanic/Latino rates include people with Hispanic/Latino ethnicity of any race. Therefore, these categories are not mutually exclusive.

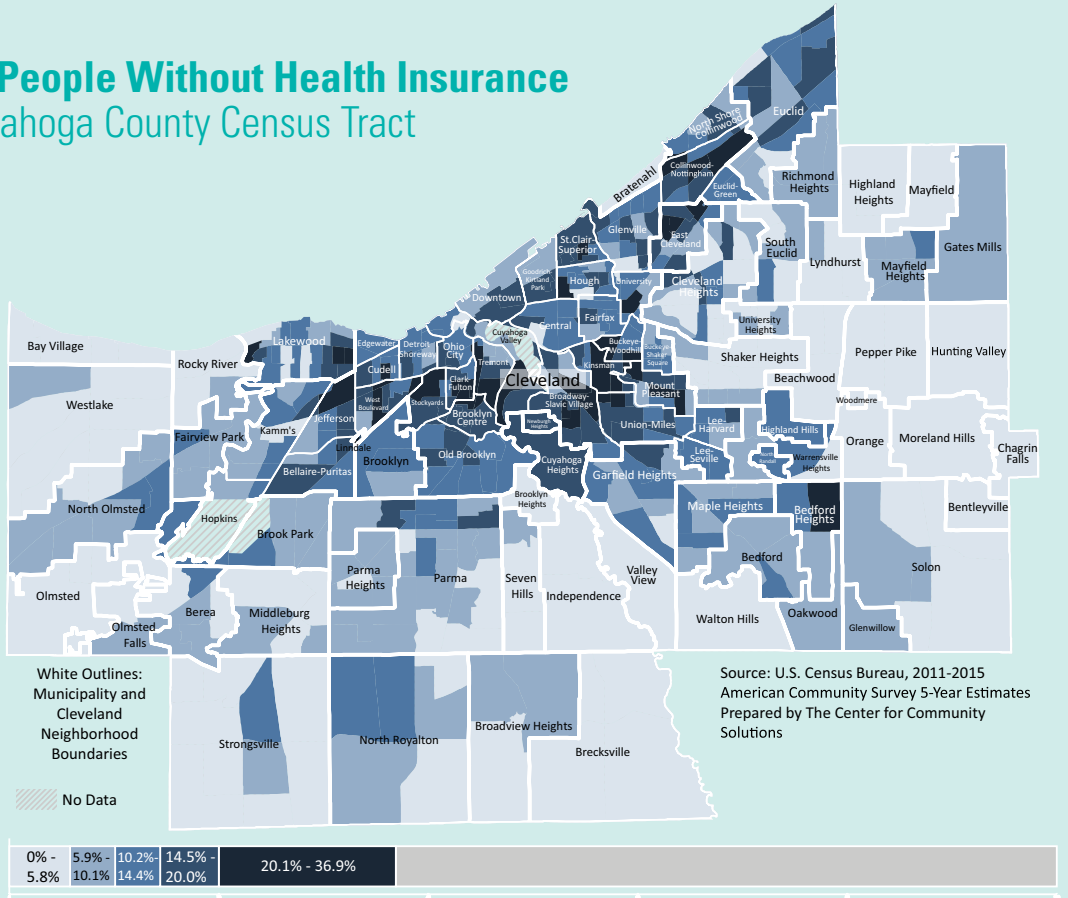
Percentage of People with Public Health Insurance (Including Medicare and Medicaid)
by Cuyahoga County Census Tract



Percentage of People With Private Health Insurance
by Cuyahoga County Census Tract



Percentage of People Without Health Insurance
by Cuyahoga County Census Tract



Providers

Given the number of health care institutions operating in Cuyahoga County, it is not surprising that the community generally fares well on measures of provider availability. However, this does not always translate to access or utilization, as data below show.

Dentists: In 2015, there was one dentist for every 1,010 Cuyahoga County residents, compared to one dentist for every 1,690 people statewide. County-level ratios ranged from 1,010 (best) to 8,770 (worst). (CHR)

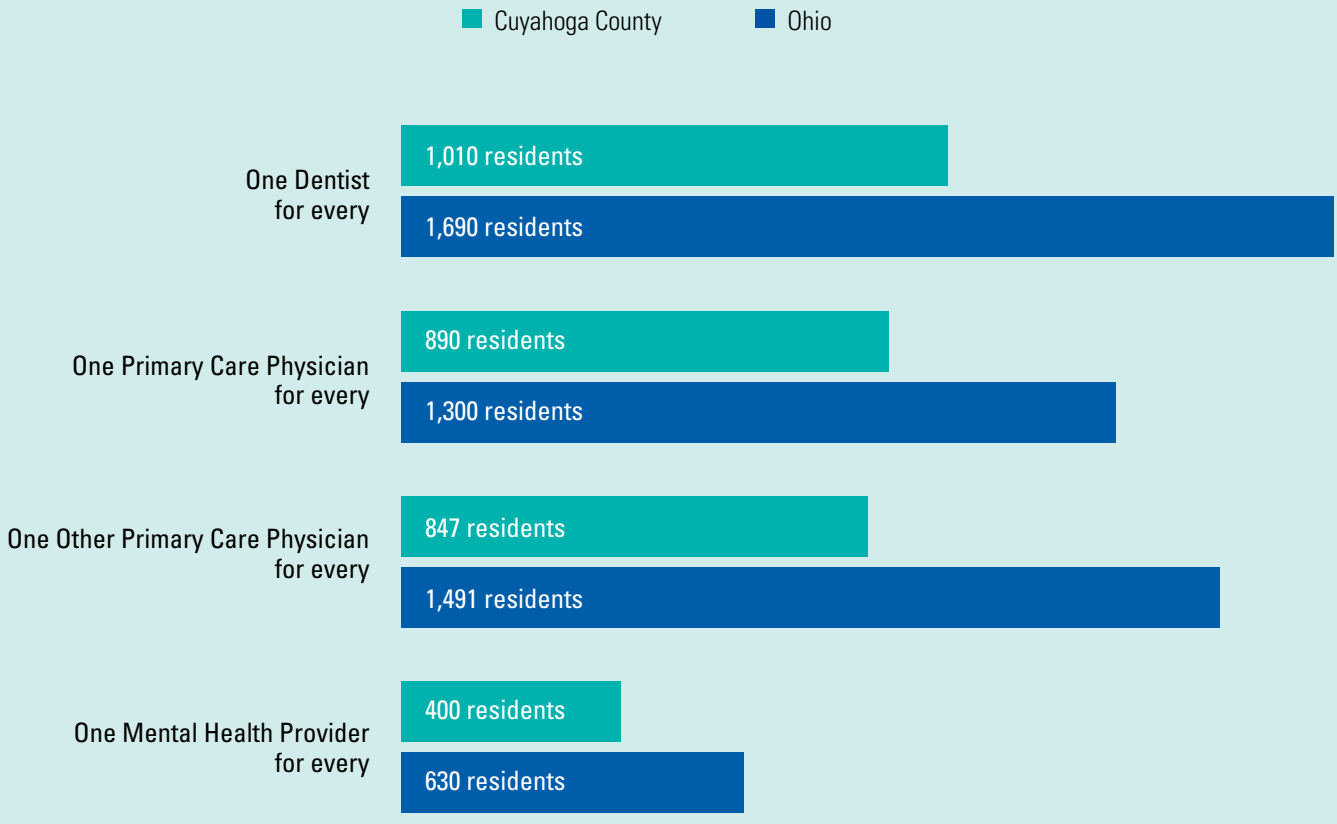
Mental health: In 2016, there was one mental health provider for every 400 Cuyahoga County residents, better than the state ratio of one for every 630 residents. County-level ratios ranged from 380 (best) to 14,640 (worst). (CHR)

Primary care physicians: In 2014, there was one primary care physician for every 890 Cuyahoga County residents, better than the state ratio of one for every 1,300 residents. County-level ratios ranged from 750 (best) to 14,840 (worst) (CHR)

Other primary care providers: In 2016, there was one other primary-care provider for every 847 Cuyahoga County residents, better than the state ratio of one for every 1,491 residents. County-level ratios ranged from 719 (best) to 17,537 (worst). Other primary care providers include nurse practitioners, physicians' assistants, and clinical nurse specialists. (CHR)

Provider Density

note: lower numbers are more favorable



Demographics

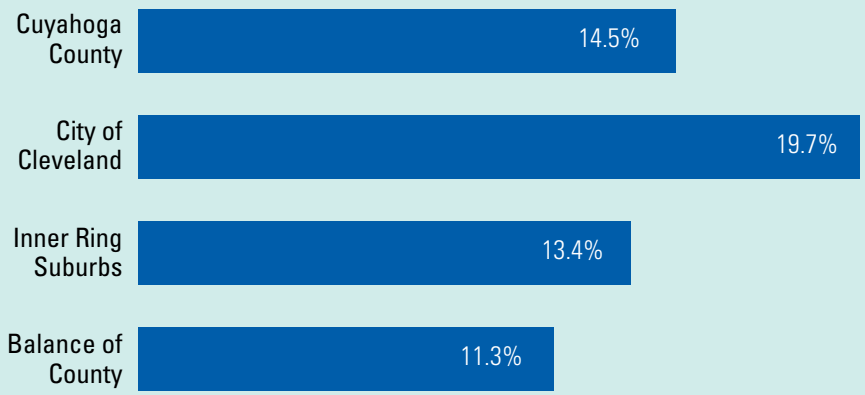
Disabilities: Overall, 14.5 percent of Cuyahoga County residents had some type of disability, with the city of Cleveland having the highest proportion of people with disabilities. Nearly one-in-five Clevelanders had a disability.

Population by Age and Gender: The largest segment of the population in Cuyahoga County is working age adults age 18 to 65, who account for nearly two-thirds of the total population of the county. However, the county is undergoing a demographic shift, due to the aging of the populous "Baby Boomer" generation, whereby the county is expected to have more older adults than children by 2030. The inner-ring and balance of county suburbs have a larger proportion of older adults than the city of Cleveland.

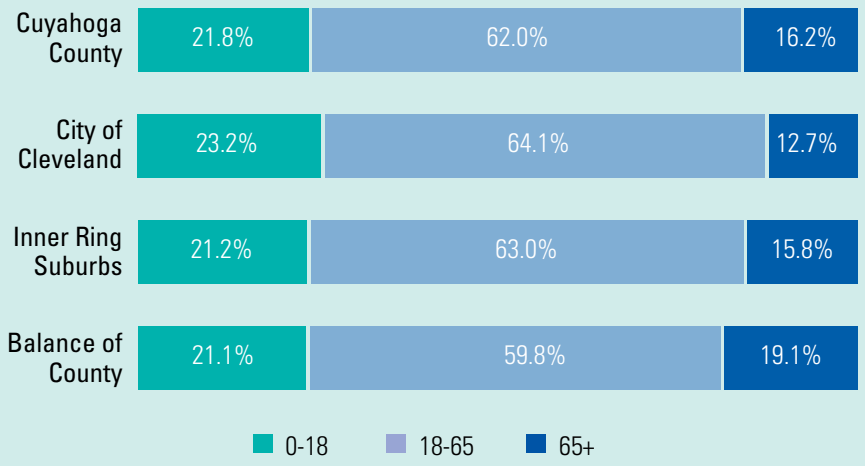
The population pyramid figures on the following page reveal even more nuanced age and gender demographic trends in the city of Cleveland, inner-ring, and balance of county suburbs.

Population by race/ethnicity: Cuyahoga County is racially diverse, though smaller geographic areas are frequently segregated by race. The City of Cleveland is majority African American (51.6 percent), though the east side neighborhoods had a higher concentration of African Americans. Both the inner-ring suburbs and the balance of county are majority White, though several individual suburbs (including East Cleveland, Warrensville Heights, Highland Hills, and North Randall) are comprised of over 75 percent African Americans. People of Asian descent make up a small portion of the overall population in the county (2.8 percent) though some suburbs (including Glenwillow, Beachwood, Middleburg Heights, Solon, and Woodmere) are comprised of close to 10 percent or more Asians. People of Hispanic/Latino ethnicity (of any race) are concentrated in some near west side neighborhoods of Cleveland (Clark Fulton, Ohio City, Tremont, Brooklyn Centre, and Stockyards) as well as some west side suburbs (Brooklyn and Linndale) where they comprise more than 10 percent of the population. The maps on the following pages reveal the geographic patterns of racial and ethnic distribution throughout the county.

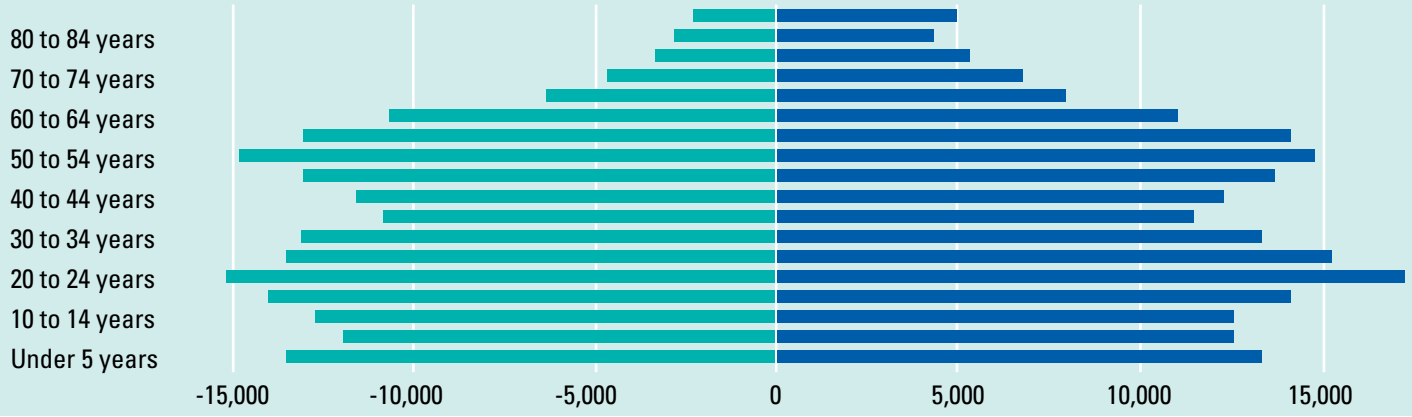
Percentage of Population With a Disability



Age of Population

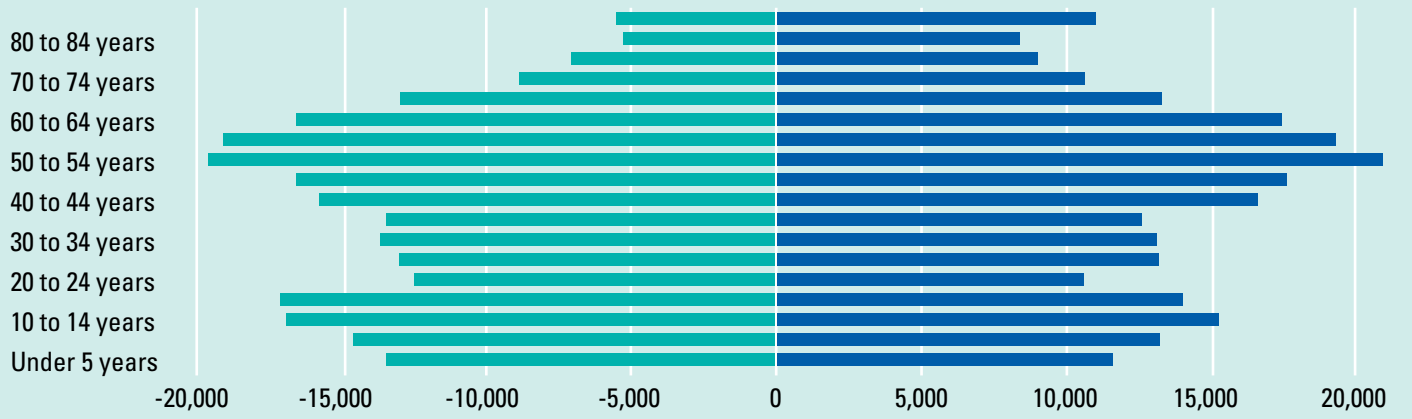


Cleveland – Population by Age



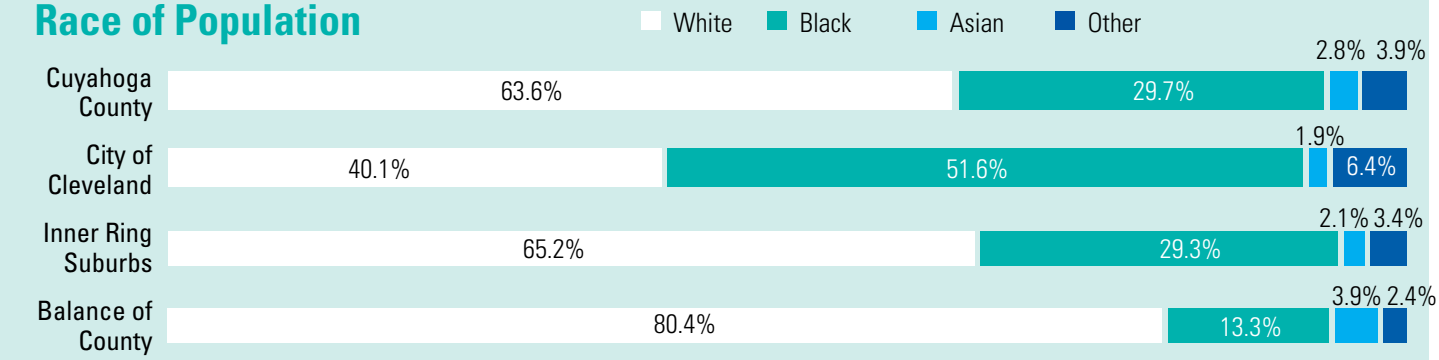
Inner Ring – Population by Age

Balance of County – Population by Age

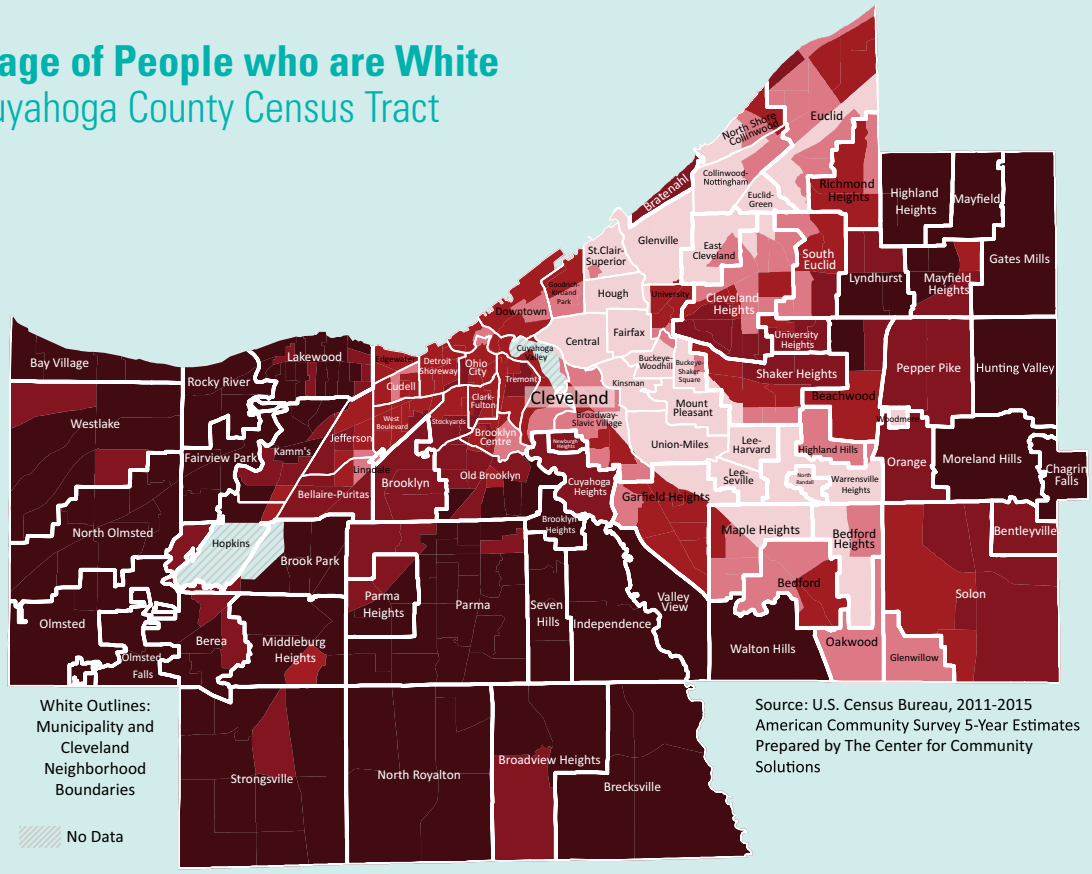


Note: Population pyramid data is from the 2010-2014 ACS 5-year estimates.

