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FY22

**PIEDMONT MACON  
MEDICAL CENTER &  
PIEDMONT MACON  
NORTH HOSPITAL**

**COMMUNITY HEALTH NEEDS  
ASSESSMENT**



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# Introduction

As a not-for-profit hospital, the mission of Piedmont Macon Medical Center and Piedmont Macon North Hospital is healthcare marked by compassion and sustainable excellence in a progressive environment, guided by physicians, delivered by exceptional professionals, and inspired by the communities we serve. Collectively, we refer to these hospitals as Piedmont Macon.

In our commitment as a not-for-profit health system, Piedmont Healthcare studied the region's community health needs for its Community Health Needs Assessment (CHNA), a triennial process required by the Internal Revenue Service due to our tax-exempt status. A CHNA is a measurement of the relative health or well-being of a given community. It's both the activity and the end-product of identifying and prioritizing unmet community health needs, which is done by gathering and analyzing data, soliciting the feedback of the community and key stakeholders, and evaluating our previous work and future opportunities.

Through this assessment, we hope to better understand local health challenges, identify health trends in our community, determine gaps in the current health delivery system and craft a plan to address those gaps and the identified health needs. The 2022 Piedmont CHNA will serve as a foundation for developing our community benefit strategies and further strengthening our community-focused work.

## About the hospital

Piedmont Macon Medical Center is a 310-bed not-for-profit facility providing compassionate, patient-centered care in middle Georgia. Founded in 1971, Piedmont Macon has grown to be a healthcare leader for middle Georgians, providing 24-hour emergency care, inpatient and outpatient surgery options, maternity services, rehabilitation programs, behavioral health and diagnostic services.

Piedmont Macon North Hospital is a 103-bed not-for-profit community hospital serving Middle Georgia. Highlighted by a robust ER and a strong and growing elective surgical program, we offer expertise in a variety of specialties, including bariatric surgery, orthopedic care, spine care and gastric reflux disease.

## About Piedmont Healthcare

Piedmont has more than 31,000 employees caring for 3.4 million patients across 1,400 locations and serving communities that comprise 80 percent of Georgia's population. This includes 22 hospitals, 55 Piedmont Urgent Care centers, 25 QuickCare locations, 1,875 Piedmont Clinic physician practices and more than 2,800 Piedmont Clinic members. Piedmont has provided \$1.4 billion in uncompensated career and community benefit programming to the communities we serve over the past five years.

# FY22 Priorities

A key component of the CHNA is to identify the top health priorities we'll address over fiscal years 2023, 2024, and 2025. These priorities will guide our community benefit work. They are, in no order of importance:

## Ensure affordable access to health, mental, and dental care

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We will work to ensure that all community members have access to affordable health, mental and dental care, regardless of income. This includes partnerships with community-based organizations, as well as internal programming to increase access to services.

## Promote healthy behaviors to reduce preventable chronic conditions and diseases

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We will actively promote healthy behaviors and encourage community members to stop risky behaviors, such as smoking, as well as put forth efforts to curb obesity and STDs. This includes widespread health education and programming.

## Reduce preventable instances of and death from cancer

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We will promote both the prevention and treatment of all cancers, especially among those most vulnerable to the disease. This includes community-based screenings and the promotion of programming meant to support community members with cancer and their families.

## Reduce preventable instances and death from heart disease

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We will promote both the prevention and treatment of heart disease and will emphasize early detection and healthy behaviors to help reduce risk. We will pay particular attention to populations most at risk for heart disease.

With each priority, we will work to achieve greater health equity by reducing the impact of poverty and other socioeconomic indicators for that priority, as poverty is a significant issue within the community. This means we will prioritize programming and investment in areas that directly address issues related to income and poverty and others who face particular challenges in accessing care due to disability, race, English proficiency, educational attainment and other areas of socioeconomic status. We will pay particular attention to homeless populations in all of our work. Additionally, whenever possible, health education will be available in the languages found within the community, with special attention spent on outreach to those populations.

When possible, we will work to address other issues that arose during the CHNA, such as Alzheimer's Disease, even though those are not listed in the above priority list.

# About the community

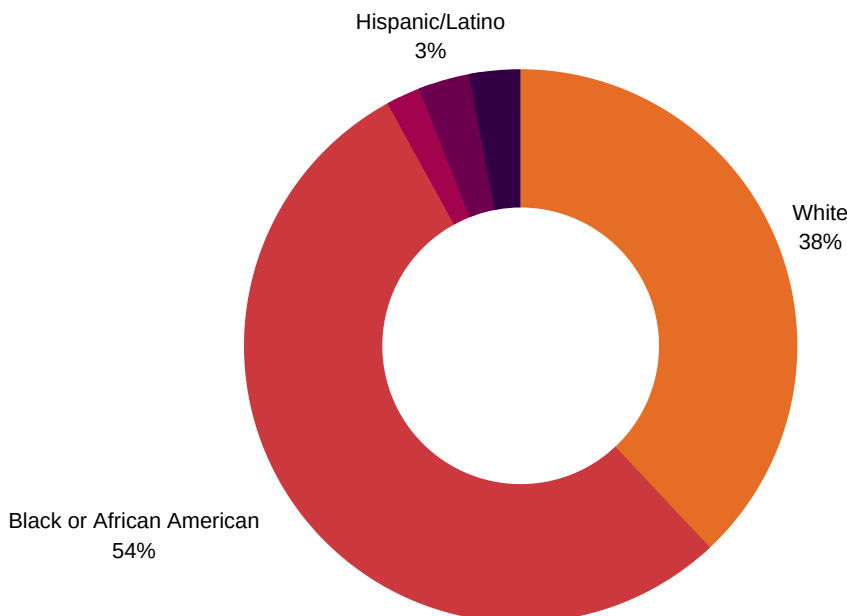
While Piedmont Macon serves patients from all over middle Georgia, for purposes of this CHNA, we consider our community to be Macon-Bibb County. We do this in recognition of the direct impact of our tax-exempt status on county residents.

## Overview

In Macon-Bibb County, in 2020, 153,200 people lived in the 249 square mile area. The population density for this area, estimated at 614 persons per square mile, is much greater than the state average population density of 181 people per square mile and the average national population density of 92 persons per square mile. The ZIP code with the highest concentration of people was 31210, where 22 percent of the county's population lived. Macon-Bibb County is mostly urban, as 86 percent of community members live within an urban setting. The ZIP code with the highest concentration of the rural population was 31066 and, like in most of Georgia, rural populations in Macon-Bibb are overwhelmingly white.

About 8 percent of the population were veterans in 2020, and the majority were aged 65 and older. Sixteen percent of the population - about 23,500 people - lived with a disability. Most of that population was between the ages of 18 and 64.

About 25 percent of the population were 17 or younger, 15.7 percent were over the age of 65, and the remaining population were between the ages of 18-64. Between 2015 and 2019, about 38 percent of all Macon-Bibb County residents were white, 54 percent were African American, 3.25 percent were Hispanic/Latino, 2 percent were Asian, and the remaining 3 percent were comprised of other races. About 3.33 percent identified as being born outside of the US and 1.55 percent of the total population does not have citizenship status.



The chart to the left represents a breakdown of races within the community. The community is still predominately white, though that is shifting. Minority populations have steadily grown in recent years, with Hispanic or Latino populations leading growth at 54 percent from 2010 to 2020, as compared to 12.3 percent for all other races. This is on-trend with Hispanic/Latino population growth throughout the state.

# Root causes of poor health

In conducting the FY22 CHNA, we recognized two main issues that emerged that are root causes of poor health.

## Poverty and health

Poverty is the most significant indicator of health as, in general, poorer people are sicker than their richer counterparts. Those living at or near poverty are most likely to die from cancer, heart disease and diabetes, due to several factors that go beyond income, such as education, housing and simple geography, things commonly dubbed “social determinants of health.” This means that factors outside your immediate physical self can play a huge role in your health, even including how long you live. Life expectancy can vary as much as 30 years between the richest and poorest Georgia counties. Macon-Bibb County has a poverty rate significantly higher than state and national averages, as a quarter of the population lived at or below poverty in 2020. Minorities are far more likely to live in poverty. For example, 34 percent of black populations lived in poverty, on average between 2015 and 2020, versus only 12 percent of whites.

## Insurance status and health outcomes

In 2020, 13 percent of the population had no form of insurance. Insurance status and health are inextricably linked. Being uninsured is generally a marker of low-income, as the overwhelming majority of those that are uninsured are also within certain ranges of the Federal Poverty Level. This means these populations are also likely to face the myriad of other social determinants of health (SDH), like housing and food insecurity.

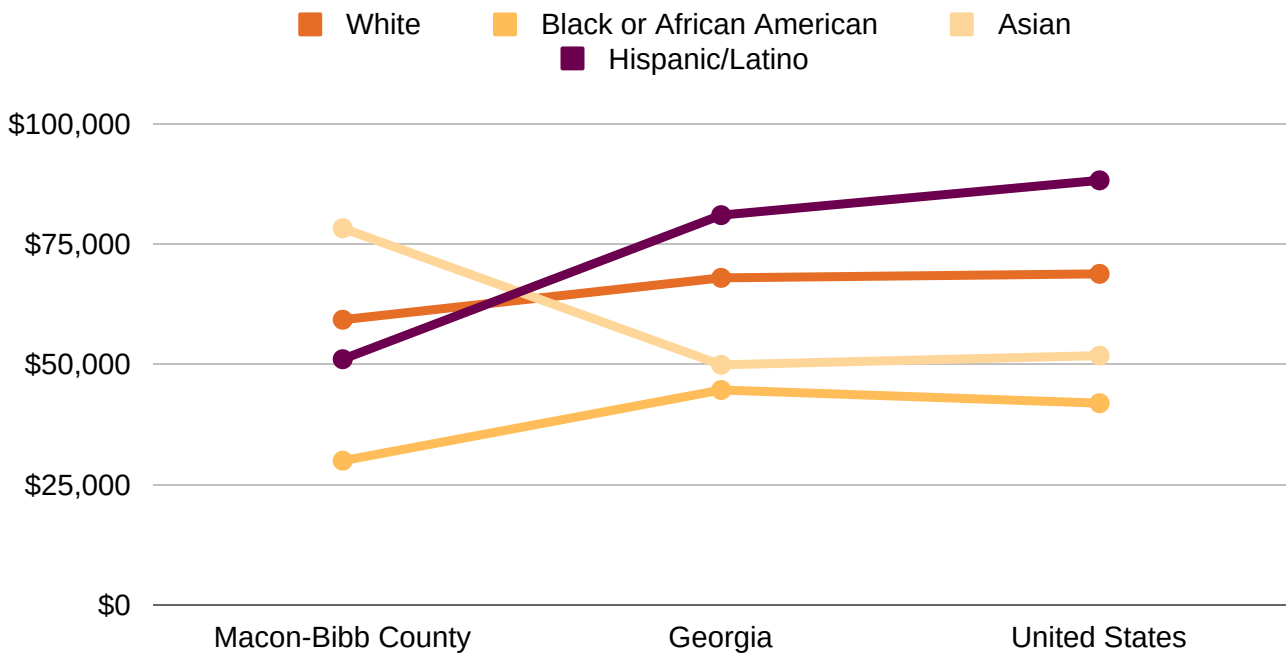
No insurance can mean no access to primary and specialty care, due to cost and/or provider availability. Conditions that could have been treated affordably in a community setting are often not and, because of this, those without insurance statistically suffer worse health outcomes than their insured counterparts. Diseases like cancer are often diagnosed later, and manageable conditions such as hypertension can elevate to dangerous levels.

