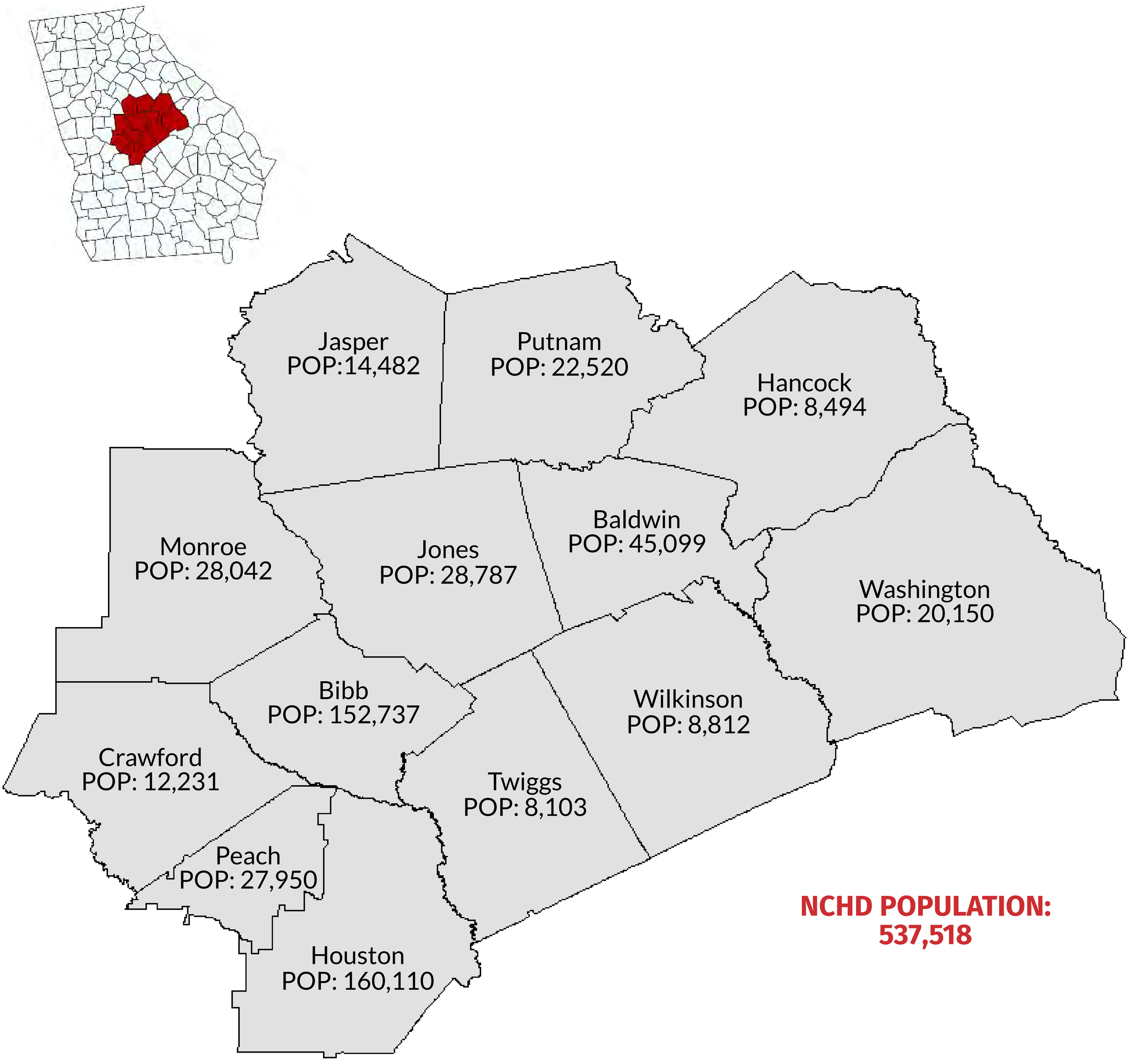
North Central Health District

2022 Community Health Assessment

North Central Health District (NCHD) is part of the Georgia Department of Public Health (DPH) and serves a population of 537,518 individuals residing in 13 Central Georgia counties: Baldwin, Bibb, Crawford, Hancock, Houston, Jasper, Jones, Monroe, Peach, Putnam, Twiggs, Washington and Wilkinson.

Georgia Department of Public Health
North Central Health District



NCHD POPULATION: 537,518

Table of Contents

Community Health Status 3
- General Population Characteristics 3
- Access to Care 16
- Health Factors and Health Outcome Rankings 18
- Leading Causes of Mortality 19
- Leading Causes of Premature Mortality 20
- Leading Causes of Emergency Department Visits 21
- Leading Causees of Hopsitalizations 22
- Health Behaviors 23
- Chronic Disease 27
- Infectious Disease 38
- Maternal and Child Health 44
- Mental and Behavioral Health 50
- Substance Abuse 54
- Crime and Safety 58

Community Strengths and Themes 61

Local Public Health Assessment 66

Forces of Change Assessment 68

References 72

Community Health Assessment Methodology

North Central Health District (NCHD) is part of the Georgia Department of Public Health (DPH) and serves a population of 537,518 individuals residing in 13 Central Georgia counties: Baldwin, Bibb, Crawford, Hancock, Houston, Jasper, Jones, Monroe, Peach, Putnam, Twiggs, Washington and Wilkinson.

The NCHD Epidemiology Program used the Mobilizing for Action through Planning and Partnerships (MAPP) process to complete this health assessment. This process was similarly used for the 2013 County Health Assessments (CHA) that were completed for each county within NCHD. For the 2022 Health Assessment, a single report will be completed for the whole district. The MAPP process consists of four assessments to complete the overall health assessment: 1. Community Health Status Assessment, 2. Community Themes and Strengths Assessment, 3. Local Public Health System Assessment, and 4. Forces of Change Assessment. (NACCHO, 2019)

Primary and secondary data was collected in 2019 but due to NCHD's response to COVID-19 pandemic the data was not able to be analyzed until 2021. Due to this time delay, secondary data points were updated to reflect newly available information but primary data points were not. Analysis of primary and secondary data occurred between October 2021 - March 2022.

Community Health Status Assessment

“The Community Health Status Assessment identifies priority community health and quality of life issues. Questions answered include: "How healthy are our residents?" and "What does the health status of our community look like?"” (NACCHO, 2019)

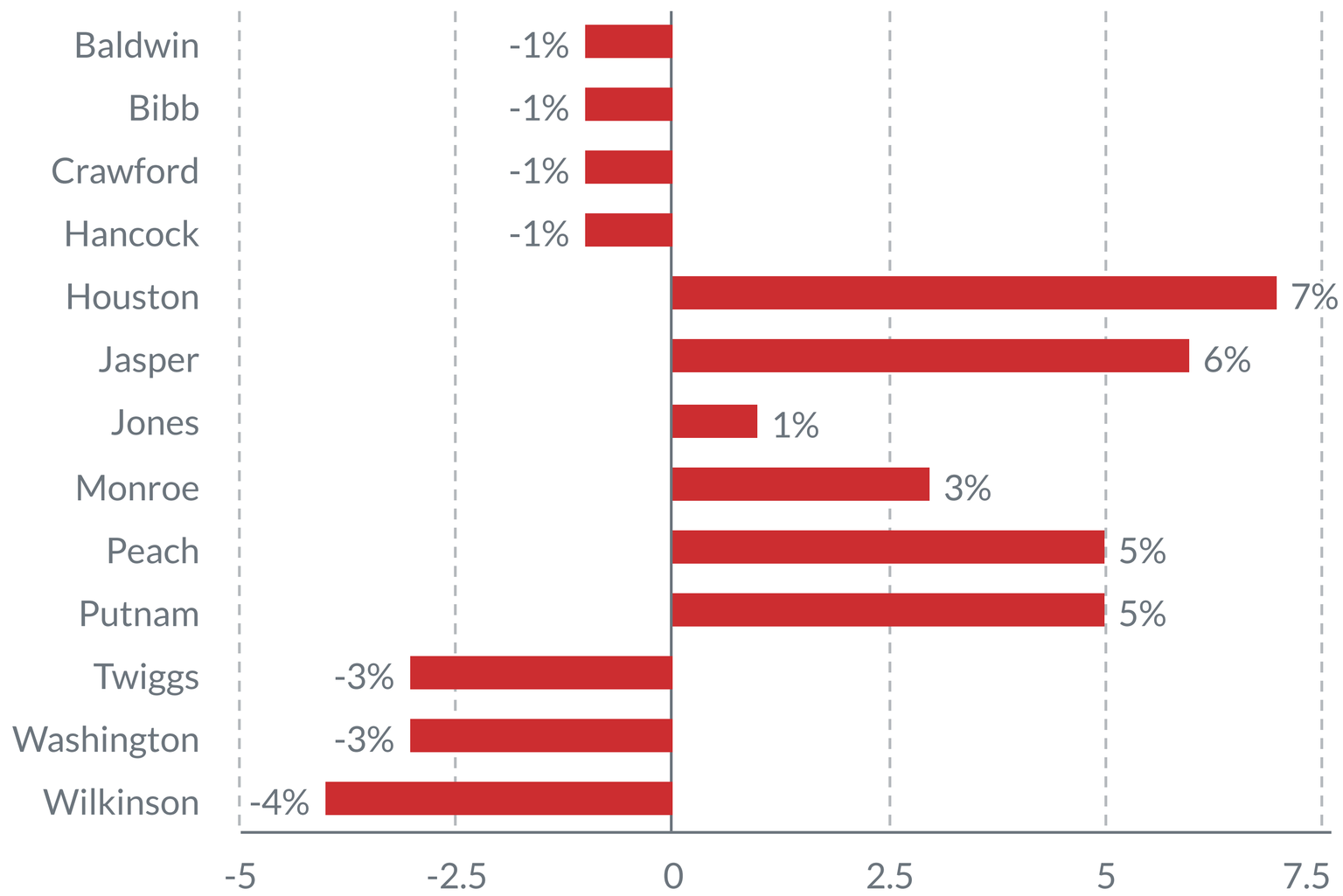
Secondary data from several third party sources were sources were used in this report.

General Population Characteristics

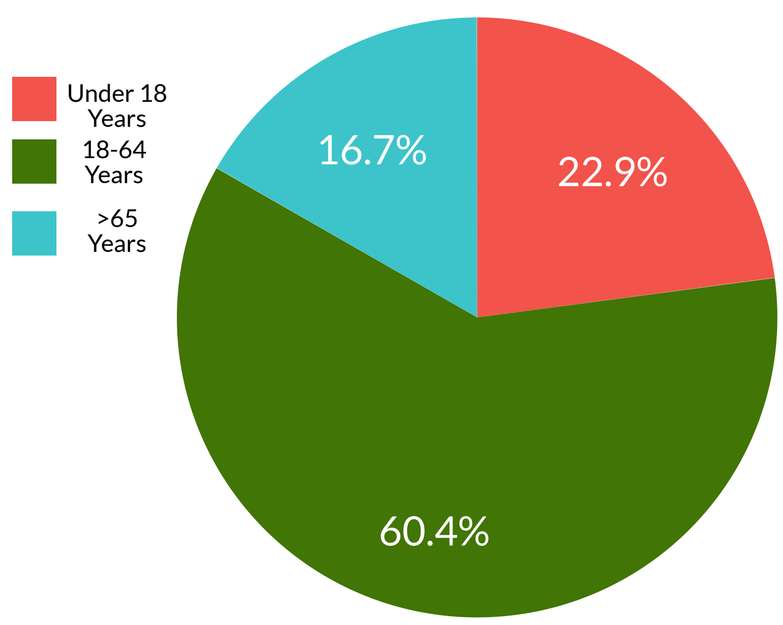
From 2015-2020, NCHD has had an overall increase in population size, with most of the growth being in Houston, Jasper, Monroe, Peach, and Putnam Counties. Changes in population could mean decreased access to health services. An increase in population could make it harder to access the services being provided due the limited amount. Decreases in population could have an overall depletion of services.

2% *Population Growth for NCHD over the past 5 years.*

Population Change, 2015 to 2019



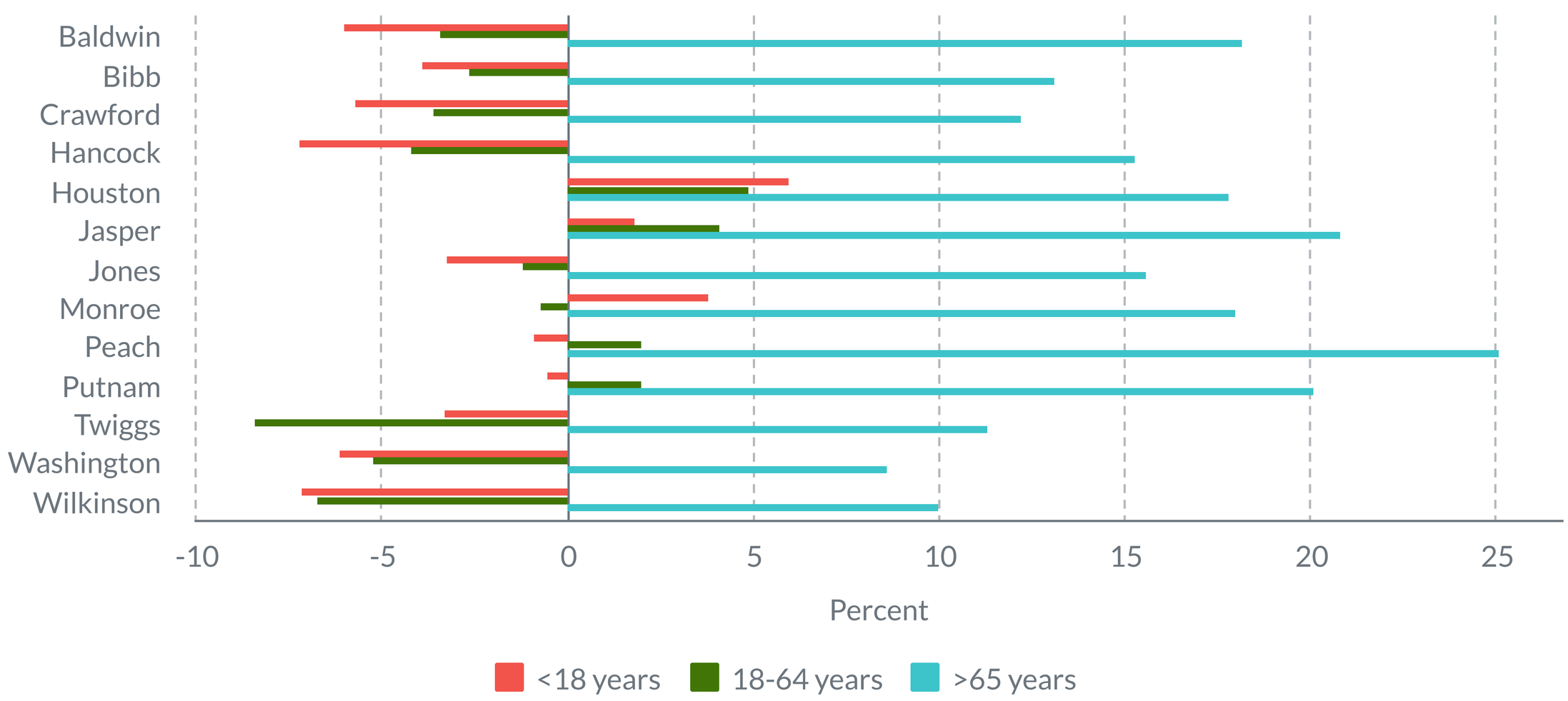
NCHD Age Distribution



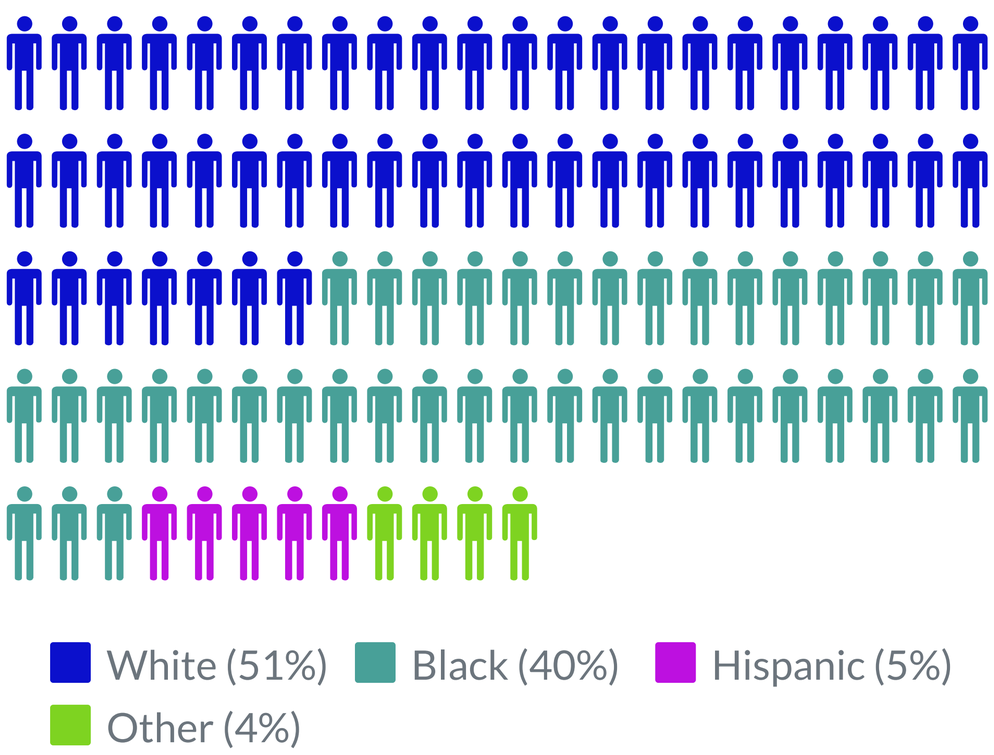
As individuals age, the burden on healthcare increases. NCHD as a whole is considered an aging population, with a 16% increase over the past 5 years in the over 65 population and a 0.4% decrease in those under 18 and 0.1% decrease in those that are 18-64.