Race of Population



Percentage of People who are White
by Cuyahoga County Census Tract



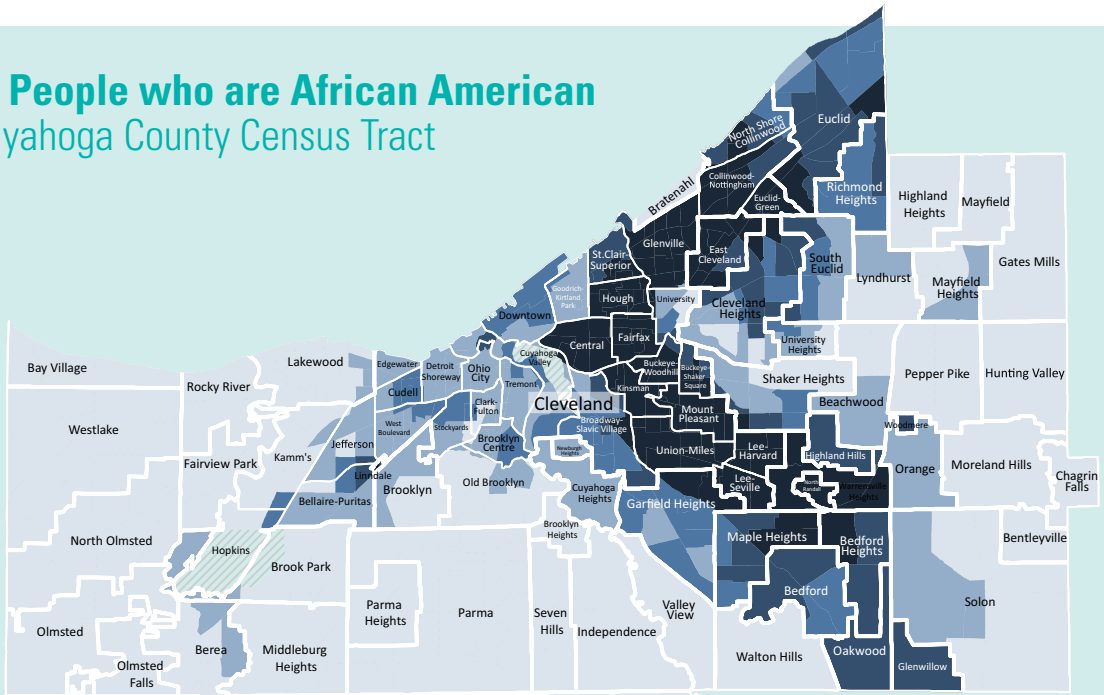
White Outlines: Municipality and Cleveland Neighborhood Boundaries

No Data

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates Prepared by The Center for Community Solutions

0% - 20.0%	20.1% - 46.7%	46.8% - 68.9%	69.0% - 85.5%	85.6% - 100%

Percentage of People who are African American
by Cuyahoga County Census Tract



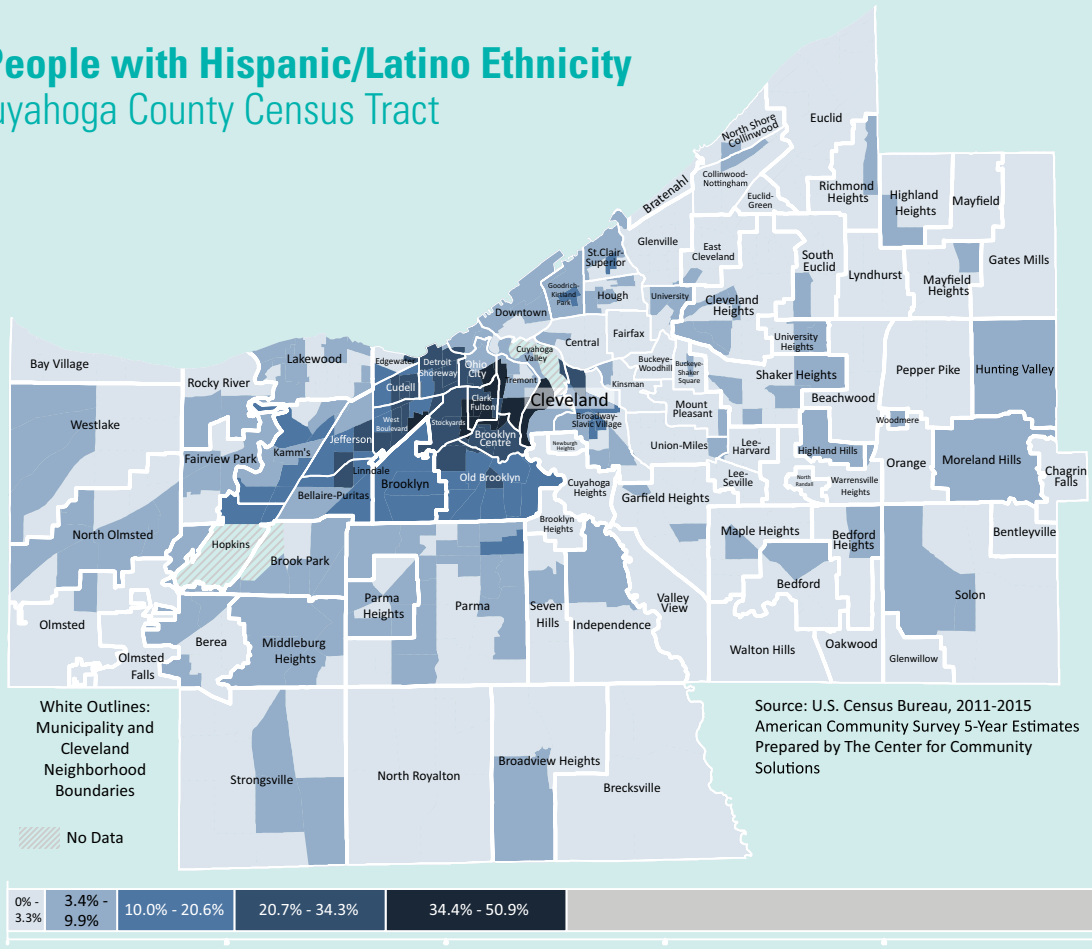
White Outlines: Municipality and Cleveland Neighborhood Boundaries

No Data

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates Prepared by The Center for Community Solutions

0% - 11.2%	11.3% - 29.8%	29.9% - 52.4%	52.5% - 77.4%	77.5% - 100%

Percentage of People with Hispanic/Latino Ethnicity
by Cuyahoga County Census Tract



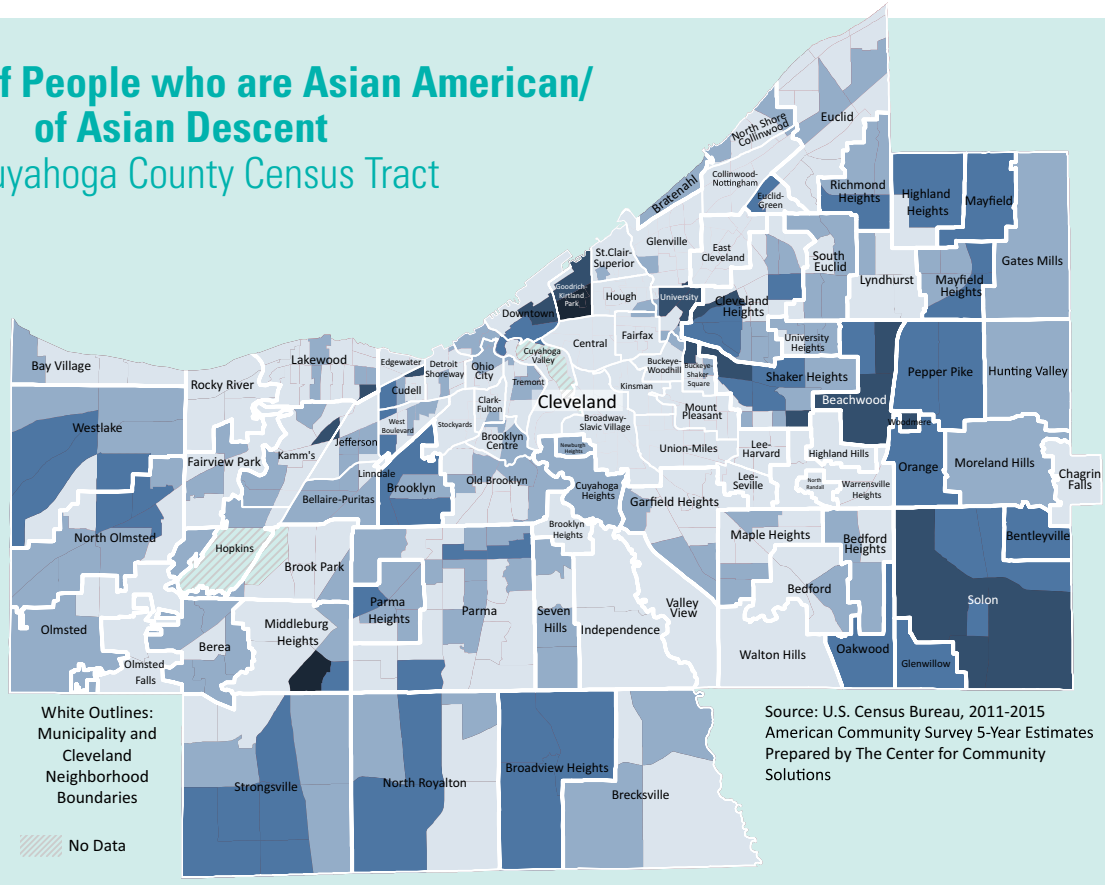
White Outlines: Municipality and Cleveland Neighborhood Boundaries

No Data

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates Prepared by The Center for Community Solutions

0% - 3.3%	3.4% - 9.9%	10.0% - 20.6%	20.7% - 34.3%	34.4% - 50.9%

Percentage of People who are Asian American/ of Asian Descent
by Cuyahoga County Census Tract



White Outlines: Municipality and Cleveland Neighborhood Boundaries

No Data

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates Prepared by The Center for Community Solutions

0% - 1.4%	1.5% - 4.6%	4.7% - 9.6%	9.7% - 18.2%	18.3% - 37.9%

Community Factors

Conditions within the community can have a profound impact on an individual's health.

Access to exercise opportunities: In 2014, 96 percent of Cuyahoga County adults reported adequate access to locations for physical exercise, higher than the statewide rate of 83 percent. Ohio counties ranged from 26 to 96 percent reporting adequate access. (CHR)

Access to parks: In 2010, 56 percent of Cuyahoga County's population lived within a half-mile of a park, compared to a national median of 14 percent. Peer counties ranged from 13 to 97 percent. (CHSI)

Air pollution – particulate matter: In 2008, Cuyahoga County's concentration of fine particulate matter in the air was 14.6 micrograms per cubic meter, higher than the national median of 10.7. The county fell into the least favorable quartile of peer counties, whose rates ranged from 7.7 to 17.7. (CHSI)

Drinking water violations: In 2014, Cuyahoga County had no reported health-related drinking water violations. (CHR)

Housing stress: In 2007-2011, 37 percent of housing units in Cuyahoga County were stressed, compared to the national median of 28 percent. The percent of stressed housing in peer counties ranged from 30 to 51 percent. (CHSI)

A house is defined as stressed if one or more of the following criteria is met: 1) housing unit lacked complete plumbing; 2) housing unit lacked complete kitchens; 3) household is overcrowded; and 4) household is cost burdened. Severe overcrowding is defined as more than 1 person per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 30 percent of monthly income.

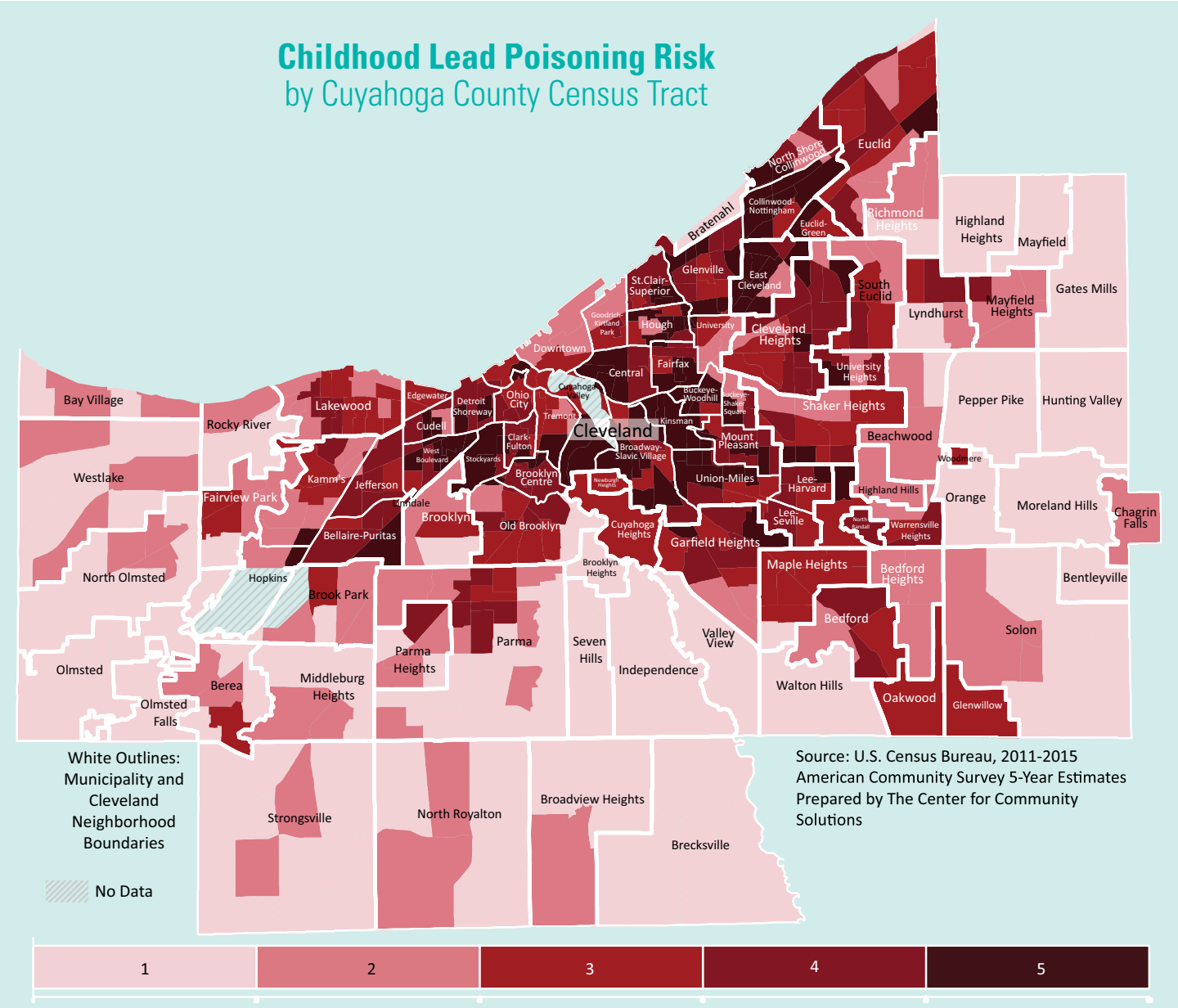
Limited access to healthy food: In 2010, 3.8 percent of Cuyahoga County residents were under 200 percent of the federal poverty level and lived farther than a mile from a grocery store. This was lower than the national county median of 6.2 percent. Peer counties ranged from 0.0 to 11.6 percent with limited access. (CHSI)

Living near highways: In 2010, 5.3 percent of Cuyahoga County residents lived within 150 meters of a highway, putting them at risk for pollution-related respiratory diseases. This compared to a national median of 1.5 percent. Peer counties ranged from 1.2 (best) to 10.6 percent (worst). (CHSI)

Elevated Blood Lead Levels: Research by Battelle on behalf of the CDC found three predictive factors to identify areas of risk for children with elevated blood lead levels: living in poverty, concentrations of housing which was built before 1960, and non-Hispanic Blacks or African-Americans. The Center for Community Solutions analyzed these factors and included data on two population indicators. It is important to note that all these data points carry margins of error, which can be substantial, so differences between small geographies should be interpreted with caution. Each census tract was scored on each of these five factors, giving equal weight to each factor. The results were divided into quintiles in order to produce a map showing relative risk for children with elevated blood lead levels. The five factors considered were:

- Percent of the population under age 5
- Female fertility rate: Births per 10,000 women ages 15-50
- Percent below poverty
- Percent of one race who identified as Black/African-American
- Percent of housing units (both rental and owner-occupied) constructed before 1960.

Cuyahoga County Blood Lead Levels Under 6 Years of Age						
Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Unconfirmed Elevated BLL (>5 µg/dl)	1,347	629	514	407	354	251
Less Than 5 (µg/dl)	19,345	20,149	19,185	16,802	16,198	18,909
Confirmed Elevated BLL (>5 µg/dl)	2,308	2,592	2,102	1,989	1,570	1,719
# of Blood Lead Tests	23,000	23,370	21,801	19,198	18,122	20,879



Transportation

Transit Across America Study: In the most recent "Transit Across America" study, Cleveland ranked 26th of the top 50 largest metropolitan areas in transit accessibility. In the Cleveland metropolitan area, 385 jobs were reachable by walking or public transportation within 10 minutes, while 74,609 could be reached within an hour. Cleveland was similar to Sacramento, Las Vegas, Columbus, Hartford, and Buffalo.

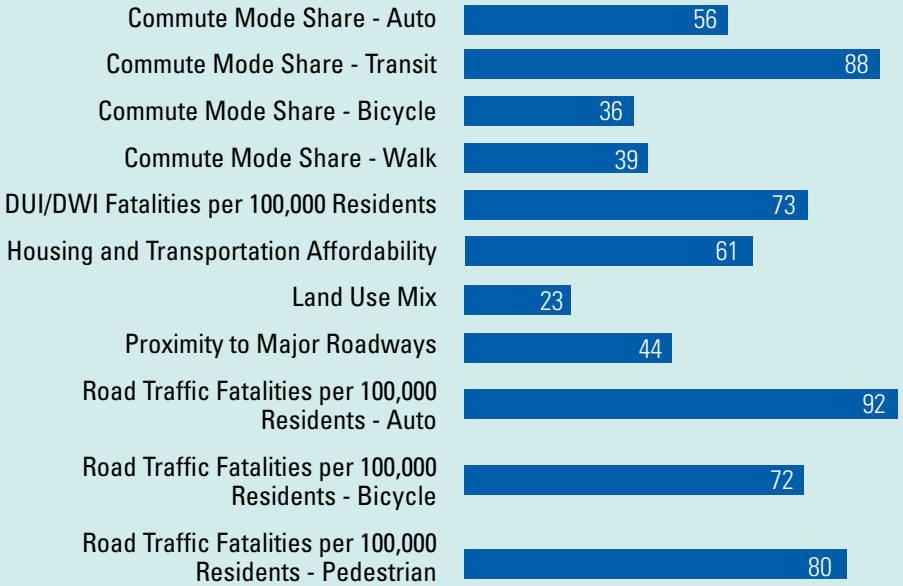
Transportation and Health Tool: The Cleveland Metropolitan Area scores well on indicators of transportation and health identified by the U.S. Department of Transportation and the CDC. Cleveland is a "top performer" in the transit commute mode share, complete streets policy, DUI/DWI fatalities per 100,000 residents, and road traffic fatalities per 100,000 residents for both auto and pedestrians. Data in the tool are not available at the county level.

Areas where Cleveland performs less well are the commute mode share for bicycles and walking, land use mix, and proximity to major roadways. Proximity to major roadways indicates the number of people who live within 200 meters of a high traffic roadway that carries over 125,000 vehicles per day. Living near a major roadway can have direct health implications linked to poor air quality.

Ohio ranks 31st for seat belt use of drivers and front-seat passengers. These data are not available at sub-state geographies.

Transportation Health Indicators, Cleveland Metropolitan Area

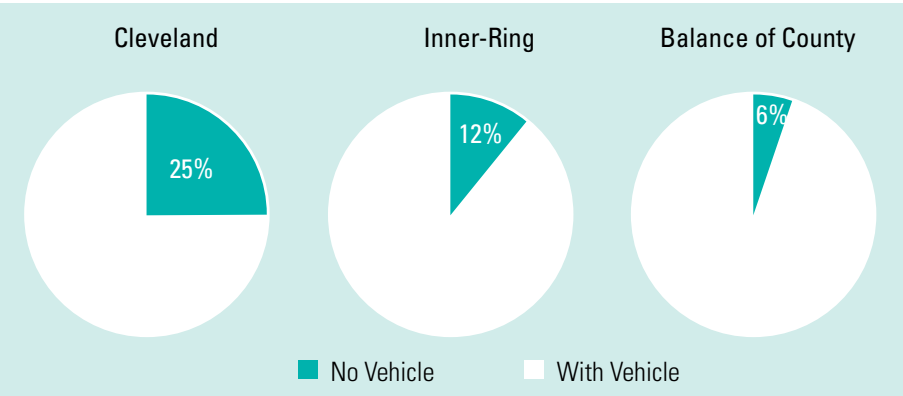
(numbers correspond to percentiles; a high score and longer bar indicates a better health performer)



Households with No Vehicles Available: Renters were nearly seven times more likely than owners to have no vehicles available. Older Adults over age 65 are most impacted, and 46 percent of older adults who rent do not have a vehicle available. (ACS)

One quarter of Cleveland residents live in a household for which there is no vehicle available. This makes those in Cleveland twice as likely as those in the inner-ring suburbs and more than four times as likely as outer communities within Cuyahoga County to have a vehicle.

East Cleveland has the highest share of households with no available vehicle, at 40 percent of all households. This is followed by Cleveland (25 percent), North Randall (24 percent), Highland Hills (24 percent), and Euclid (19 percent). On the other hand, at least 98 percent of households in Bentleyville, Broadview Heights, Brooklyn Heights, Hunting Valley, Orange, and Pepper Pike have a vehicle available.



Social Factors

Economic Vitality

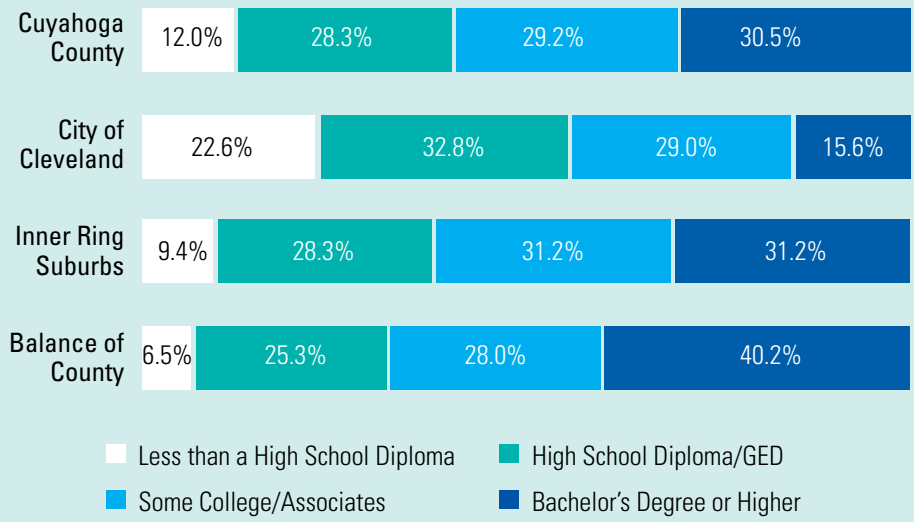
Educational attainment: In Cuyahoga County, 104,708 residents age 25 and over have less than a high school diploma. Over half of those, 57,562, live within the city of Cleveland. Over 55 percent of Cleveland residents age 25 and over do not have any education beyond a high school diploma or equivalent (GED). In the inner-ring suburbs and balance of county, residents are more educated, with 62 percent and 68 percent respectively having at least some college education. (ACS)

Income inequality: In 2011-2015, Cuyahoga County households at the 80th percentile of household income had incomes 5.6 times higher than those at the 20th percentile, a greater disparity than the Ohio average of 4.8. Among Ohio counties, the disparity ratio ranged from 3.5 (best) to 7.2 (worst). (CHR)

Median household income: There are wide income disparities across Cuyahoga County, with the median household income in the highest earning suburb (Hunting Valley) being more than 13 times the median household income in the lowest earning one (East Cleveland). The median household income for the County overall is $44,190. (ACS)

On-time high school graduation: In 2010-2011, 71.2 percent of Cuyahoga County's high school students graduated in four years, lower than the national median of 83.8 percent. The graduation rate in peer counties ranged from 53.0 to 89.9 percent. (CHSI)

Educational Attainment of Adults Age 25+

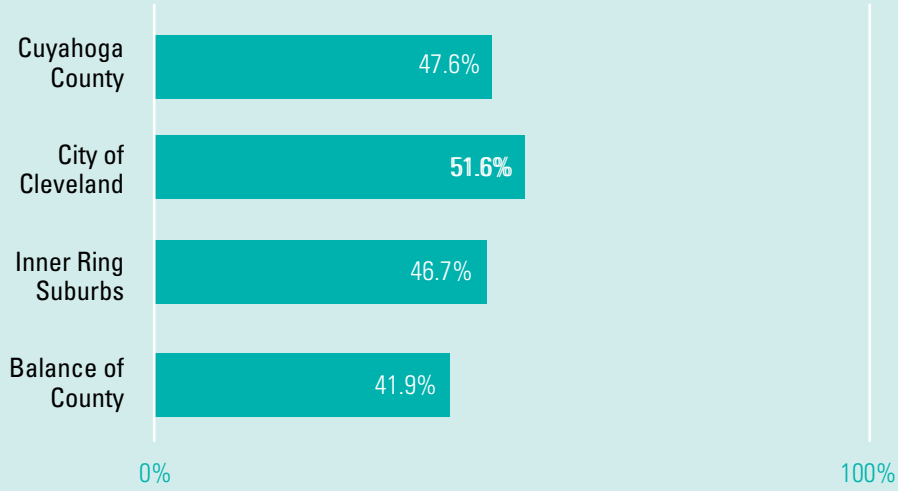


Median Household Income			
East Cleveland	$19,592	North Olmsted	$60,792
Highland Hills	$23,125	Rocky River	$62,828
Cleveland	$26,150	Lyndhurst	$64,569
North Randall	$29,286	North Royalton	$64,745
Linndale	$33,542	Chagrin Falls	$66,227
Newburgh Heights	$33,781	Walton Hills	$66,389
Warrensville Heights	$35,181	Olmsted Falls	$67,672
Euclid	$35,487	Olmsted Township	$67,766
Bedford Heights	$36,596	Mayfield	$68,191
Maple Heights	$36,774	Seven Hills	$71,923
Woodmere	$39,167	Glenwillow	$74,063
Garfield Heights	$39,249	Westlake	$76,449
Bedford	$39,626	Broadview Heights	$76,918
Brooklyn	$42,341	Shaker Heights	$77,739
Parma Heights	$43,464	Strongsville	$80,555
Mayfield Heights	$45,071	Valley View	$80,625
Lakewood	$45,408	Bratenahl	$81,136
Cuyahoga Heights	$47,237	Independence	$81,983
Brook Park	$47,906	Beachwood	$84,219
Richmond Heights	$48,272	Bay Village	$89,864
Parma	$50,440	Orange	$94,792
Cleveland Heights	$53,014	Solon	$95,320
Fairview Park	$54,134	Highland Heights	$100,470
Berea	$54,985	Brecksville	$100,589
Oakwood	$55,038	Gates Mills	$116,648
South Euclid	$59,669	Moreland Hills	$137,461
Brooklyn Heights	$60,313	Pepper Pike	$147,250
University Heights	$60,313	Bentleyville	$200,625
Middleburg Heights	$60,486	Hunting Valley	$250,000+