Adults aged 18 to 64 are most likely to be uninsured, and that's true in Macon-Bibb County. In 2020, 19.33 percent of non-elderly adults were uninsured, as compared to 5.6 percent of those under age 18 and 1 percent for those 65 and older.

As with other indicators, race matters. Approximately 33 percent of Hispanic/Latino populations were uninsured, 15.6 percent of blacks were uninsured, and 13 percent of whites were uninsured.

# Community and income

Between 2015 and 2019, the median household income was \$41,334, which is much lower than state and national levels, which are \$58,700 and \$62,843, respectively. When broken down by the four dominant races in the community, income disparities are evident.



Of employers in the community, the largest sector by employment size is health care and social assistance, which employed 19,016 community members at an average annual wage of \$59,121 in 2019, according to the US Department of Commerce. Retail trade was the second largest sector, with 12,013 people employed at an average annual wage of \$32,290. Finance and insurance was the third largest sector, with 11,764 people employed at an average annual wage of \$59,634.

## Unemployment and labor force participation

According to the 2015-2019 American Community Survey, 68,412 people in the community were part of the labor force, and only 57 percent participated. Approximately 4 percent of the population were unemployed as of March 2022, a rate higher than state and national averages. This figure has steadily decreased since last year, when in March 2021, 5.6 percent of the labor force was unemployed. When looking back further, the rate is nearly three times less than the unemployment rate in 2012.

This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

# Community safety

Below is a chart breaking down criminal offenses in 2017, as reported to the Georgia Bureau of Investigation. This is the last year for which this information is publicly available.

Murder	Rape	Robbery	Assault	Burglary	Larceny	Vehicle Theft
29	70	311	526	1,762	5,411	552

## Incarceration rate

The Opportunity Atlas estimates the percentage of individuals born in each census tract who were incarcerated at the time of the 2020 Census. According to the Atlas data, 2 percent of the county population were incarcerated, slightly lower than the state average of 2.1 percent.

## Violent crime

Violent crime is a critical public health issue as it is often largely preventable. Between 2015 and 2019, there were a total of 4,724 violent crimes within Macon-Bibb County, a figure that includes homicide, rape, robbery, domestic violence, and aggravated assault. This equates to a violent crime annual rate of 514.3 per every 100,000 people, a figure much higher than the state and national rates of 373.1 and 416, respectively.

## Juvenile arrests

Within the county, in 2018, there were 34 juvenile arrests. Juvenile arrests can illustrate one aspect of the complex societies in which youth live. Juvenile arrests are the result of many factors such as policing strategies, local laws, community and family support, and individual behaviors. Youth who are arrested face disproportionately higher morbidity and mortality. Those who are arrested and incarcerated experience lower self-reported health, higher rates of infectious disease and stress-related illnesses, and higher body mass indices.

## Firearm fatalities

Firearm fatalities are a critical public health issue as they are largely preventable. Most firearm fatalities are the result of suicides and homicides. Between 2016 and 2020, there were 201 firearm fatalities in Macon-Bibb County, resulting in an age-adjusted death rate of 27.2, which is much higher than the state rate of 16 and the national rate of 12.2.



# Vulnerability and Deprivation indexes

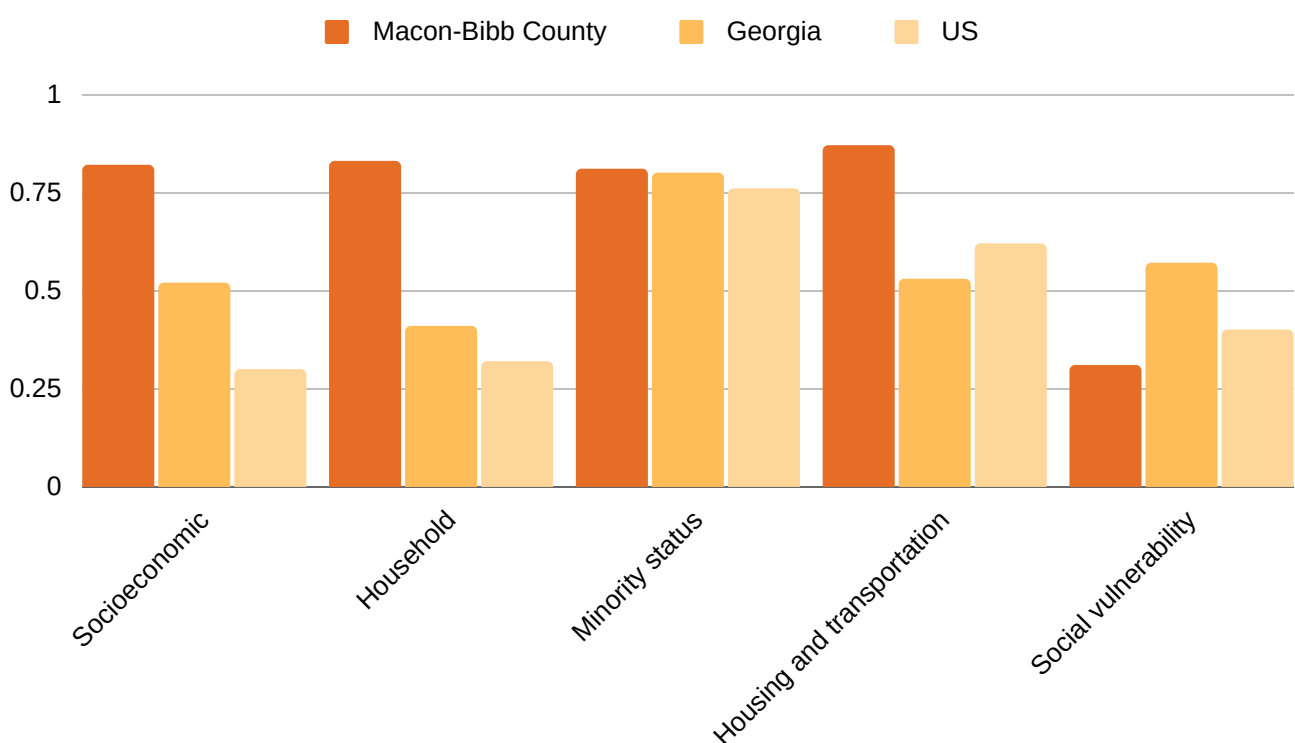
## Area Deprivation Index

The Area Deprivation Index (ADI) ranks neighborhoods and communities relative to all neighborhoods across the nation and the state. ADI is calculated based on 17 measures related to four primary domains: education, income and employment, housing, and household characteristics. The overall scores are measured on a scale of 1 to 100 where 1 indicates the lowest level of deprivation (least disadvantaged) and 100 is the highest level of deprivation (most disadvantaged). Macon-Bibb County ranks in the 68th percentile for Georgia and 73rd in the national percentile, both of which are relatively high figures. ZIP code 31206 has the highest area deprivation rate at 94 for both state and national percentiles.

## Social Vulnerability Index

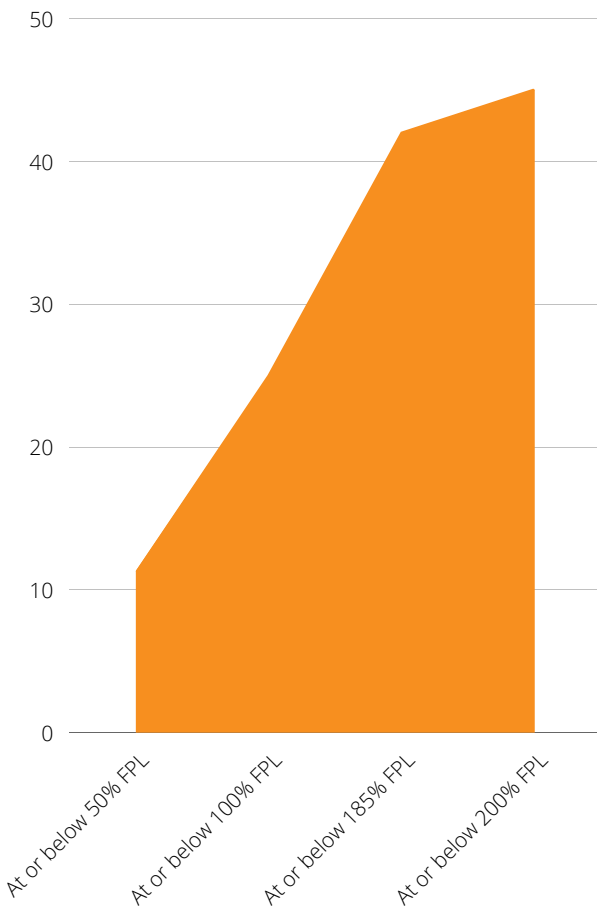
The Social Vulnerability Index is the degree to which a community exhibits certain social conditions, including high poverty, low percentage of vehicle access, or crowded households, that may affect that community's ability to prevent human suffering and financial loss in the event of disaster. These factors describe a community's social vulnerability.

The social vulnerability index is a measure of the degree of social vulnerability in counties and neighborhoods, where a **higher score indicates higher vulnerability**. Macon-Bibb County has a social vulnerability index score of 0.92, which is much higher than the state score of 0.57. Broken down by themes:



# Income and poverty

A person's income status is directly related to their health status, and predictably the more money you have, the healthier you tend to be.



The chart to the left demonstrates how many community members live in poverty or near-poverty. In 2020, 25 percent of the county lived at or below the Federal Poverty Level (FPL), a startlingly high number.

In 2022, the FPL placed a family of four as having a total household income of \$27,750. Even when living at twice the FPL, families are likely unable to afford many of life's basics.

By far, the poorest ZIP code within Macon-Bibb County is 31201, where 43 percent of the population lived in poverty in 2020.

In Macon-Bibb County, like most of the state, minorities are more likely to live in poverty. For example, in 2020, 34 percent of blacks and 37 percent of Hispanic/Latino populations lived at or below poverty, as compared to 12 percent of whites.

## SNAP Benefits

The Georgia Supplemental Nutrition Assistance Program (SNAP) is a federally funded program that provides monthly benefits to low-income households to help pay for the cost of food. A household may be one person living alone, a family, or several unrelated individuals cohabitating who routinely purchase and prepare meals together. SNAP enrollment and poverty rates are co-related.

In Macon-Bibb County, nearly 20 percent of households received SNAP benefits in December 2020, representing about 11,500 households. Black populations are far more likely to receive SNAP benefits than any other demographic. Only 6 percent of SNAP beneficiaries are white, and the remaining 94 percent are minority households. The ZIP code with the highest amount of SNAP recipients was 31206, where more than a third of residents received SNAP benefits.