Counties with the largest aging populations in NCHD are also some of the most rural Counties within the district and have limited access to healthcare resources. These counties are Hancock, Jasper, Peach, Putnam, and Twiggs Counties.

Population Change by Age Group, 2015-2019



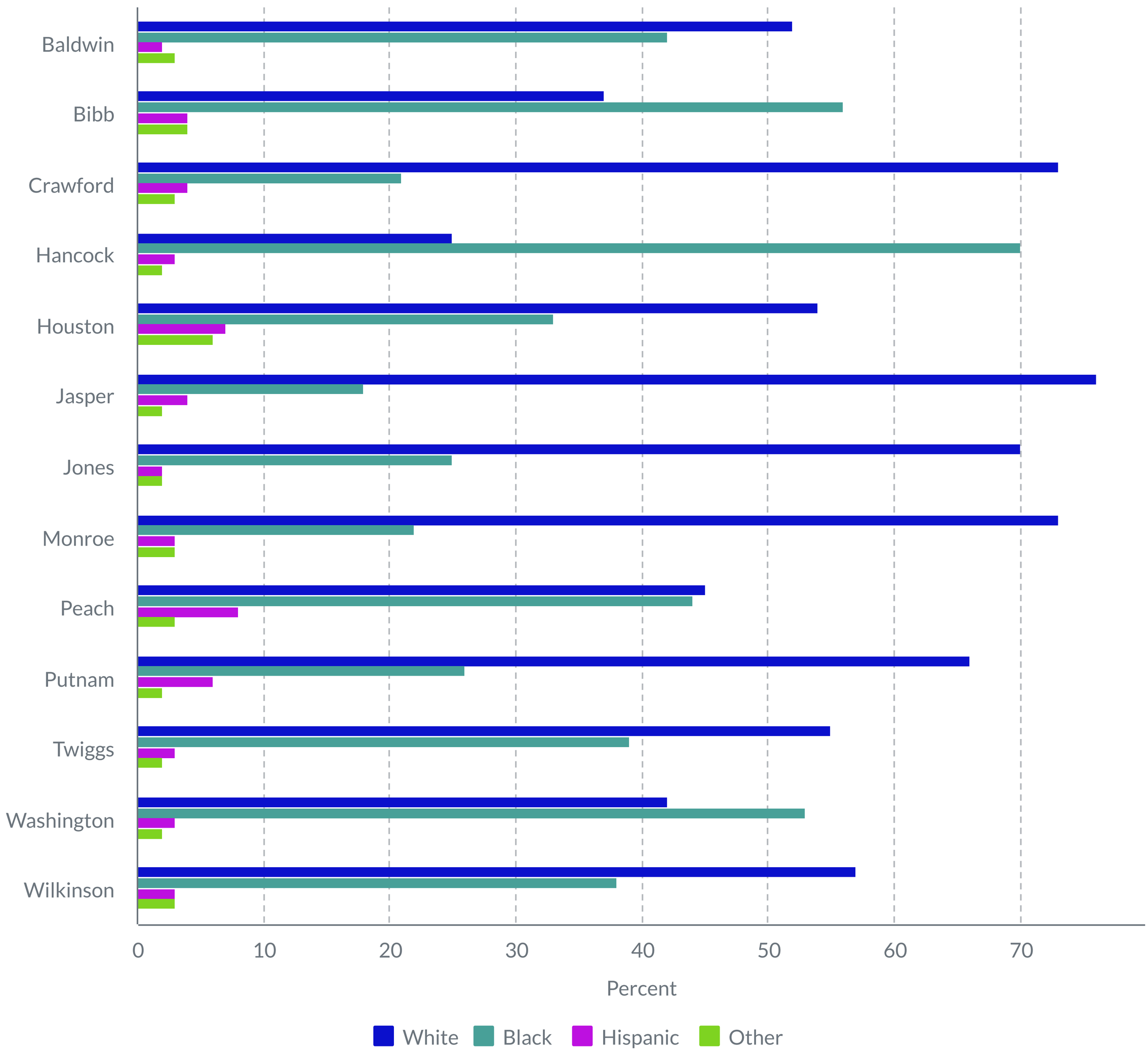
NCHD Race/Ethnicity



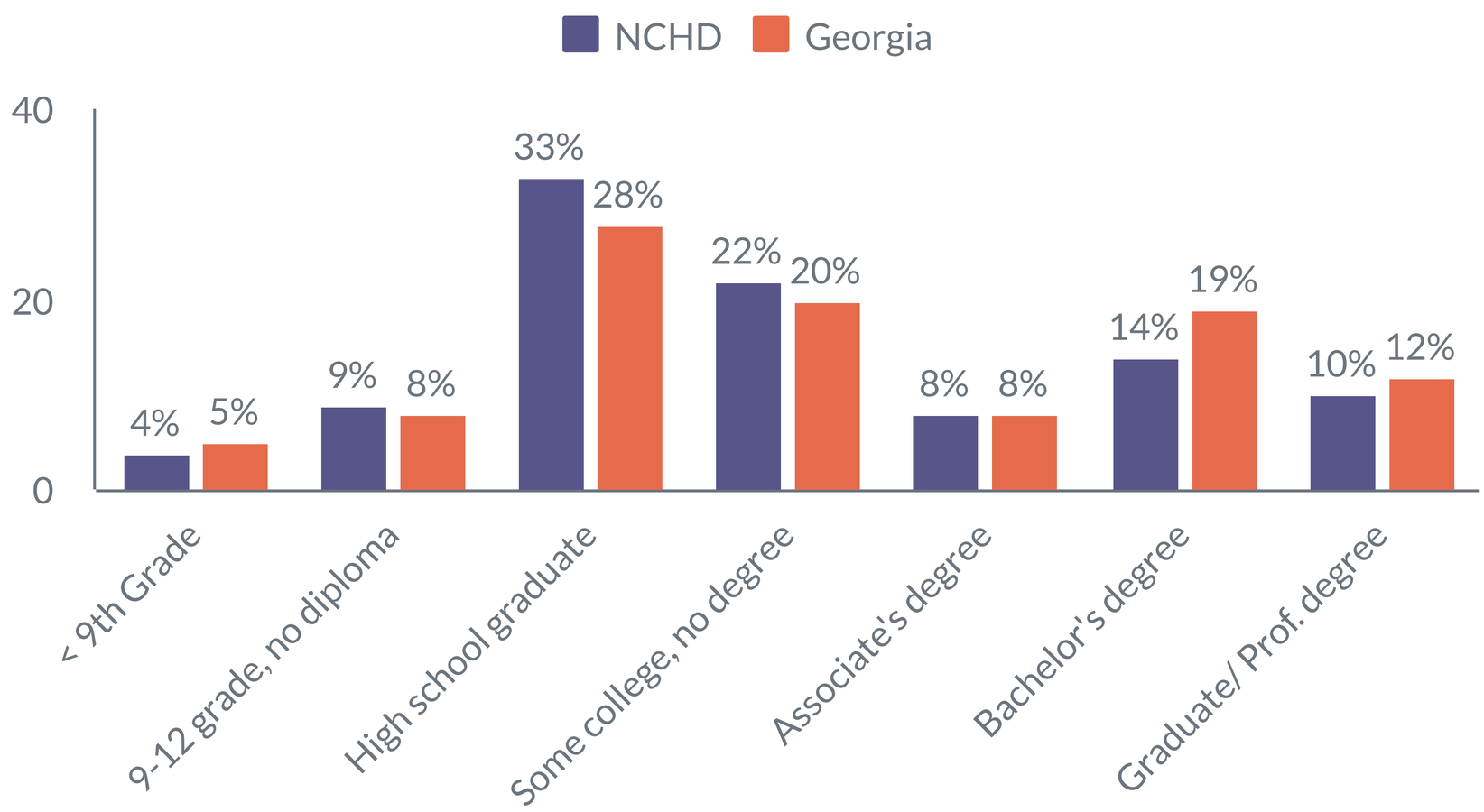
Racial and ethnic disparities are arguably the most obstinate inequities in health. Health disparities amongst these different population groups can include higher rates of chronic disease and premature death compared to the rates among whites. There are also some minority groups, specifically, Hispanic immigrants, who have better health outcomes than whites.

It is important to note that the Counties within NCHD vary in the distribution of racial and ethnic groups, just as shown above with age distributions.

Race/Ethnicity Distribution, 2015-2019



Educational Attainment, 2015-2019



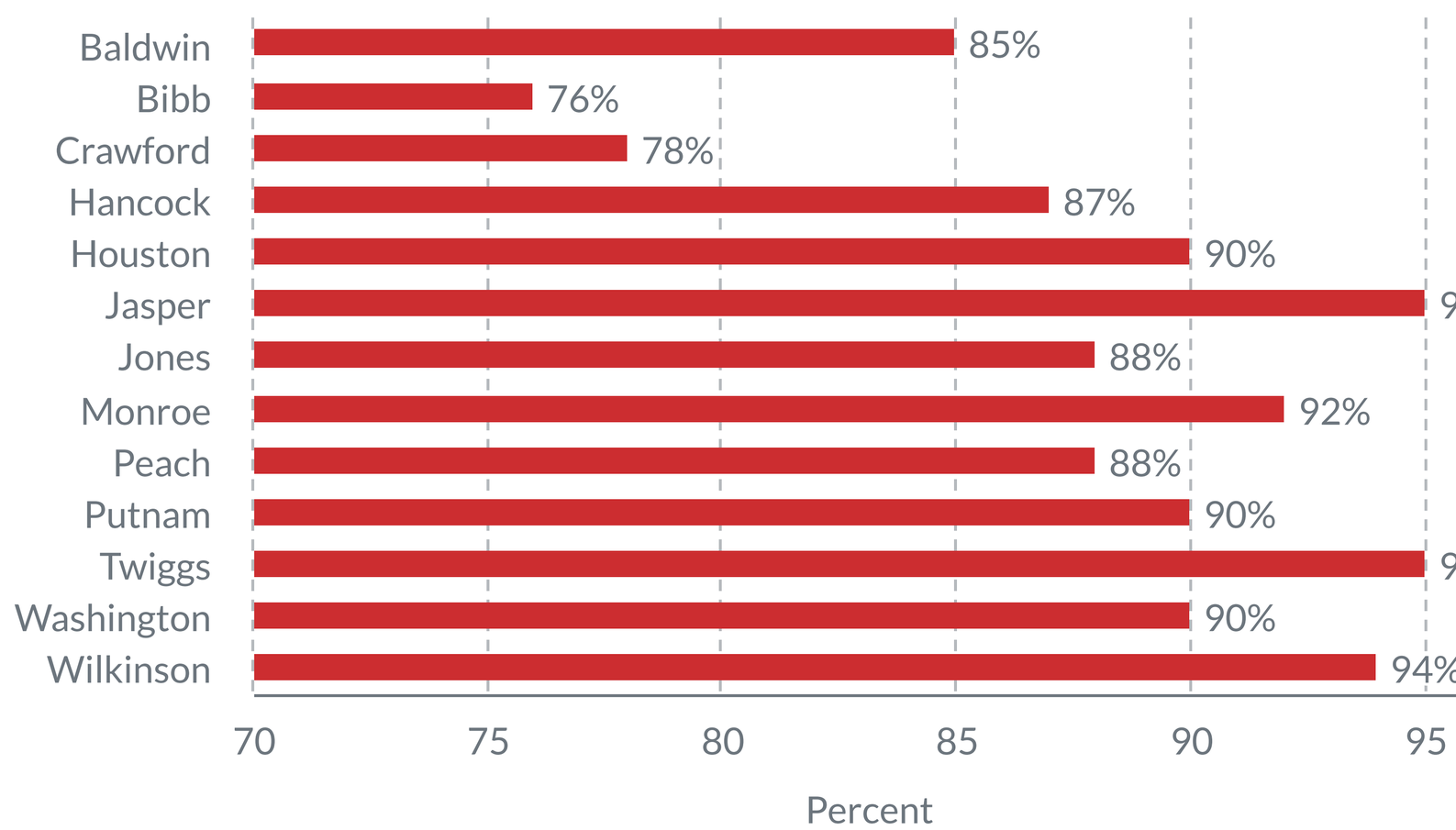
Educational attainment is both an essential component and a major contributing cause of an individual's health status.

On average, NCHD's educational attainment levels are similar to the attainment levels across the state of Georgia.

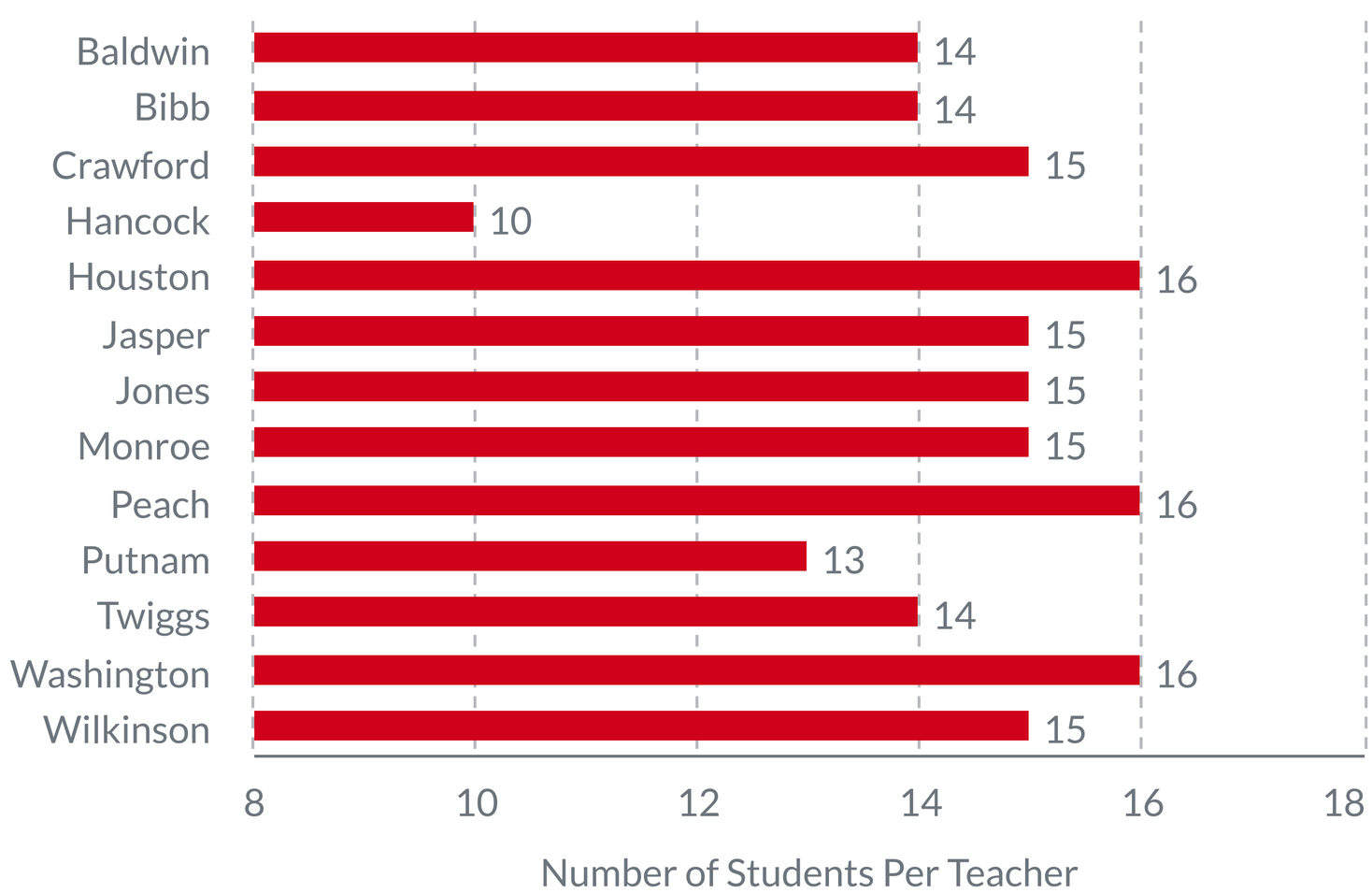
4 Year Cohort Graduation Rate, 2020

Studies have shown that those with less than a high school diploma are at a higher risk of being in poor health.

The state of Georgia has a graduation rate of 83.8% for the 2019/2020 school year. Of the Counties in NCHD, only Jasper, Monroe, Twiggs, and Wilkinson counties had graduation rates higher than the state average.