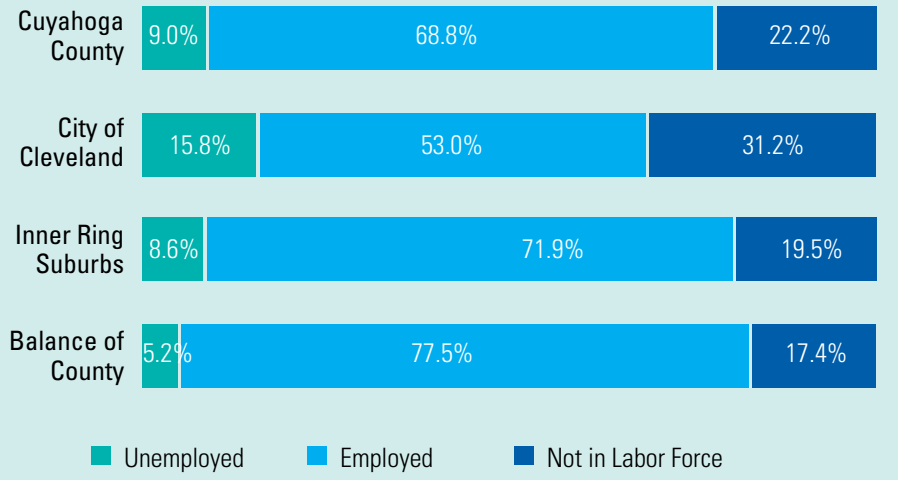
Renter housing affordability: Renters are typically less likely to have affordable housing than homeowners. Unaffordable housing is defined as housing which costs 30 percent or more of the household's gross income. In Cuyahoga County, City of Cleveland renters are most likely to live in unaffordable housing, though the rest of the county also presents affordability challenges for those who rent. Nearly half of renter households in the county live in unaffordable housing. (ACS)

Employment Status: According to the definitions followed by the U.S. Census Bureau, people are considered unemployed if they were not working during the week they were surveyed, were actively looking for work in the last month, and were available to start a job. People are considered employed if they did work as paid employees or had a job but were not at work (e.g. sick, on vacation) during the week they were surveyed. People are considered to be not in the labor force if they were not working and not looking for work during the week they were surveyed; this group typically includes students, homemakers, retired workers, and people with disabilities who are unable to work. In Cuyahoga County, 60,193 working age adults (age 25 to 64) were unemployed, and over half of those (32,480) lived in the City of Cleveland. Just over half of working age adults in Cleveland were employed, and nearly 16 percent were unemployed. Employment rates were highest in the balance of county, where over three in four working age adults were employed. (ACS)

Percent of Renter Households Who Live in Unaffordable Housing



Employment Status of Working Age Adults (Age 25-64)

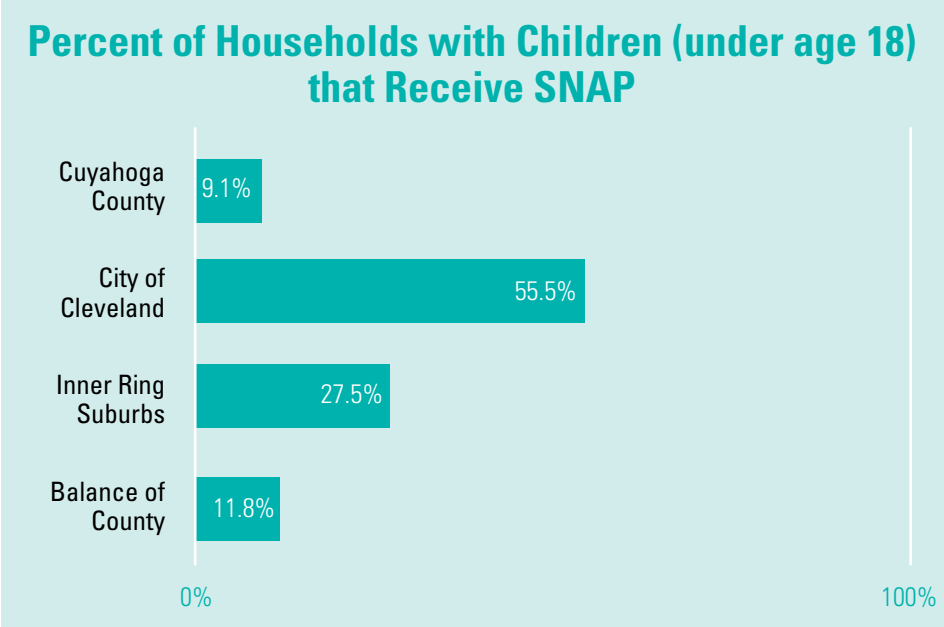


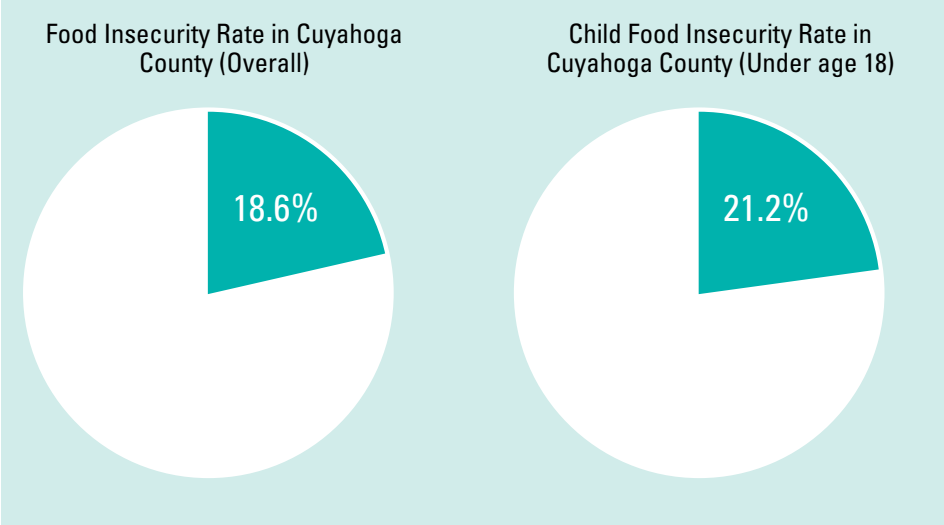
Social Determinants

Children in single-parent households: In 2008-2012, 44.4 percent of children under 18 in Cuyahoga County lived in a single-parent household, higher than the national median of 30.8 percent. This places Cuyahoga in the least favorable quartile of peer counties, whose rates ranged from 22.3 to 46.1 percent. (CHSI)

Food insecurity: Over half of Cleveland households with children under age 18 receive SNAP, or food stamps, an important benefit that ensures individuals and families can afford to buy food. In Cuyahoga County, 43,773 households with children receive SNAP, with more than half of those households (25,815) being located in the City of Cleveland. (ACS)

According to *Map the Meal Gap,* a resource from *Feeding America,* food insecurity is higher in Cuyahoga County than the state of Ohio. In Cuyahoga County, 18.6 percent of residents, or 235,200 people, are food insecure, and 55 percent of those people are below the SNAP eligibility threshold (130 percent of the Federal Poverty Level). By comparison, in the state, only 16 percent of people are food insecure. Children are at particular risk; more than one-in-five Cuyahoga County children are food insecure (21.2 percent, or 58,370 children), and 67 percent of those are income-eligible for nutrition programs.





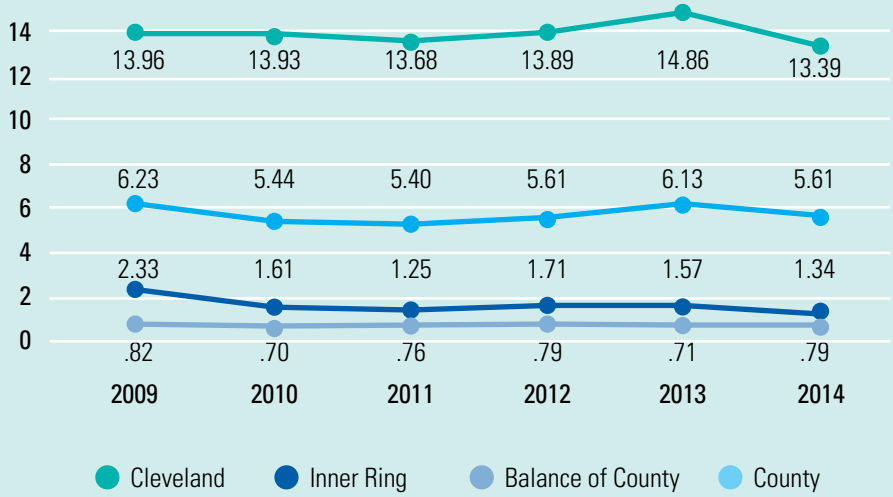
Community Trauma Factors

Clear links have been established between individual trauma or adverse childhood experiences and poor health outcomes. Broadening this to a population level, whole communities may also experience negative and traumatic effects from exposure to adverse community conditions, providing a useful framework for considering gaps within communities. While violence is the most obvious source of trauma, researchers have identified several manifestations or symptoms of trauma at the community level. These include concentrated poverty, crumbling infrastructure, inadequate access to economic and educational opportunities, and other historical inequities.

Blighted Homes and Foreclosures: One-in-four parcels in the City of Cleveland had a foreclosure filing between 2007-2015, compared to 15.4 percent in the suburbs. Seventy percent of blighted homes are concentrated in the east side neighborhoods of Cleveland and in the suburb of East Cleveland. East Cleveland has more homes likely to require demolition than the rest of the other suburbs combined. (Western Reserve Land Conservancy)

Violent crime rate/ homicides: In 2010-2012, Cuyahoga County's rate of violent crime (homicide, forcible rape, robbery, and aggravated assault) was 559.7 per 100,000 population, higher than the national median of 199.2. The rate in peer counties ranged from 178.3 to 1,153.2. (CHSI)

Rate of Violent Crime in Cuyahoga Count Per 1,000 Residents



Note: Does not include data for Cuyahoga Heights, East Cleveland, Fairview Park, Warrensville Heights, Bentleyville, Brook Park, Brooklyn Heights, Chagrin Falls, Glenwillow, Highland Hills, Hunting Valley, Maple Heights, Middleburg Heights, Newburgh Heights, North Olmsted, North Randall, North Royalton, Oakwood, Olmsted Township, Rocky River, Valley View, or Woodmere

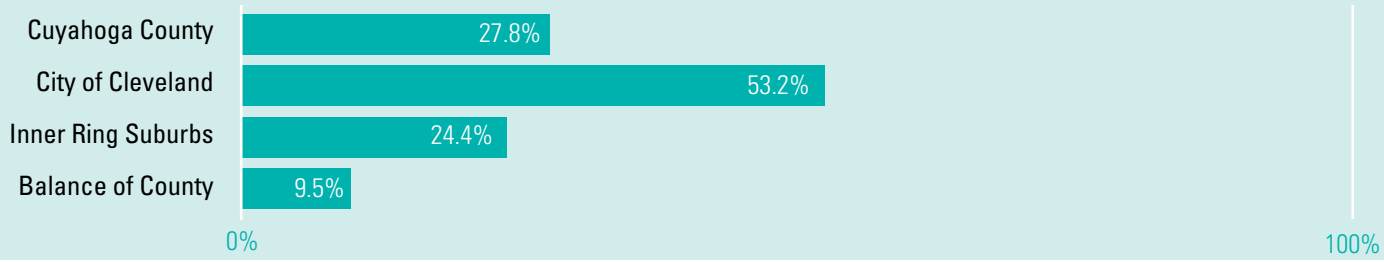
Violent Crime Trends: Crime statistics for the state of Ohio are voluntarily reported to the FBI's Uniform Crime Reporting (UCR) program. Because reporting is voluntary, this analysis does not represent a complete list of the agencies located within Cuyahoga County. It should also be noted that the crime is reported by the location of responding agency, not necessarily the location of the crime. Law enforcement will occasionally cross city boundaries to respond to criminal activity.

Inadequate social support: In 2008-2012, 19.8 percent of Cuyahoga County adults reported inadequate emotional support, close to the national median of 19.6 percent. The rate in peer counties ranged from 13.7 to 26.1 percent. (CHSI)

Poverty: In Cuyahoga County, 231,823 people live below the poverty threshold. For a family of four, being below the poverty threshold means their household income for the year was less than $24,257. A single person under age 65 below the poverty threshold had an income of less than $12,331 for the year. Children under age 18 are the most likely age group to live in poverty, and over half of children in the city of Cleveland are living in poverty. Older adults have the lowest poverty rates, which is due in large part to Social Security. Unlike most government benefits that help families make ends meet, Social Security counts as income according to how the U.S. Census Bureau calculates poverty. Among every age group, poverty rates are substantially higher in the City of Cleveland than in any other part of the county. (ACS)

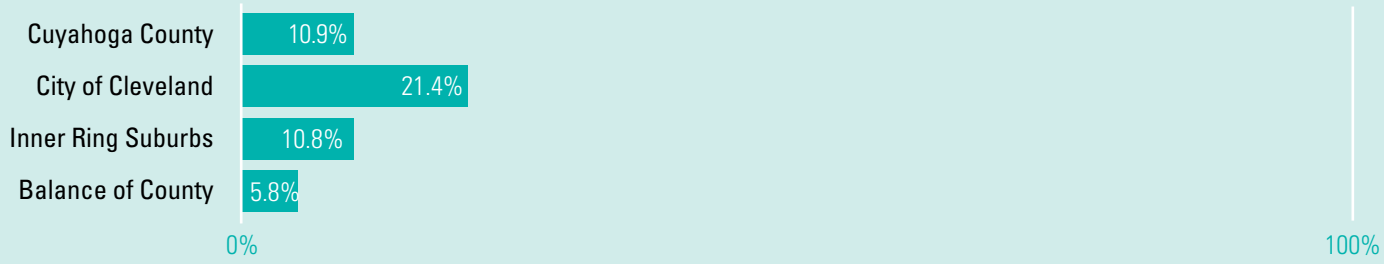
In all parts of the county, there are disparities between different racial and ethnic groups when it comes to poverty. No matter where in the county they live, African-American people have the highest poverty rates, followed closely by people with Hispanic/Latino ethnicity.

Children (Under Age 18) Living Below Poverty

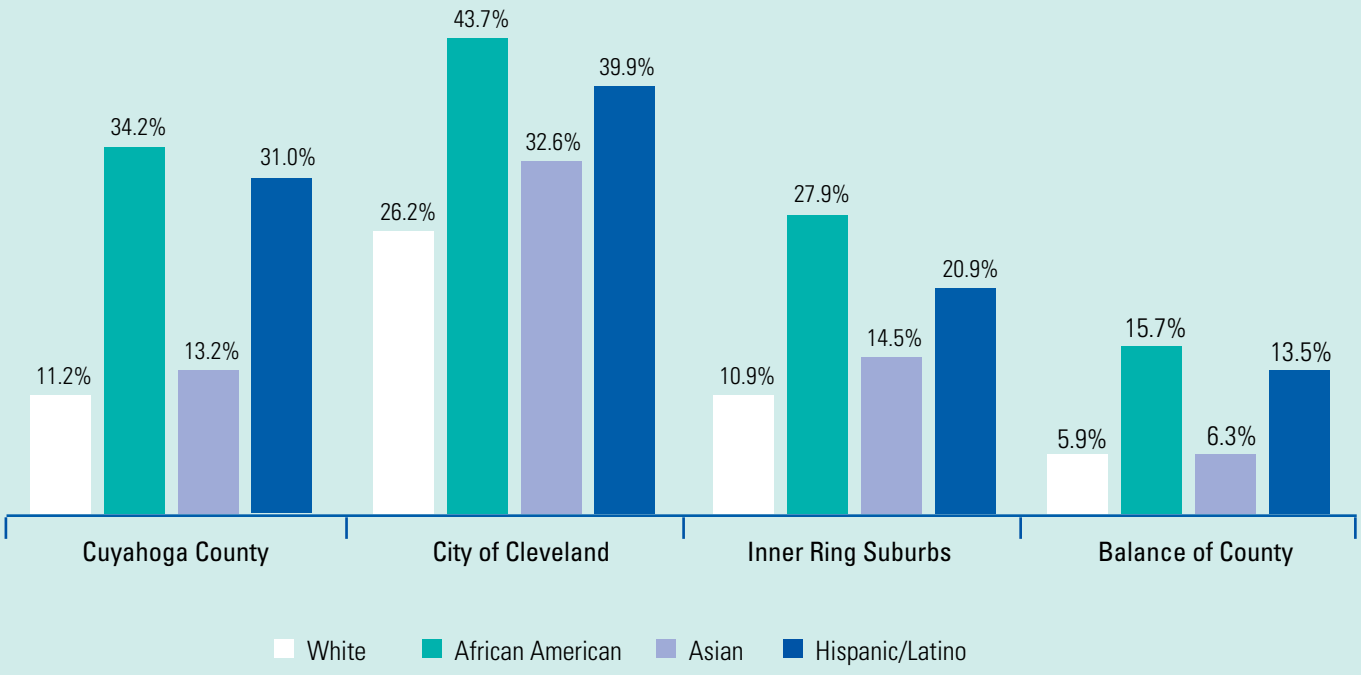


Adults (Age 18 to 64) Living Below Poverty

Older Adults (Age 65+) Living Below Poverty



Poverty Rate by Race/Ethnicity



Note: Hispanic/Latino rates include people with Hispanic/Latino ethnicity of any race. Therefore, these categories are not mutually exclusive.

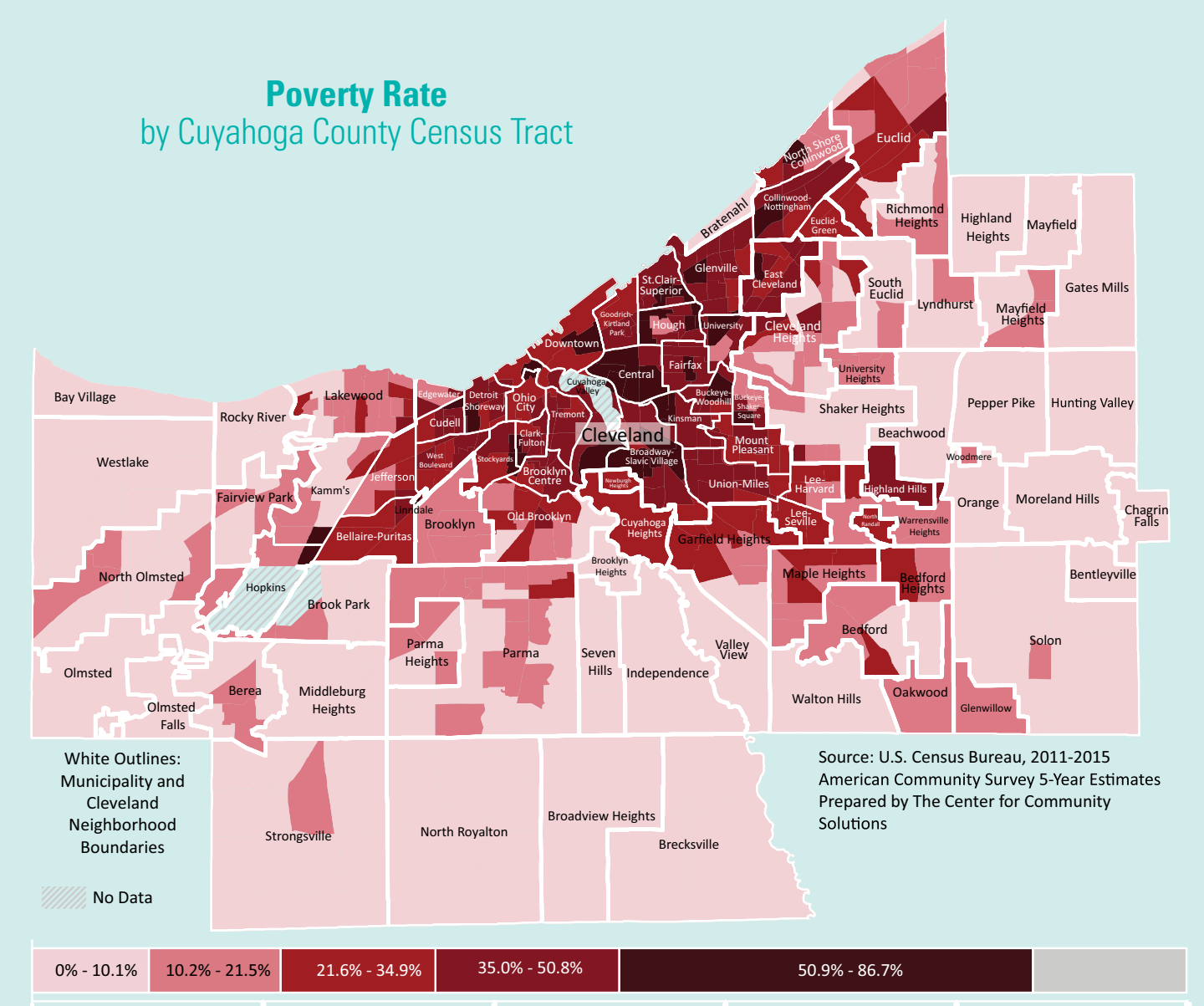
Although poverty rates are lower among all racial and ethnic groups in the inner-ring suburbs and the balance of county, White people fare better economically across the county. (ACS)

Residential segregation (Black/White and Non-White/White): In 2011-2015, on a scale of 0 (complete integration) to 100 (complete segregation), Cuyahoga County scored 72 on Black/White segregation and 63 on Non-White/White segregation, indicating greater than average segregation, especially for Blacks. The statewide scores were 70 for Black/White and 59 for Non-White/White. Across all counties in the state, Black/White segregation ranged from 30 (best) to 92 (worst), and Non-White/White ranged from 14 (best) to 64 (worst). (CHR)

Social associations: In 2014, there were 9.2 social and community associations per 10,000 Cuyahoga County residents, lower than the statewide rate of 11.3. Across all Ohio counties, the rate ranged from 6.0 to 21.9 per 10,000. (CHR)

Language spoken at home: The vast majority of Cuyahoga County residents primarily speak the English language at home, though 11 percent of residents (135,084) speak a language other than English.

Among those who speak another language at home, the most commonly spoken single language is Spanish. The rest of the languages are aggregated into groups. Indo-European languages include French, Italian, German, Greek, Russian, Hindi, and many others. Asian and Pacific Island languages



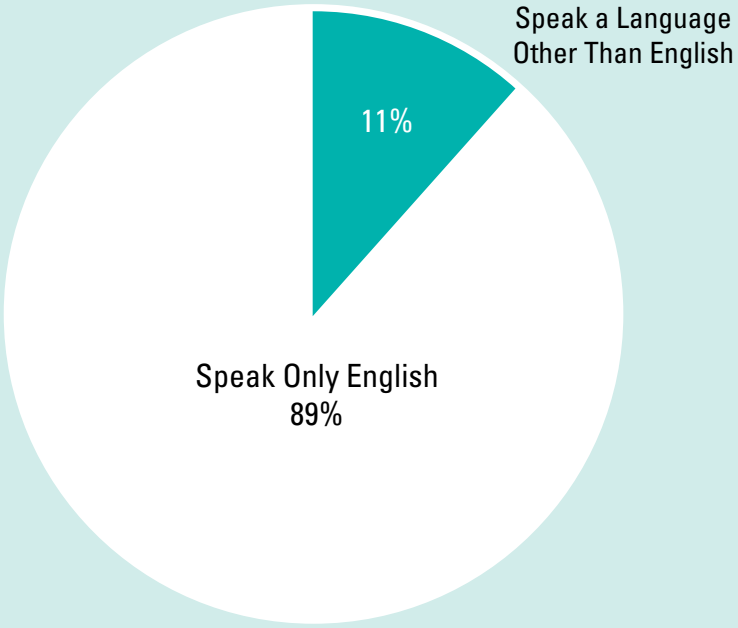
include Chinese (Mandarin and Cantonese), Japanese, Korean, Vietnamese, and many others. Included in the "All other languages category" are Navajo, Arabic, Hebrew, several African languages, and many others.