# Housing

In 2020, the median rent in Macon was \$1,052, a 19 percent increase over the previous year. Rising rents mean less of an ability to pay for other crucial areas of life. According to 2020 USDA data, the average adult male spends between \$193 and \$358 on groceries per month, and the average adult female spends between \$174 and \$315. In Macon-Bibb County, in 2020, basic utilities average \$101 per month, and internet averaged \$59. None of this includes transportation, insurance, and other costs of living. As the family size grows, costs increase, and households are increasingly burdened. None of the above reflects the impact of COVID-19 on housing stock, income, and increased cost of living, meaning the situation is likely worse than before.

## Cost-burdened households

Of the 58,116 total occupied households in Macon-Bibb County in 2019, about 34 percent lived in cost burdened households, in which housing costs are 30 percent or more of total household income. Approximately 17 percent of households had costs that exceeded 50 percent of the household income, which places the household in significant financial strain.

## Substandard housing

This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) 1 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent. Of all households in the county, about 35 percent have one or more substandard conditions. This is worse than the state average of 30.1 percent.

## Area Median Income and affordable housing

This indicator reports the number and percentage of housing units at various income levels relative to Area Median Income (AMI). The AMI is the midpoint of a region's income distribution, meaning that half of households in a region earn more than the median and half earn less than the median. A household's income is calculated by its gross income, which is the total income received before taxes and other payroll deductions.

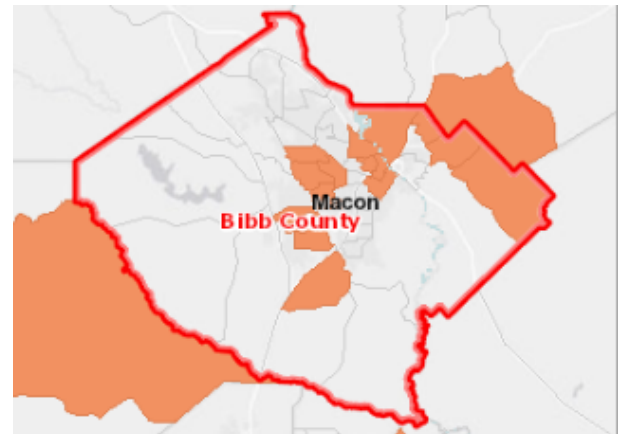
Affordability is defined by assuming that housing costs should not exceed 30 percent of total household income. Income levels are expressed as a percentage of the county's AMI. About 65 percent of housing units are affordable at 100 percent AMI, which means that housing is not affordable for the remaining 35 percent of the population. This is worse than the state rate of 67.13 percent of housing units affordable at 100 percent AMI.

# Food deserts and food insecurity

Food insecurity happens when a person or family does not have the resources to afford to eat regularly. This can happen due to affordability issues, particularly for households facing unemployment, and especially so if they were already low-income. As with many health indicators, minorities are much more likely than their white counterparts to experience food insecurity.

Neighborhood conditions can affect physical access to food. For example, people living in some urban areas, rural areas, and low-income neighborhoods may have limited access to full-service supermarkets or grocery stores. Predominantly black and Hispanic neighborhoods tend to have fewer full-service supermarkets than predominantly white and non-Hispanic neighborhoods. Communities that lack affordable and nutritious food are commonly known as “food deserts.”

In Macon-Bibb County, in 2019, 15 of the county's 44 census tracts were food deserts, as shown in the map to the right. About 47,059 people lived within these census tracts. These tracts almost directly correspond with census tracts demonstrating retailers who are authorized to take SNAP benefits. In Macon-Bibb County, like with most of the state, those retailers tend to be convenience and discount stores that carry limited, if any, healthy foods. Increasingly, discount stores like Dollar General do have some sort of produce section, but that is inconsistent among communities.



## Grocery stores

Healthy dietary behaviors are supported by access to healthy foods, and grocery stores are a major provider of these foods. There were 33 grocery establishments in the county in 2019, equaling a rate of 21.22 stores per 100,000 people, which is higher than the state and national rates of 17.46 and 20.66, respectively. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Delicatessen-type establishments are also included, and convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded.

## Low food access

Low food access is defined as living more than 0.5 mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity. According to the 2021 Food Access Research Atlas database, nearly a third of the total population in the county have low food access, meaning about 50,000 county residents may struggle to access healthy foods. This is worse than the state and national rates of 30.89 percent and 22.22 percent, respectively. ZIP code 31066 has the worst rate of low food access at 81 percent.

# Access to care

At the crux of healthcare is access, which is determined by a few factors: availability of providers, insurance status, and ability to pay.

## Insurance

Insurance status is directly related to a person's ability to access care, and this is particularly true for non-emergent care and specialty care. Health insurance makes a difference in whether and when people get necessary medical care, where they get their care, and ultimately, how healthy they are. Uninsured people are far more likely than those with insurance to postpone health care or forgo it altogether. The consequences can be severe, particularly when preventable conditions or chronic diseases go undetected.

Compared to those who have health coverage, people without health insurance are more likely to skip preventive services and report that they do not have a regular source of health care. Adults who are uninsured are over three times more likely than insured adults to say they have not had a visit about their own health to a doctor or other health professional's office or clinic in the past 12 months. They are also less likely to receive recommended screening tests such as blood pressure checks, cholesterol checks, blood sugar screening, pap smear or mammogram (among women), and colon cancer screening. Part of the reason for poor access among the uninsured is that half do not have a regular place to go when they are sick or need medical advice, while most insured people do have a regular source of care.

In Macon-Bibb County, in 2020, about 13 percent of the population were uninsured, a figure between the state rate of 16 percent and the national figure of 8.84 percent. As with other indicators, race matters. Approximately 33 percent of Hispanic/Latino populations were uninsured, 15.6 percent of blacks were uninsured, and 13 percent of whites were uninsured. Rates, overall, have steadily declined. In 2011, approximately 22 percent of all adults were uninsured. Location matters in Macon-Bibb for insurance rates. In ZIP codes 31066 and 31206, uninsurance rates for all ages were 25 percent and 18 percent, respectively.

## Insurance coverage

The below table demonstrates the type of insurance for those who had coverage in 2020, by percentage of the population. Note this doesn't equal 100 percent, as some community members have two types of coverage.

Employer or Union	Self-purchased	TRICARE	Medicare	Medicaid	VA
54.11%	14.34%	3.79%	20.87%	30.1%	2.8%

# Access to dental and primary care

## Dental care and dental outcomes

Dental care is crucial to health, as dental conditions that go unchecked can lead to decay, infection and tooth loss. Within the county, in 2018, 57.7 percent of adults went to the dentist in the past 12 months. That year, nearly 20 percent of the county reported having lost all natural teeth because of tooth decay or gum disease, an issue most felt by older adults. This is an impactful measure in multiple ways:

- Research shows that losing your teeth will shorten your lifespan. Missing nine teeth for nine years or more reduces lifespan compared to a contemporary who maintains their teeth.
- The lower your income and education level, the more likely you are to lose your teeth, which results in even fewer economic opportunities, creating a poverty cycle. For example, it is difficult to gain employment if you have visible missing teeth.
- The individual will inevitably struggle with eating certain foods, limiting their options, which can be detrimental for lower-income populations already facing food insecurity.

It's important to note that there are few options for low-income patients needing dental care. While most dental services for children enrolled in the low-income public health insurance program PeachCare are covered, for adults covered by Medicaid, only emergency dental care is provided. There are limited options for low-income dental care services within the county, and there are few -- if any, at a given time -- options for low-cost dental services that go beyond cleaning, basic fillings, and extractions. For example, if you have lost even one tooth, you have few, if any, options for implants that aren't at full retail cost. In Georgia, the cost to replace a single tooth can range from \$3,000 to \$4,500, out of pocket.

## Primary care and routine check-ups

In 2019, about 80 percent of adults aged 18 or older saw a doctor for a routine check-up the previous year, a measure that is slightly higher than both state and national averages. For Medicare recipients, this number jumps to 87 percent of adult beneficiaries, which is above both state and national averages. Routine check-ups are a critical component to maintaining good health and identifying conditions that can be treated affordably in a community-based setting. Absent that, even simple-to-treat conditions can escalate to deeper issues, eventually requiring more intensive care, later stage diagnoses, or reduced life expectancy.

As with most all other indicators, race and income play heavily into this. White populations are far more likely to receive preventive care than their white counterparts (77.64 percent among black populations compared to 90.48 percent among white populations), and those with insurance are also much more likely to go to the doctor for a routine check-up than those without insurance.

# Causes of death

Below are the eight leading causes of age-adjusted death, in total, between 2016 and 2020. The dials indicate how severe the rate is, as compared to the rest of the state.



Ischemic heart and vascular disease - 1



Cerebrovascular disease - 2



Trachea, bronchus and lung cancer - 3



All COPD except asthma - 4



All other mental and behavioral disorders (usually dementia) - 5



Alzheimer's Disease - 6



Nephritis, nephrotic syndrome and nephrosis - 7



Essential hypertension and hypertensive renal and heart disease - 8

When broken down by race, the leading causes of death shift. Below is a list of the top three causes of death, by race.

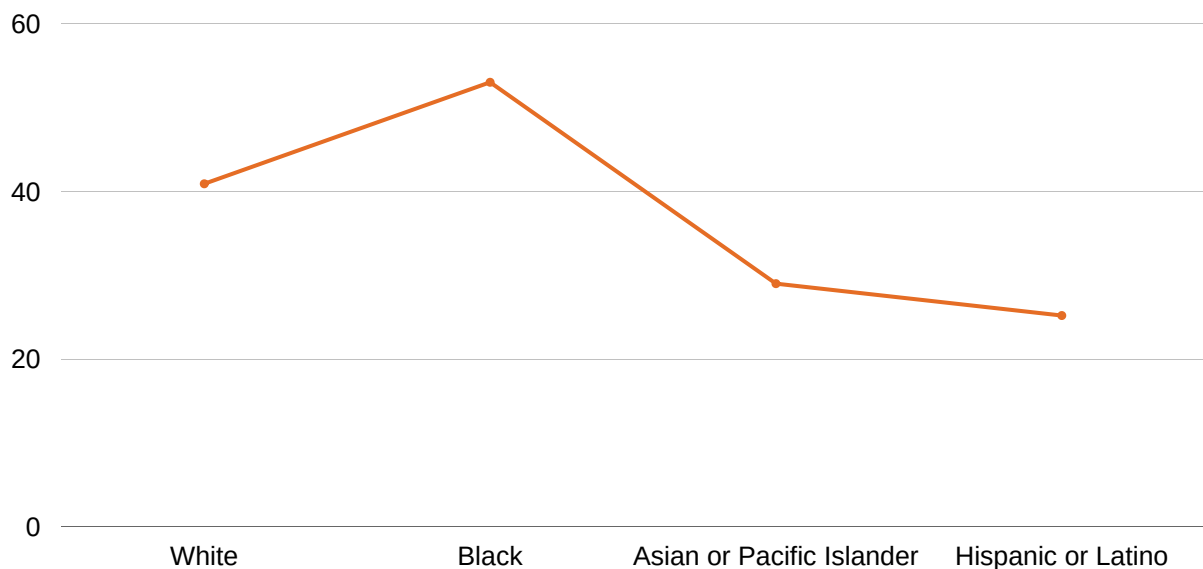
- White: Ischemic heart disease and vascular disease; all COPD except asthma; all other mental and behavioral disorders
- Black or African American: Ischemic heart and vascular disease; cerebrovascular disease; nephritis, nephrotic syndrome, and nephrosis (also note that homicide was the sixth leading cause of death)
- Hispanic/Latino: Ischemic heart disease and vascular disease; diabetes; essential hypertension and hypertensive renal and heart disease

All other races had numbers too small to report.