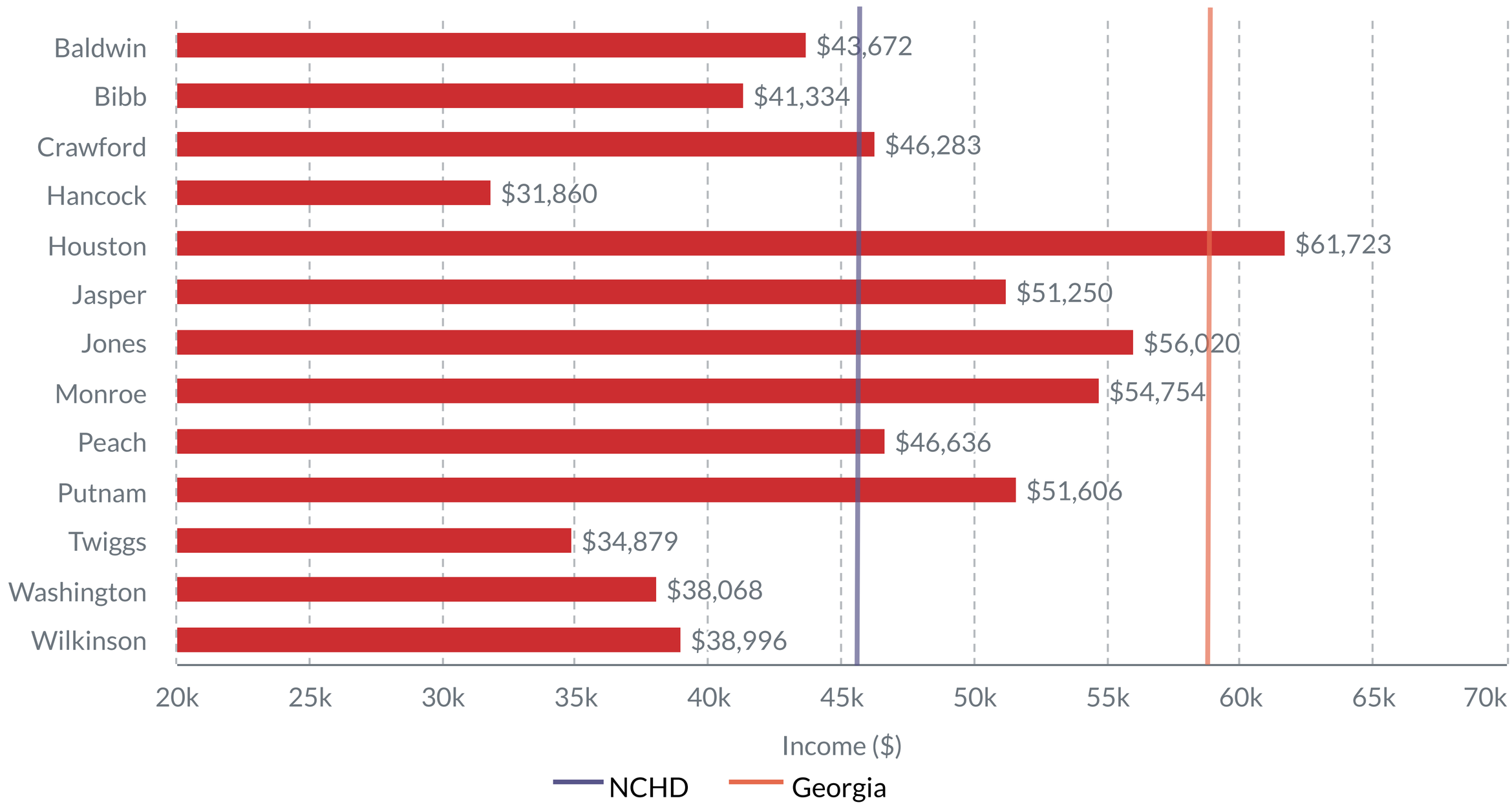


Student-Teacher Ratio by County



Georgia public schools have an average of a 15:1 student to teacher ratio. The average ratio in NCHD is 14:1 with 10:1 being the lowest in Hancock County and 16:1 the highest in Washington, Peach and Houston Counties.

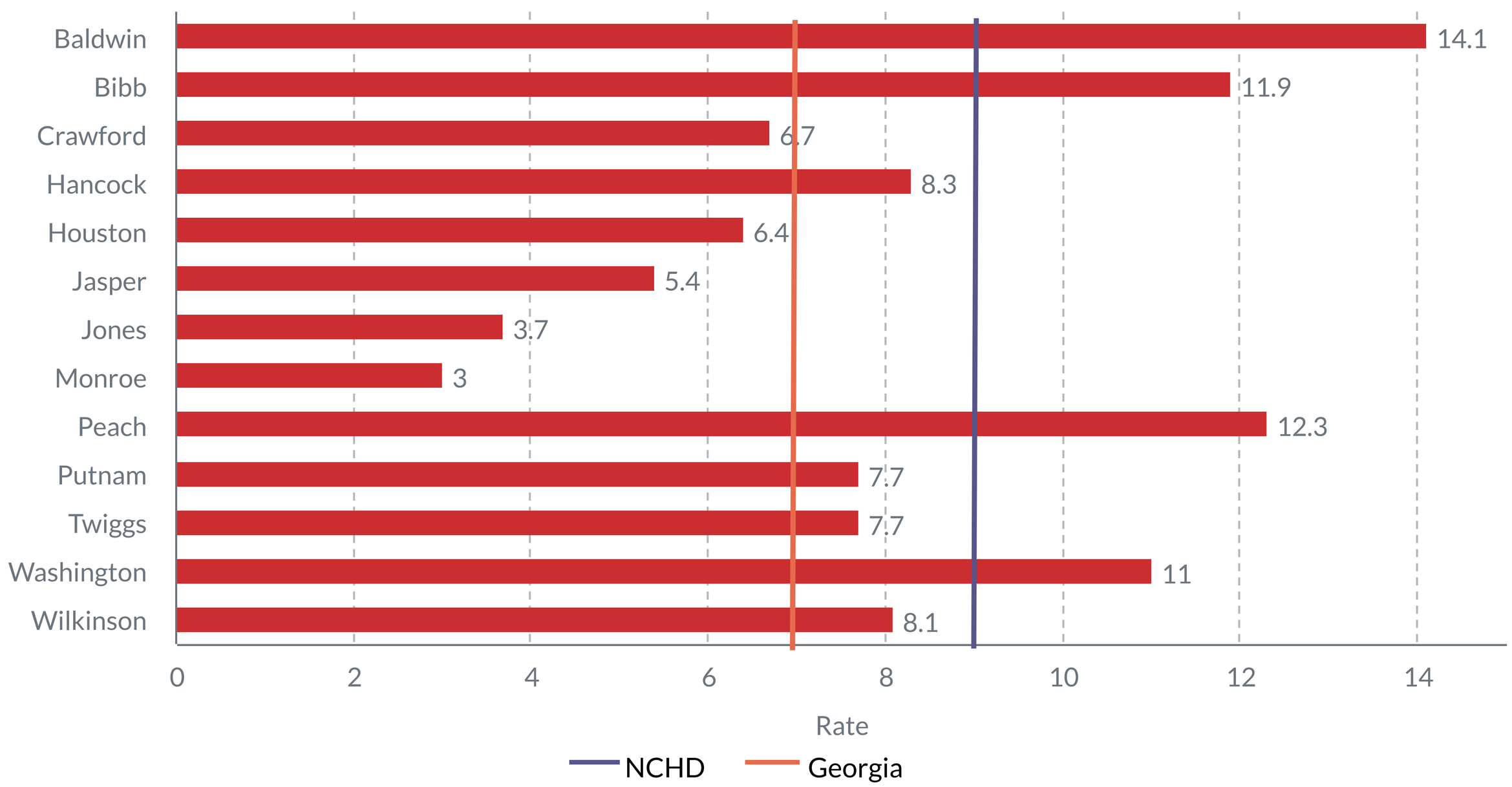
Median Income, 2015-2019



Higher incomes allow easier access to needed services.

The median income in the state of Georgia is $58,700. NCHD has a lower median income of $45,929. Only one County within NCHD has a median income higher than the state, Houston.

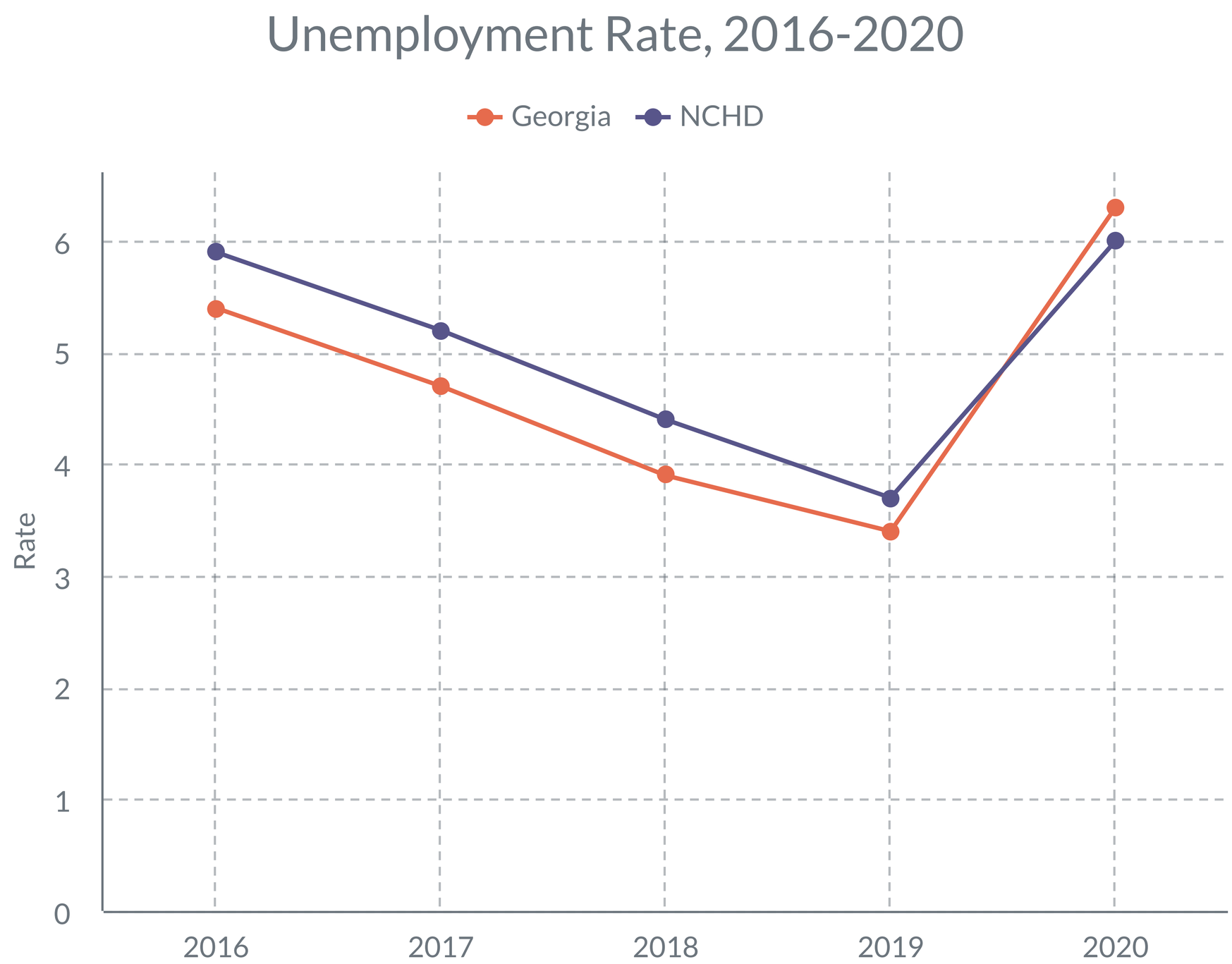
Working Poor, 2015-2019

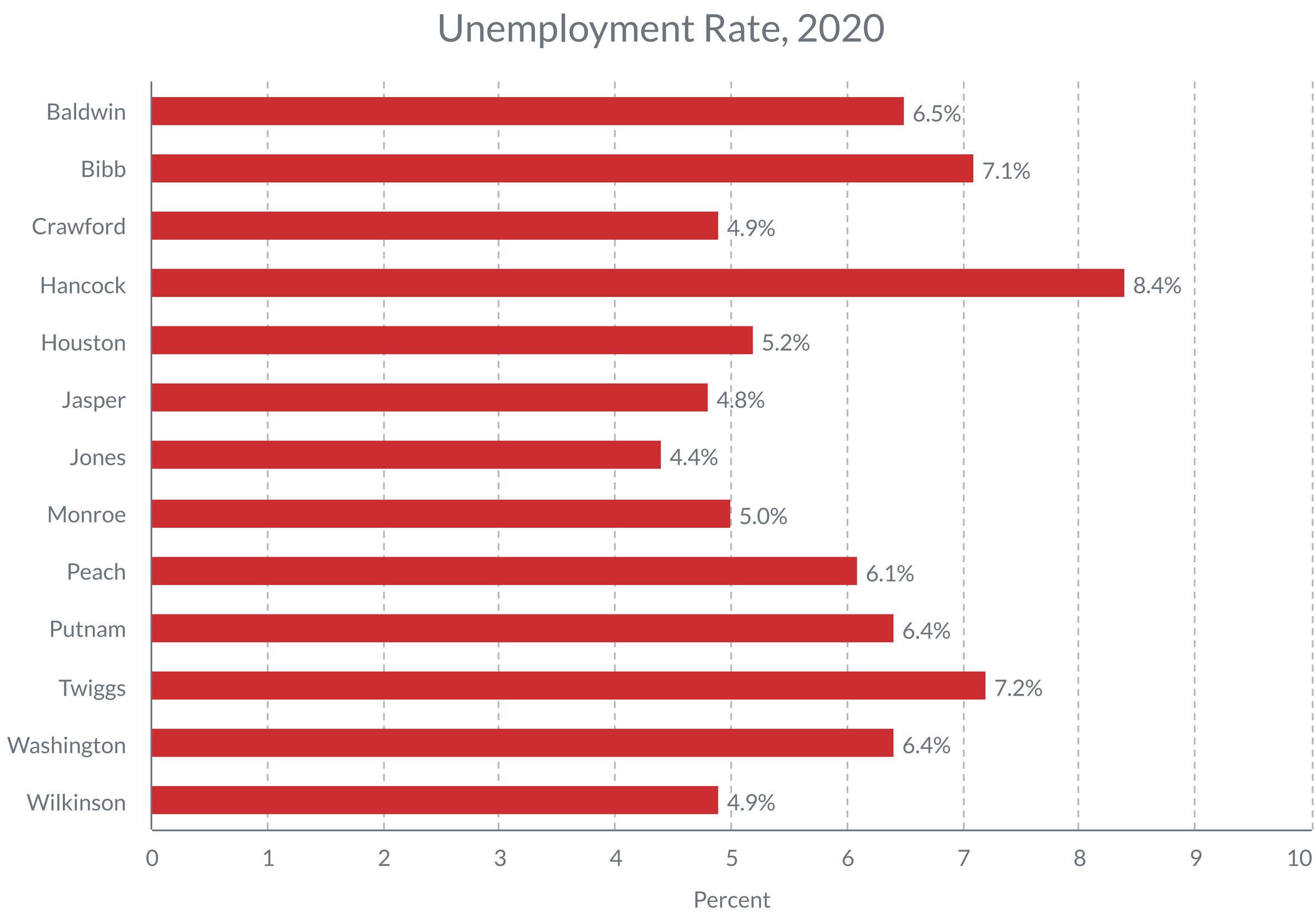


The percentage of all civilian labor force 16 and older who are "working poor," defined as both (1) working full-time and (2) having a family income below the indicated federal poverty threshold based on family size and composition.
Between 2015-2019 the percentage of those within NCHD considered "working poor" was 9% which is higher than the state percentage of 7%. Baldwin, Bibb, Peach, and Washington counties have the highest rates of working poor in the district.

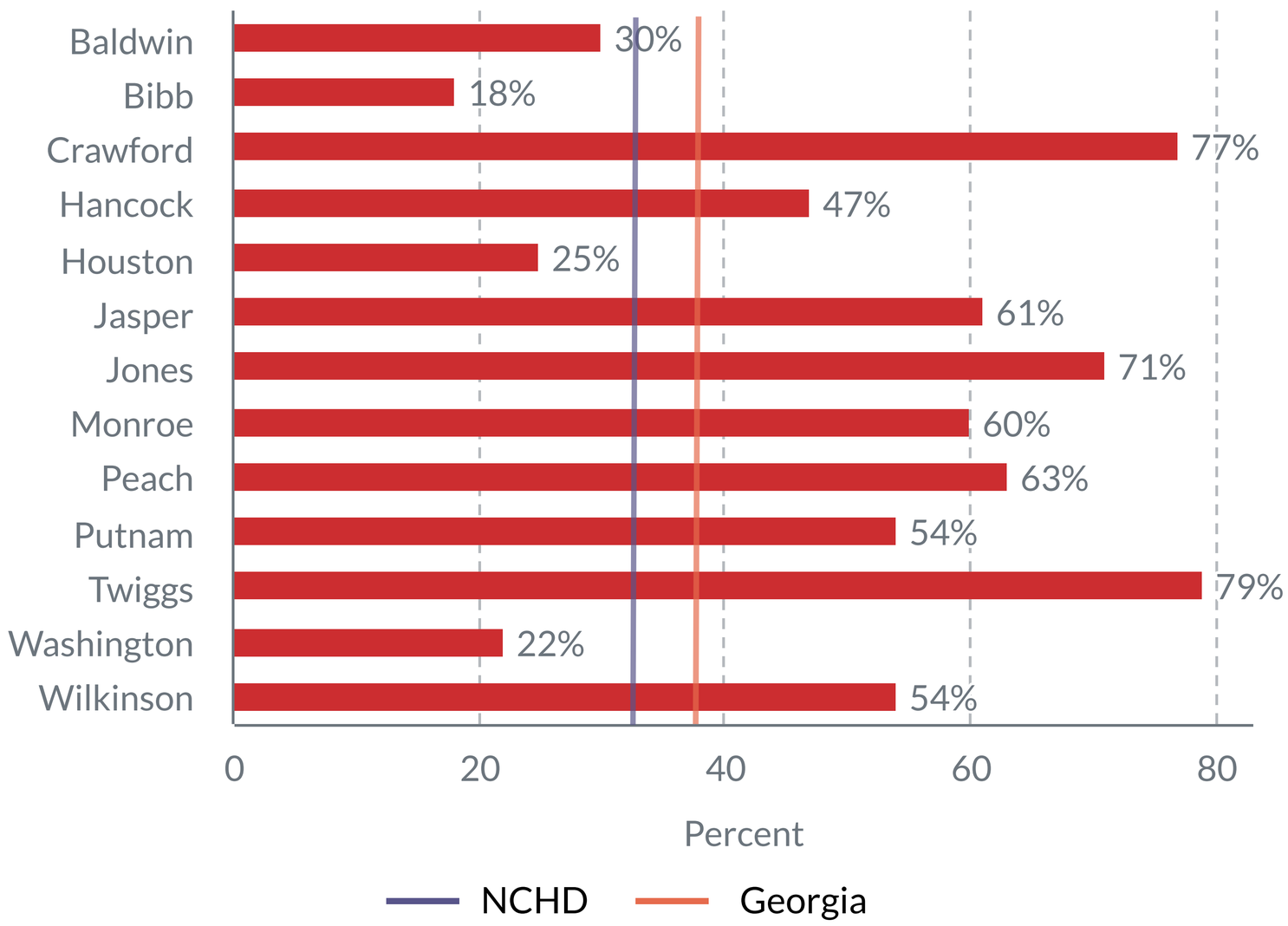
Unemployment has negative health implications to one's physical and mental health.