Community Trauma Risk: To identify the neighborhoods and/or municipalities that might be at greatest risk for experiencing trauma due to adverse community conditions, readily available indictors pointing to the manifestations, or symptoms of community trauma were examined. These include:

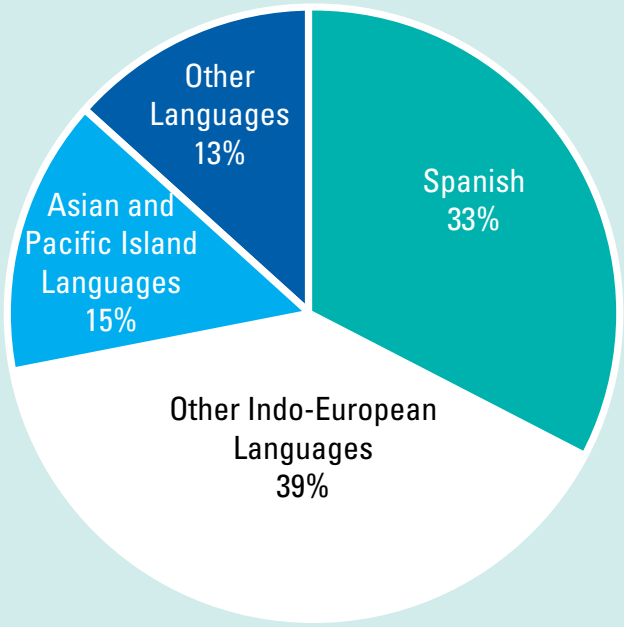
- Concentrated Poverty: percent living in deep poverty (under 50 percent of poverty)
- Inadequate Access to Educational Opportunities: persons (Ages 25 and older) with a High School diploma or less
- Inadequate Access to Economic Opportunities (adult labor force participation)
- Crumbling Infrastructure: share/number of home foreclosures.

Data for the first three indicators were gathered from Neighborhood Profiles compiled by The Center for Community Solutions. Foreclosure data came from NEOCANDO, maintained by the Center on Urban Poverty and Community Development, housed at Case Western Reserve University's Mandel School of Applied Social Sciences. Four neighborhoods within the City of Cleveland and one inner-ring suburb emerged as being most likely to be at risk for community trauma: Buckeye-Woodhill, Central, Clark-Fulton, Hough, and East Cleveland. More detailed profiles of each area are included later in this report. Each of these neighborhoods fell in the bottom third on all of the factors.

Language Spoken at Home, Cuyahoga County Residents Age 5+



Languages Other Than English Spoken at Home, Cuyahoga County Residents Age 5+



Gaps Analysis

To conduct the gaps analysis, secondary data, other community reports focusing on Cuyahoga County, and data on unmet needs provided by United Way's 2-1-1 Help Center were used.

Secondary Data

First, the secondary data analysis was examined and indicators where Cuyahoga County lags compared to the state were highlighted. Particular focus was given to issues that are interrelated and/or where there is a significant distance between the county and state or national benchmarks. Below is a list of indicators on which Cuyahoga County lags.

Differences between population groups and/or sub-county geographies were evaluated when such data was available. Those gaps are generally highlighted within the secondary data analysis section, above.

2-1-1 Community Need

The United Way 2-1-1 Help Center provides confidential and easy access to receive help for social service needs. For Cuyahoga County, 2-1-1 is operated by United Way of Greater Cleveland. Most individuals request assistance via traditional telephone calls or online chat. In 2016, there were 192,340 total contacts in Cuyahoga County.

The greatest number of residents assisted by 2-1-1 in 2016 were from Cleveland, Euclid, East Cleveland, Cleveland Heights, and Maple Heights. East Cleveland had the highest utilization rate per 1,000 residents in 2016, followed by Cleveland, Warrensville Heights, Euclid, and Brooklyn Heights.

United Way tracks the categories of need for which callers seek referrals. Overall, food (16 percent of calls), housing/shelter (16 percent), and utilities (15 percent) were the needs for which assistance was most frequently sought. However, as

Health Outcomes

- Alzheimer's disease diagnoses
- Adult asthma
- Arthritis
- Chronic obstructive pulmonary disease
- Gonorrhea
- Older adult preventable hospitalizations
- Leading causes of death: Heart Disease, Cancer
- Mortality by age group:
  - Less than 1 year old
  - Working age adults 25-54
  - Older adults ages 65-74
- Alcohol-impaired driving deaths
- Deaths by despair (intentional self-harm, chronic liver disease, accidents)
- Drug overdose emergency room visits
- Estimated drug overdoses
- Births to unmarried mothers
- Low birth weight
- Preterm Births

Health Factors

- Adolescents having sexual intercourse for the first time before age 13
- Older adults up to date on preventive screenings (Cleveland)

Community Factors

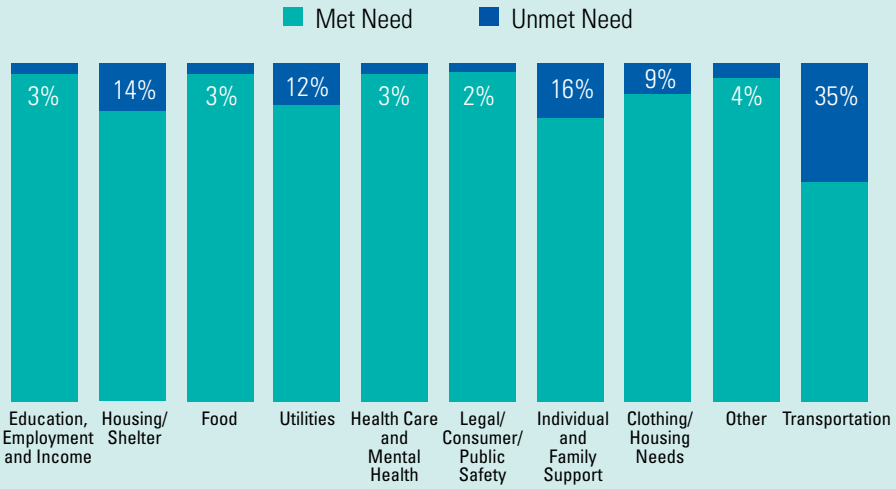
- Air pollution – particulate matter
- Stressed housing units (lack complete plumbing, lack complete kitchens, overcrowded, cost burdened)
- Commute mode share: bicycles, walking
- Living near highways

Social Factors

- Income inequality
- On-time high school graduation
- Children in single-parent households
- Violent crime rate/ homicides
- Residential segregation (Black/White and Non-White/White)
- Social associations

Need	Cuyahoga County Communities Where This is the Top Requested Need
Food	Brook Park, Brooklyn, Brooklyn Heights, Cleveland, East Cleveland, Lakewood
Housing/Shelter	Bedford Heights, Berea, Fairview Park, Middleburg Heights, Parma, Parma Heights, Richmond Heights, Shaker Heights, Solon, Strongsville, Warrensville Heights, Westlake
Utilities	Bedford, Cleveland Heights, Garfield Heights, Maple Heights, South Euclid, University Heights
Health Care and Mental Health	Beachwood, Broadview Heights, Lyndhurst, Mayfield Heights, North Olmsted, North Royalton, Rocky River

2-1-1 Met and Unmet Needs by Category, 2016



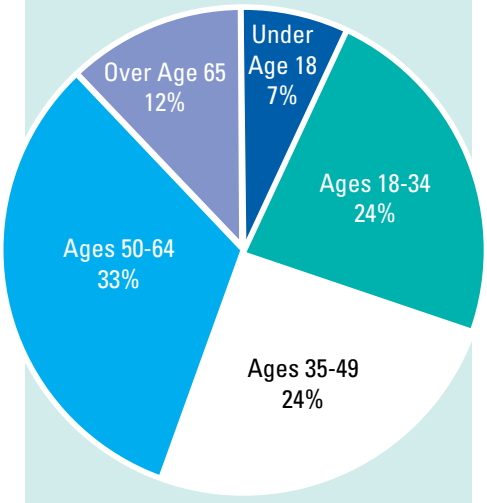
NOTE: The "Other" category includes Arts/ Culture/ Recreation, Other Government/ Economic Services, and Volunteers/Donations.

shown above, the most requested service was different for various parts of the county.

When 2-1-1 resource specialists are unable to make a referral to appropriate services, United Way considers this to be an unmet need. In 2016, the top five unmet needs overall were rent payment assistance, gas service payment assistance, electric service payment assistance, rental deposit assistance, and water service payment assistance. Although there were fewer total calls seeking transportation assistance, more than one-third of the needs for transportation were unmet.

For callers who provided their age, individuals between the ages of 50 and 64 made up the greatest share of unmet needs, with 3,957 interactions where a referral could not be made.

2-1-1 Total Unmet Needs, by Age, 2016



Other Community Reports

Over the past several years, a number of institutions and initiatives in Cuyahoga County have conducted assessment or planning processes. Key findings from a select group with relevance to the health and wellness of various populations are included below.

Hospital Community Health Needs Assessments (CHNA): Most hospitals in Cuyahoga County have conducted two rounds of CHNAs, in 2013 and 2016. While each hospital had a separate assessment document, there were many similarities between key issues or priority needs identified within health systems. In total, we examined 11 CHNAs.

- Cleveland Clinic System: Euclid, Fairview, Hillcrest, Main Campus, Children's, Children's Rehabilitation
- University Hospitals System: Ahuja, Case, Parma, Rainbow Babies & Children's
- St. Vincent Charity Medical Center

Each assessment identified priority and/or significant health needs. As shown in the table, there was much overlap between

Priority or Significant Health Issue	Cleveland Clinic						University Hospitals				St. Vincent Charity Medical Center	Total
	Main Campus	Fairview	Hillcrest	Euclid	Children's	Children's Rehabilitation	Parma	Case	Ahuja	Rainbow Babies & Children's		
Obesity	X	X	X	X	X	X	X	X	X	X	X	11
Poverty	X	X	X	X	X	X	X	X	X	X	X	11
Cost of Care	X	X	X	X	X	X	X	X	X	X		10
Diabetes	X	X	X	X	X	X	X	X	X	X		10
Transportation	X	X	X	X	X	X	X	X		X	X	10
Chemical Dependency/ Substance Abuse	X	X	X	X	X	X	X		X		X	9
Unemployment	X	X	X	X	X	X	X	X	X			9
Crime/ Violence	X	X	X	X	X	X		X	X			8
Heart Disease	X	X	X	X	X	X	X	X				8
Poor mental health status/ Mental Illness	X	X	X	X	X	X	X		X			8
Respiratory Diseases	X	X	X	X	X	X	X	X				8
Smoking cessation	X	X	X	X			X	X		X	X	8
Aging Population	X	X	X	X			X	X	X			7
Exercise/ Physical Activity	X	X	X	X	X	X		X				7
Mental Health Providers		X	X	X			X	X		X	X	7
Nutrition	X	X	X	X	X	X		X				7
Poor birth outcomes	X	X	X	X	X	X			X			7
Cancer	X	X	X	X			X	X				6
Primary Care Physicians		X	X	X			X		X	X		6
Communicable Diseases (including STIs)	X	X	X	X					X			5
Dentists		X	X	X						X		4
Hypertension	X	X	X	X								4
Infant Mortality							X	X	X		X	4
Alzheimer's (cognitive impairment)							X	X	X			3
Autism Spectrum Disorder					X	X						2
Injury Prevention					X	X						2
Risk Behaviors					X	X						2
Asthma										X		1
Bilingual Providers							X					1
Cardiovascular Diseases									X			1
Chronic Stress							X					1
Culturally Appropriate Care											X	1
Digestive Diseases								X				1
Education								X				1
Food Deserts							X					1
Health Literacy								X				1
Kidney Disease									X			1
Lack of Insurance							X					1
Sexual activity/no birth control										X		1
Soft drink consumption										X		1
Gun Ownership											X	1
Non-White Populations										X		1
Prenatal Care											X	1

the CHNAs. Obesity and poverty were identified by each of the hospitals, followed closely by cost of care, diabetes, and transportation (10 hospitals) and chemical dependency/ substance use, and unemployment (nine hospitals).

Cuyahoga County Health Improvement Plan (June 2015): The Health Improvement Partnership – Cuyahoga (HIP-Cuyahoga) initiative brings together a diverse group of stakeholders interested in improving opportunities for everyone in Cuyahoga County to be healthy. In 2015, HIP-Cuyahoga coordinated the development of Cuyahoga County's first Community Health Improvement Plan. This identifies several key indicators, some of which are quoted directly from the report:

- Three times as many African-American babies die compared to White babies.
- One in four people in Cuyahoga County overall, and one in two people in the City of Cleveland, are living in areas that lack access to healthy food options, referred to as "food deserts."
- The community experiences two to three times as many poor mental health days as the nation.
- The cancer death rate is 1.5 times higher in the City of Cleveland than the national benchmark.
- Two to three times more African-American and Hispanic residents experience poverty than Whites in the City of Cleveland.

After examining community data, the Health Improvement Plan identifies four priorities:

1. Eliminate Structural Racism – Structural racism limits opportunities for some but contributes to poor health for all.
2. Healthy Eating and Active Living – Everyone should be able to eat as healthy and be as active as they choose to be.
3. Clinical and Public Health – Public health and health care systems must work together to improve the health of communities.
4. Chronic Disease Management – An increasing number of people of color are at risk of chronic disease and do not get the care they deserve and need.

Community Health Status Assessment for Cuyahoga County (March 2013): HIP-Cuyahoga conducted a community health assessment which served as the data underpinnings for the subsequent process to develop a community health improvement plan (described above). Because the geography of the HIP-Cuyahoga report overlaps MetroHealth's service area, the findings of this report are particularly useful to validate and inform the secondary data and gaps analysis. Key findings and data points are quoted directly from the HIP-Cuyahoga report.

- Hospitalizations for chronic conditions were 50 percent higher than the national average. Many of these conditions could be preventable through improved nutrition, increased physical activity and eliminating tobacco usage, which underscore a need to reallocate treatment dollars to prevention.
- Many residents lack access to personal vehicles, public transportation, and safe areas for recreation.
- Racial/Ethnic disparities are almost two to three times larger within the City of Cleveland compared to Cuyahoga County overall for the following: deaths occurring in the first year of life; newly diagnosed cases of HIV and AIDS; homicides; and births to adolescents 10-14 and teens 15-17 years old.
- Persons living in Cuyahoga County overall will live an average of four years longer than persons living in the City of Cleveland.
- Residents in the City of Cleveland may be faced with more challenging socioeconomic conditions (e.g. higher unemployment, higher poverty, lower insurance coverage, lower levels of educational attainment) that can affect overall health compared to Cuyahoga County overall.
- Residents in the City of Cleveland are experiencing more death, illness, and injury compared to Cuyahoga County overall.
- For gun-related deaths, the rate is: over two and a half times higher among Black, non-Hispanic compared to White, non-Hispanic; primarily

occurring in males; and highest among the 18-34 year old age group.

First Year Cleveland: Strategic Plan (June 2017): First Year Cleveland is an initiative to address infant mortality. Its mission is to mobilize the community through partnerships and a unified strategy to reduce infant deaths.

In its recently released strategic plan, First Year Cleveland identifies several key issues and salient data points relating to infant mortality. The points below are quoted directly from their report. They found that:

- African Americans make up 38 percent of births in Cuyahoga County but represent 69 percent of infant deaths. This racial disparity persists when controlling for education and income. Suggested reasons include structural racism, the environment of the mother, nutritional deficiencies, and long-term stress.
- For over two decades, prematurity has been the largest contributing factor to infant mortality in Cuyahoga County. In 2015, the City of Cleveland and Cuyahoga County experienced 155 infant deaths: 87 babies or 55 percent did not survive to celebrate their first birthday with 70 or 45 percent being extremely premature births, defined as 23 weeks gestation or earlier – the vast majority of those being African American.

First Year Cleveland identified three priorities: reduce racial disparities, address extreme prematurity, and eliminate sleep-related infant deaths.

Age-Friendly Cleveland Assessment (December 2015): The City of Cleveland Department of Aging published an extensive report on the needs of older adults as part of Cleveland's participation in the World Health Organization's Global Network of Age-Friendly Cities and AARP Network of Age-Friendly Communities. This broad report relied on secondary data analysis, two surveys of older adults, and focus groups. It examined current conditions, challenges, and opportunities among eight domains of livability including outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community support and health services. In particular, the Community Support and Health Services section relates to this CHNA. Findings are quoted directly from the final report, which was released in 2015:

- While, overall, Cleveland older adults reported good health status, low-income adults were more likely to report poor or fair health than upper-income individuals.
- Most older adults are generally satisfied with their health services.
- Focus group participants widely shared that they were not familiar with, or don't have access to, available mental health services.
- According to the outreach questionnaire results, 32 percent of those who responded said they could not get an appointment with their doctor when they needed to, while 64 percent indicated that they could only "sometimes" get a needed appointment.
- Nearly 30 percent of those who completed the outreach questionnaire indicated that when seeking help for health, financial, or housing issues, they don't qualify for the services they need.

Cuyahoga County ADAMHS Board Needs Assessment (forthcoming): In 2016, the Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board undertook a needs assessment process. The final report is not yet available online, but The Center for Community Solutions requested and obtained a copy of the summary. Key findings which are particularly relevant to this report are included, below, and are directly quoted from the summary.

- In 2016 we can estimate that all of those who are not Medicaid beneficiaries who require and seek care are receiving at least some care. That is, the gap here is not in people who need care being completely turned away; instead the gap is in the availability (both community capacity and financial resource) for the best types of care which are required based on the individual need for each client…. There is not a sufficient level of either community capacity or financial resources to pay for the number of clients who require residential care.
- The gap for Medicaid

beneficiaries who require care relate to those whose outcomes would be improved if they had access to key services which Medicaid does not cover… housing, employment services, inpatient detoxification.

- The demographic profile of the ADAMHS Board client base has changed little from 2013 to 2015. The adults served by funding provided by the Board are predominantly unmarried (8 in 10), male (59 percent), and non-White (45 percent African American and 6 percent Hispanic/Latino) in 2015.
- The median age of those who received mental health services was 34 in 2015, and 33 for those who received addiction services. However, the distributions of the ages of those two client populations were quite different. The ages of those who received mental health services is fairly evenly distributed among all adult age groups under age 60, with the greatest proportion aged 13 to 18 or aged 53 to 57. In sharp contrast, those who received addiction service cluster in the age 20 to 35 range. That being said, 40 percent of those who received addiction services in 2015 were over age 35.
- About one-fourth of the mental health and one-third of the addiction services clients account for 80 percent of the service expenditures for the ADAMHS Board.
- The ADAMHS Board is not alone in Cuyahoga County in its being impacted by the Affordable Care Act. Many components of the Affordable Care Act have resulted in a greater emphasis on the management of chronic disease outside of the traditional healthcare institutions.
- Perhaps the most pressing issue facing the community related to behavioral health is the very rapid increase in the number of fentanyl-related overdose deaths.

Cuyahoga County Opiate Task Force Report 2016: For the past several years, the Cuyahoga County Opiate Task Force (CCOTF) has released a report detailing need and action to address the growing opioid crisis. CCOTF is convened by Cuyahoga County Board of Health and includes a wide-ranging group of stakeholders representing various systems and agencies concerned or impacted by this issue.

The 2016 report recognized that it was a momentous year for our community as Cleveland hosted the RNC, the Cleveland Cavaliers won the NBA championship, and the Cleveland Indians played in the World Series. The report states, "Annually, the number of individuals in Cuyahoga County who misuse or abuse prescription opioids would fill First Energy Stadium (73,200). From those individuals, if you took a portion of them and filled Quicken Loans Arena, this is the number of individuals every year who make the switch to heroin (20,562). Last, if you filled and crashed a 747 commercial jet airliner, this is approximately the number of people who die on an annual basis in Cuyahoga County as a result of this epidemic (over 350)." In addition, the report highlights other key data points, which are quoted directly, below:

- Per the Cuyahoga County Medical Examiner's Office, an average of 12 people per week lost their lives to drug overdoses. This resulted in over 500 victims in 2016. This number more than doubles the fatalities for 2015.
- The United States consumes nearly 80 percent of the world's total opioid supply, even though it makes up only 5 percent of the world's population.
- About 75 percent of all prescription drug overdose deaths can be attributed to opioid pain relievers.
- The leading cause of injury-related death in Ohio continues to be accidental drug overdose.
- Ohio has experienced nearly an 800 percent increase in fatalities since 2000.
- Heroin and fentanyl are at the forefront of the epidemic.

United Way of Greater Cleveland: Power of Community Report (July 2017): United Way of Greater Cleveland undertook an extensive community assessment process during 2016 and 2017. Their examination included secondary data on a wide variety of demographic and other data, as well as primary data collected via surveys, focus groups, stakeholder interviews, and feedback forums. The resulting report provides an overview of community conditions relating to basic needs, education, financial stability, and health.

United Way identified five priority issues: workforce development,

education, basic needs, health and human services, and safety. The data points below are quoted directly from the final report:

- Cleveland has an unemployment rate that is almost two percentage points above the county's at 6.3 percent in 2015, and a median household income of $28,831 versus the suburban rate of $45,297.
- Educational attainment in Cleveland is well below that of its neighbors, contributing to the correlating demographics. This includes 46 percent of kindergartners arriving unprepared, 54 percent of third graders not reading at grade level, and only 69.1 percent of high school students graduating on time. This level of education negatively impacts the workforce and economic trajectory of the region.
- Due to the high poverty rates for multiple populations, such as 53 percent for children within Cleveland, it is assumed that residents are struggling to make ends meet. This is in addition to a housing market destabilized by the foreclosure crisis where some homes have only retained 13 percent of their pre-crisis value.
- Clevelanders have higher rates of chronic diseases that increase as income decreases, are less likely to visit a doctor, experience the death of an infant at nine per 1,000 live births, and are more likely to have a child diagnosed with lead poisoning due to aging housing stock.
- While violent crime is still far below levels in the 1970s and 1980s, the data support the need to intervene, as Cleveland has a violent crime rate of 13.396 per 1,000 versus the county average of 5.61 per 1,000.

Ohio 2016 State Health Assessment: The Ohio 2016 State Health Assessment (SHA) identified eight key issues. Below, we highlight a few data points from the report, which are quoted directly:

1. Many opportunities exist to improve health outcomes
   a. Mental health and addiction – The unintentional injury death rate, which includes drug overdoses, increased 30 percent from 2009 to 2014 and emerged as Ohio's second highest cause of premature death.
   b. Chronic disease – Obesity and hypertension, for example, are highly prevalent conditions reported by nearly one-third of Ohio's adult population. The prevalence of adult diabetes rose from 10.4 percent in 2013 to 11.7 percent in 2014. All three of these conditions were more common among middle-aged Ohioans (ages 45-64) than younger Ohioans (ages 18-44), indicating that chronic disease will be a significant challenge for Ohio's growing aging population in the coming years.
   c. Maternal and infant health – In 2014, the Black infant mortality rate was more than twice as high as the White rate. This Black and White gap is not nearly as large in the U.S. overall, indicating that more can be done to reduce this sobering disparity.
   d. Health Behaviors – Ohio's 2014 adult smoking rate (21 percent) was nine percentage points above the Healthy People 2020 target (12 percent). In addition, Ohio's mothers were nearly twice as likely to have smoked during pregnancy in 2014 than in the U.S. overall. Forty-two percent of Ohioans reported that they did not consume fruits on a daily basis and 26 percent did not eat vegetables on a daily basis in 2013.
2. Many opportunities exist to decrease health disparities
3. Access to health care has improved, but challenges remain
4. Social determinants of health present cross-cutting challenges and strengths
5. Opportunities exist to address health challenges at every stage of life
6. Improved data collection efforts are needed to assess health issues at the local level and for specific groups of Ohioans.
7. Widespread agreement on health issues identified at local, regional and state levels can be an impetus for greater collaboration
8. Sustainable health care spending remains a concern in Ohio.

Identified Gaps

Disparities in Health Outcomes

Unfortunately, there are limited data readily available on the impact of health conditions for various sub-populations, such as different racial and ethnic groups, for the community. However, there is a dearth of research at the national level which indicates that race is a significant factor in health outcomes. In addition, several community health initiatives, including HIP-Cuyahoga, Better Health Partnership, and First Year Cleveland, have specifically identified racial disparities as key priorities. In Cuyahoga County, racial disparities in health care coverage persist, particularly in the suburbs.

On nearly every measure for which there are data on sub-county geographies, the City of Cleveland lags behind the Cuyahoga County averages. In addition to the gaps described below, the CDC's 500 Cities data reveal that Cleveland residents experience more days of poor mental and physical health than their peers in Parma or the rest of the county. Poverty, a lack of access to resources, and underutilization of available health care services all contribute to poor health outcomes for Cleveland residents. These disparities begin at birth and continue throughout the lifecycle. The HIP-Cuyahoga assessment, in particular, highlights geographic disparities which are also shown in the secondary data analysis.