# Heart disease and stroke

Heart disease is a leading cause of death for both women and men in Macon-Bibb County. In 2020, the age-adjusted death rate was 273 deaths for every 100,000 people, which is far worse than both state and national rates, which were 72.4 and 91.5 heart-related deaths per 100,000 people, respectively.

Between 2016 and 2020, there were 393 deaths due to stroke, representing an age-adjusted death rate of 44 deaths per every 100,000 people. Men are more likely to die from stroke than women, as are black populations. Below is a chart demonstrating the death rate broken down by race, per every 100,000 people, between 2016 and 2020.



There are several potential reasons for this, including a higher poverty rate among black populations, which impacts all areas of life, including access to primary health care and healthy foods. Hypertension and other related chronic conditions also tend to be higher among black populations, as do obesity and diabetes, all of which tend to occur at a younger age than they do for their white counterparts. Finally, neighborhoods matter. In Macon-Bibb County, black populations tend to live in communities with lower walkability rates and more limited access to healthy foods.

## Hospitalizations

The hospitalization rates for heart disease and stroke among Medicare recipients have steadily decreased over the last five years. The cardiovascular disease hospitalization rate in 2018 was 16 hospitalizations per every 1,000 Medicare beneficiaries, which is higher than the state and national rates of 12.2 and 11.8, respectively. The hospitalization rate for stroke, though, is on par with state and national rates, with 8.9 hospitalizations per every 1,000 Medicare beneficiaries, as compared to the state rate of 9.3 and the national rate of 8.4.



# Cancer

Although heart disease leads in county deaths, cancer remains a critical issue within the community. The cancer incidence rate for Macon-Bibb County each year, on average between 2014 and 2018, was 496.5 per every 100,000, which equates to a diagnosis rate of an average 879 new cases each year. Below is a chart showing cancer diagnoses, by site, between 2014 and 2018, the last year for which this data is available.

Cancer Site	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Population)
1 - Breast	130	136.5
2 - Prostrate	126	153.4
3 - Lung and bronchus	126	68.3
4 - Colon and rectum	76	43.2
5 - Melanoma of the skin	39	22.6

When comparing to state and national average, though, Macon-Bibb County does fare better in terms of overall diagnosis. This means one of two things: there are either fewer incidence rates of cancer within the community or there are fewer screenings for all members of the community, therefore resulting in fewer diagnoses.

When broken down by cancer site, though, the breast cancer incidence rate of 136.5 is higher than state and national rates, which are 128.4 and 126.8 diagnoses per every 100,000 people, on average each year. Other diagnosed cancer rates are relatively on par with state and national averages.

Poverty is directly related to increased incidence rates of cancer, as those with lower levels of education and lower levels of income experience higher rates of cancer diagnoses. They are also more likely to die from certain cancers – particularly lung cancer and colorectal cancer. For survivors, income and socioeconomic status are significant predictors of quality of life after cancer. Increased income allows patients to maintain a level of comfort that people with low SES might not be able to afford, meaning that even if a low-income patient survives cancer, their quality of life after will be worse than someone more well off.

# Hospitalizations and ER visits

## Emergency department visits

In 2020, all hospitals in Macon-Bibb County treated patients through approximately 78,572 emergency room visits, a significant decrease from 96,526 visits in 2019. This is likely in part due to the impact of COVID-19 and a wariness among patients to visit a hospital. In previous years, the rate remained steady, usually around 92,000 total visits each year.

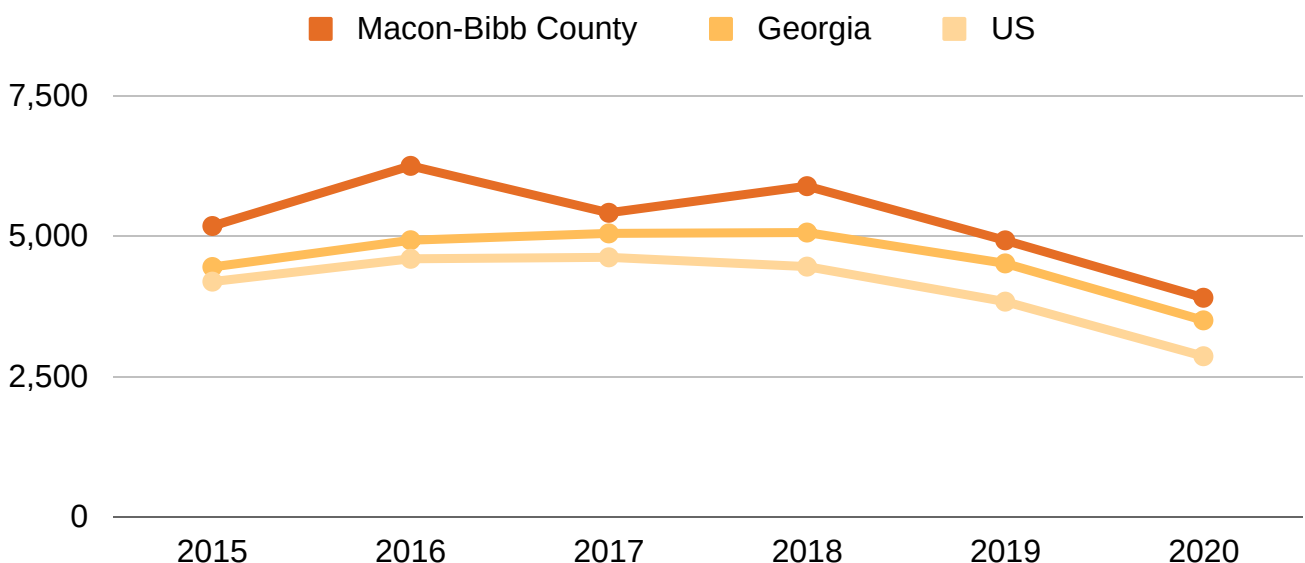
## Inpatient stays

In 2020, there were 29,611 Medicare Part A and Part B beneficiaries in the county. Approximately 2,403 total beneficiaries, or 16.5 percent, had a hospital inpatient stay, resulting in a rate of stays of 267 stays per every 1,000 beneficiaries. The rate of inpatient stays in the county was higher than the state rate of 230.0 during the same time.

## Preventable hospitalizations among Medicare beneficiaries

Preventable hospitalizations include hospital admissions for one or more of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, bacterial pneumonia, or urinary tract infections. Rates are presented per 100,000 beneficiaries. In 2020, the preventable hospitalization rate was 3,905, which was worse than the state rate of 3,503 during the same time. As with other health indicators, African Americans were twice as likely to experience preventable hospitalizations than other races in 2020.

The below chart demonstrates the five-year trend for preventable hospitalizations over the last five years.



# Chronic conditions

A chronic condition is a health condition or disease that is persistent or otherwise long-lasting in its effects or a disease that comes with time. As with most health indicators, low-income households are most at risk for developing chronic diseases and for premature deaths. Such households are more vulnerable for several reasons, including their inability to cover medical expenses and diminished access to health care facilities.

## Diabetes

In 2019, 13 percent of adults aged 20 and older had diabetes, which is higher than the state rate of 9.8 percent. Diabetes is a prevalent problem in the US, often indicating an unhealthy lifestyle and puts individuals at risk for further health issues. Diabetes itself is often a killer, and leads in causes of deaths for minorities, particularly Hispanic/Latino populations.

## Kidney disease

Chronic kidney disease, also called chronic kidney failure, involves a gradual loss of kidney function. Your kidneys filter wastes and excess fluids from your blood, which are then removed in your urine. Advanced chronic kidney disease can cause dangerous levels of fluid, electrolytes and wastes to build up in your body. In 2019, 4 percent of the county's population had a diagnosis of kidney disease, a rate worse than the state and national percentages of 3.22 percent and 3.1 percent, respectively.

## High cholesterol

In 2019, 33.3 percent of adults 18 and older reported having high cholesterol of the total population. Too much cholesterol puts you at risk for heart disease and stroke, two of the main causes of death within the county.

## High blood pressure

In 2019, 27.7 percent of adults 18 and older had a diagnosis of high blood pressure. High blood pressure can damage your arteries by making them less elastic, which decreases the flow of blood and oxygen to your heart and leads to heart disease.

## Multiple chronic conditions among Medicare populations

This indicator reports the number and percentage of the Medicare fee-for-service population with multiple (more than one) chronic conditions. Data are based upon Medicare administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Within the county, there were 11,962 beneficiaries with multiple chronic conditions based on administrative claims data in the latest report year, representing 75.2 percent of the total Medicare fee-for-service beneficiaries. Twenty-two percent of these beneficiaries have six or more chronic conditions.

# Infectious diseases

Infectious diseases are an issue in Macon-Bibb County, and especially so for sexually transmitted diseases. Most infectious diseases have only minor complications. But some infections — such as pneumonia, AIDS, and meningitis — can become life-threatening. A few types of infections have been linked to a long-term increased risk of cancer. For example, human papillomavirus is linked to cervical cancer. Note that COVID-19 created a spike in STD rates, which is not reflected below.

## **HIV/AIDS**

HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). While there is no cure for HIV/AIDS, if treated, most can live a relatively healthy life. In Macon-Bibb County, in 2018, there were 922.3 confirmed cases of HIV/AIDS for every 100,000 people. This is significantly higher than the state rate of 624.90 confirmed cases per every 100,000 people.

## **Chlamydia**

Chlamydia is a common STD that can cause infection among both men and women. It can cause permanent damage to a woman's reproductive system. This can make it difficult or impossible to get pregnant later. Chlamydia can also cause a potentially fatal ectopic pregnancy (pregnancy that occurs outside the womb). In Macon-Bibb County, in 2018, there were 1,695 confirmed cases of chlamydia, resulting in a rate of about 1,108.84 infections per every 100,000 people. This is much higher than the state rate of 632.2 confirmed cases per every 100,000 people.