From 2016-2019, unemployment steadily declined. In 2020, the unemployment rate increased most likely due to the COVID-19 pandemic.





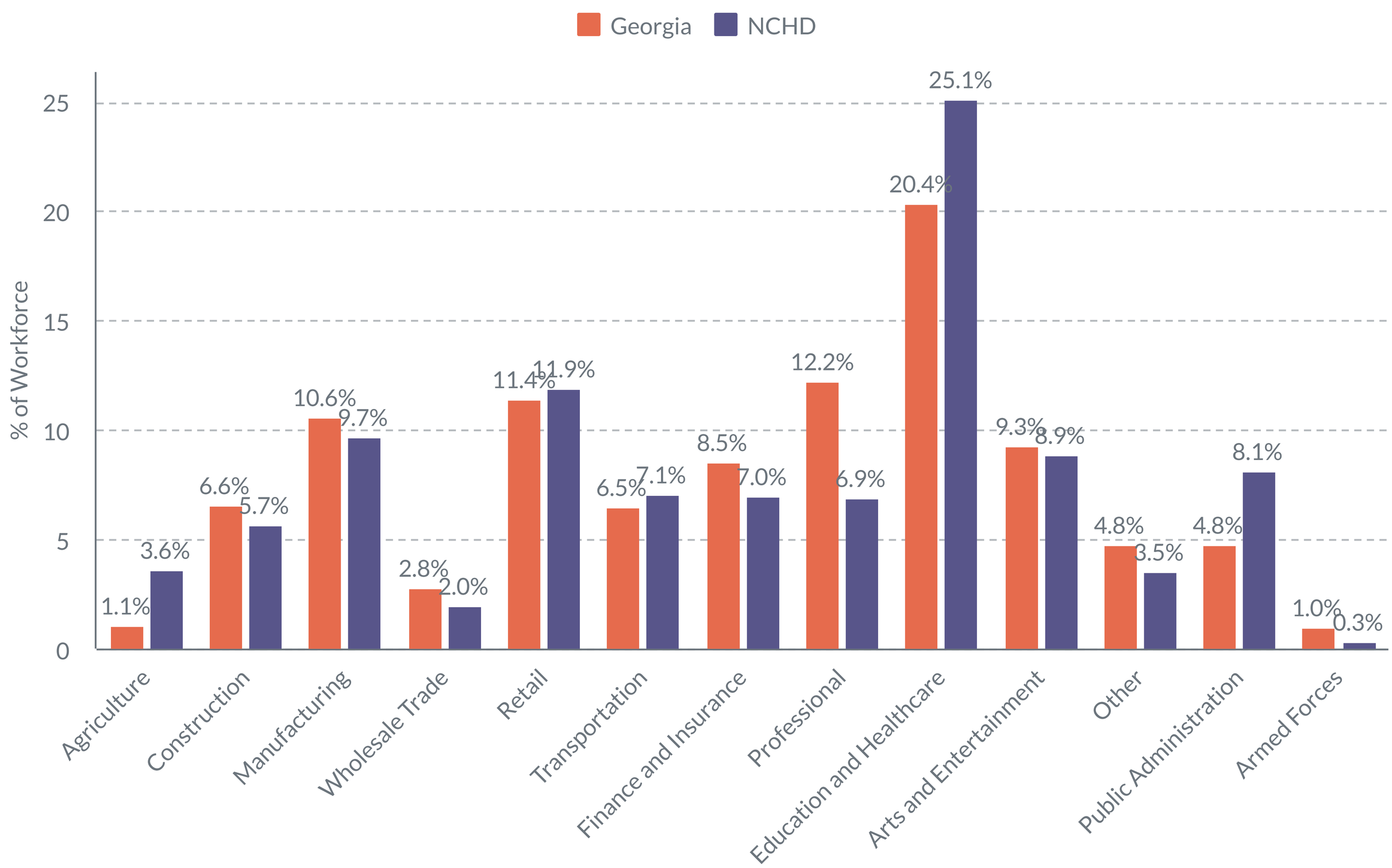
Residents Who Commute to Work, 2015-2019



The transportation choices that communities and individuals make have important impacts on health through items such as active living, air quality, and traffic crashes. Someone who commutes to work, defined as working outside of their county of residence, are likely to have lower levels of physical activity.

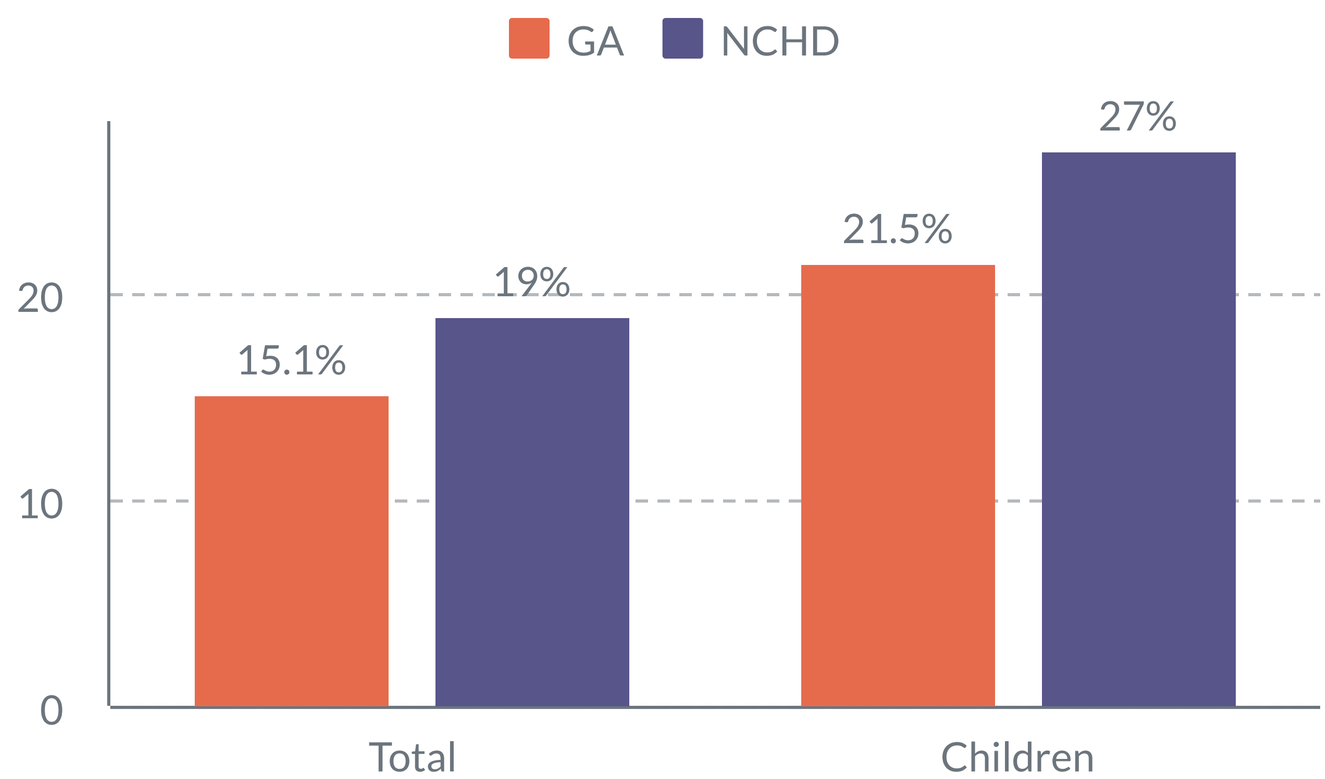
34% of NCHD residents 16 years and older who work outside of their County of residence from 2015-2019, compared to 39% of Georgia residents during the same time period. Crawford and Twiggs counties have the highest percentage of commuters.

Types of Industry



The largest industry in both the state and NCHD is the Education and Healthcare Industry. It accounts for 20.49% of jobs in the entire state and 25.1% of the jobs in NCHD. The Armed forces is the smallest industry for both the state and NCHD, accounting for 0.3% of NCHD jobs and 1% of jobs in the state.

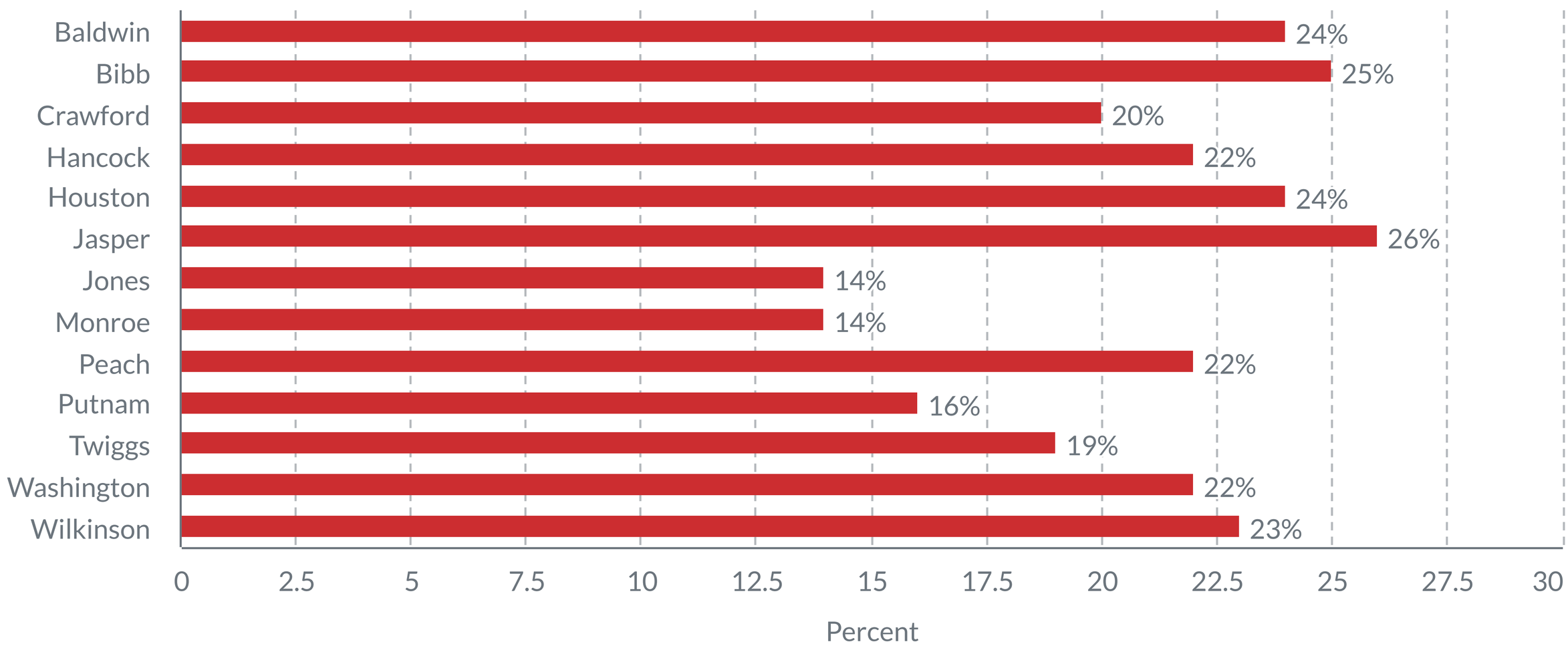
Percent Living Below Poverty, 2015-2019



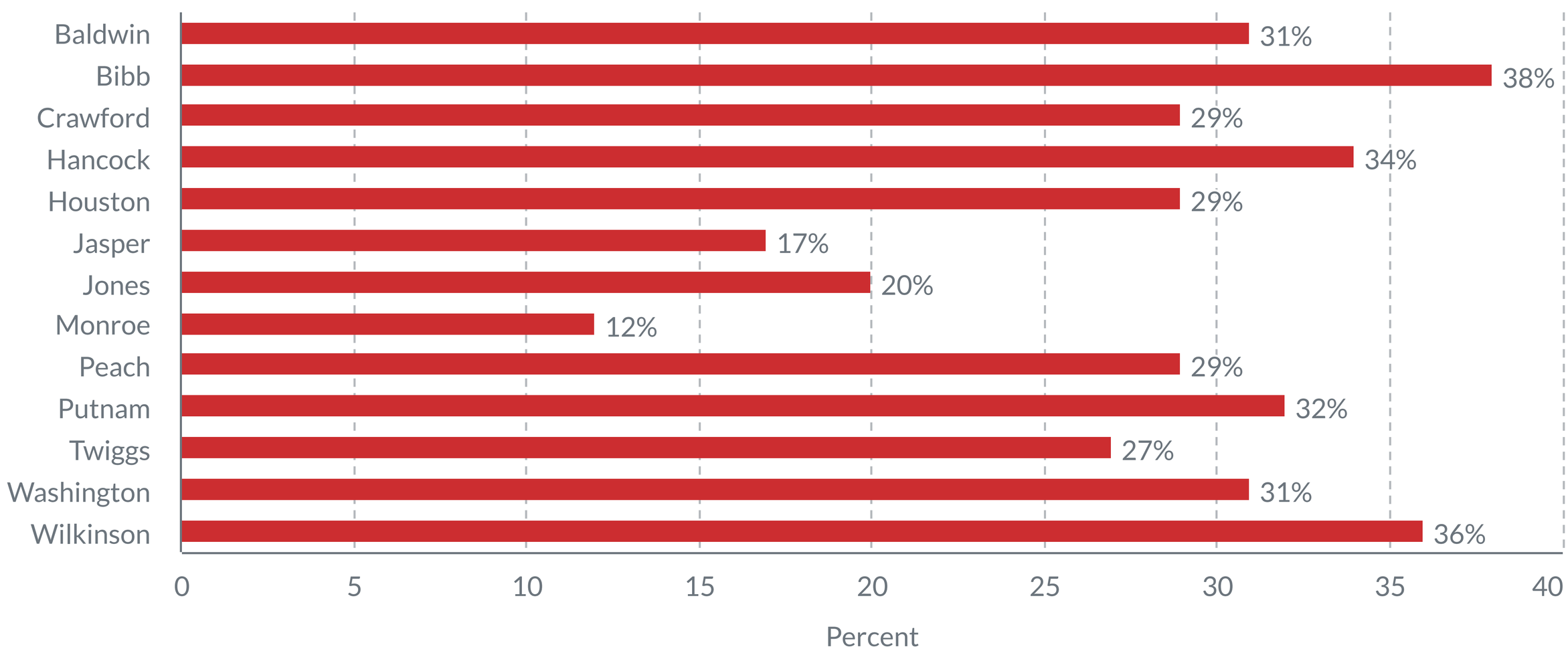
19% of NCHD residents were below poverty levels between 2015-2019, compared to 15.1% of Georgia residents below poverty during the same time period.

27% of NCHD residents under 18 years of age were below poverty levels between 2015-2019, compared to 21.5% of Georgia residents under 18 years of age below poverty during the same time period.