Detailed below are health outcomes which are worse for residents of Cuyahoga County and the City of Cleveland than the rest of the state. Indicators of chronic disease are particularly concerning, as these are closely tied to health behaviors and community and social factors on which the city and county also perform poorly. In addition, local data and national research indicate that there are gaps for certain groups or communities, creating health disparities.

1. **Diabetes:** Both the county and Cleveland have a higher prevalence of diabetes diagnoses than Ohio, but the impact of diabetes is not evenly distributed among racial and ethnic groups. Nationally, the death rate related to diabetes is twice as high for African Americans as it is for Whites. Better Health Partnership has also identified racial disparities in patients meeting standards of diabetes outcomes at the local level. Obesity is closely related to diabetes. Although there is no statistically significant difference between adult obesity rates between the county and state, adult obesity represents one of the largest gaps between Cleveland and Ohio in the CDC's 500 Cities Data.

2. **Heart Disease:** The prevalence of coronary heart disease is greater in Cleveland than in Ohio or the nation. Identified gaps related to unhealthy behaviors, especially smoking and lack of physical activity, likely contribute to heart disease prevalence in the community. There also appears to be a significant gap in the treatment of heart disease within Cuyahoga County. The prevalence of coronary heart disease in Cuyahoga County is lower than the state, but heart disease is the leading cause of death. In addition, the mortality rate related to heart disease is much higher for Cuyahoga County than the state or U.S.

3. **Asthma:** Adults in Cuyahoga County are more likely to have asthma than Ohio as a whole. Although readily available local data on childhood asthma did not meet the criteria to be included in this report, clinical data analyzed by Better Health Partnership indicate that this issue is of concern to the community. The County also lags on indicators which can relate to asthma, including air quality and living near a highway.

Issues Facing Young Children

An unacceptable number of children in the community die before their first birthday, and an unfortunate number of those who survive are poisoned by lead before they reach school. Young children are some of the most vulnerable residents of any community. Further, studies have found positive returns on investments in services for young children, such as early childhood care and education and foster care diversion programs. These programs can lower need for more costly health and social service and justice interventions for children affected by lead poisoning and trauma as they develop into adulthood.

1. **Infant Mortality:** Infant mortality rates in the City of Cleveland approach those of

less developed countries, and racial disparities are particularly stark in incidence of infant death. First Year Cleveland identified extreme prematurity and structural racism as two driving factors which must be addressed to move the needle on this issue. Some believe that infant mortality has reached crisis levels. The secondary analysis showed that Cuyahoga County and Cleveland lag behind state and national benchmarks on a series of negative birth outcomes which are associated with infant mortality.

2. **Elevated Blood Lead Levels:** Data obtained from Ohio Department of Health indicate that lead poisoning rates in some Cleveland census tracts could be as high as 40 percent of tested children. Cuyahoga County has higher rates for each of the predictive factors for elevated blood levels in children (pre-1960 housing, African Americans, poverty) than the state as a whole, and these factors are of particular concern in the cities of Cleveland and East Cleveland, including the neighborhood immediately surrounding the MetroHealth Medical Center. Elevated blood lead levels have been linked to a host of behavioral and educational issues that persist even when lead returns to an acceptable level in the blood.

Barriers to Accessing Care

Cuyahoga County is home to high-quality health institutions, including The MetroHealth System. While Cuyahoga County ranks in the top 10 counties in Ohio on the County Health Rankings for access and quality of clinical care, it is consistently in the bottom third for health outcomes of residents. Several other studies examined for this report identified cost of care as a priority issue. Analysis revealed several additional gaps which contribute to barriers for residents to access available care.

1. **Transportation:** If people are unable to travel to the locations where services are provided, then they will be unable to take advantage of available services and treatment. The number of households which do not have a vehicle is concerning, especially within the City of Cleveland. Alternative transportation options for those without vehicles have been further limited by recent changes in public transit. The focus groups frequently cited transportation as a problem which prevents people from living healthy lives.

2. **Lack of Health Insurance:** Despite significant gains in health coverage in recent years thanks to Medicaid expansion and the Affordable Care Act, more than one-fifth of working-age adults in Cleveland and 14 percent in the county overall remain uninsured. While most residents of the county have private health insurance, in the City of Cleveland, the number of people covered by Medicaid (152,074) is almost as high as the number who have private health insurance coverage (166,702). Racial disparities persist.

Social Determinants of Health

Community conditions have a significant impact on the health of individuals and communities. The residents of Cuyahoga County, especially those that live in Cleveland and East Cleveland, face numerous challenges. The community lags behind state and national averages on nearly every measure of social factors. Three areas which display particularly large gaps are outlined below.

1. **Poverty:** Families and individuals living in poverty face constrained resources, limiting their ability to make ends meet, forcing difficult choices. The Ohio Association of Foodbanks found that 66 percent of families served by their network had to choose between food and medicine or medical care. Research has repeatedly shown a link between poverty and numerous negative health and social conditions. Cleveland is the second-poorest city in the United States and more than half of Cleveland's children live in poverty. Due to the high rates in this community, poverty was identified as a priority health issue by each of the 11 hospital CHNAs examined for this study.

2. **Unemployment:** Poor health and poor mental health can be both a cause and an effect of unemployment. According to the CDC, productivity losses related to personal and family health problems cost U.S. employers $225.8 billion annually. Even a decade after the start of the Great Recession, unemployment

remains above national rates, and is especially high in some parts of Cleveland. The large share of Cleveland working-age adults who are not in the labor force indicates high rates of discouraged workers. Unemployment negatively impacts both the resources available to a family through income, and also access to affordable employer-based health coverage.

3. **Housing Issues:** The foreclosure crisis and subsequent issues of vacancy and abandonment hit Cuyahoga County particularly hard. For most parts of the community, house values have not recovered to pre-recession levels, wiping out a significant financial asset for many families. Many residents live in unaffordable rental situations, and the quality of housing stock is of particular concern. Stable housing reduces stress, improves compliance with treatment regimens, and facilitates employment. Lead, mold, inadequate kitchen or bathroom facilities, and home heating issues can directly and negatively impact health.

Emerging Issues

Communities are constantly changing, and there are several issues which have emerged as areas of concern in recent years. If trends continue, these will become even larger factors impacting the health of residents in coming years.

1. **Opioids:** After being relatively steady for several years, the number of estimated drug overdoses began a precipitous rise in 2015. By the end of August, estimated drug overdoses in Cuyahoga County had nearly overtaken the annual total for the previous year. Estimated drug overdoses jumped 60 percent between 2015 and 2016 and if current rates continue, will increase by another 46 percent over last year. The ADAMHS Board of Cuyahoga County and the Opiate Task Force recently completed studies of this issue, which is having a broad impact on health, social service, and criminal justice systems.

2. **Older Adults:** Thanks to longer lifespans, low fertility, and the "baby boomers," the share of older adults in Cuyahoga County and across the state is increasing. By 2030, it is expected that adults over age 65 will outnumber children under 18 in Cuyahoga and 43 other counties in Ohio. Mortality rates for the younger segment of older adults (ages 65-74) in Cuyahoga County are higher than those for the state, which might suggest overall poor health for this age group in the community. As the population continues to age, community health needs will change. There are currently gaps in the share of older adults receiving preventive care, which may increase as the population continues to age. Capacity to meet these growing needs is concerning; and practitioners have expressed concern about the lack of geriatric specialists working in Cleveland and Cuyahoga County.

3. **Community Trauma:** Clear links have been established between individual trauma or adverse childhood experiences and poor health outcomes. Broadening this to a population level, whole communities may also experience negative and traumatic effects due to adverse community conditions, such as violence, disinvestment, poverty, and historical inequities. The violent crime rate in Cuyahoga County is nearly three times the national median. Individuals in communities are witnessing violence at alarming rates. In East Cleveland, severe budget constraints, caused in part by a drop in revenue resulting from high rates of foreclosures, have required such deep cuts to the police force that it is considered a public safety issue to even publicize how few police officers remain on the streets. Crumbling infrastructure, especially in the form of vacant and abandoned homes, adds to community trauma. Meanwhile, measures that could mitigate community trauma, such as access to economic and educational opportunity, are lacking in many areas of Cleveland and East Cleveland.

Geographic Areas of Focus

The data profiles, below, present data for areas identified in the secondary data analysis as being at risk for community trauma.

East Cleveland

East Cleveland's population is slightly older than the rest of Cuyahoga County, and the community is home to fewer

families with children. The population of East Cleveland is almost entirely African-American (91.8 percent), one of the highest concentrations in the county.

East Cleveland residents are less likely to be in the labor force than the rest of the county (51.5 percent versus 63.2 percent). As shown in the attached fact sheet, they are nearly three times more likely to receive cash public assistance and twice as likely to receive SNAP. The reliance on public assistance could be due, in part, to the fact that East Cleveland has the lowest median income of any community in Cuyahoga County, more than $6,000 per year below the City of Cleveland. The poverty rate in East Cleveland is more than double that for Cuyahoga County. As noted in the secondary data analysis, East Cleveland has more blighted homes which are likely in need of demolition than the remainder of the suburbs combined. The community also has the highest share of households with no available vehicle, at 40 percent of households.

Buckeye-Woodhill Neighborhood

Residents in the Buckeye-Woodhill neighborhood of Cleveland tend to be younger and are more likely to be African American than the city as a whole. In fact, at 94.3 percent, the share of African Americans in Buckeye-Woodhill is the largest in Cleveland. Because it is home to so many families with children, the fact that Buckeye-Woodhill's child poverty rate is over 75 percent is especially concerning. Like other neighborhoods highlighted here, labor force participation and median household income are lower in Buckeye-Woodhill than the rest of Cleveland. However, health insurance coverage is slightly higher.

Central Neighborhood

The Central neighborhood in Cleveland has the lowest median income of any neighborhood in the City, at $9,647. This is below the federal poverty level for any family size. Therefore, it is not surprising that poverty rates are very high in Central, with more than 80 percent of children and nearly 70 percent of people of any age living in poverty. Nearly 65 percent of those over age 25 in Central have no education beyond a high school diploma, indicating limited education and employment prospects. On the other hand, individuals in the Central neighborhood are more likely to have health coverage than the rest of Cleveland, and the uninsured rate in Central is only 12 percent. Central also has fewer older adults (6 percent) than the rest of the city (12.4 percent).

Clark-Fulton Neighborhood

The Clark-Fulton neighborhood of Cleveland is home to a large share of the city's Hispanic or Latino population, which comprise 48.1 percent of the total population of the neighborhood. Individuals living in Clark-Fulton are more likely to receive public assistance than the rest of Cleveland, including Social Security Income (29.6 percent), cash public assistance income (12.3 percent), and SNAP (49.0 percent).

Residents of Clark-Fulton are less likely to have health insurance (21 percent uninsured versus 16 percent). Clark-Fulton also has the highest teen birth rate among Cleveland's neighborhoods. According to the 500 Cities data, smoking is more prevalent in the census tracts which comprise the Clark-Fulton neighborhood.

Poverty rate for Clark-Fulton is higher than the city, both overall and for each age group. Adults in Clark-Fulton are half as likely to have at least a Bachelor's degree, and 71.1 percent of residents have a high school diploma or less, compared to 55.6 percent of Cleveland residents.

Hough Neighborhood

A study by Cuyahoga County Board of Health found that residents of the Hough neighborhood of Cleveland have the lowest life expectancy of any part of Cuyahoga County. The neighborhood is heavily African American (92.1 percent) and has slightly higher rates of single parent families than the rest of Cleveland. Labor force participation in Hough is low, with only half of individuals over age 16 in the labor force. Hough residents are more likely than their peers in other parts of Cleveland to be reliant on public benefits income, including Social Security income, cash public assistance (TANF/Ohio Works First), and SNAP (food stamps). Likewise, the uninsured rate in Hough is slightly lower than that for Cleveland. A large share of renters (57 percent) live in unaffordable housing which costs more than 30 percent of household income.

East Cleveland Community Factsheet

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Demographics (2011-2015 ACS 5-Year Estimates)

	East Cleveland		Cuyahoga County	
	Count	%	Count	%
Total Population	17,519		1,263,189	
Under age 18	3,802	21.7%	275,375	21.8%
Age 18-64	10,494	59.9%	783,177	62.0%
Age 65+	3,223	18.4%	204,637	16.2%
White	1,003	5.7%	803,486	63.6%
Black/African American	16,082	91.8%	375,018	29.7%
Asian/Pacific Islander	36	0.2%	35,057	2.8%
Other/more than one race	398	2.3%	49,628	3.9%
Hispanic or Latino (of any race)	139	0.8%	66,416	5.3%
Families with own children	1,521	18.8%	129,933	24.3%
Single-parent families with children	1,144	14.1%	58,917	11.0%

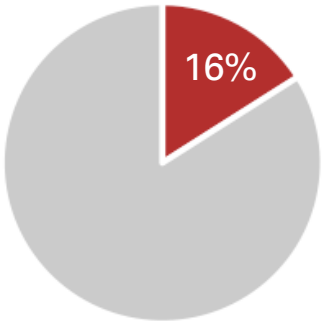
Employment and Income (2011-2015 ACS 5-Year Estimates)

	East Cleveland		Cuyahoga County	
	Count	%	Count	%
Labor Force Participation, age 16+	7,275	51.5%	645,723	63.2%
Median Household Income	$19,592		$44,190	
Public Benefits Income				
Households with Social Security Income	2,669	33.0%	163,299	30.5%
Households with Cash Public Assistance Income	884	10.9%	20,951	3.9%
Households that received SNAP (food stamps)	3,692	45.7%	98,743	18.5%

Health Coverage (2011-2015 ACS 5-Year Estimates)

Percent of people with *no health insurance coverage*:

East Cleveland



Cuyahoga County

East Cleveland Community Factsheet

Poverty (2011-2015 ACS 5-Year Estimates)

	East Cleveland		Cuyahoga County	
	Count	%	Count	%
Persons living below poverty	7,327	42.6%	231,823	18.7%
Children (Age 0-17) living below poverty	2,401	63.5%	75,385	27.8%
Families with children living below poverty	941	51.9%	34,224	23.9%
Seniors (Age 65+) living below poverty	708	23.3%	21,394	10.9%
Persons in deep poverty (under 50% of poverty)	3,393	19.7%	111,861	9.0%
Persons in or near poverty (under 200% of poverty)	11,837	68.8%	460,406	37.2%

Education (2011-2015 ACS 5-Year Estimates)

	East Cleveland		Cuyahoga County	
	Count	%	Count	%
Persons (Age 25+) with a High School diploma or less	6,510	54.0%	352,050	40.3%
Persons (Age 25+) with a Bachelor's degree or higher	1,327	11.0%	266,330	30.5%

Housing Affordability (2011-2015 ACS 5-Year Estimates)

	East Cleveland	Cuyahoga County
Unaffordable housing: *Housing costs are more than 30% of the household income*		
Owner-occupied households in unaffordable housing	50.0%	30.5%
Renter-occupied households in unaffordable housing	54.0%	47.6%
Overall households in unaffordable housing	53.1%	39.3%

Teen Birth (2010-2014 Ohio Department of Health, U.S. Census Bureau)

	East Cleveland		Cuyahoga County	
Rates are per 1,000 Females	5-Year Total	Rate	5-Year Total	Rate
Teen Births	218	84.2	6,702	32.3

Sources: 2011-2015 ACS 5-Year Estimates were compiled by The Center for Community Solutions. 2010-2014 Teen Birth data are from Ohio Department of Health, compiled by The Center for Community Solutions. Rates are calculated using U.S. Census Bureau population data.

Buckeye-Woodhill Neighborhood Factsheet

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Demographics (2010-2014 ACS 5-Year Estimates)

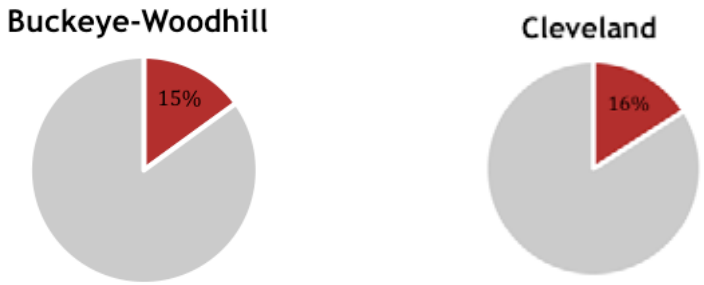
	Buckeye-Woodhill		Cleveland	
	Count	%	Count	%
Total Population	6,967		392,114	
Under age 18	2,279	32.7%	92,191	23.5%
Age 18-64	3,966	56.9%	251,135	64.1%
Age 65+	723	10.4%	48,788	12.4%
Race and Ethnicity				
White	327	4.7%	157,419	40.1%
Black/African American	6,570	94.3%	204,249	52.1%
Asian/Pacific Islander	2	0.0%	6,711	1.7%
Other/more than one race	69	1.0%	23,735	6.1%
Hispanic or Latino (of any race)	205	2.9%	39,406	10.0%
Household Makeup				
Families with own children	925	32.3%	40,180	24.1%
Single-parent families with children	898	31.4%	28,154	16.9%

Employment and Income (2010-2014 ACS 5-Year Estimates)

	Buckeye-Woodhill		Cleveland	
	Count	%	Count	%
Labor Force Participation, age 16+	2,596	53.0%	182,834	58.9%
Median Household Income	$15,002		$26,179	
Public Benefits Income				
Households with Social Security Income	649	22.3%	46,237	27.7%
Households with Cash Public Assistance Income	312	10.7%	11,977	7.2%
Households that received SNAP (food stamps)	1,559	53.5%	57,501	34.5%

Health Coverage (2010-2014 ACS 5-Year Estimates)

Percent of people with *no health insurance coverage*:



Note: The current uninsured rates are likely lower due to the implementation of the Affordable Care Act.

Buckeye-Woodhill Neighborhood Factsheet

Poverty (2010-2014 ACS 5-Year Estimates)

	Buckeye-Woodhill		Cleveland	
	Count	%	Count	%
Persons living below poverty	3,728	54.5%	136,860	35.9%
Children (Age 0-17) living below poverty	1,629	75.9%	48,267	53.5%
Families with children living below poverty	727	66.7%	21,622	46.3%
Seniors (Age 65+) living below poverty	199	27.6%	9,819	21.0%
Persons in deep poverty (under 50% of poverty)	2,416	35.3%	68,532	18.0%
Persons in or near poverty (under 200% of poverty)	5,509	80.6%	233,518	61.2%

Education (2010-2014 ACS 5-Year Estimates)

	Buckeye-Woodhill		Cleveland	
	Count	%	Count	%
Persons (Age 25+) with a High School diploma or less	2,439	64.4%	141,855	55.6%
Persons (Age 25+) with a Bachelor's degree or higher	212	5.6%	38,705	15.2%
Youth who are high school dropouts	44	-	2,045	-

Housing Affordability (2010-2014 ACS 5-Year Estimates)

	Buckeye-Woodhill	Cleveland
Unaffordable housing: *Housing costs are more than 30% of the household income*		
Owner-occupied households in unaffordable housing	42.7%	32.6%
Renter-occupied households in unaffordable housing	62.0%	52.8%
Overall households in unaffordable housing	56.4%	44.0%

Teen Birth (2010-2014 Ohio Department of Health, U.S. Census Bureau)

	Buckeye-Woodhill		Cleveland	
Rates are per 1,000 Females	5-Year Total	Rate	5-Year Total	Rate
Teen Births	111	62	4,172	59

Sources: 2010-2014 ACS 5-Year Estimates for Cleveland neighborhoods were calculated by NODIS at Cleveland State University. Because geographies are small, margins of error may be high, and differences between geographies should be interpreted with caution. 2010-2014 Teen Birth data are from Ohio Department of Health, compiled by The Center for Community Solutions. Rates are calculated using U.S. Census Bureau population data.

Central Neighborhood Factsheet

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Demographics (2010-2014 ACS 5-Year Estimates)

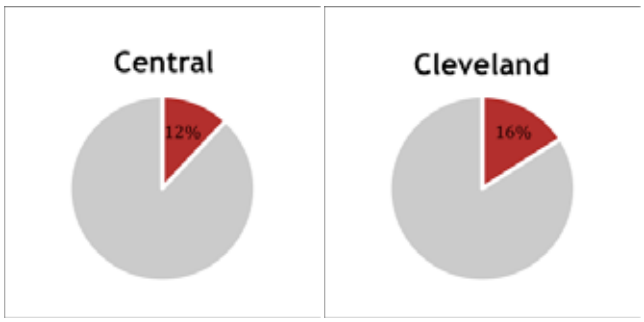
	Central		Cleveland	
	Count	%	Count	%
Total Population	10,980		392,114	
Under age 18	4,631	42.2%	92,191	23.5%
Age 18-64	5,687	51.8%	251,135	64.1%
Age 65+	662	6.0%	48,788	12.4%
Race and Ethnicity				
White	728	6.6%	157,419	40.1%
Black/African American	9,963	90.7%	204,249	52.1%
Asian/Pacific Islander	11	0.1%	6,711	1.7%
Other/more than one race	278	2.5%	23,735	6.1%
Hispanic or Latino (of any race)	172	1.6%	39,406	10.0%
Household Makeup				
Families with own children	1,892	43.5%	40,180	24.1%
Single-parent families with children	1,794	41.2%	28,154	16.9%

Employment and Income (2010-2014 ACS 5-Year Estimates)

	Central		Cleveland	
	Count	%	Count	%
Labor Force Participation, age 16+	3,603	52.9%	182,834	58.9%
Median Household Income	$9,647		$26,179	
Public Benefits Income				
Households with Social Security Income	826	19.4%	46,237	27.7%
Households with Cash Public Assistance Income	800	18.8%	11,977	7.2%
Households that received SNAP (food stamps)	2,907	68.4%	57,501	34.5%

Health Coverage (2010-2014 ACS 5-Year Estimates)

Percent of people with *no health insurance coverage*:



Note: The current uninsured rates are likely lower due to the implementation of the Affordable Care Act.

Central Neighborhood Factsheet

Poverty (2010-2014 ACS 5-Year Estimates)

	Central		Cleveland	
	Count	%	Count	%
Persons living below poverty	7,480	68.9%	136,860	35.9%
Children (Age 0-17) living below poverty	3,522	81.2%	48,267	53.5%
Families with children living below poverty	1,550	76.0%	21,622	46.3%
Seniors (Age 65+) living below poverty	235	41.0%	9,819	21.0%
Persons in deep poverty (under 50% of poverty)	5,407	49.8%	68,532	18.0%
Persons in or near poverty (under 200% of poverty)	9,670	89.1%	233,518	61.2%

Education (2010-2014 ACS 5-Year Estimates)

	Central		Cleveland	
	Count	%	Count	%
Persons (Age 25+) with a High School diploma or less	3,324	64.7%	141,855	55.6%
Persons (Age 25+) with a Bachelor's degree or higher	257	5.0%	38,705	15.2%
Youth who are high school dropouts	136	-	2,045	-

Housing Affordability (2010-2014 ACS 5-Year Estimates)

	Central	Cleveland
Unaffordable housing: *Housing costs are more than 30% of the household income*		
Owner-occupied households in unaffordable housing	36.7%	32.6%
Renter-occupied households in unaffordable housing	47.4%	52.8%
Overall households in unaffordable housing	45.9%	44.0%

Teen Birth (2010-2014 Ohio Department of Health, U.S. Census Bureau)

	Central		Cleveland	
Rates are per 1,000 Females	5-Year Total	Rate	5-Year Total	Rate
Teen Births	181	63	4,172	59

Sources: 2010-2014 ACS 5-Year Estimates for Cleveland neighborhoods were calculated by NODIS at Cleveland State University. Because geographies are small, margins of error may be high, and differences between geographies should be interpreted with caution. 2010-2014 Teen Birth data are from Ohio Department of Health, compiled by The Center for Community Solutions. Rates are calculated using U.S. Census Bureau population data.