## **Gonorrhea**

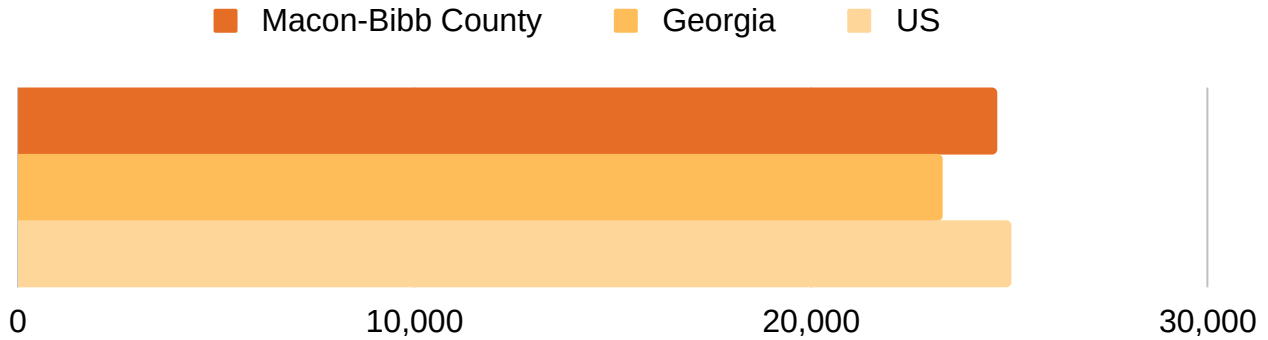
Gonorrhea is an STD that can cause infection in the genitals, rectum, and throat. It is very common, especially among young people ages 15-24 years. Untreated gonorrhea can cause serious and permanent health problems in both women and men. In women, gonorrhea can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). In Macon-Bibb County, in 2018, there were 500.6 confirmed cases of gonorrhea for every 100,000 people. This is significantly higher than the state rate of 200.10 confirmed cases per every 100,000 people.

## **Influenza and pneumonia**

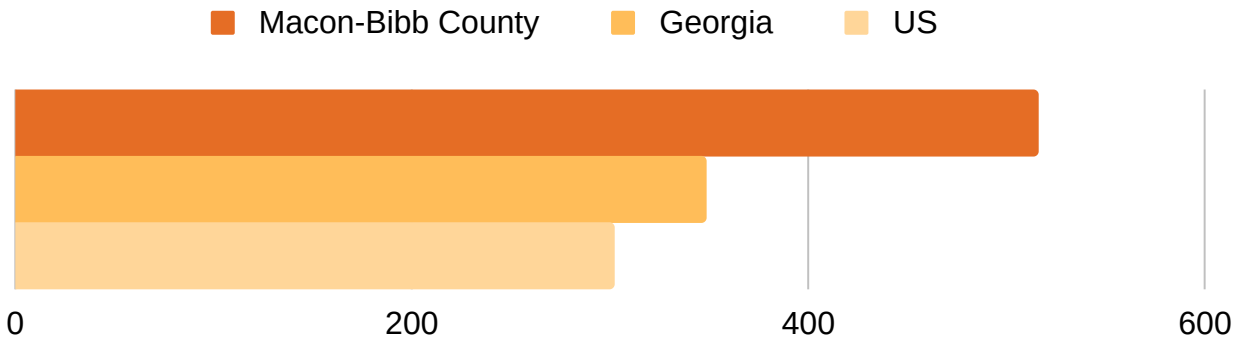
Within the county, between 2016 and 2018, there were a total 159 deaths due to influenza and pneumonia, representing an age-adjusted death rate of 18.2 per every 100,000 people, which is higher than the state and national rates of 13.6 and 13.6, respectively. In Macon-Bibb County, men are nearly twice as likely to die from influenza or pneumonia than women, and black men are especially susceptible.

# COVID-19

Without a doubt, COVID-19 is easily one of the most impactful health events to happen within both the community and the world. As of May 23, 2022, Macon-Bibb County had a total 57,813 confirmed COVID-19 cases, resulting in a confirmed case rate of 24,663.12 cases per every 100,000 people.



As of May 23, 2022, 790 people have died from COVID-19, resulting in a death rate of 516.02 deaths per every 100,000 people.



Approximately 56 percent of the county was fully vaccinated as of May 22, 2022, and the county had a COVID-19 vaccine coverage index (CVAC) of 0.58, which is a score of how challenging vaccine rollout may be in some communities compared to others, with values ranging from 0 (least challenging) to 1 (most challenging). CVAC ranks states and counties on barriers to coverage through 28 indicators across five themes:

- Historic undervaccination
- Sociodemographic barriers
- Resource-constrained health system
- Health care accessibility barriers
- Irregular care-seeking behaviors.

The CVAC can help contextualize progress to widespread COVID-19 vaccine coverage, identifying underlying community-level factors that could be driving low vaccine rates.

# Children and youth

There were approximately 37,614 children and youth under the age of 18 in Macon-Bibb County in 2020, representing 25 percent of the population. The ZIP code with the highest number of children was 31206, according to the Census Bureau. Approximately 2.3 percent of students were homeless in 2020 -- about 494 kids.

Of all children, 60 percent lived at or below 200 percent of the Federal Poverty Level (FPL), which was \$55,500 gross household income for a family of four in 2022. The highest percentage of poor children were in the 31206 ZIP code, where 77.5 percent of children lived in poverty in 2020. Overall, in Macon-Bibb County, black children were more than three times more likely to live in poverty than white children.

Additionally, 93.19 percent of county children qualified for free or reduced-price lunch in the 2019-2020 school year, a figure far above state and national rates of 60 percent and 50 percent, respectively. Free or reduced-price lunches are served to qualifying students in families with income under 185 percent (reduced price) or under 130 percent (free lunch) of the US FPL as part of the federal National School Lunch Program (NSLP).

## **Access - Head Start and preschool enrollment**

Head Start is a program designed to help children from birth to age five who come from families at or below poverty level. This helps these children become ready for kindergarten while also providing the needed requirements to thrive, including health care and food support. Macon-Bibb County had nine Head Start programs in 2019, equaling a rate of 7.85 programs per every 10,000 children under five years old in 2020, which falls between state and national rates of 6.83 and 10.53, respectively. Approximately half of all children aged 3 to 4 were enrolled in preschool in 2020, a rate on par with state and national figures of 50.26 percent and 48.32 percent, respectively.

## **Single-parent households**

In 2019, 22 percent of children lived in households where only one parent is present, and the majority of those were led by a single woman. Statistically, compared to married parents, single parents tend to be poorer (because there is not a second earner in the family) and less well-educated (in part because early childbearing interrupts or discourages education, and single parent households tend to be led by younger parents).

## **English and math 4th grade proficiency**

Of 11,766 students tested, 72.3 percent of 4th graders tested below the "proficient" level in the English Language Arts portion of state standardized tests in the 2018-2019 school year, which is worse than the state rate of 60.8 percent and the national rate of 53.8 percent. Reading proficiency is key; up until 4th grade, students are learning to read. After that, they are reading to learn. For the math portion of the test, 65.9 percent of 4th graders tested below the "proficient" level, according to the latest data. Students in the county tested better than the statewide rate of 46.1 percent.

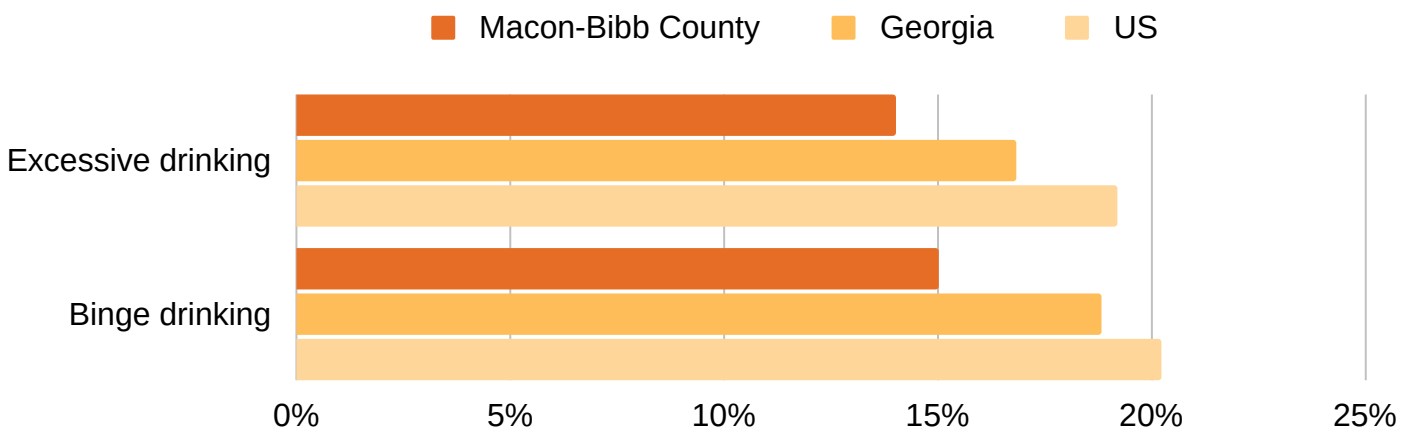
# Risky behaviors

Behaviors are directly related to health outcomes, leading to increased risks of cardiovascular disease, cancer, liver diseases, hepatitis, and sexually transmitted diseases.

## Alcohol use

Excessive alcohol use can lead to a myriad of health issues, including liver disease, depression, injuries, violence, and cancer. In Macon-Bibb County, in 2018, about 14 percent of adults self-reported excessive drinking in the last 30 days, which was less than the state rate of 16.81 percent. Data for this indicator were based on survey responses to the 2018 Behavioral Risk Factor Surveillance System (BRFSS) annual survey, the last year for which data is available. Based on preliminary national data, these rates likely increased during 2020, in which alcohol use increased during COVID-19 quarantine periods.

The below chart shows self-reported excessive and binge drinking rates in 2018. Binge drinking is defined as adults aged 18 and older who report having five or more drinks (men) or four or more drinks (women) on an occasion in the past 30 days. Excessive drinking is when binge drinking episodes occurred multiple times within the last 30 days.



## Tobacco use

Within the county in 2019, 23 percent of adults reported being a current smoker. Smoking is directly related to a myriad of health issues, the most serious of which is cancer.

## Insufficient sleep

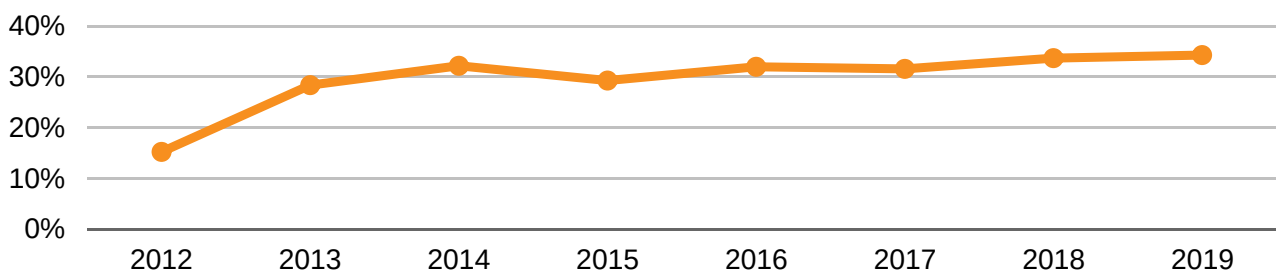
Approximately 44 percent of county residents reported regularly sleeping less than 7 hours most nights, on average, in 2019. Sleep is an essential function that allows your body and mind to recharge, leaving you refreshed and alert when you wake up. Healthy sleep also helps the body remain healthy, fight diseases, and maintain good mental health. Without enough sleep, the brain cannot function properly.