Total Living Below Poverty, 2015-2019

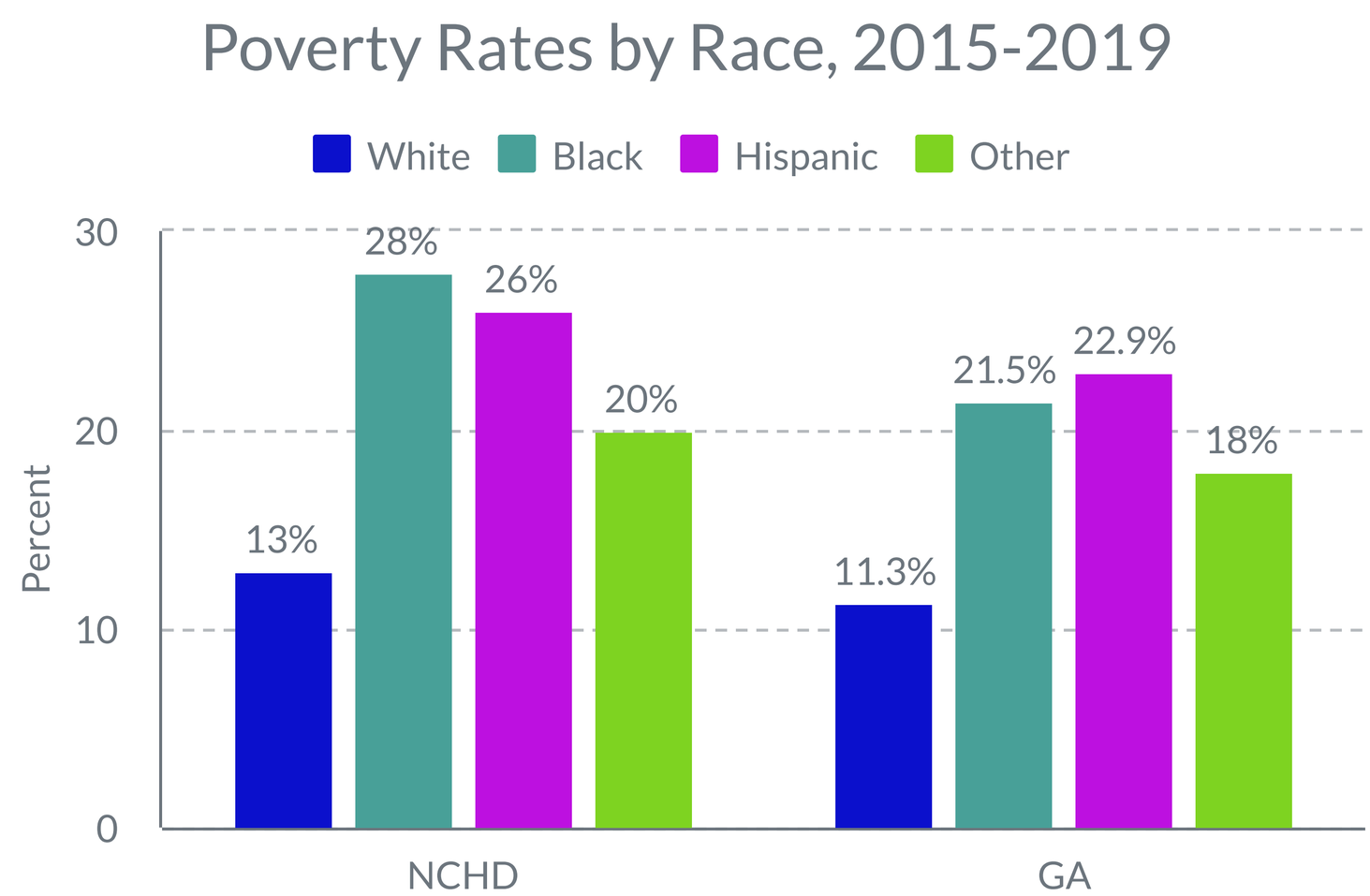


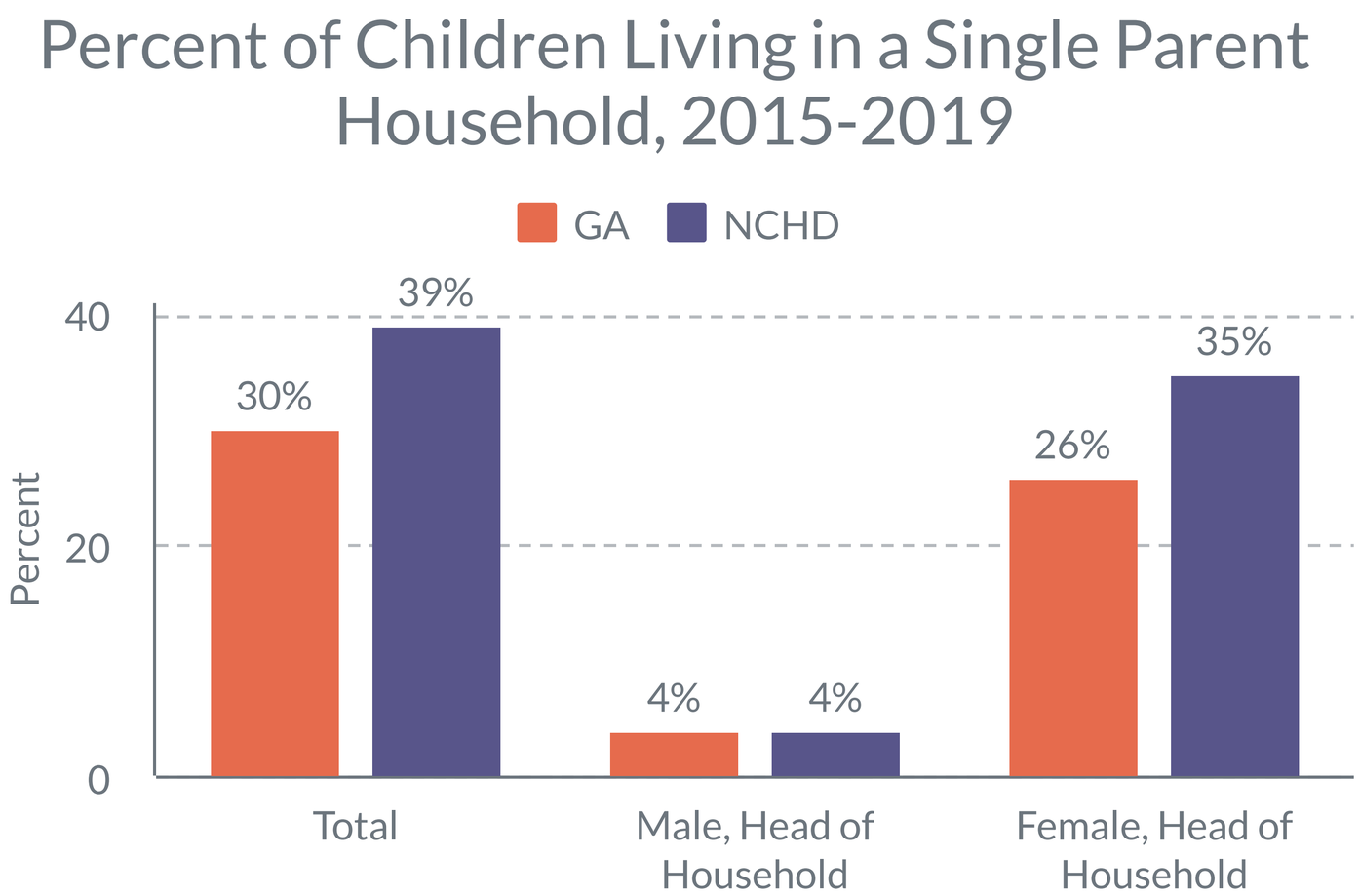
Children Living Below Poverty, 2015-2019



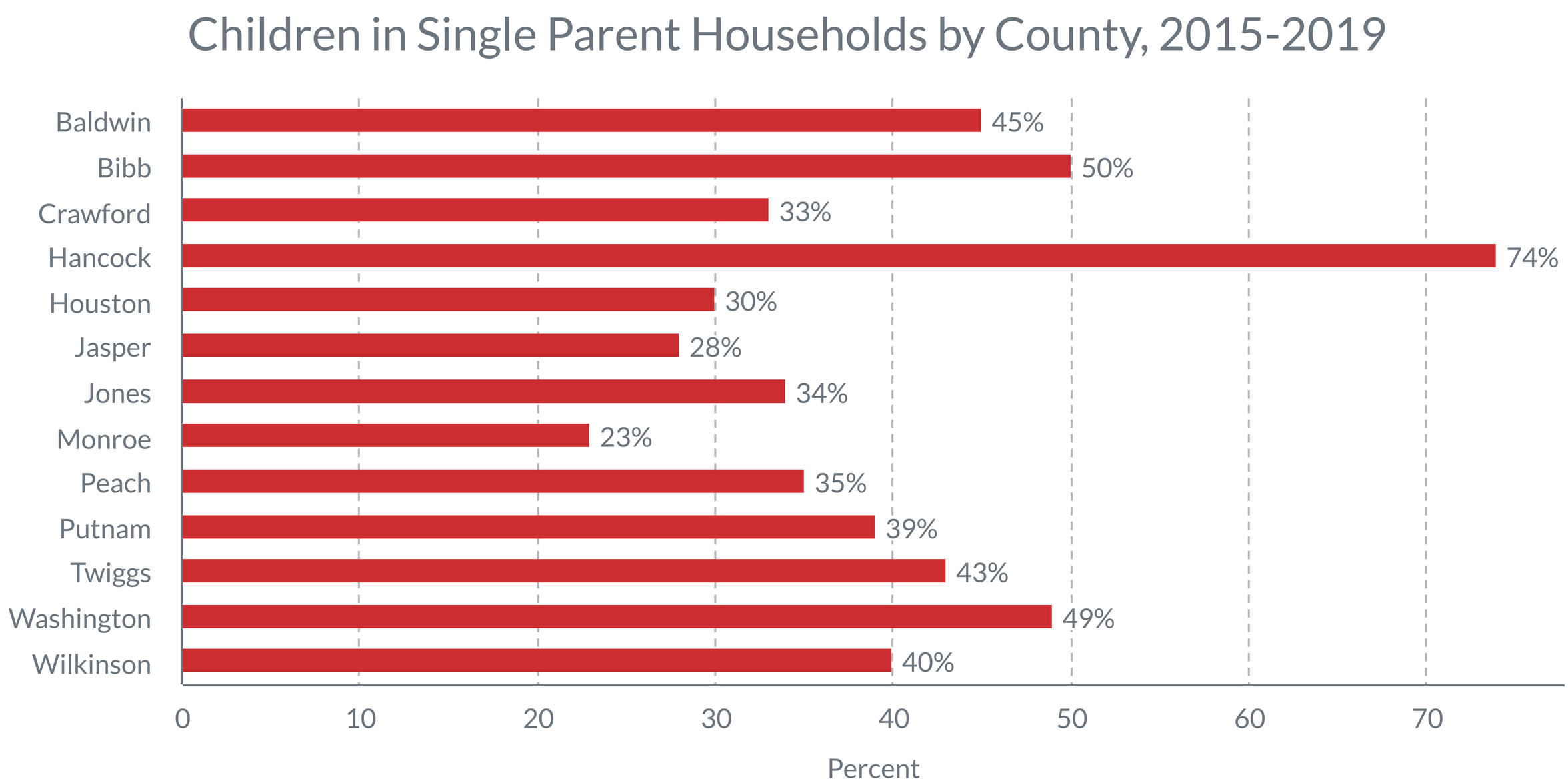
Poverty levels disproportionately affected some residents of NCHD by race and ethnicity 2015-2019:

28% of Black, 20% of Other races, and 26% of Hispanics were below the poverty level, compared to 13% of the White population below the poverty level.

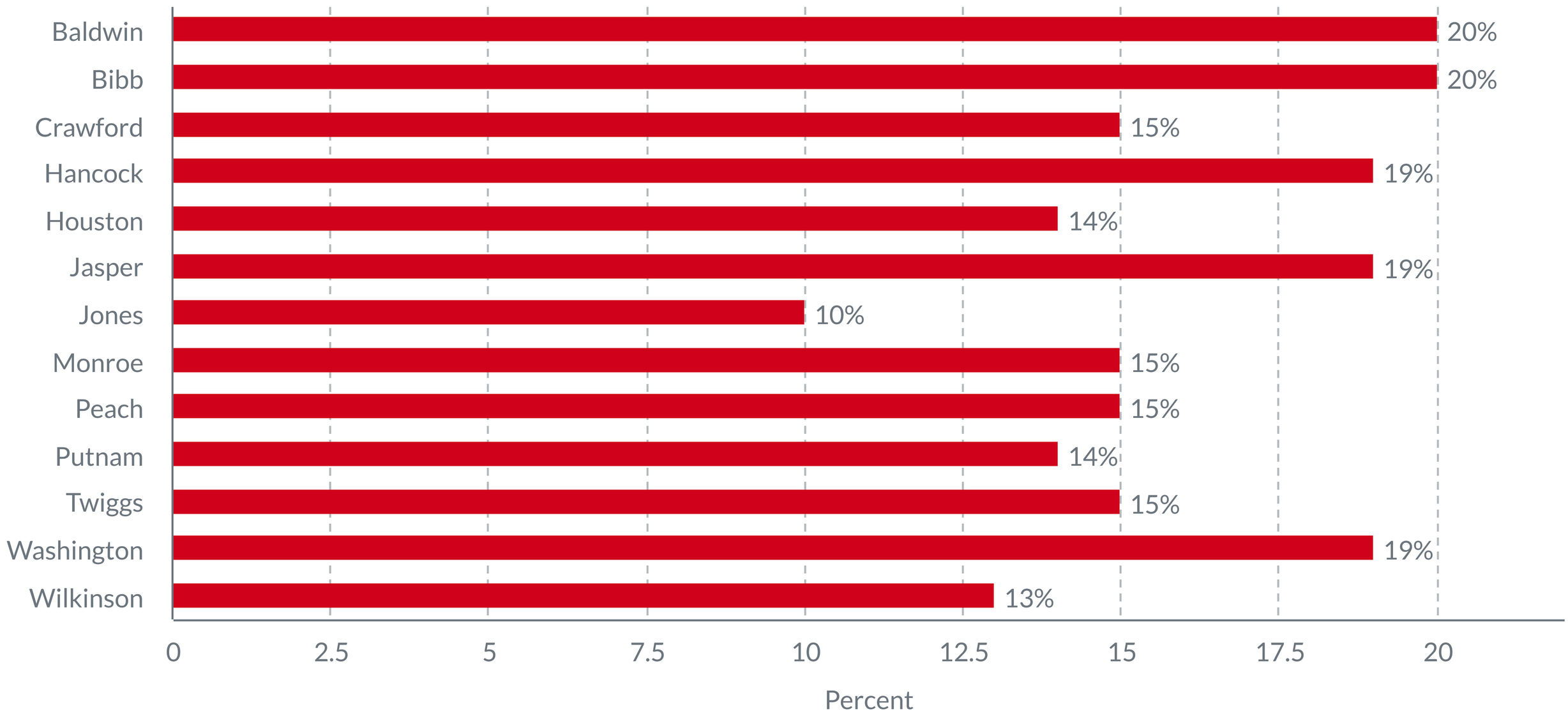




39% of NCHD residents under 18 years of age lived in a single parent household between 2015-2019, compared to 30% of Georgia residents under 18 years of age during the same time period.



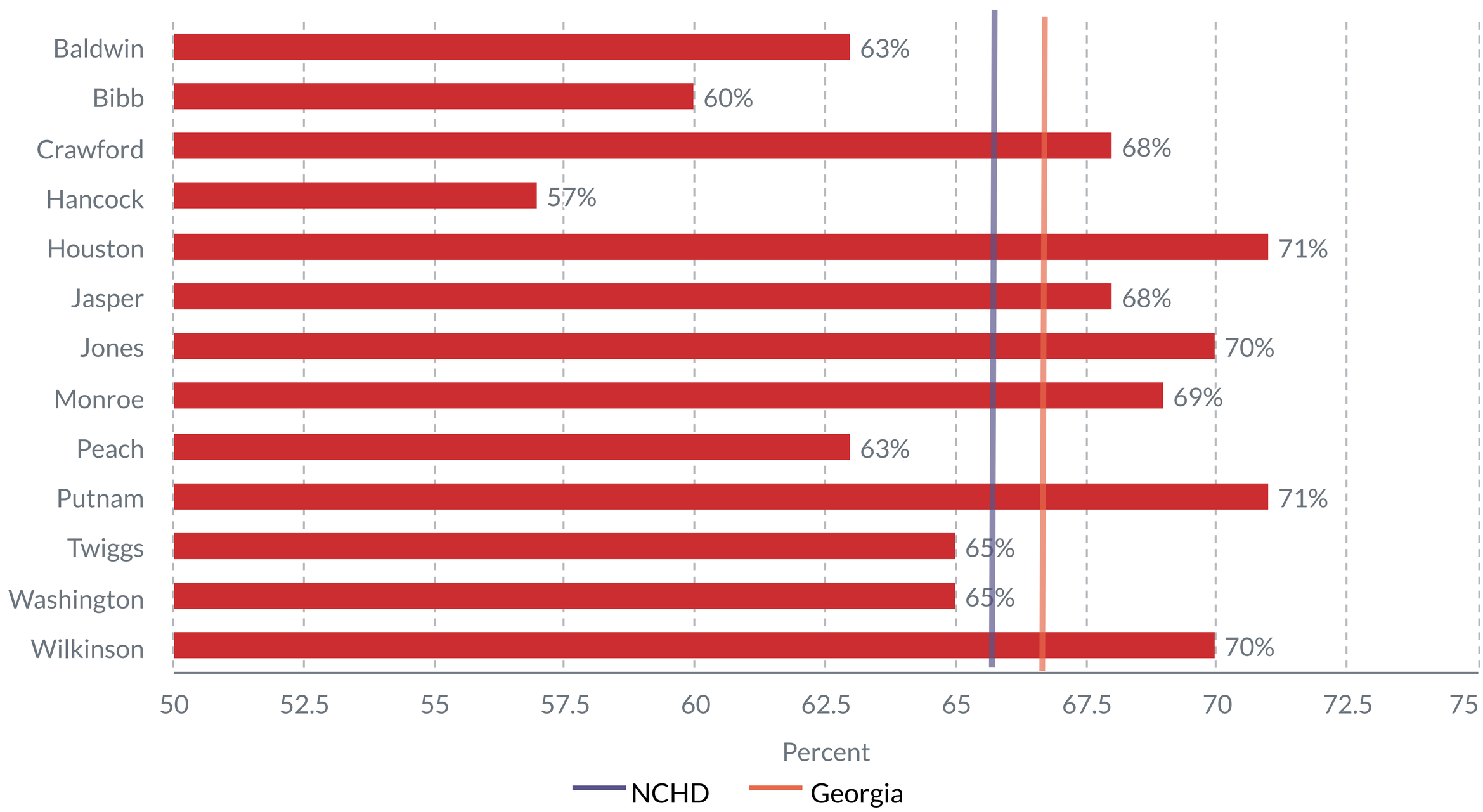
Percent with Severe Housing Problems By County



County Health Rankings use several metrics for severe housing problems including cost burden, overcrowding, and inadequate kitchen or bathroom facilities.