Clark-Fulton Neighborhood Factsheet

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Demographics (2010-2014 ACS 5-Year Estimates)

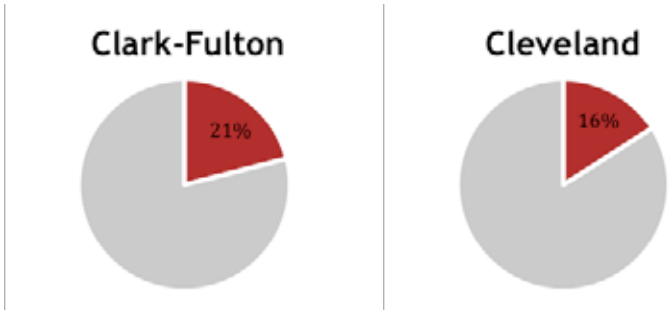
	Clark-Fulton		Cleveland	
	Count	%	Count	%
Total Population	7,451		392,114	
Under age 18	1,901	25.5%	92,191	23.5%
Age 18-64	4,804	64.5%	251,135	64.1%
Age 65+	746	10.0%	48,788	12.4%
Race and Ethnicity				
White	4,733	63.5%	157,419	40.1%
Black/African American	1,379	18.5%	204,249	52.1%
Asian/Pacific Islander	68	0.9%	6,711	1.7%
Other/more than one race	1,271	17.1%	23,735	6.1%
Hispanic or Latino (of any race)	3,586	48.1%	39,406	10.0%
Household Makeup				
Families with own children	730	25.5%	40,180	24.1%
Single-parent families with children	510	17.8%	28,154	16.9%

Employment and Income (2010-2014 ACS 5-Year Estimates)

	Clark-Fulton		Cleveland	
	Count	%	Count	%
Labor Force Participation, age 16+	3,040	52.0%	182,834	58.9%
Median Household Income	$21,983		$26,179	
Public Benefits Income				
Households with Social Security Income	827	29.6%	46,237	27.7%
Households with Cash Public Assistance Income	342	12.3%	11,977	7.2%
Households that received SNAP (food stamps)	1,368	49.0%	57,501	34.5%

Health Coverage (2010-2014 ACS 5-Year Estimates)

Percent of people with *no health insurance coverage*:



Note: The current uninsured rates are likely lower due to the implementation of the Affordable Care Act.

Clark-Fulton Neighborhood Factsheet

Poverty (2010-2014 ACS 5-Year Estimates)

	Clark-Fulton		Cleveland	
	Count	%	Count	%
Persons living below poverty	3,434	46.6%	136,860	35.9%
Children (Age 0-17) living below poverty	1,127	61.6%	48,267	53.5%
Families with children living below poverty	504	58.3%	21,622	46.3%
Seniors (Age 65+) living below poverty	171	25.0%	9,819	21.0%
Persons in deep poverty (under 50% of poverty)	1,797	24.4%	68,532	18.0%
Persons in or near poverty (under 200% of poverty)	5,335	72.4%	233,518	61.2%

Education (2010-2014 ACS 5-Year Estimates)

	Clark-Fulton		Cleveland	
	Count	%	Count	%
Persons (Age 25+) with a High School diploma or less	3,466	71.1%	141,855	55.6%
Persons (Age 25+) with a Bachelor's degree or higher	305	6.2%	38,705	15.2%

Housing Affordability (2010-2014 ACS 5-Year Estimates)

	Clark-Fulton	Cleveland
Unaffordable housing: *Housing costs are more than 30% of the household income*		
Owner-occupied households in unaffordable housing	36.6%	32.6%
Renter-occupied households in unaffordable housing	69.0%	52.8%
Overall households in unaffordable housing	55.0%	44.0%

Teen Birth (2010-2014 Ohio Department of Health, U.S. Census Bureau)

	Clark-Fulton		Cleveland	
Rates are per 1,000 Females	5-Year Total	Rate	5-Year Total	Rate
Teen Births	177	126	4,172	59

Sources: 2010-2014 ACS 5-Year Estimates for Cleveland neighborhoods were calculated by NODIS at Cleveland State University. Because geographies are small, margins of error may be high, and differences between geographies should be interpreted with caution. 2010-2014 Teen Birth data are from Ohio Department of Health, compiled by The Center for Community Solutions. Rates are calculated using U.S. Census Bureau population data.

Hough Neighborhood Factsheet

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Demographics (2010-2014 ACS 5-Year Estimates)

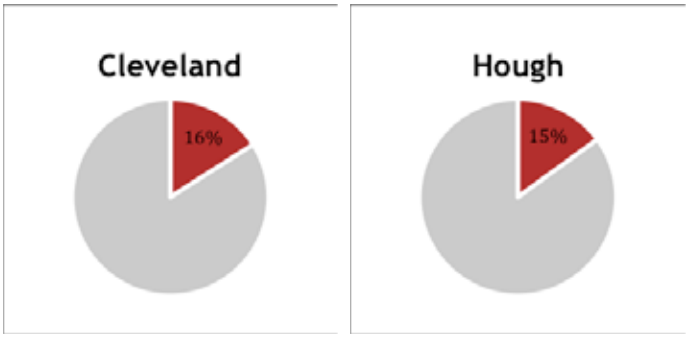
	Hough		Cleveland	
	Count	%	Count	%
Total Population	11,733		392,114	
Under age 18	2,917	24.9%	92,191	23.5%
Age 18-64	7,022	59.8%	251,135	64.1%
Age 65+	1,794	15.3%	48,788	12.4%
Race and Ethnicity				
White	484	4.1%	157,419	40.1%
Black/African American	10,805	92.1%	204,249	52.1%
Asian/Pacific Islander	130	1.1%	6,711	1.7%
Other/more than one race	314	2.7%	23,735	6.1%
Hispanic or Latino (of any race)	195	1.7%	39,406	10.0%
Household Makeup				
Families with own children	1,105	22.6%	40,180	24.1%
Single-parent families with children	900	18.4%	28,154	16.9%

Employment and Income (2010-2014 ACS 5-Year Estimates)

	Hough		Cleveland	
	Count	%	Count	%
Labor Force Participation, age 16+	4,561	50.0%	182,834	58.9%
Median Household Income	$15,376		$26,179	
Public Benefits Income				
Households with Social Security Income	1,586	32.3%	46,237	27.7%
Households with Cash Public Assistance Income	538	10.9%	11,977	7.2%
Households that received SNAP (food stamps)	2,516	51.2%	57,501	34.5%

Health Coverage (2010-2014 ACS 5-Year Estimates)

Percent of people with *no health insurance coverage*:



Note: The current uninsured rates are likely lower due to the implementation of the Affordable Care Act.

Hough Neighborhood Factsheet

Poverty (2010-2014 ACS 5-Year Estimates)

	Hough		Cleveland	
	Count	%	Count	%
Persons living below poverty	5,345	48.1%	136,860	35.9%
Children (Age 0-17) living below poverty	2,094	71.7%	48,267	53.5%
Families with children living below poverty	802	61.0%	21,622	46.3%
Seniors (Age 65+) living below poverty	458	28.7%	9,819	21.0%
Persons in deep poverty (under 50% of poverty)	3,129	28.2%	68,532	18.0%
Persons in or near poverty (under 200% of poverty)	7,614	68.6%	233,518	61.2%

Education (2010-2014 ACS 5-Year Estimates)

	Hough		Cleveland	
	Count	%	Count	%
Persons (Age 25+) with a High School diploma or less	4,784	62.6%	141,855	55.6%
Persons (Age 25+) with a Bachelor's degree or higher	619	8.1%	38,705	15.2%
Youth who are high school dropouts	30	-	2,045	-

Housing Affordability (2010-2014 ACS 5-Year Estimates)

	Hough	Cleveland
Unaffordable housing: *Housing costs are more than 30% of the household income*		
Owner-occupied households in unaffordable housing	35.6%	32.6%
Renter-occupied households in unaffordable housing	57.0%	52.8%
Overall households in unaffordable housing	50.7%	44.0%

Teen Birth (2010-2014 Ohio Department of Health, U.S. Census Bureau)

	Hough		Cleveland	
Rates are per 1,000 Females	5-Year Total	Rate	5-Year Total	Rate
Teen Births	149	71	4,172	59

Sources: 2010-2014 ACS 5-Year Estimates for Cleveland neighborhoods were calculated by NODIS at Cleveland State University. Because geographies are small, margins of error may be high, and differences between geographies should be interpreted with caution. 2010-2014 Teen Birth data are from Ohio Department of Health, compiled by The Center for Community Solutions. Rates are calculated using U.S. Census Bureau population data.

Primary Data Analysis

Five possible priorities were identified by the Community Engagement Committee of MetroHealth's Board of Trustees. These included reducing infant mortality; addressing the opioid epidemic; eliminating racial/ethnic disparities in care provided for chronic disease; mitigating community trauma in neighborhoods on the east side of Cleveland; and community building in the Clark-Fulton neighborhood. Primary data collection and analysis focused on three issues: racial/ethnic disparities and chronic disease, community trauma, and the Clark-Fulton neighborhood. Quantitative data on MetroHealth patients was examined and qualitative information was collected during several moderated conversations with community leaders.

MetroHealth Patient Data:
To protect patient privacy and confidentiality, Community Solutions did not have direct access to patient data. Instead, MetroHealth provided summary tables based on research questions and data points of interest identified by Community Solutions.

In addition, Better Health Partnership provided maps showing the percent of adult MetroHealth patients with uncontrolled diabetes and hypertension by census tract.

Key Informant Focus Groups and Faith Leaders Roundtable:
Three focus groups and one roundtable discussion targeted key informants in the community. Nearly 30 individuals participated in the four conversations, which were comprised of residents of the Clark-Fulton neighborhood who serve as Block Club leaders, representatives from churches and other faith-based groups in several of Cleveland's east side neighborhoods, physicians who practice in The MetroHealth System, and community service providers who specialize in serving Latino and Hispanic residents. Focus group participants were recruited by MetroHealth and the focus groups were led by Community Solutions. The faith leaders' roundtable was convened by MetroHealth and the discussion was led by a member of the Community Engagement Committee.

Qualitative data was collected in the form of notes and analyzed by Community Solutions. The discussions were confidential and anonymous. Participants in each focus group also completed a written survey. Paper surveys were collected and written responses were entered into the Survey Monkey online system in order to more easily compile and analyze results. Not all participants completed the survey and a total of 18 were returned. One hundred percent of respondents said they, or a family member, had received care at MetroHealth, including all of the community providers.

Disparities in Chronic Disease

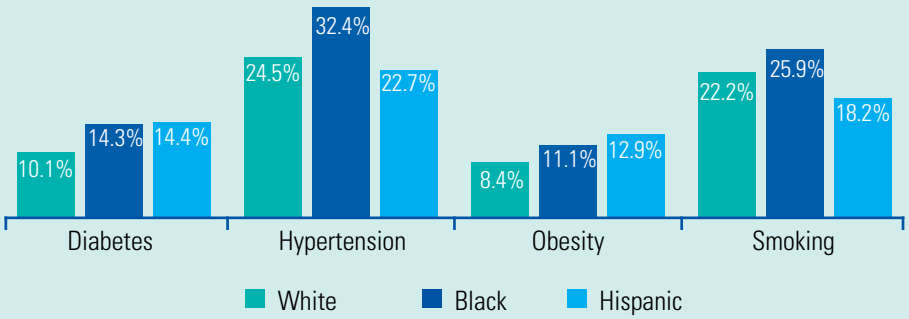
The analysis of MetroHealth patient data focused on racial disparities and chronic disease. The focus group with physicians also presented an opportunity to delve into the issues facing MetroHealth patients and to explore conditions which could influence disparities in care and outcomes.

Using summary data for MetroHealth patients from July 2016 through June 2017, differences among racial and ethnic groups were examined in the presence of four chronic conditions: current smoking behavior, diabetes, hypertension, and obesity. These disparities in three clinical settings (inpatient stays, emergency department stays, and outpatient visits) were reviewed, as well as all settings together.[1] Data were provided in summary tables which were broken down by three geographic levels (all MetroHealth patients over age 18, Cleveland residents, and residents of ZIP code 44109, the neighborhood of MetroHealth Medical Center).

Data on the ten ZIP codes with the largest number of MetroHealth patients with four chronic conditions: smoking, diabetes, hypertension and obesity was also provided. As can be seen on the maps, the patients clustered in the neighborhoods on the near east and west sides of Cleveland, and in Parma (44130

[1] *Inpatient, emergency, and outpatient categories include each visit or stay separately and may count the same patient multiple times, while "all settings" is an unduplicated count of all patients.*

Prevalence of Certain Conditions, All MetroHealth Patients, by Race/Ethnicity



and 44134). The percent of all patients in those ZIP codes with those conditions was calculated.

These statistics indicate a pattern of racial disparities in chronic conditions among MetroHealth patients. System-wide, African Americans had higher rates of chronic conditions than did Whites, while Latinos and Asians had mixed results. Native Americans, despite their low absolute numbers, have high rates of some chronic conditions and may benefit as a community by greater outreach and attention. The data show higher rates of conditions among inpatient stays and outpatient visits, which might be explained by the fact that patients in poor health are likely to be seen more than once in these settings, and could be counted multiple times. Finally, there were fewer racial disparities present in the 44109 neighborhood than the other geographies. This might indicate that people in that neighborhood of all races might have more in common; or being geographically close to the main campus may improve their access to care.

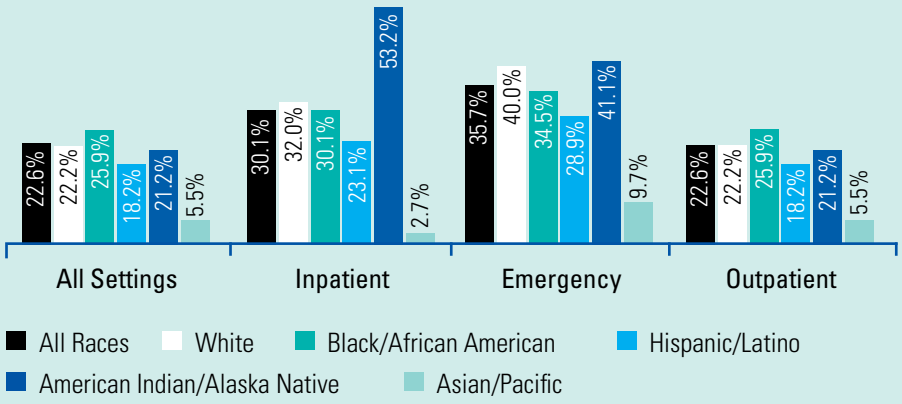
Overall, patients of MetroHealth who are Black or African-American are more likely to experience the chronic diseases of diabetes and hypertension than White patients. Hispanics are more likely to be diagnosed with diabetes than Whites, but less likely to be struggling with hypertension. African-American patients are most likely to be current smokers and Hispanics are least likely. On the other hand, Hispanic patients are about 1.5 times as likely as White patients to be obese.

Smoking

Just under one fourth (22.6 percent) of all adult patients reported that they are currently a smoker. Overall smoking rates were higher in Cleveland and the 44109 neighborhood. At all geographic levels, Emergency Department users generally had higher levels of smoking than inpatient or outpatient users.

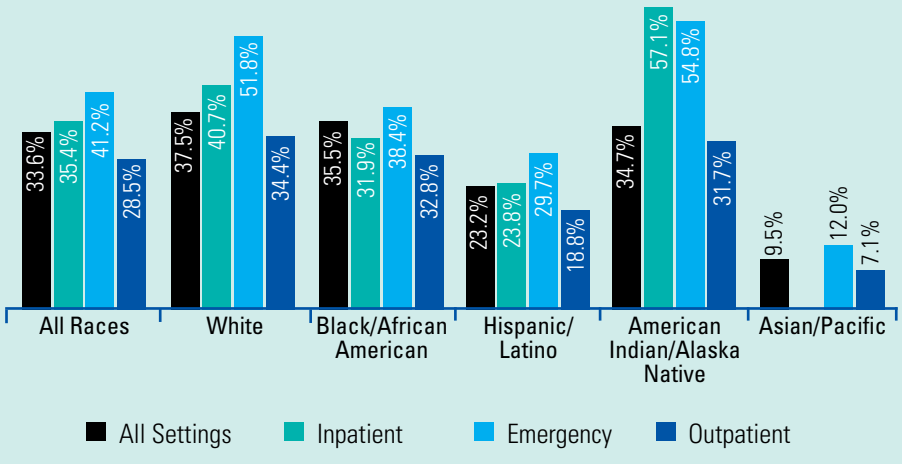
A slightly lower percentage of Whites (22.2 percent) than of

Currently a Smoker – All MH Patients

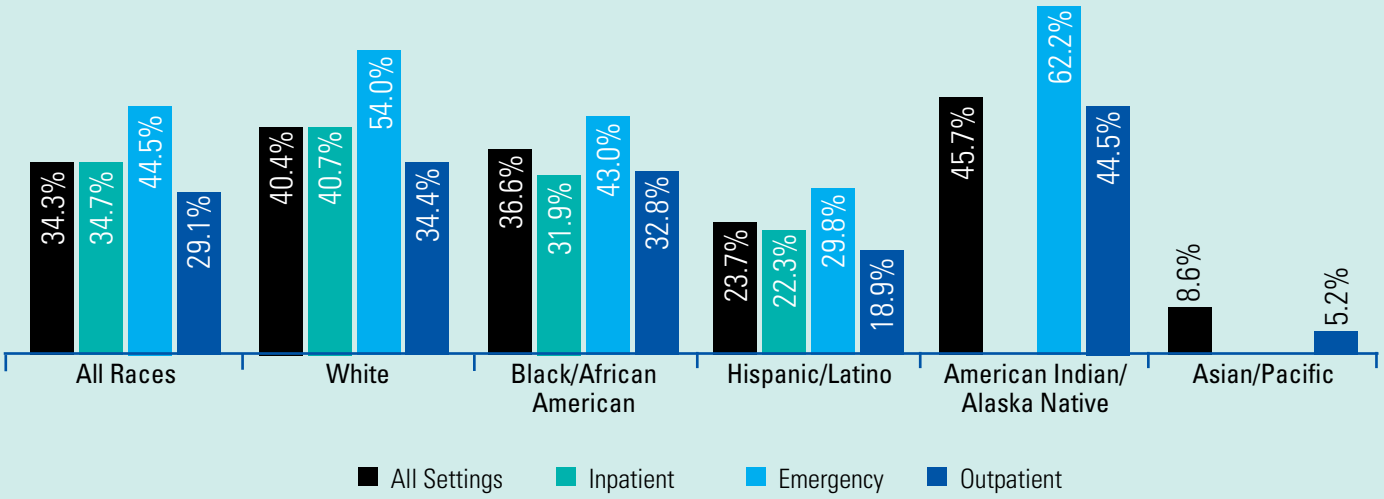


NOTE: All settings provides an unduplicated count of patients while the other settings include each visit or stay separately.

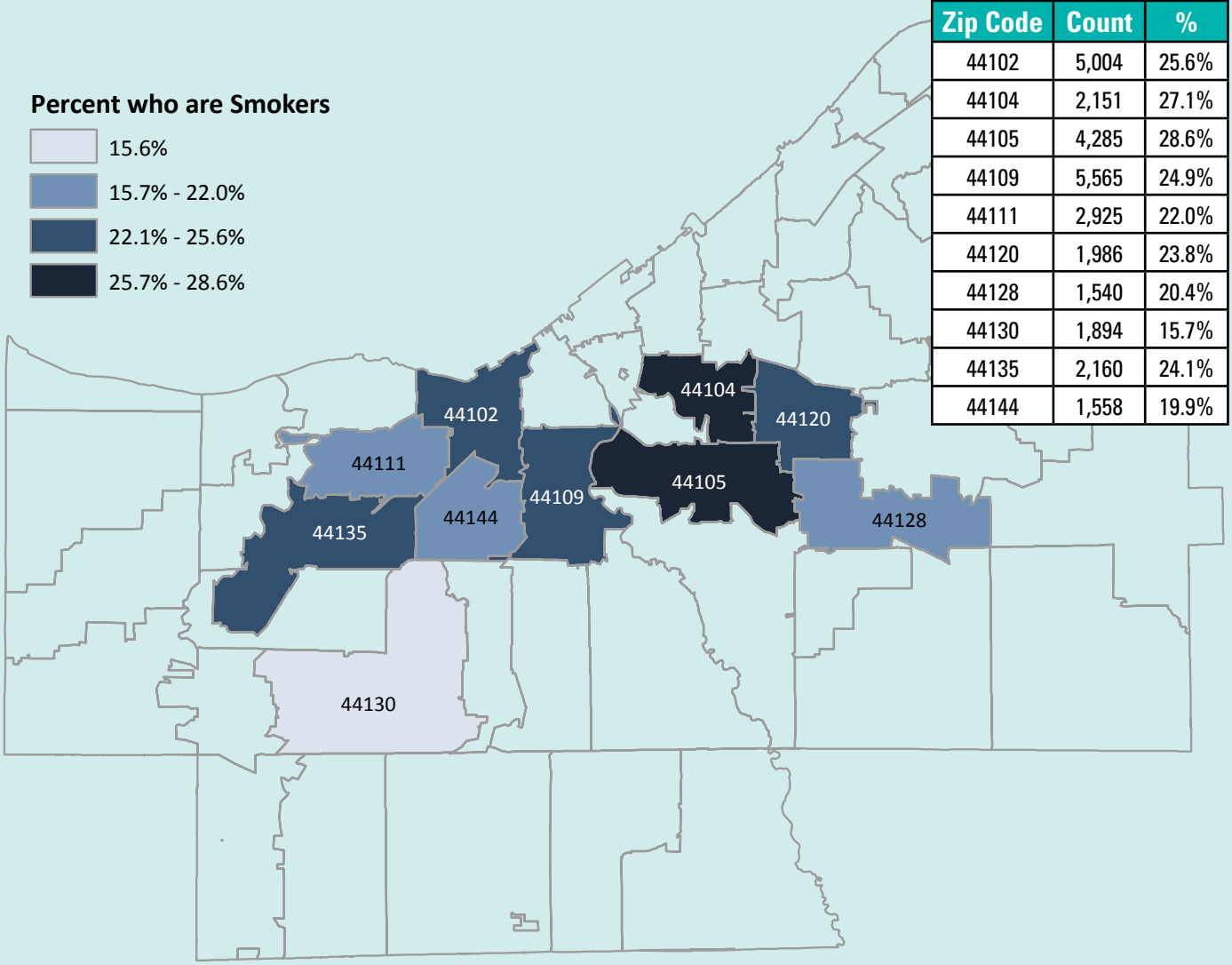
Currently a Smoker – Patients in Cleveland



Currently a Smoker – Patients in 44109



Percent of MetroHealth Patients who are Smokers*



	Smokers	
Zip Code	Count	%
44102	5,004	25.6%
44104	2,151	27.1%
44105	4,285	28.6%
44109	5,565	24.9%
44111	2,925	22.0%
44120	1,986	23.8%
44128	1,540	20.4%
44130	1,894	15.7%
44135	2,160	24.1%
44144	1,558	19.9%

*In top ten ZIP codes by number with that condition

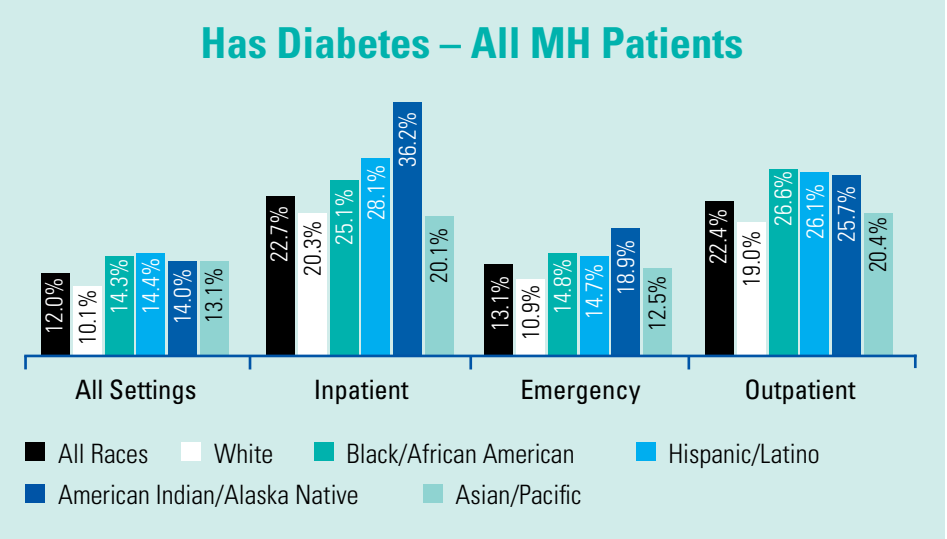
African Americans system-wide smoked, although the rate was higher for Whites than African Americans in Cleveland and in 44109. Latino patients had lower smoking rates than Whites, 18.2 percent system-wide. Of particular note is the high rate of usage among Native Americans, including 53.2 percent of inpatients and 41.1 percent of ED users. Although low in number (fewer than 700 total patients system-wide), this group had high rates of other chronic conditions as well. Asians and Pacific Islanders had the lowest rate of smoking (5.5 percent system-wide).