# Health factors

Certain health factors have a strong impact on overall health, including obesity and physical inactivity.

## Obesity

In 2019, 34.3 percent of county residents aged 20 and older were obese, meaning they had a body mass index of 30 percent or more. Obesity rates have steadily risen in Macon-Bibb County, where ten years ago, 24.5 percent of the population were considered obese. Obesity is directly linked to several health issues, including diabetes and heart disease.



In Macon-Bibb County, as throughout the state and nation, the poorer you are, the more likely you are to be obese. Additionally, Hispanic/Latino and black populations are much more likely to be obese than their white counterparts.

## Physical inactivity

Within the county in 2019, 30 percent of adults aged 20 and older self-report no active leisure time, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

One reason may be the lack of available public places for physical activity. For example, only 17 percent of county residents live within a half mile of a park, a figure much lower than the national rate of 38.01 percent. Additionally, there were only 13 recreation and fitness places within the county in 2019, resulting in a rate of 8.36 facilities per every 100,000 people, another number below state and national averages.

## Soda expenditures

This indicator reports soft drink consumption by census tract by estimating expenditures for carbonated beverages, as a percentage of total food-at-home expenditures. Soda is directly related to obesity and poor dental health. In Macon-Bibb County, households spent an average 4.71 percent of their food budget on sodas in 2019, which is higher than average state and national expenditures, which were 4.18 percent and 4.02 percent, respectively. Some ZIP codes spent more on soda, such as 31207, which had a rate of 5.14 percent.



# Mental health

Mental health is a critical driver of overall health, as being in a good mental state can keep you healthy and help prevent serious health conditions. A study found that positive psychological well-being can reduce the risks of heart attacks and strokes. On the other hand, poor mental health can lead to poor physical health or harmful behaviors.

## Deaths of Despair

Deaths of despair -- suicide, drug and alcohol poisoning, and alcoholic liver disease—are at their highest rate in recorded history, according to the Centers for Disease Control and Prevention (CDC). In Macon-Bibb County, the average rate of death due to despair was 32.9 people per every 100,000 people in 2020, a number that has steadily risen since 2010, when it was 29.5 people per every 100,000 people. This is most common among white adults with four-year degrees. Specifically, suicide rates in the county continue to climb and are among leading causes of death for middle-age white men.

## Poor mental health days

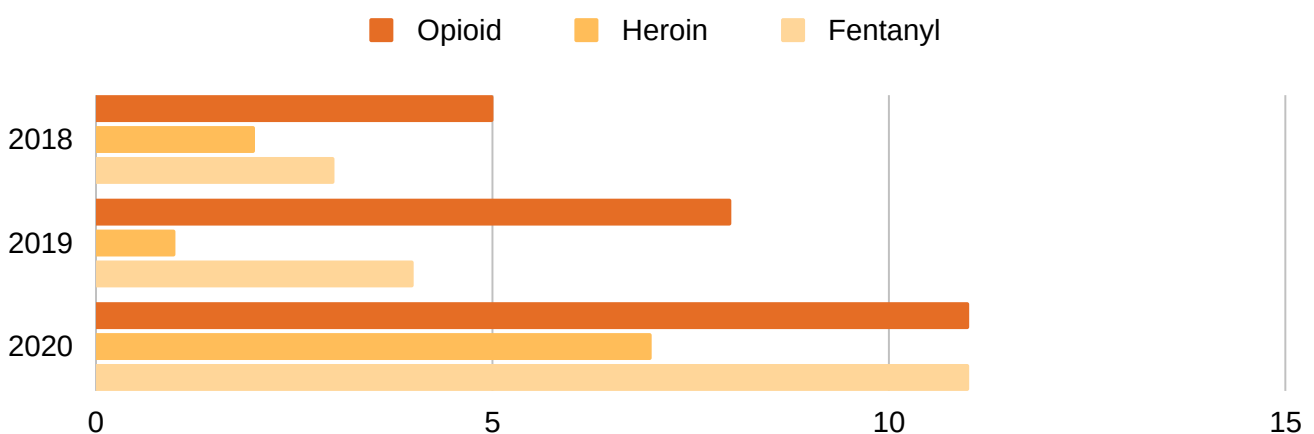
In 2018, the last year for which data is available, county members reported an average 4.6 poor mental health days over the last 30 days, which is higher than the state average of 4.2 poor mental health days. This is a statistic that likely sharply increased in 2020 and 2021, when the severe mental impact of COVID-19 was felt throughout the community.

Additionally, in 2018, 18 percent of adults reported being in frequent mental distress, which is 14 or more poor mental health days within a 30-day period. This statistic also likely increased during 2020 and 2021.

## Opioid and substance use

Providers in Macon-Bibb County prescribed 125.61 prescriptions per every 100 people in 2020, the last year for which data is available and one of the highest rates in the state.

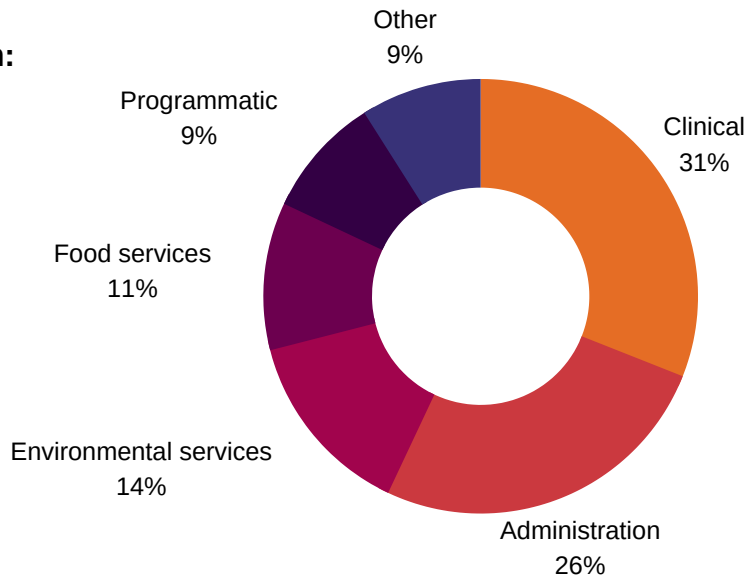
Below is a chart demonstrating opioid-related drug deaths between 2018 and 2020.



# Employee survey

In March 2022, we launched an online employee survey to solicit community input on key health issues. A total 1,053 system employees responded, including 46 Piedmont Macon employees. Below are the results of that survey. You can find all survey questions in the appendix.

## The employees who responded worked in:



## They worked at:

- Piedmont Athens: 13.12%
- Piedmont Atlanta: 9%
- Piedmont Cartersville: 2.98%
- Piedmont Columbus: 8.93%
- Piedmont Eastside: 4.31%
- Piedmont Fayette: 7.69%
- Piedmont Healthcare: 4.29%
- Piedmont Henry: 5%
- Piedmont Macon: 4.4%
- Piedmont Mountainside: 5.83%
- Piedmont Newnan: 7.38%
- Piedmont Newton: 3.33%
- Piedmont Physicians: 4.4%
- Piedmont Rockdale: 4.64%
- Piedmont Walton: 3.45%
- Multiple locations: 5.98%
- Other: 5.36%

**Q: What do you think are the five most important factors for a healthy community? The top five answers were:**

1. Access to health care
2. Access to healthy foods
3. Economic opportunity for everyone
4. Healthy behaviors and lifestyle
5. Good place to raise children

**Q: What do you think are the five most important health problems in your community? The top five answers were:**

1. Aging problems
2. Poverty
3. Mental health problems
4. COVID-19
5. Heart disease and stroke

# Employee survey, cont'd

**Q: What do you think are the five riskiest behaviors in your community?**

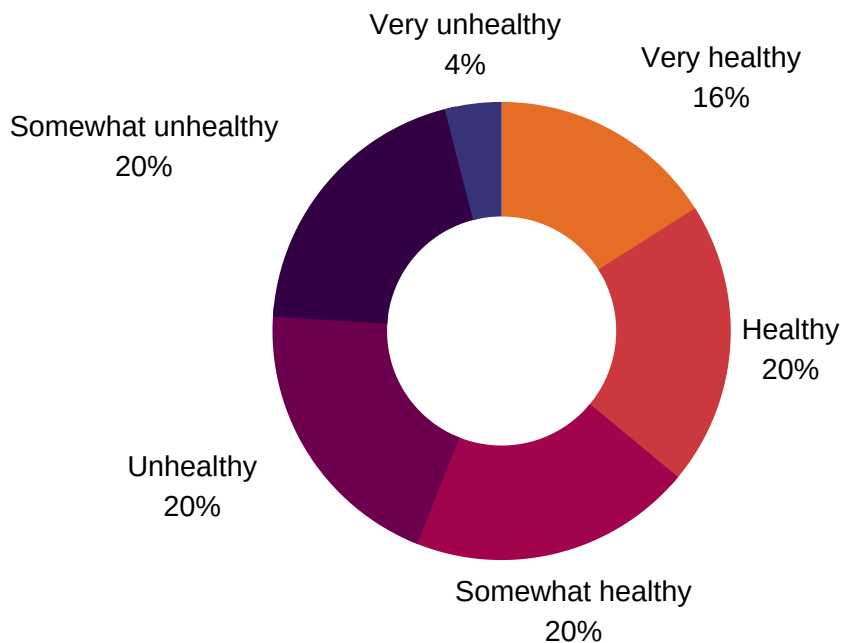
The top five answers were:

1. Not getting vaccinations to prevent disease, including COVID-19
2. Poor diet
3. Alcohol abuse
4. Tobacco use
5. Lack of exercise

**Q: What issues do you think may prevent community members from accessing care? The top five answers were:**

1. Unable to pay co-pays and deductibles
2. No insurance
3. Lack of access to transportation
4. Fear (e.g., not ready to face or discuss health problem)
5. Don't understand the need to see a doctor

**Q: How would you rate the overall health of your community?**



# Employee survey, cont'd

**Q: What do you think are the top five most important actions in improving the health of community members living within Piedmont communities? The top five answers were:**

1. Access to low-cost mental health services
2. Financial assistance to those who qualify
3. Access to dental care services
4. Community-based programs for health
5. Expanded access to specialty physicians

**Q: What is your vision for a healthy community? Some answers were:**

A healthy community includes access to affordable healthcare, healthy food, safe housing, quality education, and stable jobs.

A place where people are healthy enough to move about and enjoy life.

One that is educated, with access to health services both financially and geographically.

Families and individuals who care for each other.

A community who has access to services, I have been an ER nurse for nearly a decade and the mental health population continues to grow. There are not many resources for these patients; Advantage is great but it would be wonderful to have a local Piedmont facility to help with these patients.

Affordable housing that is safe.

More community care clinics where underserved communities can have access to "affordable" healthcare.

Using healthcare for prevention instead of trying to treat most problems after onset.