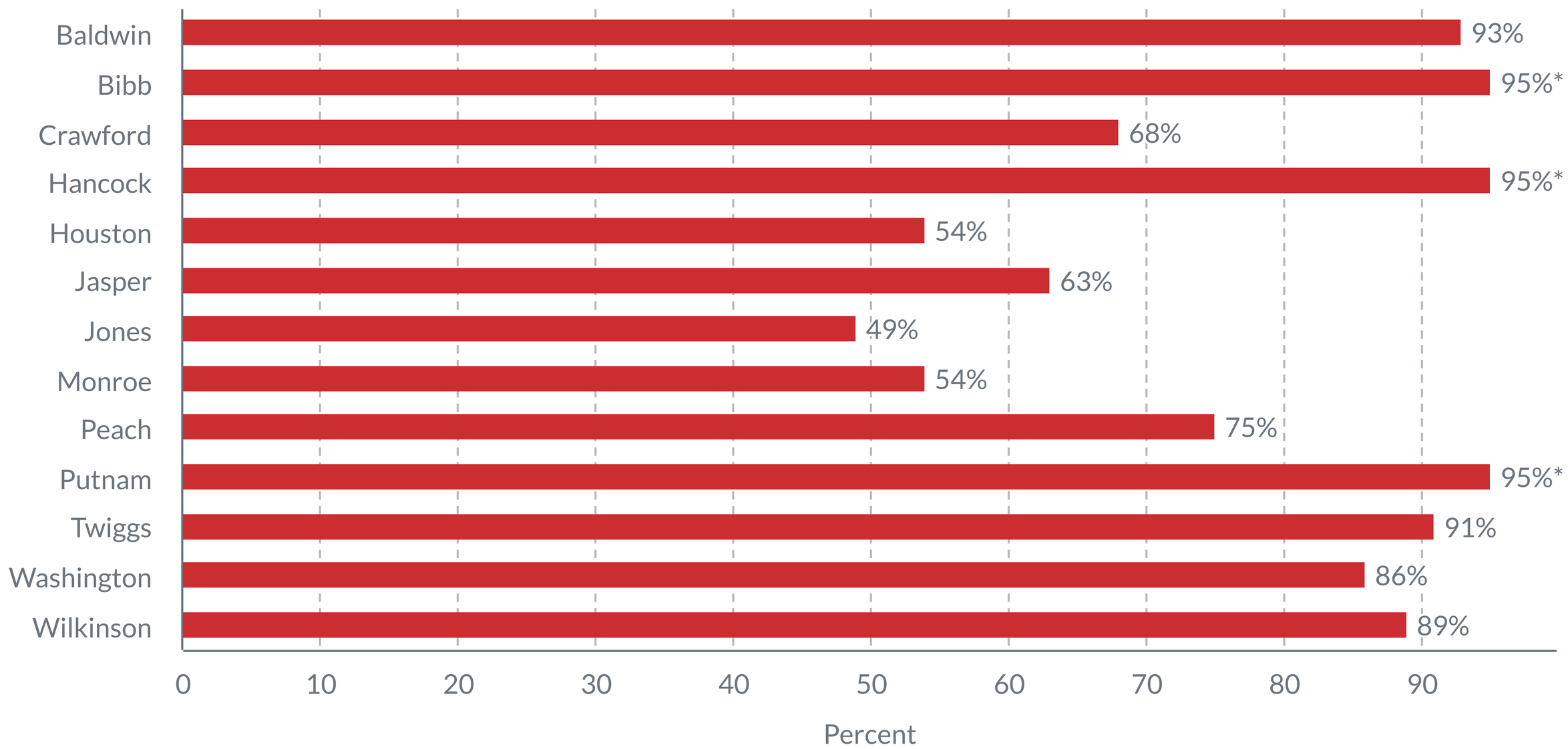
In Georgia, 16% of households have severe housing problems. Five counties have a higher rate of severe household problems than the state. These counties include Baldwin, Bibb, Hancock, Jasper, and Washington.

Percentage of Housing Units Considered Affordable, 2015-2019



Of the 129,884 occupied housing units within NCHD between 2015-2019; 66% cost equal or less than 30% of the household income compared to 67% of the occupied housing throughout Georgia. Crawford, Houston, Jasper, Jones, Monroe, Putnam, and Wilkinson counties have the most affordable housing in the district.

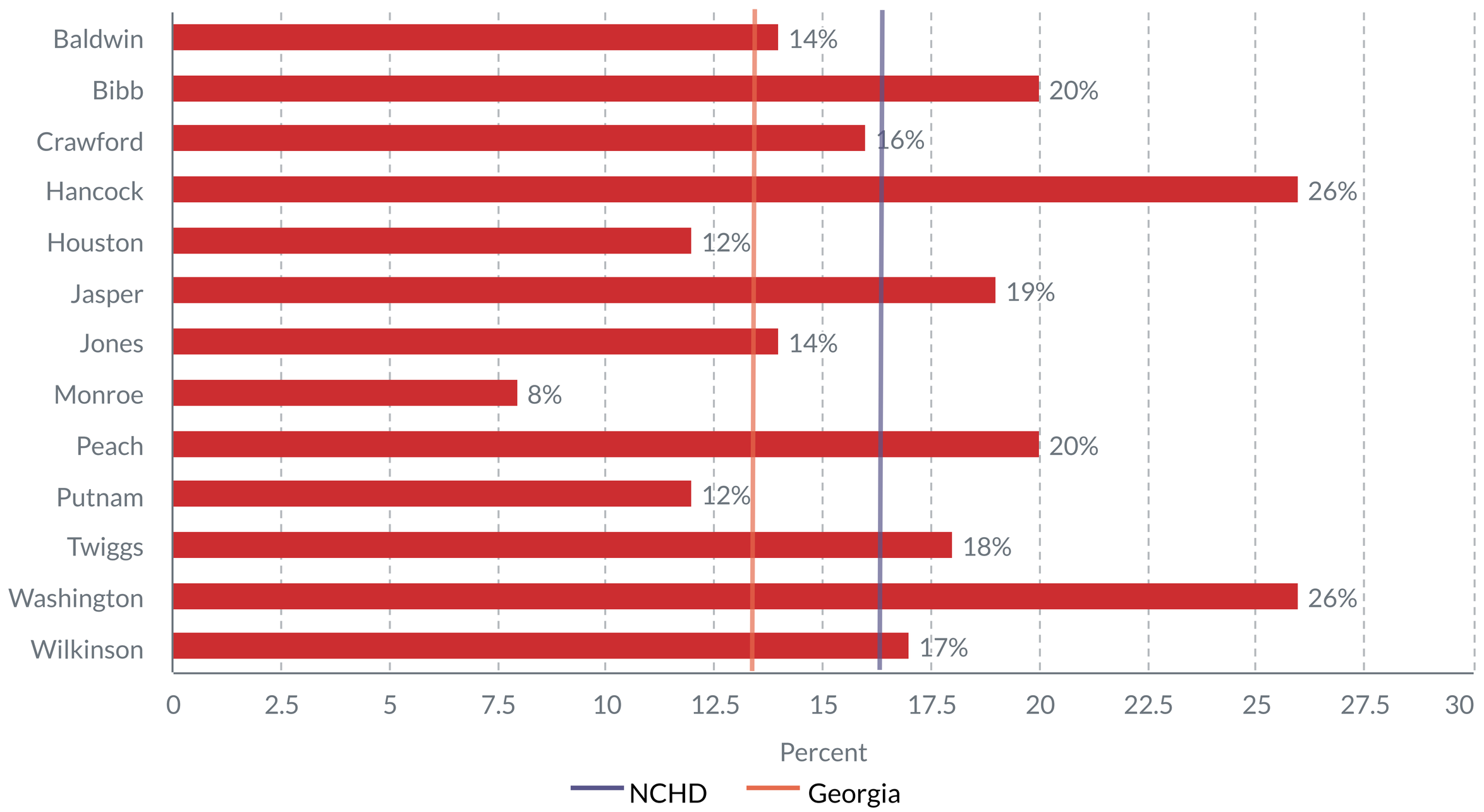
Free and Reduced School Lunch, 2019-2020



59.45% of Georgia students are eligible for free or reduced school lunches during the 2019/2020 school year.

"*" indicates Free and Reduced Lunch (FRL) percentage is greater than 95%.

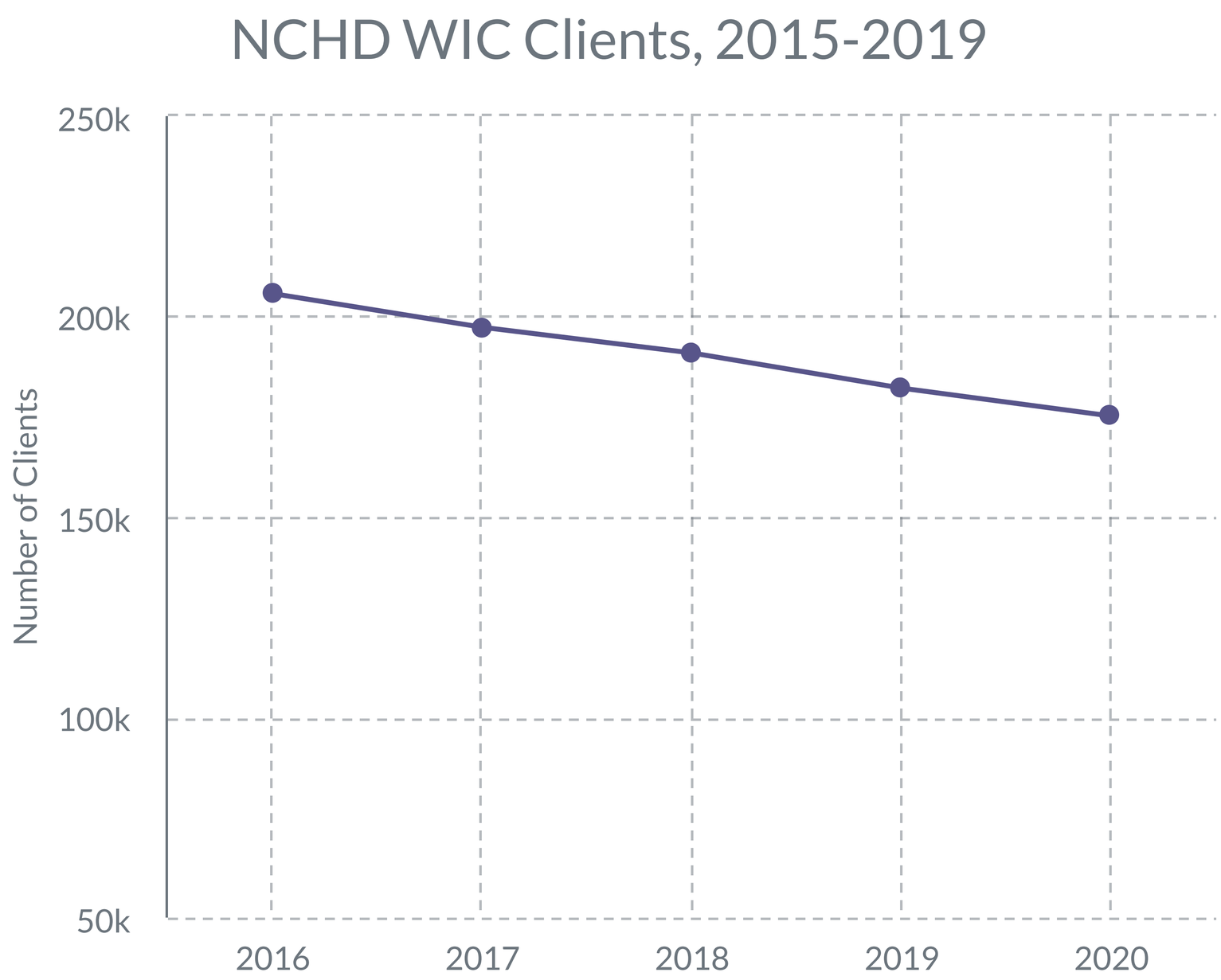
Households receiving Food Stamps/Supplemental Nutrition Assistance Program (SNAP), 2019

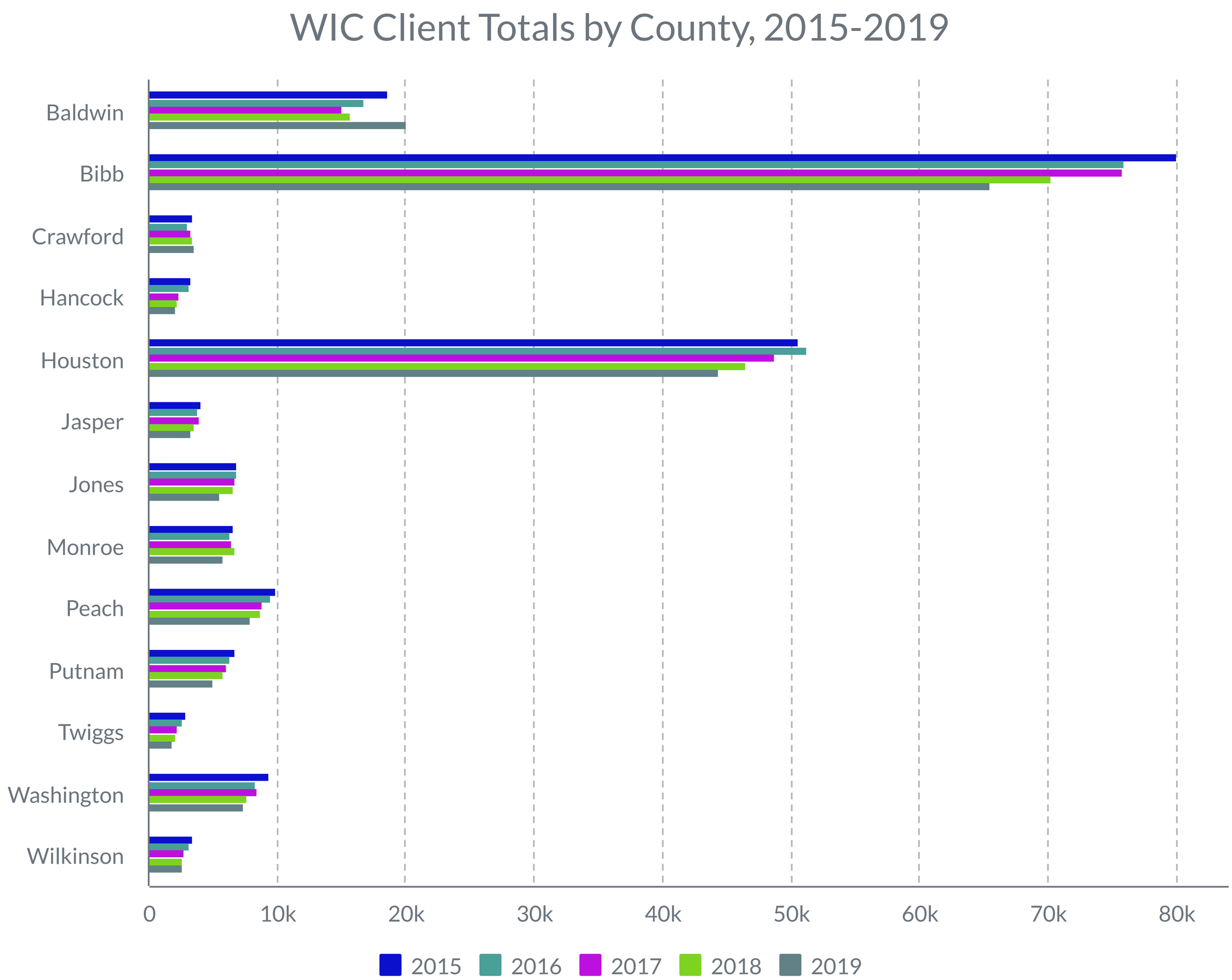


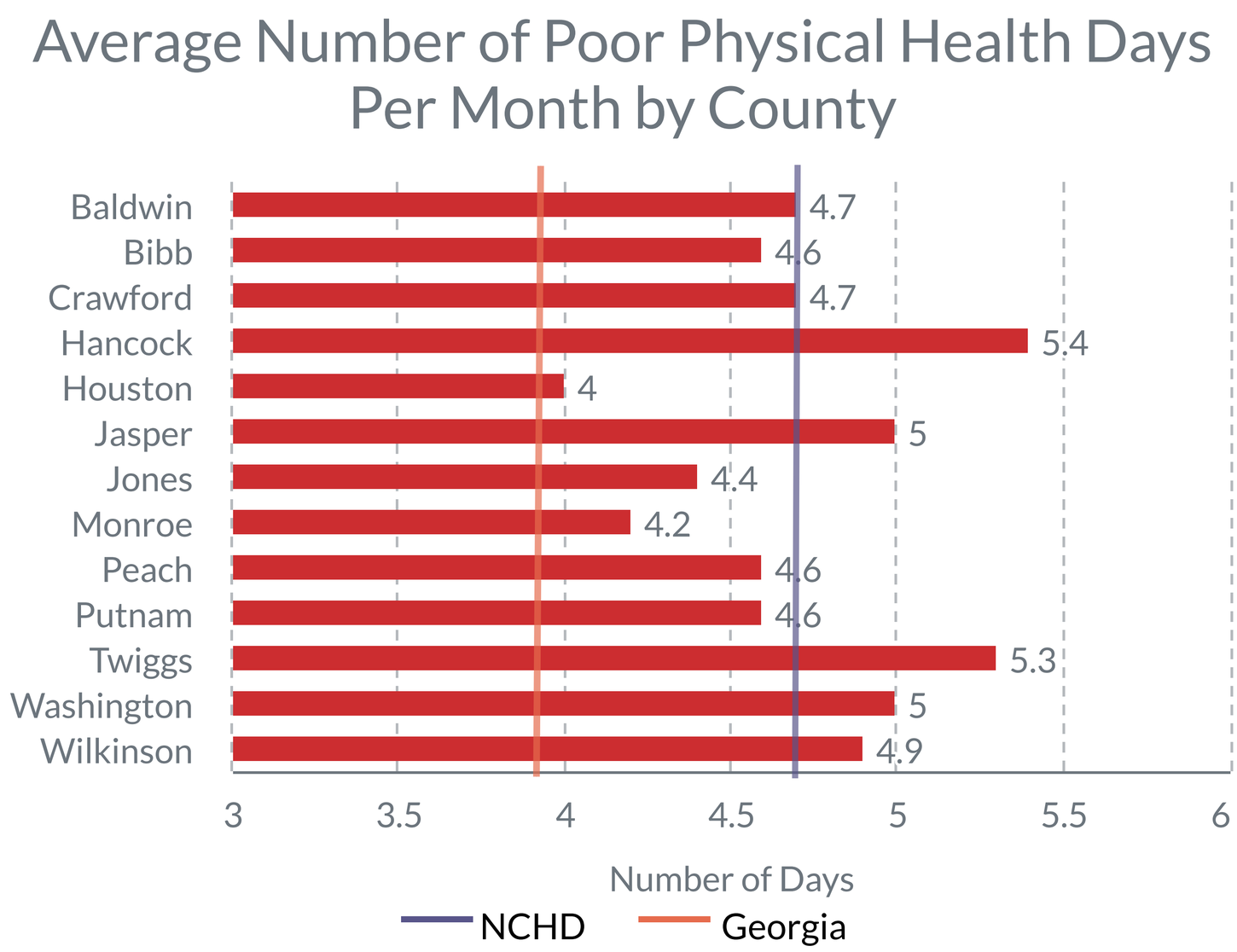
NCHD contained 197,284 households between 2015-2020, and 16% of district households received Food Stamp/Supplemental Nutrition Assistance Program (SNAP) compared to 13% of receiving SNAP benefits throughout Georgia.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal assistance program of the Food and Nutrition Service of the United States Department of Agriculture for healthcare and nutrition of low-income pregnant women, breastfeeding women, and children under the age of five.