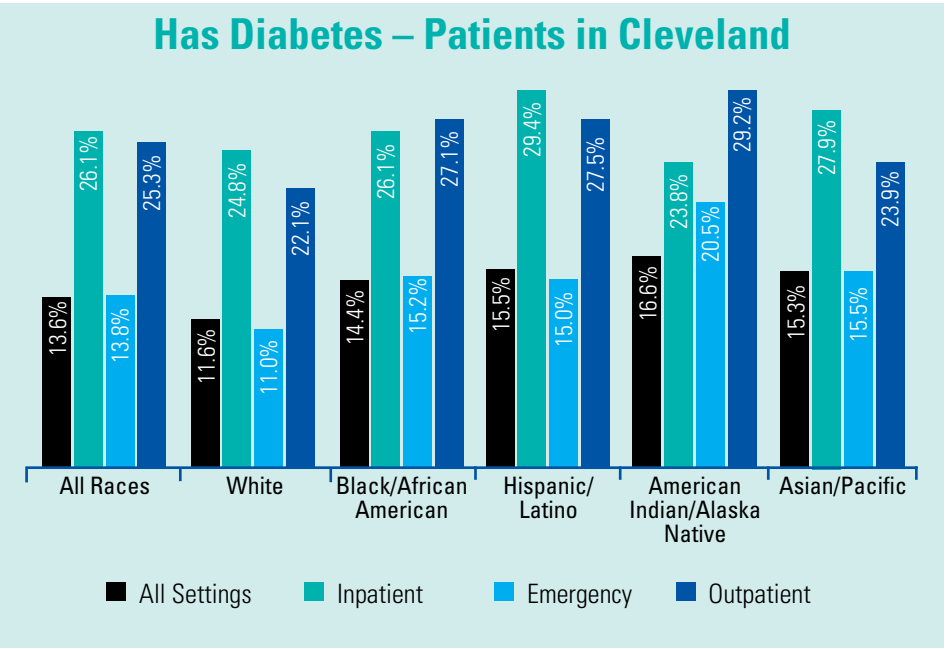
Among the top ten ZIP codes by number of patients who smoked, smoking was most prevalent in two east side ZIPs: 44105 (28.6 percent) and 44104 (27.1 percent). The lowest smoking rate was found in the Parma ZIP 44130 (15.6 percent).

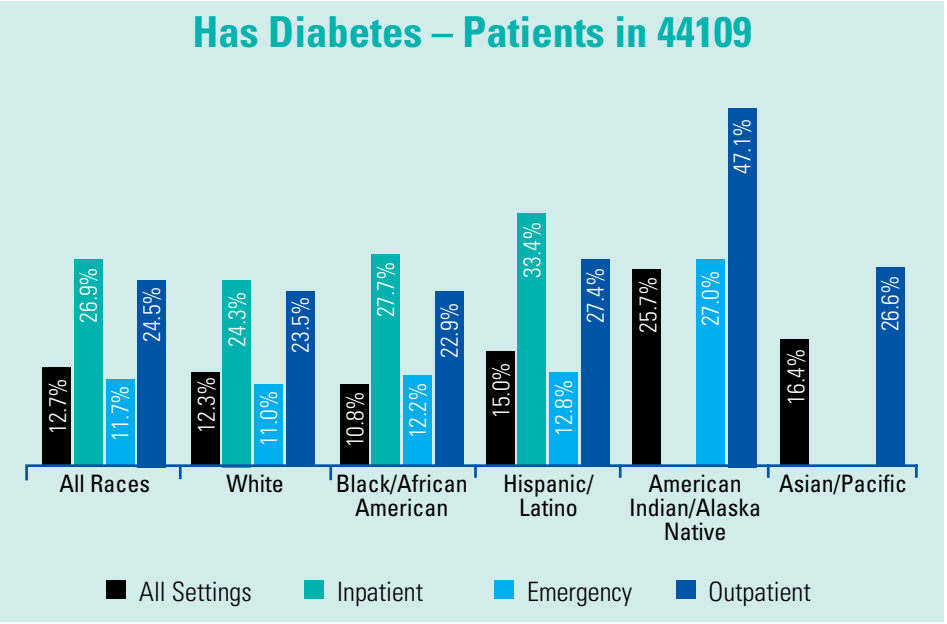
Diabetes

Twelve percent of all patients system-wide had diabetes; the rates were slightly higher in Cleveland (13.6 percent) and the 44109 neighborhood (12.7 percent). Compared to the rate for Whites (11.6 percent), all racial minorities had higher diabetes rates system-wide (13 to 14 percent), and rates were higher in inpatient (22.7 percent) and outpatient (22.4 percent) settings than in ED visits (13.1 percent).

The prevalence of diabetes in the ZIP codes with the most patients with these conditions was highest in the east side ZIP 44128 (13.4 percent), and lowest in the west side ZIPs 44102, 44109, 44111, and the Parma ZIP 44130 (between 9.1 and 9.4 percent). However, the greatest number of



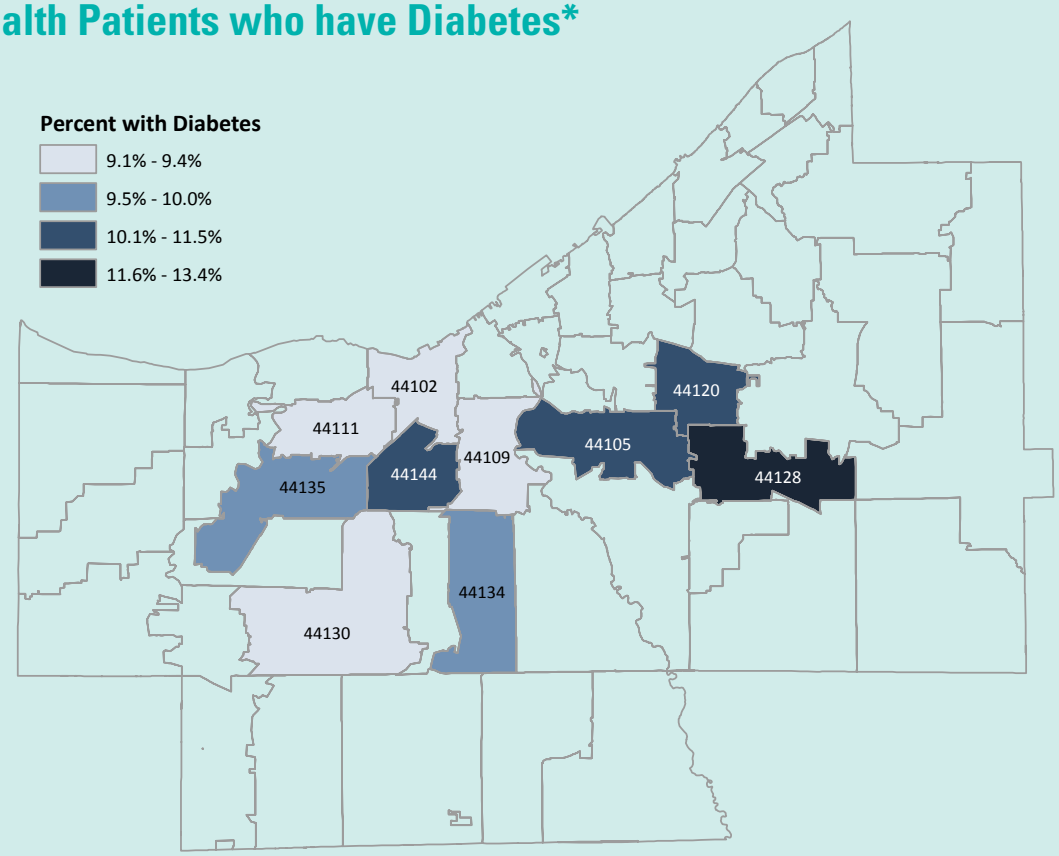




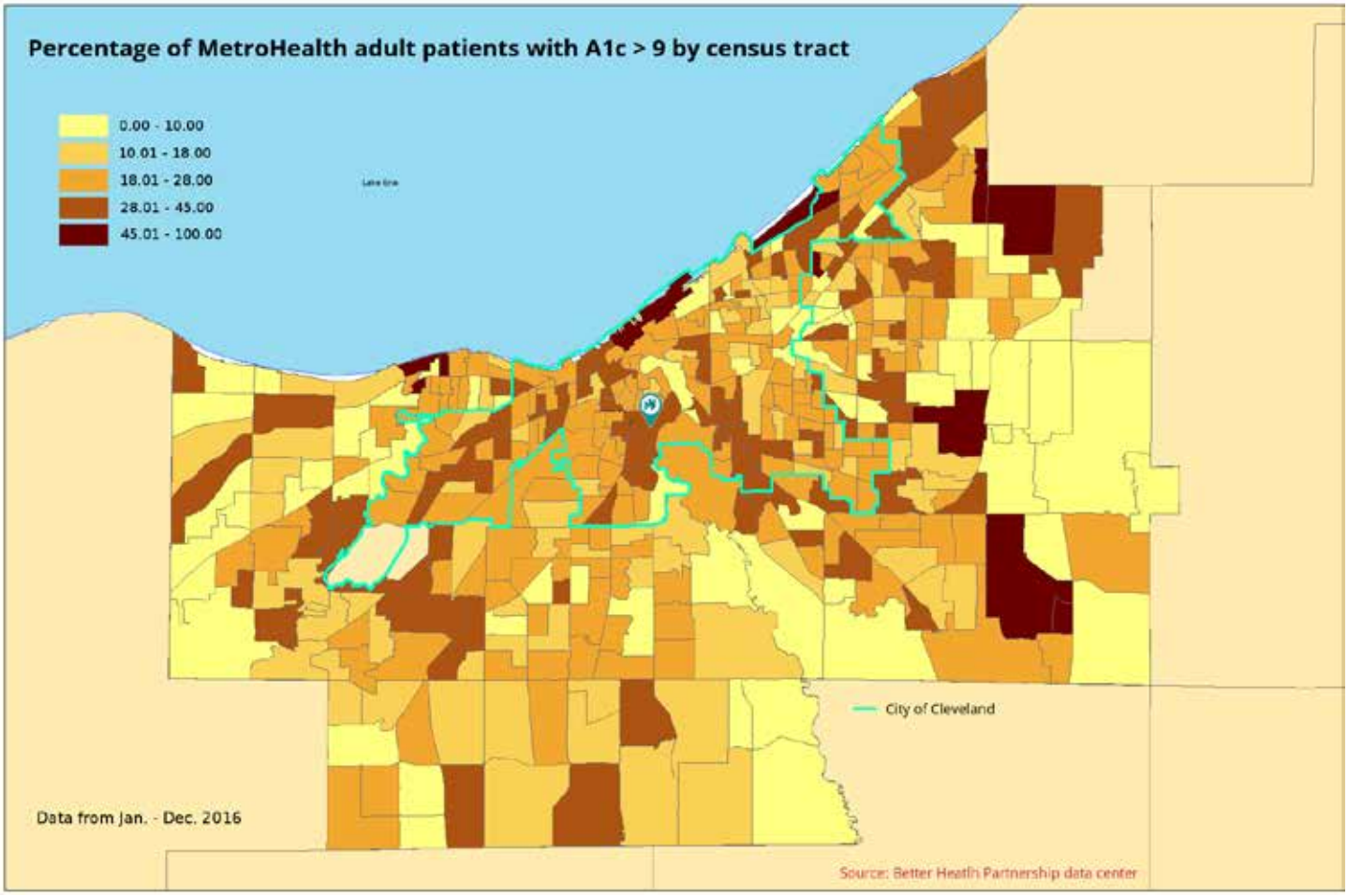
NOTE: All settings provides an unduplicated count of patients while the other settings include each visit or stay separately.

Percent of MetroHealth Patients who have Diabetes*

	Diabetes	
Zip Code	Count	%
44102	1,775	9.1%
44105	1,567	10.4%
44109	2,067	9.2%
44111	1,255	9.5%
44120	964	11.6%
44128	1,008	13.4%
44130	1,135	9.4%
44134	806	9.7%
44135	901	10.0%
44144	814	10.4%

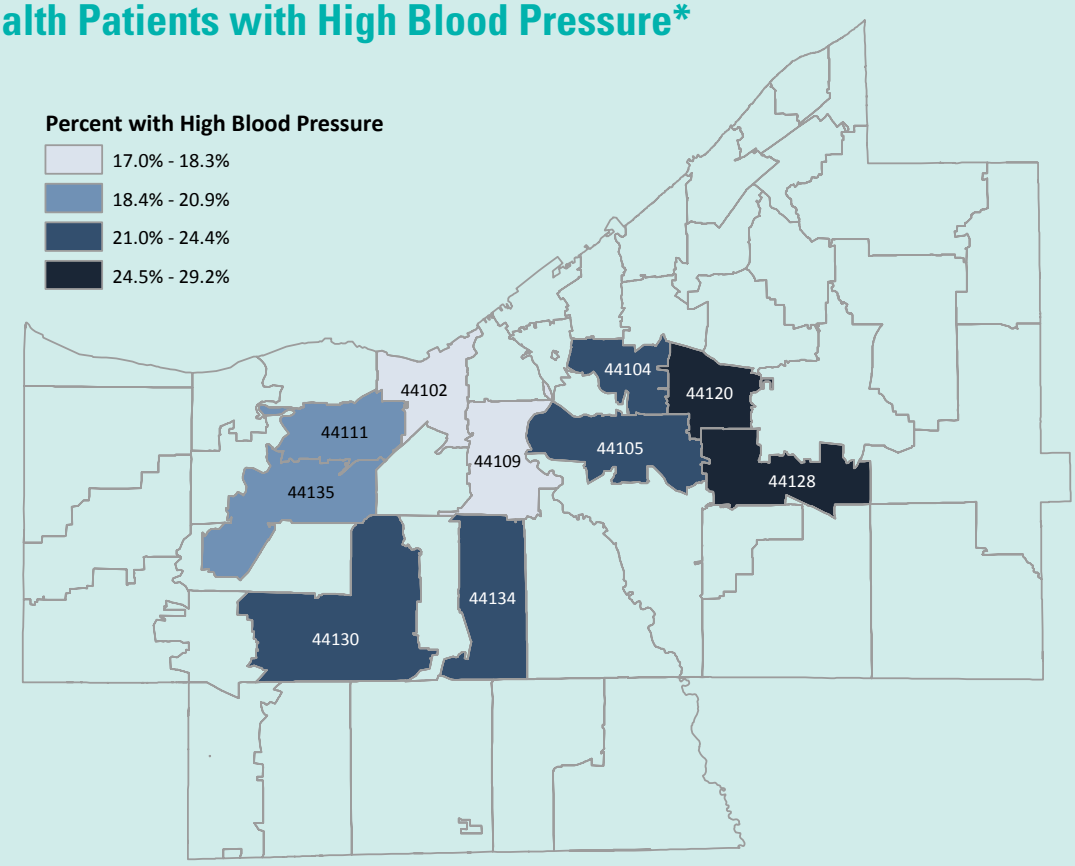


*In top ten ZIP codes by number with that condition

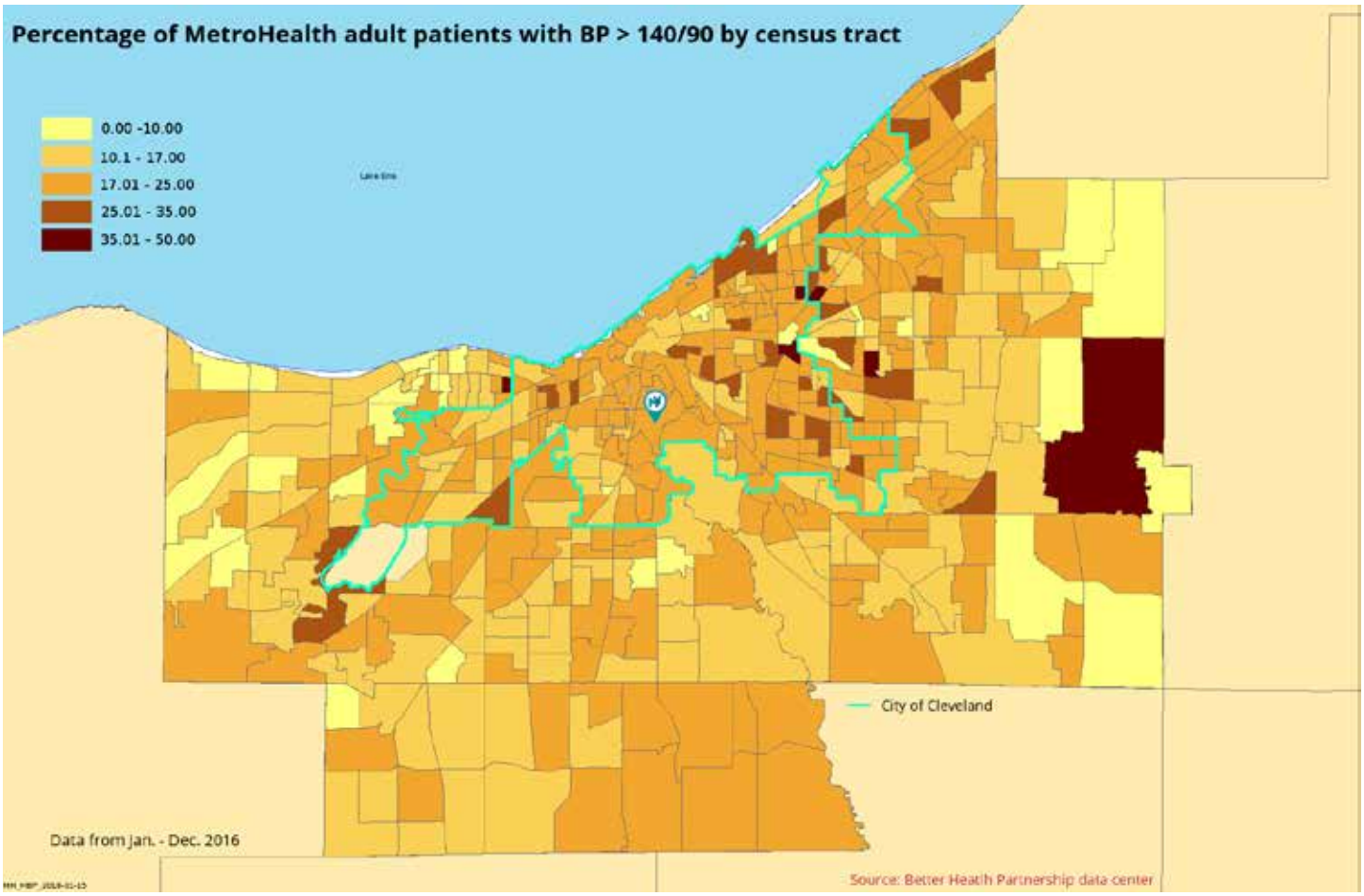


Percent of MetroHealth Patients with High Blood Pressure*

	High Blood Pressure	
Zip Code	Count	%
44102	3,338	17.1%
44104	1,801	22.7%
44105	3,618	24.1%
44109	4,108	18.4%
44111	2,559	19.3%
44120	2,258	27.1%
44128	2,205	29.2%
44130	2,815	23.3%
44134	2,038	24.5%
44135	1,880	21.0%



*In top ten ZIP codes by number with that condition



patients with diabetes came from ZIP 44109.

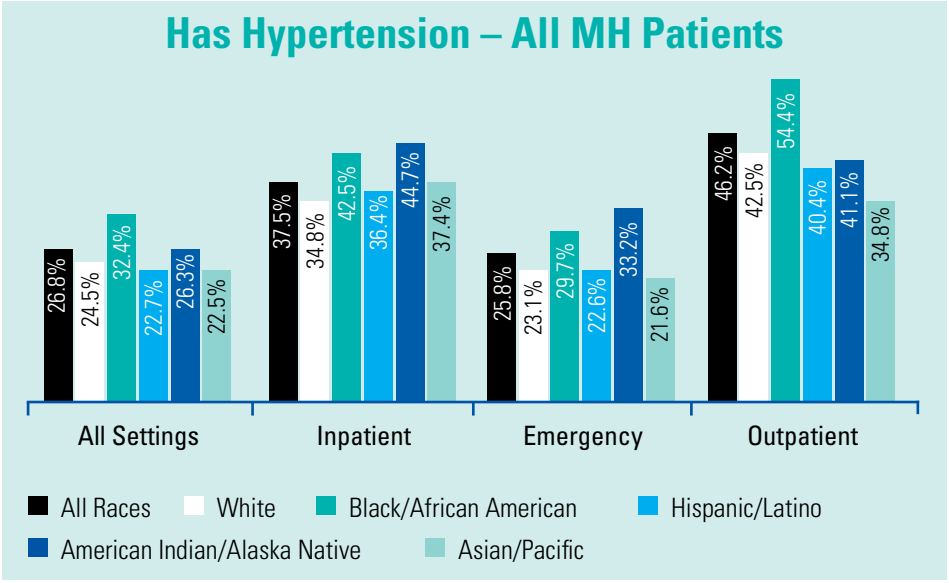
MetroHealth patients with uncontrolled diabetes (A1c > 9) by census tract is shown on the map on the previous page provided by Better Health Partnership. In most census tracts in Cleveland, at least 18 percent of MetroHealth's patients with diabetes do not have their disease well-controlled.

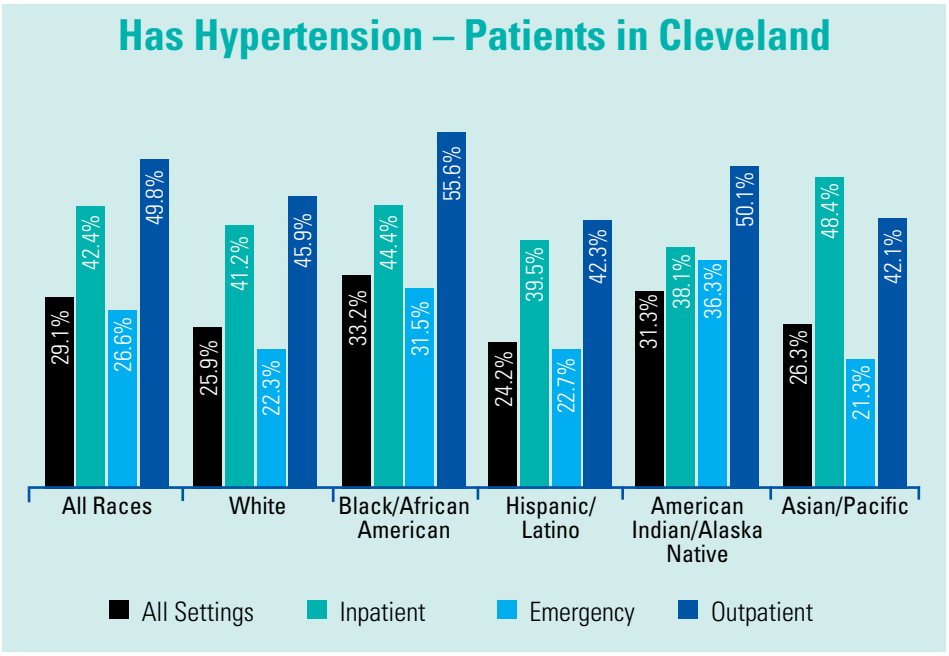
Hypertension

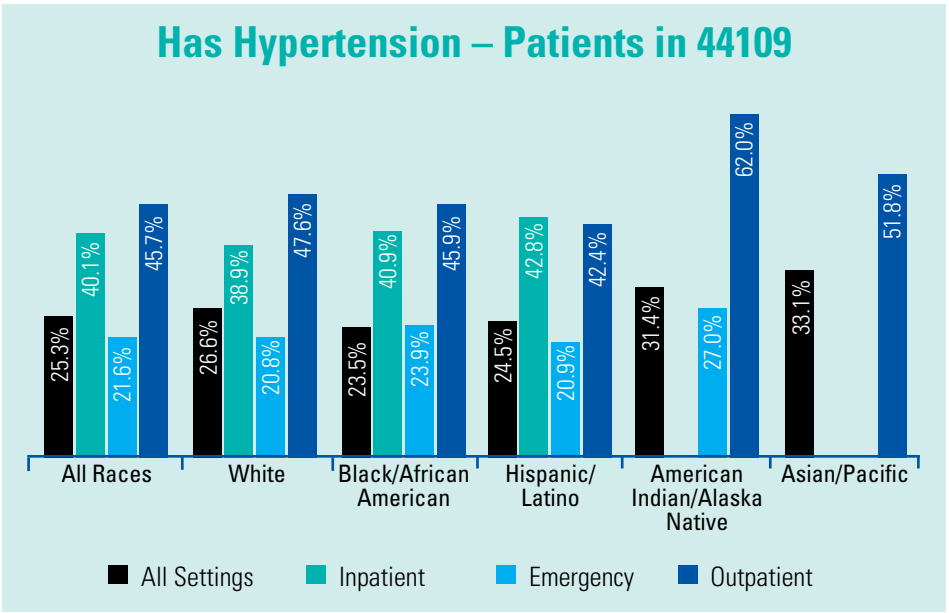
Just over one-fourth (26.8 percent) of all adult patients were diagnosed with hypertension. Similar to diabetes, patients in inpatient and outpatient settings had higher rates than in the Emergency Department. Hypertension was more prevalent among African American patients (32.4 percent) than Whites, Latinos, and Asian Americans; Native Americans living in Cleveland also had higher rates than Whites, and there were fewer racial disparities in the 44109 neighborhood.