Free little food pantries on different blocks in towns, with healthy food choices.

A healthy community to me would be a place where social and financial factors do not stop a person for asking for help when in need. If everyone was able to get healthcare assistance, the community would be a healthy place as a whole.

## Employee survey, cont'd

**Q: What is the single most pressing issue that you believe our patients face? Most answers centered around cost, with some health factors. Among the answers:**

Barriers to accessing health care including lack of health insurance and poor socioeconomic status.

Medical bills.

Affordable, really affordable, health care for everyone.

Financial insecurity (including but not limited to people living at or below poverty lines).

Mental health.

Drug use, obesity, and heart failure are things that could probably be helped if they had the access to the right facilities.

Uninsured and underinsured people are so underserved. There are so many people who don't access care until they are falling apart and end up hospitalized simply because they couldn't afford to see a doctor and pay out of pocket rates.

Low healthcare literacy.

**Q: What are one or two things we can do better to serve our patients/our community? Some answers were:**

Include better discharge instructions on how to stay well at home. Also have a health hotline to triage calls before heading to emergency room.

Participate in community clinics that offer reduced cost preventative services (wellness, vaccines, chronic illness management) in challenged communities.

Get more involved in schools, as healthy behaviors start early.

Make non-emergent care more viable for uninsured and underinsured populations.

Help lower income patients with housing and food issues and provide discharge instructions that are viable for these patients.

Push the Governor to accept federal funding to fully expand Medicaid under the ACA.

# Community stakeholders

As part of our process, we interviewed nearly 245 stakeholders, policy makers, and lawmakers representing public health, low-income populations, minorities, chronic conditions, older adults, and our communities. These included 12 stakeholders within the Macon-Bibb County community. Answers carried certain themes. Below is a summary of comments.

## **Access to Care**

Almost every stakeholder identified access to care as a significant issue within the community, especially given the high rates of poverty. Many stated that services are not able to keep up with the need. There is an ongoing concern over chronic health concerns such as diabetes, hypertension, obesity, and respiratory disease. These conditions were often paired with a concern around the high number of residents living in food deserts, without access to grocery stores, further perpetuating these health concerns.

Stakeholders identified homelessness as a significant barrier to care, and that discharge processes for these populations can be flawed due to the unique challenges these populations have. This includes having a safe space to go when the homeless patient is well enough to leave the hospital but not well enough to be back on the streets. One stakeholder relayed that such a place is currently being built, however, the stakeholder worried the need would soon outstrip the resources.

At least two stakeholders expressed a wish for stronger collaboration between the hospitals and the groups serving these populations to avoid any unnecessary and preventable hospitalizations, as well as ensure proper follow-up care. One stakeholder stated a need for different discharge protocols and definitions for homeless populations that would include social components to ensure the patient has a safe place to go. Another cited the need for increased case management within the hospital to better address the needs of low-income patients.

Additionally, several stakeholders felt there was an urgent need for more school-based health services and education, citing housing insecurity and food insecurity as key drivers for health issues among school-age children. One stakeholder relayed issues with care management for low-income students, and another cited the impact of health and social issues on the child's educational ability. As one stakeholder put it, "How can you focus on learning when you don't feel well and are hungry?"

Finally, most stakeholders cited the critical need for more mental health and addiction recovery services within the county. One stakeholder said there are no true long-term affordable resources for community members, and that the system itself is fragmented, with no real central resource.

# Community stakeholders, cont'd

## Social Determinants of Health

Macon-Bibb County is poor, and the impact of poverty is felt throughout the community. Many stakeholders noted that there are an increasing number of resources and services for these populations, but that efforts can be disjointed at times. The limited amount of affordable housing was discussed by most interviewees, and most noted that as prices continue to rise, more community members will be without a home. Additionally, several stakeholders cited challenges to safe housing, including mention of homes that lack heating and cooling, which in turn can lead to poor health outcomes.

Many stakeholders living in public housing are in food deserts, lacking access to grocery stores to fulfill these nutritional deficits. Children with nutritional deficits are unable to develop appropriately and have poor health outcomes and performance in school. Furthermore, those living in proximity to a grocery store often still are unable to afford their nutritional needs. Jobs in the area are available, but few that offer a livable wage for employees, forcing many people to allocate a high percentage of their income going towards cost of living to cover basic needs.

Overall, stakeholders relayed a need for social determinants of health to be addressed holistically, as these issues are intertwined. For example, one stakeholder discussed the prevalence of asthma among children living in subsidized and substandard housing, and the inability of parents to afford necessary medication at times, which then worsens the issue, leading to chronic school absences, which impacts learning. As the stakeholder said, "It's all connected. Each issue is impacted by another, and you're left with families that are struggling to even survive, much less thrive."

Several stakeholders cited the need for a central group to work together in coordinating resources across the community. Among one stakeholder's wish list of attendees were: mental health providers, planning and zoning representatives, nonprofit leaders, transportation representatives, hospital leaders, groups with disabilities, veterans, those able to support healthy food access, those focused on older populations, groups working with substance abuse, public health, the faith-based community, public safety, emergency response personnel, and the legal and judicial system.

# Methodology

The Piedmont Macon CHNA was led by the Piedmont Healthcare community benefits team and consulting organization Public Goods Group, with significant input and direction from Piedmont Macon's leadership and Piedmont Healthcare's Department of External Affairs.

The CHNA started with an analysis of available public health data. We looked at our Piedmont service region, which spans the northeast section of the state. We paid particular attention to the home counties of our hospitals, which is reflected in this CHNA. We focused on the home counties in the individual CHNAs due to the local impact of our tax-exempt status.

Once our community was established, we interviewed key stakeholders who have a particular expertise or knowledge of our communities. Specifically, we interviewed representatives of local and regional public health entities, minority populations, faith-based communities, local business owners, the philanthropic community, mental health agencies, elected officials and individuals representing our most vulnerable patients.

An internal survey was also conducted throughout the healthcare system for both clinical and non-clinical employees. Information was gathered on knowledge and understanding of community benefit and current programs, as well as suggestions for how we can better serve our patients and communities. Approximately 1,053 employees spanning the system responded. Additionally, we conducted a community-based survey that was widely advertised to the community.

Once both qualitative and quantitative data was gathered, we authored the preliminary report. Several key community health needs emerged during the assessment process. The chosen priorities were recommended by the community benefit department with sign-off from hospital and board leadership. The following criteria were used to establish the priorities:

- The number of persons affected;
- The seriousness of the issue;
- Whether the health need particularly affected persons living in poverty or reflected health disparities; and,
- Availability of community and/or hospital resources to address the need.

While the priorities reflect clinical access and certain conditions, all priorities are viewed through the lens of health disparities, with particular attention paid to improving outcomes for those most vulnerable due to income and race. The priorities we chose reflected a collective agreement on what hospital leadership, staff and the community felt was most important and within our ability to positively impact the issue. Once priorities were chosen, we then authored the CHNA and presented our findings and recommendations to the hospital's board of directors for their input and approval.



# Approval

Hospital leadership then reviewed the CHNA and provided input. We incorporated their input into the final CHNA report, which is this report. We then presented our findings and recommended priorities to the hospital board of directors.

Once we established our priorities, we presented the CHNA to the board of directors for approval on June 27, 2022.

# Appendices

## Appendix one: Federal Poverty Levels

Data on the poverty threshold is created by the US Census Bureau, which uses pre-tax income as a yardstick to measure poverty. The statistical report on the poverty threshold is then used by the HHS to determine the federal poverty level (FPL). Below are the rates for 2022.

Family size	100%	150%	200%	300%	400%
1	\$13,590	\$20,385	\$27,180	\$40,770	\$54,360
2	\$18,310	\$27,465	\$36,620	\$54,930	\$73,240
3	\$23,030	\$34,545	\$46,060	\$69,090	\$92,120
4	\$27,750	\$41,625	\$55,500	\$83,250	\$111,000
5	\$32,470	\$48,705	\$64,940	\$97,410	\$129,880
6	\$37,190	\$55,785	\$74,380	\$111,570	\$148,760
7	\$41,910	\$62,865	\$83,820	\$125,730	\$167,640
8	\$46,630	\$69,945	\$93,260	\$139,890	\$186,520

## Appendix two: Stakeholders interviewed

In February and March 2022, we interviewed several stakeholders within the Macon-Bibb community. These stakeholders were: Sister Theresa Sullivan (Daybreak Homeless Shelter), Alison Bender (Brookdale Warming Center), George McCanless (United Way), Jeff Battcher (Middle Georgia Food Bank), Dr. Jimmie Smith (Bibb County Health Department), Dr. Mitch Rodriguez (Georgia Department of Public Health), Nancy White (Macon Volunteer Clinic), Shannon Gordon (River Edge Behavioral Health), Patty Gibbs (Family Counseling Center of Middle Georgia), Laura Paxton (United in Pink), Reverend Sandra Simmons (Fountain Grove AME Church), and Daniel Charles (Mission United at the Vectre Center).

### Appendix three: Sources for data

We utilized numerous data sources throughout the CHNA process. Due to the high volume in this report, we did not individually cite each statistic. That said, we provide a list of all data sources below. Please contact the Piedmont Healthcare community benefit department at [communityprograms@piedmont.org](mailto:communityprograms@piedmont.org) for questions on specific data points.

Category	Data Source
Demographics	US Census Bureau, Decennial Census, 2020.
Demographics	US Census Bureau, American Community Survey, 2015-19.
Demographics	University of Wisconsin Net Migration Patterns for US Counties, 2010-20.
Income and Economics	US Census Bureau, American Community Survey, 2015-19.
Income and Economics	US Census Bureau, Business Dynamics Statistics, 2018-19.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2019.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2019.
Income and Economics	US Department of Labor, Bureau of Labor Statistics, Jan. 2022.
Income and Economics	IRS - Statistics of Income, 2018.
Income and Economics	US Census Bureau, American Community Survey, 2015-19.

### Appendix three: Sources for data, cont'd

Category	Data Source
Income and Economics	US Census Bureau, American Community Survey, University of Missouri, Center for Applied Research and Engagement Systems, 2007-11.
Income and Economics	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2017.
Income and Economics	US Department of Commerce, US Bureau of Economic Analysis, 2016.
Income and Economics	National Center for Education Statistics, NCES - Common Core of Data, 2020-21.
Income and Economics	US Census Bureau, Small Area Income and Poverty Estimates, 2020.
Education	US Department of Health & Human Services, HRSA - Administration for Children and Families, 2019.
Education	US Census Bureau, American Community Survey, 2015-19.
Education	National Center for Education Statistics, NCES - Common Core of Data, 2020-21.
Education	US Department of Education, EDFacts, 2018-19.
Education	US Census Bureau, American Community Survey, 2014-18.
Education	U.S. Department of Education, US Department of Education - Civil Rights Data Collection, 2017-18.
Housing and Families	US Census Bureau, American Community Survey, 2015-19.