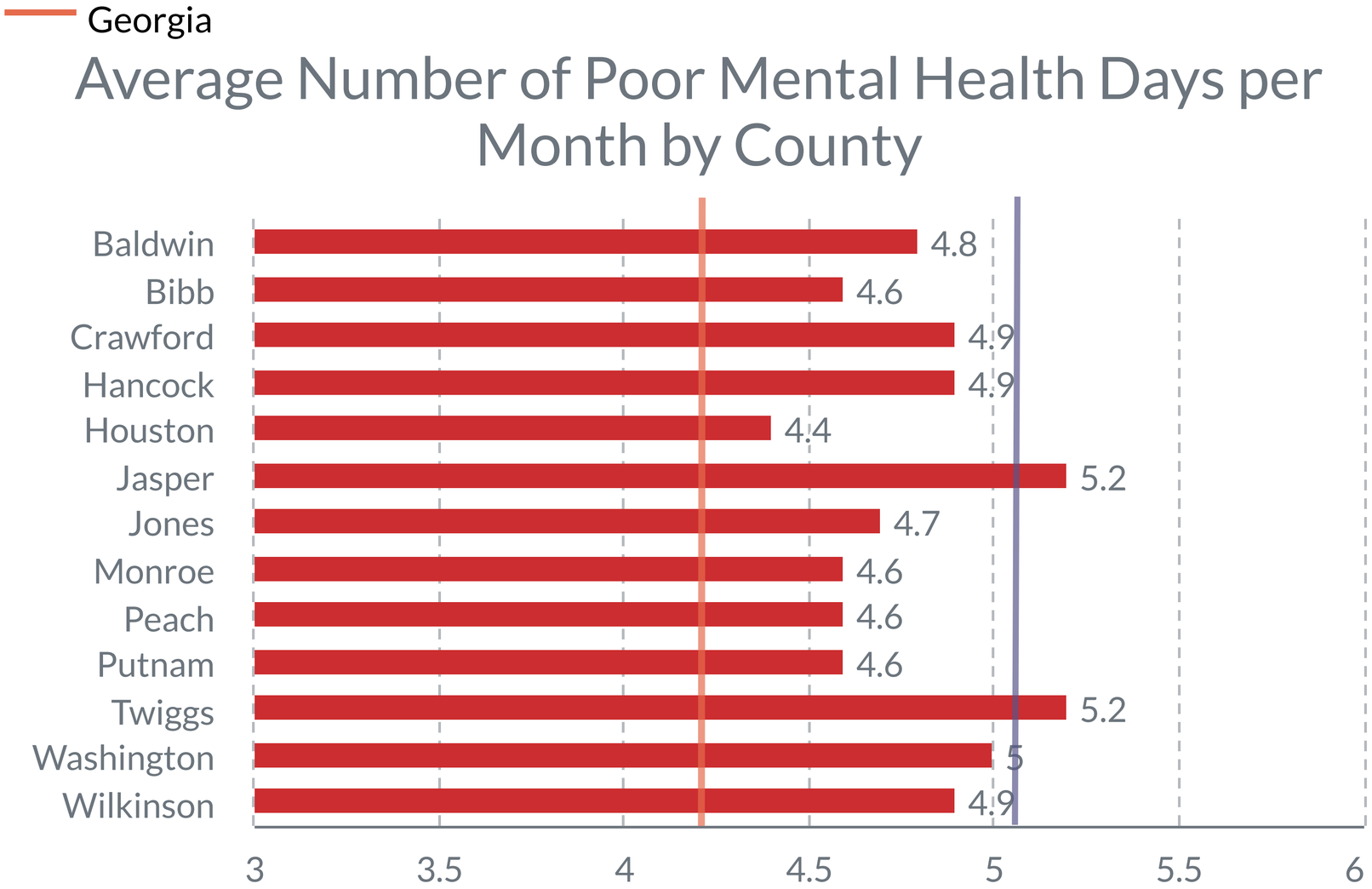
From 2015-2019, WIC utilization within NCHD has declined.



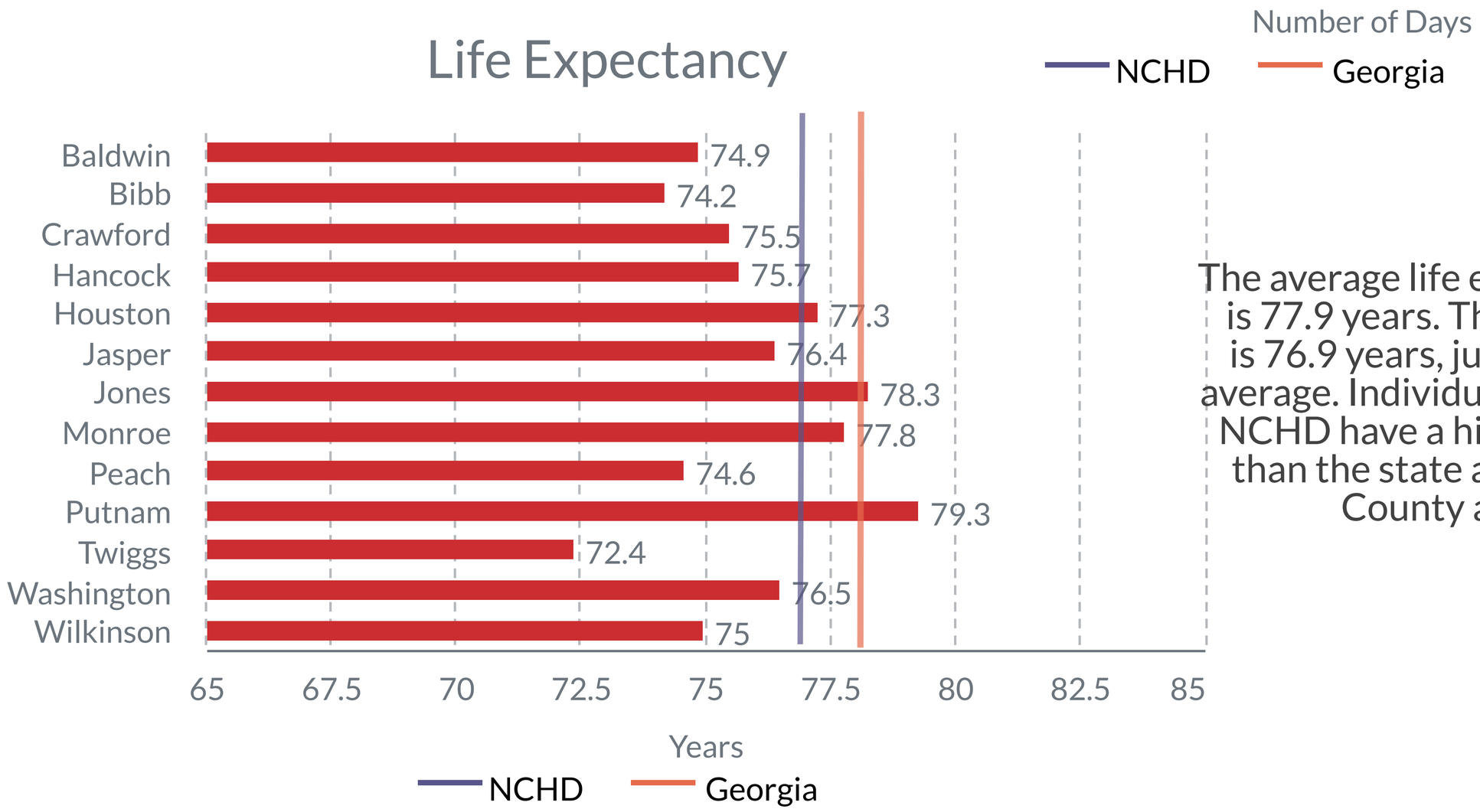




The state as a whole averaged 3.9 poor physical health days per month. Every County in the district exceeded this average with a district average of 4.7.



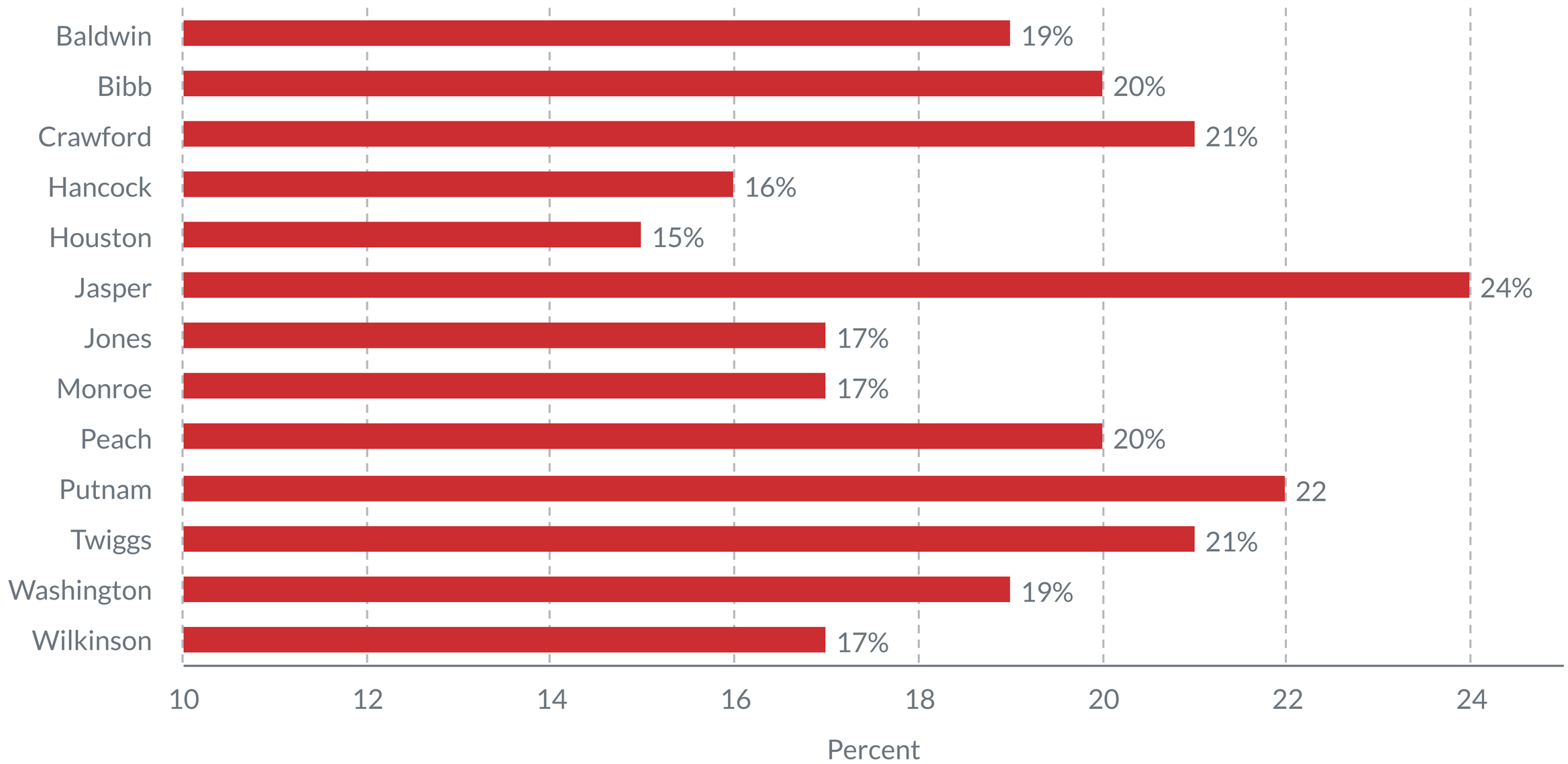
The state as a whole averaged 4.2 poor mental health days per month. Every County in the district exceeded this average with a district average of 4.8. Only Jasper and Twiggs counties have move average days than the state.



The average life expectancy in Georgia is 77.9 years. The average in NCHD is 76.9 years, just short of the state average. Individually some Counties in NCHD have a higher life expectancy than the state average, eg. Putnam County at 79.3 years.

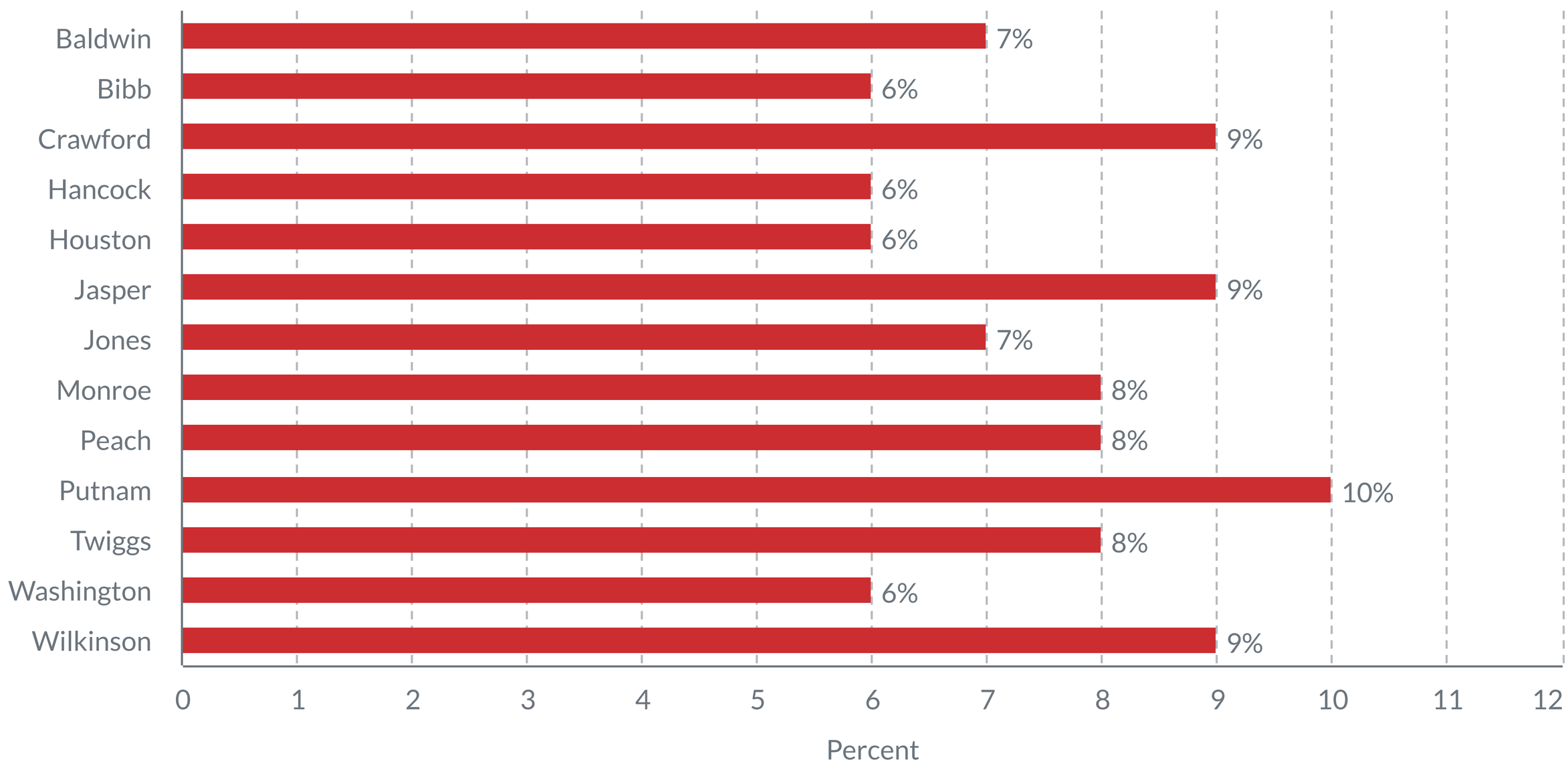
Access To Care

Percent of Adults Uninsured by County



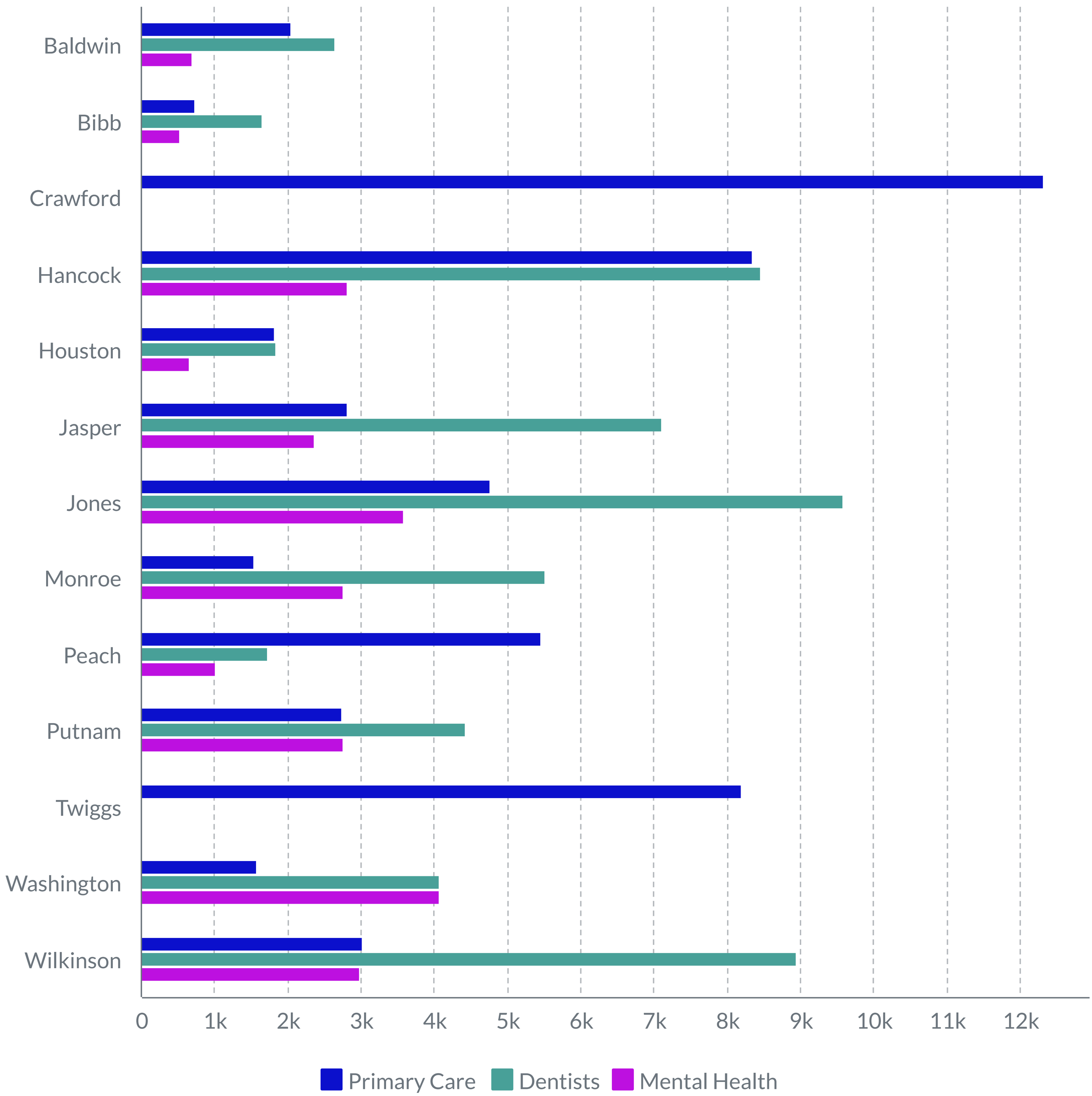
The average percent of adults without insurance in the state is 19%. Bibb, Crawford, Jasper, Peach, Putnam, and Twiggs Counties are all higher than this average. Houston County has the lowest percent of uninsured adults at 15% and Jasper County has the highest percent of uninsured adults at 24%.