The disparities between White and Black/African-American patients' hypertension prevalence is one of the largest displayed in the patient data. Nearly one-third (32 percent) of African-American patients have hypertension.

The percent of patients with hypertension was highest in the east side ZIPs 44128 (29.2 percent) and 44120 (27.1 percent) and lowest in the west side ZIPs 44102 (17.1 percent) and 44109 (18.3 percent), among ZIP codes with the largest number of patients with that condition. This is consistent with data showing that hypertension prevalence was higher for the City of Cleveland patients overall than those from ZIP 44109.







The map from Better Health Partnership also shows a concentration of MetroHealth patients with high blood pressure (greater than 140/90) in certain areas of the east side of Cleveland. These ZIP codes partially overlap neighborhoods identified by the focus on community trauma.

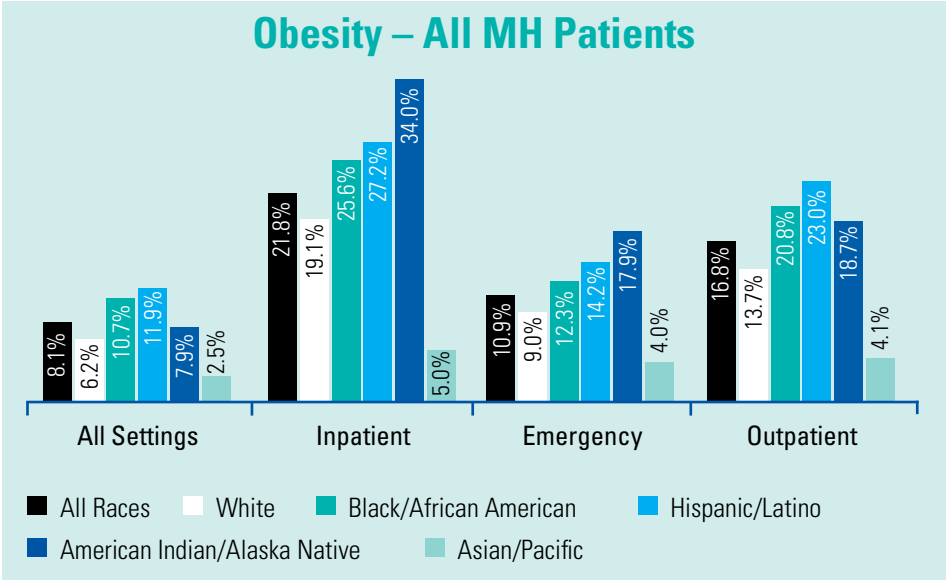
Obesity

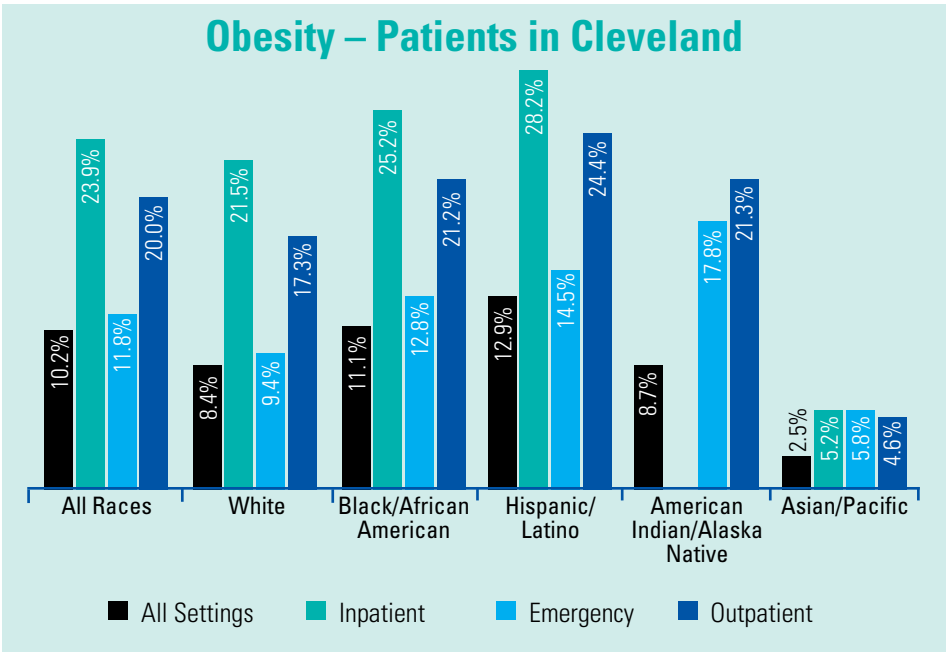
Eight percent of all MetroHealth patients were determined to be obese. Patients in outpatient settings were twice as likely, and patients in inpatient settings were 2.5 times as likely to be obese than those who visited the ED. Compared to Whites, African Americans and Latinos were more likely to be obese, while Native Americans and Asians were less likely. Patients living in Cleveland of all races except Asians had greater rates of obesity, and there were fewer racial disparities among patients in the 44109 neighborhood.

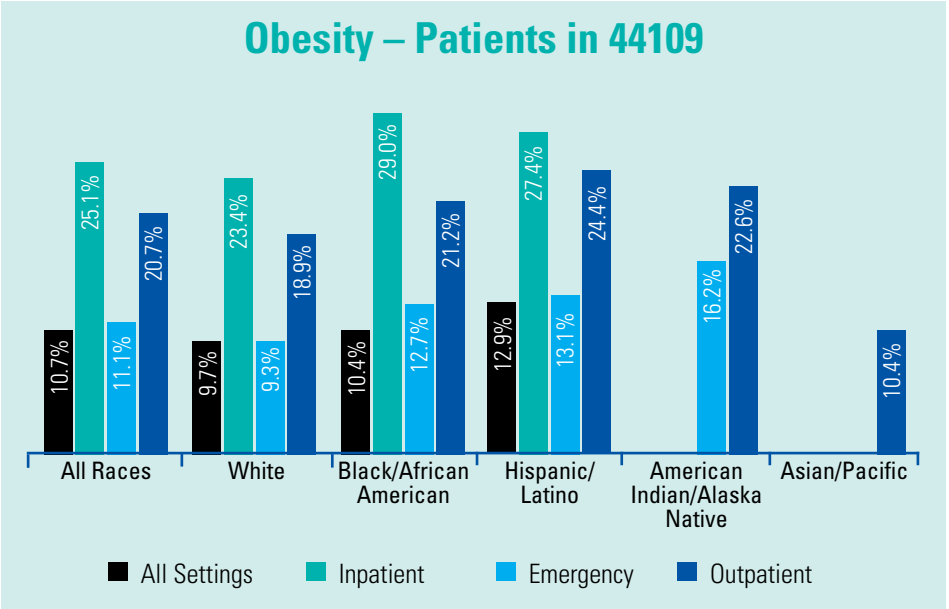
Patients with obesity were most highly concentrated in the east side ZIP 44128 (9.0 percent) and least concentrated in the Parma ZIP 441130 (5.2 percent).

Focus Groups

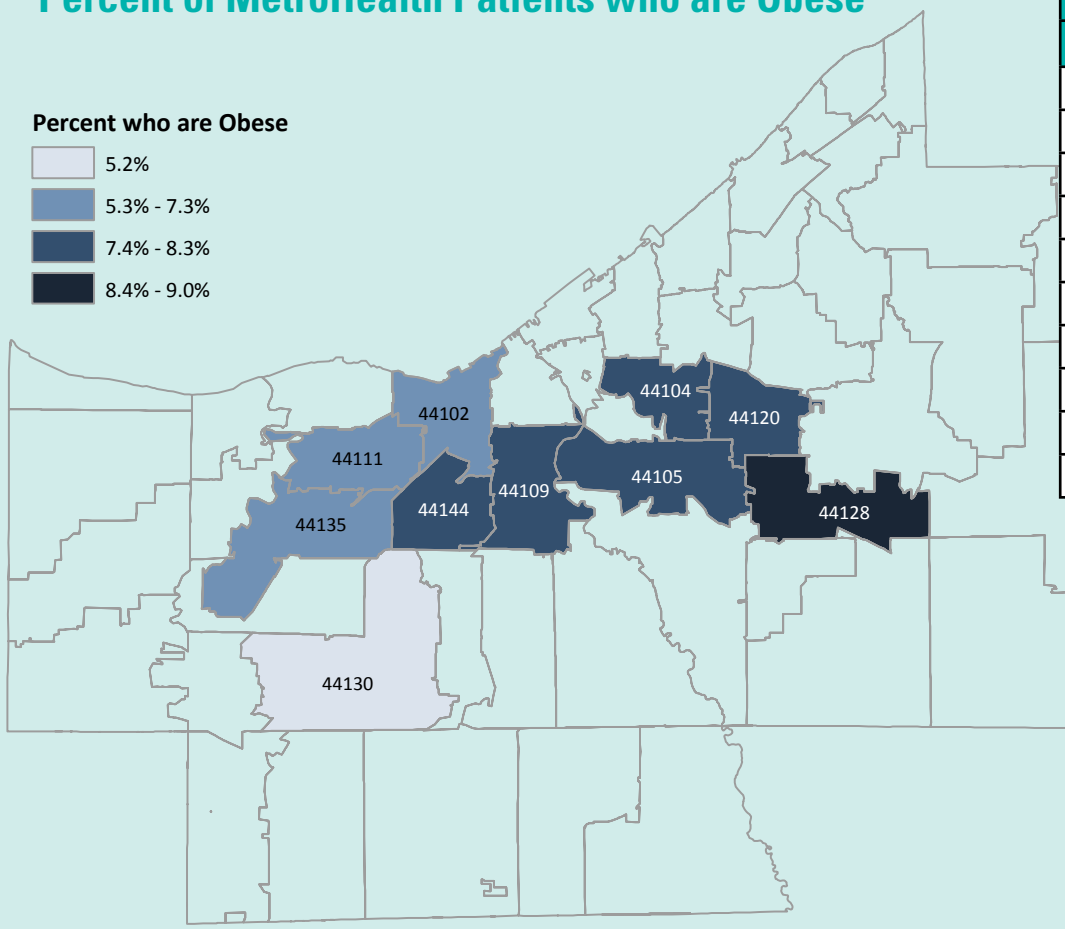
The focus groups explored issues related to certain chronic diseases. During their focus group, physicians spoke of the social determinants of health, including poverty, housing, and structural racism, as being significant challenges to treating patients with chronic disease. Transportation, lack of food access, and cost were also cited as barriers. These providers are clearly committed to improving the health of their patients, but appeared frustrated by their







Percent of MetroHealth Patients who are Obese*



	Obesity	
Zip Code	Count	%
44102	1,432	7.3%
44104	650	8.2%
44105	1,182	7.9%
44109	1,724	7.7%
44111	911	6.9%
44120	694	8.3%
44128	679	9.0%
44130	636	5.3%
44135	596	6.6%
44144	620	7.9%

*In top ten ZIP codes by number with that condition

limitations to address non-clinical issues impacting patients' health.

Missing appointments was presented as a challenge to helping patients maintain their health. Some reasons for missing appointments cited by both physicians and community providers included inflexible work schedules, transportation issues, and fear. They indicated that these issues disproportionally impact people of color.

Racial and ethnic disparities in chronic disease prevalence and outcomes are pervasive, yet difficult to improve. Many of the community providers specialize in serving Hispanic residents, and reported that personal interactions were paramount to their clients taking care of their chronic disease conditions and living a healthy life. The community providers group emphasized the need for trust and for patients to feel comfortable not just with their doctor, but with the staff and all other aspects of the office in order to maintain treatment. As both physicians and providers pointed out, these patients have many barriers to getting in to see a doctor, and if they do not believe they will receive great care or are skeptical about whether clinical interventions will help, they may decide not to bother.

Challenges presented by language were acknowledged by both groups, yet other barriers, especially transportation, seemed to be identified as of greater concern. None of the paper surveys mentioned language as something that prevents people from living a healthy life. Lack of education, access to healthy food, and poverty were the most frequently identified barriers.

The solutions to improve chronic disease disparities identified by the physicians and community provider focus groups were similar. Convenient opportunities for physical activity, especially access to gyms, pools, and green space were recommended. Bringing services to the community, where people, "live, play, and pray" could help. However, addressing broader issues of housing, job stress and poverty were deemed important, but outside the role of MetroHealth.

Community Building in the Clark-Fulton Neighborhood

MetroHealth Medical Center is physically located in the Clark-Fulton neighborhood and the greatest number of MetroHealth patients live in ZIP code 44109, which overlaps Clark-Fulton. Focus groups with block club leaders and community providers provided primary data to inform the possible priority of building community in the Clark-Fulton neighborhood. In addition, findings from focus groups conducted earlier in 2017 by MetroHealth with patients who are residents of near west neighborhoods including Clark-Fulton were also reviewed. Feedback regarding this possible priority could have been influenced by publicity surrounding MetroHealth's planned campus transformation. All focus group participants were aware of the transformation plans to some degree.

In both focus group conversations and in the written survey, participants were asked whether things have improved or gotten worse in the neighborhood. Half of the respondents to the survey said they were not sure if the Clark-Fulton neighborhood had gotten better or worse over the past five years. This was true even for long-time residents of the neighborhood. Rather than indicating a lack of knowledge of community conditions, it seems that individuals felt some aspects of the neighborhood had improved, while others had gotten worse. Five respondents believed the neighborhood was better, while four said it was worse, further illustrating the unclear direction of community conditions. This seems to indicate that there are many opportunities for community improvement.

Block club leaders spoke about wanting to see the kind of improvements that have occurred in other parts of Cleveland, such as Tremont and Ohio City, in their neighborhood. Several indicated that they believed conditions were already in place, but further investment was needed. On one hand they described struggling businesses and vacant properties, while on the other, they talked about enjoying parts of the neighborhood where they used to be concerned about their personal safety.

Block club leaders were most likely to describe the Clark-Fulton neighborhood as "diverse," but differed as to whether that diversity was an asset or a challenge. Some spoke of newer residents who do not respect their own homes or the community. Most pointed to the change in the demographics of neighborhood residents, and it was clear that some residents are more accepting and comfortable with these changes than others. For example, a few participants spoke negatively about Hispanic residents, while others praised this subgroup of neighbors. One block club leader described a separation between Hispanics and non-Hispanics, where residents are close within their own communities but few bridges between the communities are crossed.

Transportation, food access, and safety were of paramount concern to both community providers and block club leaders. Regarding transportation, long waits for ride programs, especially after an appointment was complete, was cited as a problem in both focus groups. The cost of parking at MetroHealth Medical Center was also identified as a barrier to living healthy.

A lack of healthy food was listed as one of the top health issues in the written survey by all three groups: physicians, community providers, and block club leaders. Many spoke of food deserts, the expense of eating healthy, and the need for culturally-sensitive healthy eating programs. Several block club leaders seemed unaware of services and programs MetroHealth already provides, so additional communication and outreach is warranted.

There were two roles that individuals believed MetroHealth could undertake to improve Clark-Fulton. The first related to the physical presence of MetroHealth Medical Center in the Clark-Fulton neighborhood, and is relatively straightforward. More nuanced is a desire to see MetroHealth bring clinical care to residents in the neighborhood. In addition, block club leaders were interested in seeing more MetroHealth employees live in the Clark-Fulton neighborhood where they work. They suggested that MetroHealth could provide incentives to employees to become neighbors.

The MetroHealth campus transformation is an opportunity which could improve the aesthetics of the neighborhood, as identified by several of the block club leaders. Many stated that they would like to see more

green space and less concrete. Additional green space could be utilized for exercise, but individuals in each focus group pointed out that outdoor activities are not practical year-round in cold weather cities like Cleveland. Further, even individuals who live within a few blocks of the hospital were reluctant to walk there, due to safety or their own physical limitations. Many block club leaders seemed skeptical about the impact of the transformation on the neighborhood as a whole, citing other commercial areas which are in disrepair.

In terms of services, many expressed interest in continuing a personal, community feel including smaller health clinics, home visiting, outreach, and community engagement. Community providers lauded MetroHealth for being a willing partner and described wanting to see even more collaboration between MetroHealth and other types of service providers already operating in the neighborhood. The near west focus groups in January 2017 gathered suggestions "for MetroHealth to grow" in the community which includes Clark-Fulton. Listed opportunities included the drug addiction/opiate epidemic, mental health treatment, and exercise and physical activity.

Building trust and the need to follow through and execute plans was brought up in the community provider and block club leader focus groups, as well as during the faith leaders roundtable. Many of these individuals indicated that they have been involved in planning processes in the past where results were never realized. Ensuring that key stakeholders remain engaged should be a major part of the work going forward.

Residents and community providers seemed to hold a positive view of MetroHealth's involvement in the Clark-Fulton neighborhood and would likely welcome an expanded role for the health system. However, they clearly understood the size and scope of the desire to build a healthy, vibrant neighborhood. They encouraged MetroHealth to carefully identify factors where the health system could have the most impact.

Community Trauma on the East Side of Cleveland

Churches and faith-based communities are important anchors in the neighborhoods on the east side of Cleveland. A group of nine faith leaders from the Mount Pleasant, Union Miles, Buckeye, and Lee-Harvard neighborhoods gathered at MetroHealth Medical Center in November 2017 to review some of the data and findings from the secondary and gaps analysis and to share their perspectives on community conditions, needs, and potential responses. This roundtable was described as the beginning of a process to develop a response to address the impact of community trauma on the health of residents in a certain area of Cleveland. As shown in the maps above, many MetroHealth patients who are diagnosed with the chronic diseases of hypertension and diabetes live in these neighborhoods.

In general, discussion participants believed that using the term "community trauma" could be a useful tool to describe a problem that they witness among those they serve. Being able to name, describe, understand, and accept that adverse experiences can have an impact on all individuals within a community, even if they did not experience trauma personally, was seen as the first step in being able to identify and implement solutions. All acknowledged that pockets of these neighborhoods were doing well, but need in other areas is severe.

Violence within the home and in the neighborhood was a frequently cited source of possible trauma. Historic disinvestment, crumbling infrastructure, and a lack of clear avenues to opportunity were seen as exacerbating the stressors on residents in these neighborhoods, all of which are compounded by pervasive poverty. Healing circles, wrap-around services, and increased collaboration between MetroHealth and groups already operating in the community, such as churches, were suggested as potential responses. Participants agreed that the design of any new initiatives by MetroHealth should be responsive to the community, varied to acknowledge the complexity of the problem, and must ensure that they are not duplicating existing efforts. The group agreed to reconvene in the coming months to discuss issues and possible responses in further detail.

Conclusion

This report represents an assessment of health needs within MetroHealth's service area of Cuyahoga County. Based on this assessment, review of other community assessments, input from health system leaders, and deliberations of members of the Community Engagement Committee of MetroHealth's Board of Trustees, five areas of focus for the next three years have been identified. They are:

- Reducing infant mortality
- Addressing the opioid epidemic
- Eliminating racial and ethnic disparities in chronic disease outcomes for MetroHealth patients
- Community building in the Clark-Fulton neighborhood
- Addressing community trauma in east side neighborhoods

Cuyahoga County is home to high-quality health institutions, including The MetroHealth System. While the county ranks in the top 10 counties in Ohio on the County Health Rankings for access and quality of clinical care, it consistently falls in the bottom third for health outcomes of residents.

This Community Health Needs Assessment revealed several gaps including disparities in health outcomes relating to diabetes, heart disease, and asthma; issues facing young children such as infant mortality and blood lead levels; barriers to accessing care, especially transportation and health insurance; social determinants of health like poverty, unemployment, and housing issues; and the emerging issues of opioids, older adults, and community trauma. Several of these gaps were selected as priorities by the Community Engagement Community and investigated further in the primary data analysis.

Cuyahoga County lags state or national averages on 28 indicators of health and wellbeing. Unfortunately, the community is falling behind on indicators of health across the lifespan, including birth outcomes, drug overdoses, some chronic diseases, and preventable hospitalization of older adults. Data on community factors is especially concerning. Mortality rates for several age groups, including infants, working age adults, and older adults between ages 65 and 74 are higher than the state average. The primary data analysis confirmed many of the issues that emerged in the secondary data and gaps analysis. Patient data show disparities in prevalence of certain chronic diseases between racial and ethnic groups and food and transportation were frequently identified as barriers to health.

National research has identified measurable and significant differences in health outcomes for various racial and ethnic groups. Census tracts in Cleveland with greater prevalence of chronic disease, especially asthma and diabetes, tend to be more heavily African American. In terms of geographic disparities, the City of Cleveland fares worse than the County as a whole on nearly every indicator for which there is sub-county data. These patterns were also found among MetroHealth patients.

The solutions to improve chronic disease disparities identified by the physicians and community provider focus groups were similar. Convenient opportunities for physical activity were recommended. Bringing services out into the community could help. However, addressing broader issues of housing, job stress and poverty were deemed important, but outside the role of MetroHealth.

On the other hand, block club leaders from the Clark-Fulton neighborhood called MetroHealth a "stabilizing force." Both they and community providers wanted MetroHealth to be a place that fosters health and wellness, not simply a place to go for diseases and ailments. Empowering and educating patients, partnering and collaborating with other community groups, and finding a better way to connect clinical care with non-clinical assistance for social determinants were all identified as possible solutions. Specifically, focus group participants and survey respondents suggested that MetroHealth provide a physical space for both indoor and outdoor exercise opportunities, promote healthy eating, continue to increase and deepen collaborations, focus on educating people visit-by-visit, and collect and provide data.

Two issues which are having a significant impact on Cuyahoga

County are infant mortality and opioid addiction. Infant mortality rates in the City of Cleveland approach those of less developed countries, and racial disparities are particularly stark in incidents of infant death. The secondary analysis showed that Cuyahoga County and Cleveland lag state and national benchmarks on a series of negative birth outcomes which are associated with infant mortality.

The opioid epidemic has been identified by several community organizations as an emerging challenge. After being relatively steady for several years, the number of estimated drug overdoses began a precipitous rise in 2015. Estimated drug overdoses jumped 60 percent between 2015 and 2016 and if current rates continue, will increase by another 46 percent in 2017.

Building on the understanding that individual trauma and adverse childhood experiences contribute to poor health outcomes, entire communities may be impacted by adverse community conditions. Violence, disinvestment, poverty and other historical inequities may lead to traumatic effects at a population level. The violent crime rate in Cuyahoga County is nearly three times the national median. Several areas on the east side of Cleveland have been impacted by historic disinvestment, crumbling infrastructure, especially in the form of vacant and abandoned homes, and a lack of clear avenues to opportunity. These issues are exacerbated by pervasive poverty. Faith leaders who serve and live in these neighborhoods indicated that framing this collective experience as community trauma could be a useful tool to describe problems they have witnessed and to identify and implement solutions.

The five identified priorities address some of the most pressing community issues, while recognizing the unique role that MetroHealth plays in its neighborhood and in the community more broadly. Over the coming months we will be putting our plans in place – developing strategies, tactics and partnerships to address these priorities and methods by which to measure our success.