### Appendix three: Sources for data, cont'd

Category	Data Source
Housing and Families	US Department of Housing and Urban Development, 2019.
Housing and Families	US Department of Housing and Urban Development, US Census Bureau, American Community Survey, 2019.
Housing and Families	Eviction Lab, 2016.
Housing and Families	US Census Bureau, American Community Survey, 2011-15.
Housing and Families	Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act, 2014.
Housing and Families	US Census Bureau, Decennial Census, US Census Bureau, American Community Survey, 2015-19.
Housing and Families	US Department of Housing and Urban Development, 2014.
Housing and Families	US Census Bureau, Census Population Estimates, 2019.
Housing and Families	US Department of Housing and Urban Development, 2020-Q4.
Other Social & Economic Factors	University of Wisconsin-Madison School of Medicine and Public Health, Neighborhood Atlas, 2021.
Other Social & Economic Factors	Feeding America, 2017.
Other Social & Economic Factors	US Department of Education, EDFacts, 2019-20.

### Appendix three: Sources for data, cont'd

Category	Data Source
Other Social & Economic Factors	US Census Bureau, American Community Survey, 2015-19.
Other Social & Economic Factors	Opportunity Insights, 2018.
Other Social & Economic Factors	US Census Bureau, American Community Survey, 2015-2019.
Other Social & Economic Factors	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2020.
Other Social & Economic Factors	US Census Bureau, Small Area Health Insurance Estimates, 2019.
Other Social & Economic Factors	Opportunity Nation, 2018.
Other Social & Economic Factors	US Census Bureau, Decennial Census, University of Missouri, Center for Applied Research and Engagement Systems, 2020.
Other Social & Economic Factors	US Census Bureau, Small Area Income and Poverty Estimates, 2019.
Other Social & Economic Factors	Pennsylvania State University, College of Agricultural Sciences, Northeast Regional Center for Rural Development, 2014.
Other Social & Economic Factors	Centers for Disease Control and Prevention and the National Center for Health Statistics, CDC - GRASP, 2018.
Other Social & Economic Factors	Debt in America, The Urban Institute, 2021.

### Appendix three: Sources for data, cont'd

Category	Data Source
Other Social & Economic Factors	Centers for Disease Control and Prevention, National Vital Statistics System, 2013-19.
Other Social & Economic Factors	Federal Bureau of Investigation, FBI Uniform Crime Reports, 2014; 2016.
Other Social & Economic Factors	Federal Bureau of Investigation, FBI Uniform Crime Reports, 2014; 2016.
Other Social & Economic Factors	Townhall.com Election Results, 2016.
Physical Environment	US Environmental Protection Agency, 2018-19.
Physical Environment	Centers for Disease Control and Prevention, CDC - National Environmental Public Health Tracking Network, 2015.
Physical Environment	Centers for Disease Control and Prevention, CDC - National Environmental Public Health Tracking Network, 2016.
Physical Environment	EPA - National Air Toxics Assessment, 2014.
Physical Environment	US Environmental Protection Agency, 2019.
Physical Environment	US Census Bureau, County Business Patterns, 2019.
Physical Environment	National Broadband Map, Dec. 2020.
Physical Environment	US Census Bureau, American Community Survey, 2015-19.

### Appendix three: Sources for data, cont'd

Category	Data Source
Physical Environment	US Department of Health & Human Services, US Food and Drug Administration Compliance Check Inspections of Tobacco Product Retailers, 2018-20.
Physical Environment	Climate Impact Lab, 2018.
Physical Environment	Multi-Resolution Land Characteristics Consortium, National Land Cover Database, 2016.
Physical Environment	Federal Emergency Management Agency, National Flood Hazard Layer, 2019.
Physical Environment	Center for Disease Control and Prevention, CDC National Environmental Public Health Tracking, 2017-19.
Physical Environment	Federal Emergency Management Agency, National Risk Index, 2020.
Physical Environment	US Census Bureau, Decennial Census, ESRI Map Gallery, 2013.
Physical Environment	US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2019.
Physical Environment	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2017.
Physical Environment	Centers for Disease Control and Prevention, CDC - Division of Nutrition, Physical Activity, and Obesity, 2011.
Physical Environment	US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator, 2021.



### Appendix three: Sources for data, cont'd

Category	Data Source
Physical Environment	US Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture, 2012.
Physical Environment	US Fish and Wildlife Service, Environmental Conservation Online System, 2019.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Clinical Care and Prevention	Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, CDC - Atlas of Heart Disease and Stroke, 2016-18.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2020.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2020.
Clinical Care and Prevention	Centers for Disease Control and Prevention, National Vital Statistics System, Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research, 2019.
Clinical Care and Prevention	Centers for Disease Control and Prevention, CDC - FluVaxView, 2019-20.
Clinical Care and Prevention	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2019.

### Appendix three: Sources for data, cont'd

Category	Data Source
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2015-18.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2018-19.
Clinical Care and Prevention	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2015-16.
Health Behaviors	University of Wisconsin Population Health Institute, County Health Rankings, 2018.
Health Behaviors	Child and Adolescent Health Measurement Initiative, National Survey of Children's Health, 2018.
Health Behaviors	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019.
Health Behaviors	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2018.
Health Behaviors	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Health Behaviors	US Census Bureau, American Community Survey, 2015-19.
Health Outcomes	Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File, 2018.
Health Outcomes	State Cancer Profiles, 2014-18.

**Appendix three: Sources for data, cont'd**

<b>Category</b>	<b>Data Source</b>
Health Outcomes	State Cancer Profiles, 2014-18.
Health Outcomes	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2019.
Health Outcomes	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2019.
Health Outcomes	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2018.
Health Outcomes	Centers for Medicare and Medicaid Services, 2018.
Health Outcomes	Centers for Disease Control and Prevention, National Vital Statistics System, 2016-20.
Health Outcomes	University of Wisconsin Population Health Institute, County Health Rankings, 2013-19.
Health Outcomes	Institute for Health Metrics and Evaluation, 2017.
Health Outcomes	Centers for Disease Control and Prevention and the National Center for Health Statistics, U.S. Small-Area Life Expectancy Estimates Project, 2010-15.
Health Outcomes	US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2015-19.
Health Outcomes	University of Wisconsin Population Health Institute, County Health Rankings, 2017-19.

### Appendix three: Sources for data, cont'd

Category	Data Source
Health Outcomes	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2018.
Health Outcomes	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool, 2019.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), May 2021.
Healthcare Workforce	US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Feb. 2022.
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File, 2015.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), 2021.
Healthcare Workforce	Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), 2020.
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File, 2017.
Healthcare Workforce	US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File, Sept. 2020.
Healthcare Workforce	US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File, 2019.

### Appendix three: Sources for data, cont'd

Category	Data Source
Healthcare Workforce	US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Health Professional Shortage Areas Database, May 2021.
COVID-19	Johns Hopkins University, 2022.
COVID-19	Google Mobility Reports, Feb. 01, 2022.
COVID-19	Centers for Disease Control and Prevention and the National Center for Health Statistics, CDC - GRASP, 2022.

### Appendix four: Employee survey

From March 01 to March 31, 2022, the hospital placed online an employee survey meant to capture employees' thoughts on challenges within our communities and suggestions on how the hospital can improve its community's health. Below is the survey these employees received.

In our commitment as a not-for-profit health system, Piedmont is currently studying the region's community health needs for its Community Health Needs Assessment. As a member of our community, we invite you to take this 15-minute survey so that your feedback can be heard and included in identifying health priorities which we'll address over the next three years.

Thank you for your time and input.

1. What type of role do you have?

- Administrative
- Clinical
- Environmental Services
- Food Services
- Programmatic
- Other: Please describe

2. Are you an employee or are you a contract employee?

## Appendix four: Employee survey, cont'd.

3. What is your home zip code?

4. How do you define the community you serve in your role?

- From wherever our patients come
- All of Georgia
- The hospital's county
- Other: Please describe

5. In the following list, what do you think are the five most important factors for a healthy community? We consider this to be those factors which most improve the quality of life in a community.

- Access to health care (e.g., family doctor)
- Access to healthy food
- Arts and cultural events
- Civic participation
- Clean environment
- Ethnic and cultural diversity
- Financial assistance for health care at the hospital
- Healthy behaviors and lifestyles
- High retirement rates
- Emergency preparedness
- Good place to raise children
- Low adult death and disease rate
- Low crime/safe neighborhoods
- Low infant deaths
- Low level of child abuse
- Parks and recreation
- Low- and no-cost options for health care within the community
- Quality of care
- Quality of housing or housing availability
- Religious or spiritual values
- Social cohesion
- Strong family life
- Strong school district
- Transportation and walkability
- Other: Please describe

## Appendix four: Employee survey, cont'd.

6. In the following list, what do you think are the five most important health problems in our community? Please check five.

- Aging problems (e.g., arthritis, hearing/vision loss, etc.)
- Cancers
- Child abuse / neglect
- COVID-19
- Dental problems
- Diabetes
- Domestic violence
- Firearm-related injuries
- Heart disease and stroke
- High blood pressure
- HIV/AIDS
- Homicide
- Infant death
- Infectious diseases
- Mental health problems
- Motor vehicle crash injuries
- Poverty
- Rape/sexual assault
- Respiratory/lung disease
- Sexually transmitted diseases (STDs)
- Social isolation
- Suicide
- Teenage pregnancy
- Terrorist activities
- Health illiteracy
- Built environment
- Housing insecurity
- Neighborhood environmental risk (e.g., pollution, high lead exposure)
- Other: Please describe

7. How would you rate the overall health of our community?

- Very unhealthy (most have three or more chronic conditions such as heart disease or diabetes)
- Unhealthy (most have one or two chronic conditions such as heart disease or diabetes)
- Somewhat unhealthy
- Somewhat healthy
- Healthy
- Very healthy (most have no chronic conditions such as heart disease or diabetes)

## Appendix four: Employee survey, cont'd.

8. What issues do you think may prevent community members from accessing care?

- No insurance
- Unable to pay co-pays and deductibles
- Language barriers
- Lack of access to transportation
- Unable to use technology to find doctors, schedule appointments, manage online care
- Fear (e.g., not ready to face or discuss health problem)
- Don't understand the need to see a doctor
- Don't know how to find doctors
- Cultural/religious beliefs
- Lack of availability of doctors

9. Of the following, what do you think are the top five things most important in improving the health of community members living in our communities?

- Access to local inpatient mental health services
- Access to local outpatient mental health services
- Access to low-cost mental health services
- Access to health care services
- Access to dental care services
- Additional access points to affordable care within the community
- Cancer awareness and prevention
- Community-based health education
- Community-based programs for health
- Curbing tobacco use, such as banning indoor smoking
- Expanded access to specialty physicians
- Financial assistance for those who qualify
- Free or affordable health screenings
- Increased social services
- More options for paying for care
- Opioid awareness and prevention campaigns
- Partnerships with local charitable clinics
- Programs that address issues of housing
- Programs that address food insecurity
- Safe places to walk and play
- Substance abuse rehabilitation services
- Other: Please describe



#### **Appendix four: Employee survey, cont'd.**

10. What is your vision for a healthy community?

11. What is the single most pressing issue you feel our patients face?

12. What are one or two things we can do better to serve our patients/our community?

13. Do you have questions about this survey or community health in general?