Percent of Children Uninsured



The average percent of children without insurance in the state is 8%. Crawford, Jasper, Putnam, and Wilkinson Counties are higher than the state average.

Population to Provider Ratio



Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.

In Georgia the average population to provider ratio for Primary Care Physicians is 1,510:1, Dentists 1920:1 and Mental Health Providers 690:1.

Health Factor and Health Outcome Rankings by County

The county health rankings are based on a model of community health that emphasizes the many factors that influence how long and how well we live. The Rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors). Explore the Model to learn more about these measures and how they fit together to provide a profile of community health.

Health Outcomes represent how healthy a county is right now. They reflect the physical and mental well-being of residents within a community through measures representing not only the length of life but quality of life as well. Rankings are measured on a percentage scale; Least Healthy County in Georgia -(Lowest 0%-25%), Lower Middle Range of Counties in Georgia (Lower 25%-50%), Higher Middle Range of Counties in Georgia (Higher 50%-75%) and Healthiest Counties in Georgia (Highest 75%-100%).

COUNTY	RANK	DESCRIPTION
Baldwin	91	Lower middle range of counties in Georgia
Bibb	129	Least healthy counties in Georgia
Crawford	98	Lower middle range of counties in Georgia
Hancock	159	Least healthy counties in Georgia
Houston	25	Healthiest counties in Georgia
Jasper	64	Higher middle range of counties in Georgia
Jones	32	Healthiest counties in Georgia
Monroe	59	Higher middle range of counties in Georgia
Peach	104	Lower middle range of counties in Georgia
Putnam	41	Higher middle range of counties in Georgia
Twiggs	151	Least healthy counties in Georgia
Washington	80	Higher middle range of counties in Georgia
Wilkinson	145	Least healthy counties in Georgia

https://www.countyhealthrankings.org/app/georgia/2022/rankings/outcomes/overall

Health Factors represent those things we can modify to improve the length and quality of life for residents. They are predictors of how healthy our communities can be in the future. Rankings are measured on a percentage scale; Least Healthy County in Georgia -(Lowest 0%-25%), Lower Middle Range of Counties in Georgia (Lower 25%-50%), Higher Middle Range of Counties in Georgia (Higher 50%-75%) and Healthiest Counties in Georgia (Highest 75%-100%).

COUNTY	RANK	DESCRIPTION
Baldwin	95	Lower middle range of counties in Georgia
Bibb	89	Lower middle range of counties in Georgia
Crawford	80	Higher middle range of counties in Georgia
Hancock	159	Least healthy counties in Georgia
Houston	16	Healthiest counties in Georgia
Jasper	55	Higher middle range of counties in Georgia
Jones	17	Healthiest counties in Georgia
Monroe	29	Healthiest counties in Georgia
Peach	88	Lower middle range of counties in Georgia
Putnam	58	Higher middle range of counties in Georgia
Twiggs	117	Lower middle range of counties in Georgia
Washington	101	Lower middle range of counties in Georgia
Wilkinson	90	Lower middle range of counties in Georgia

https://www.countyhealthrankings.org/app/georgia/2022/rankings/factors/overall

Leading Causes of Mortality

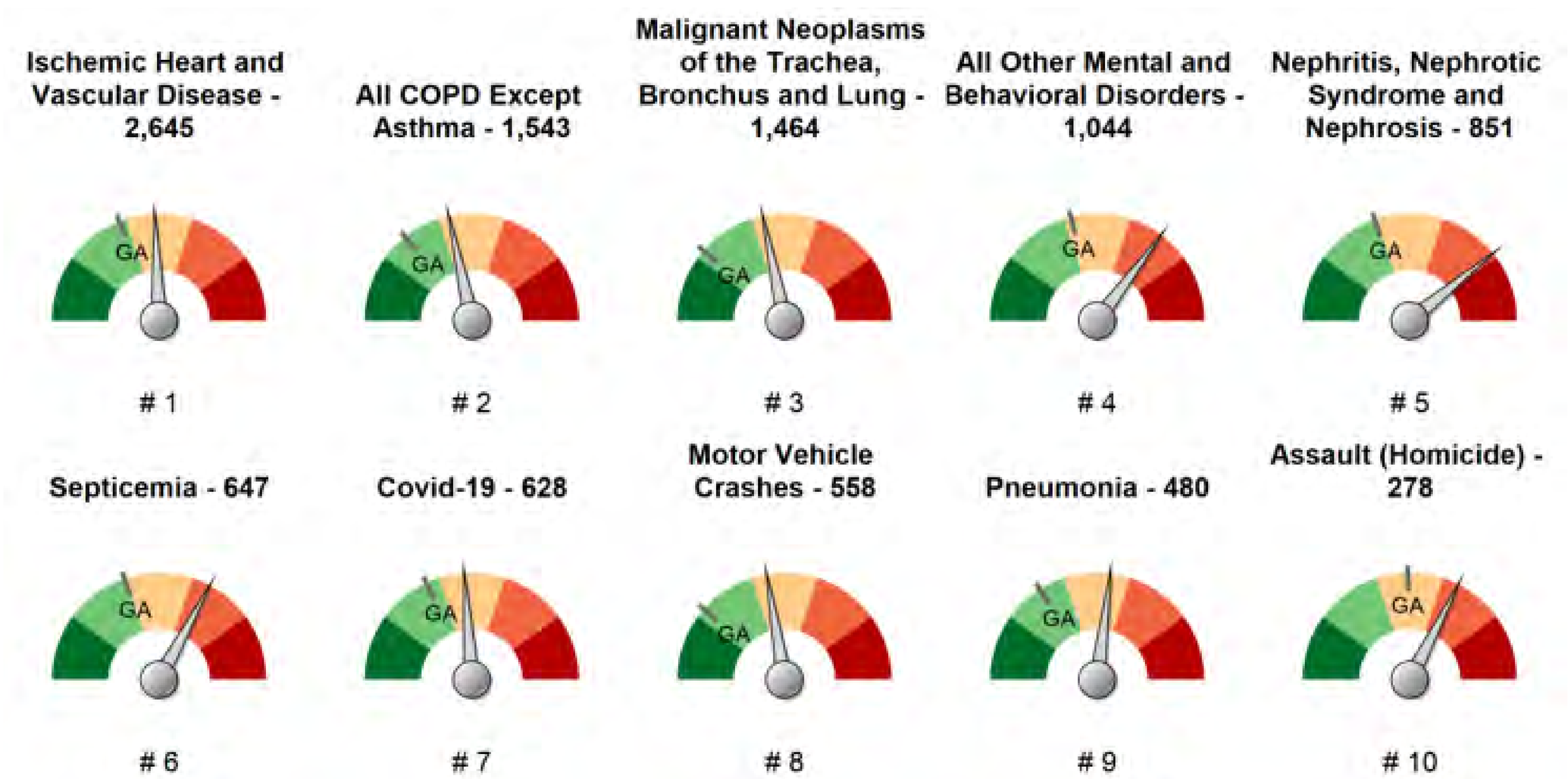
Public Health District Comparison with Georgia

Cause	Selected Geography Rank	Georgia Rank
Ischemic Heart and Vascular Disease	1	1
All COPD Except Asthma	2	2
Malignant Neoplasms of the Trachea, Bronchus and Lung	3	5
Cerebrovascular Disease	4	3
Alzheimers Disease	5	4
Essential (Primary) Hypertension and Hypertensive Renal, and Heart Disease	6	6
All Other Mental and Behavioral Disorders	7	8
Nephritis, Nephrotic Syndrome and Nephrosis	8	10
Diabetes Mellitus	9	9
Septicemia	10	12

The top three leading causes of mortality in NCHD are ischemic heart disease, chronic obstructive pulmonary disease (COPD) and cancers of the respiratory system.

- Ischemic heart disease, also known as coronary heart disease or coronary artery disease, refers to heart problems caused by reduced blood and oxygen supply through narrowed arteries, often due to the buildup of plaque along the walls of these arteries.
- COPD, including chronic bronchitis and emphysema, is a chronic inflammatory lung disease that obstructs airflow to and from the lungs making it hard to breathe.
- Malignant neoplasms or cancers of the trachea, bronchus and lungs are caused by abnormal mass of tissues resulting from uncontrolled cell growth and most commonly occurs among people who smoke.

Ranked Significantly High Causes and State/County Comparison, Age-Adjusted Death Rate, North Central Health District (Macon), 2016 - 2020



The table and dials show the top 10 causes of death from 2016-2020 in NCHD, and how each compare in rank to the same causes for the State.
Of the top three leading causes of mortality, the top two causes rank the same for NCHD as well as the state of Georgia. However, the third leading cause for health district (malignant neoplasms of the trachea, bronchus and lungs) differs from that of the state (cerebrovascular disease).
During the five-year period, there were a total of 2,645 deaths due to ischemic heart disease, 1,543 deaths due to COPD (excluding asthma) and 1,464 deaths due to malignant neoplasms of the respiratory system in NCHD.

To interpret the Dials: Green=Good, Red=Bad.

The number next to the cause name is the total deaths for the 5 year period. Underneath each dial is the Rank based on the number of events.
In sum, the dials show:
• Rank within County • Number of total events (deaths) • How a county compares against the state • How a county compares against all other counties.

Leading Causes of Premature Mortality

Public Health District Comparison with Georgia

Cause	Selected Geography Rank	Georgia Rank
Ischemic Heart and Vascular Disease	1	1
Motor Vehicle Crashes	2	2
Intentional Self-Harm (Suicide)	3	4
Assault (Homicide)	4	5
Certain Conditions Originating in the Perinatal Period	5	6
Malignant Neoplasms of the Trachea, Bronchus and Lung	6	8
Essential (Primary) Hypertension and Hypertensive Renal, and Heart Disease	7	7
Accidental Poisoning and Exposure to Noxious Substances	8	3
All Other Diseases of the Nervous System	9	11
Cerebrovascular Disease	10	10

The top three leading causes of premature mortality in NCHD are ischemic heart and vascular disease, motor vehicle crashes and intentional self-harm or suicide.
Much like ischemic heart disease, ischemic vascular disease occurs as a result of plaque buildup in the blood vessels which, in turn, can restrict adequate blood flow to organs.
Motor vehicle crashes are most often caused by traffic collisions between motor vehicles or between a motor vehicle and a fixed object.
Intentional self-harm or suicide is the deliberate action of causing harm to oneself, often as a maladaptive response to acute or chronic psychological stress.

Ranked Significantly High Causes and State/County Comparison, Premature Death Rate (YPLL), North Central Health District (Macon), 2016 - 2020

The table and dials show the top 10 causes of premature death from 2016-2020 in NCHD, and how each compare in rank to the same causes for the State.
Of the top three leading causes of premature mortality, the top two causes rank the same for NCHD as well as the state of Georgia. However, the third leading cause for health district (intentional self-harm/suicide) differs from that of the state (accidental poisoning and exposure to noxious substances).
During the five-year period, there were a total of 17, 207 deaths due to ischemic heart and vascular disease, 16, 323 deaths due to motor vehicle crashes and 12, 110 deaths due to intentional self-harm (suicide) in NCHD.

Leading Causes of Emergency Department Visits

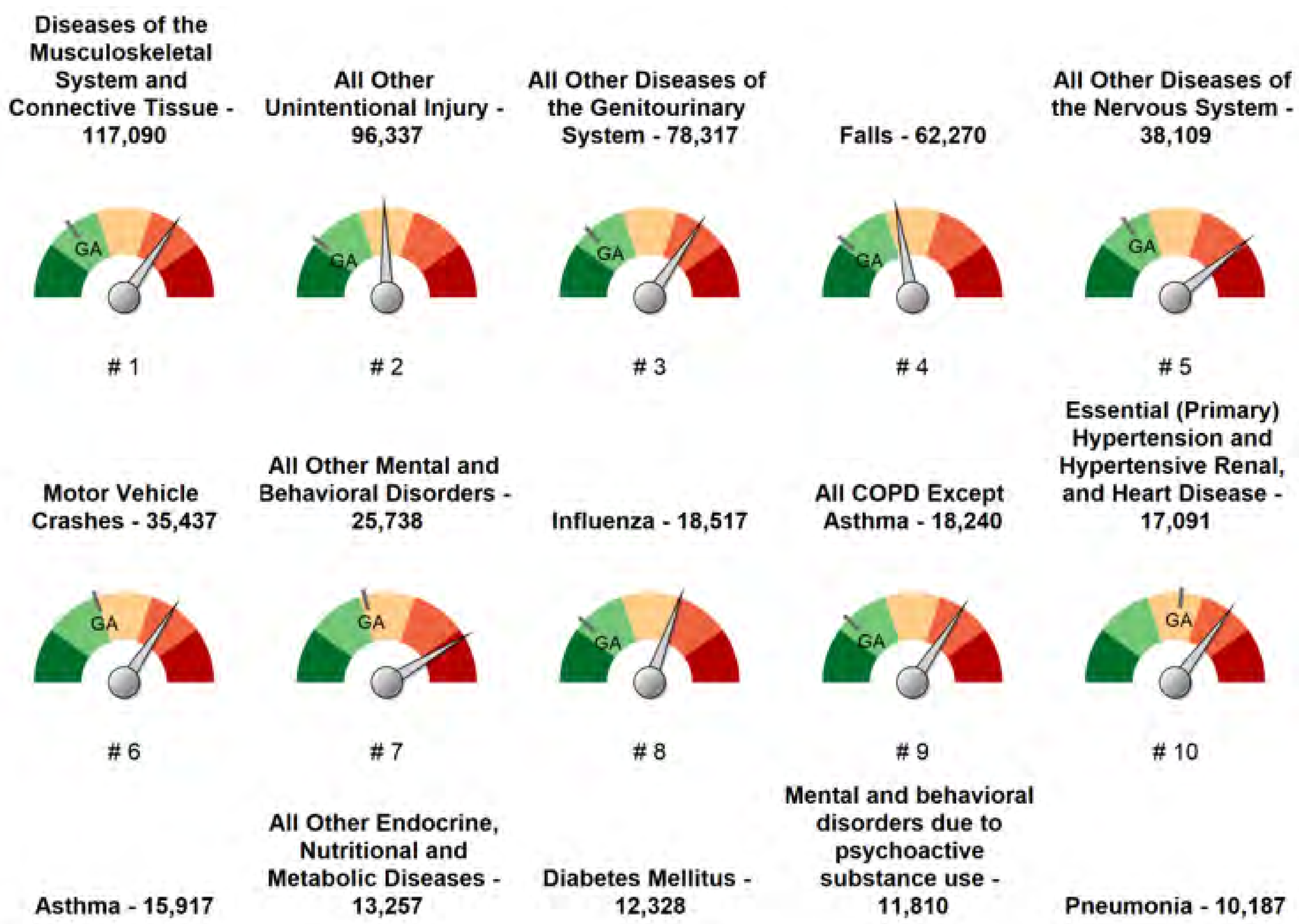
Public Health District Comparison with Georgia

Cause	Selected Geography Rank	Georgia Rank
Diseases of the Musculoskeletal System and Connective Tissue	1	1
All Other Unintentional Injury	2	2
All Other Diseases of the Genitourinary System	3	3
Falls	4	4
All Other Diseases of the Nervous System	5	6
Motor Vehicle Crashes	6	5
All Other Mental and Behavioral Disorders	7	7
Influenza	8	10
All COPD Except Asthma	9	11
Essential (Primary) Hypertension and Hypertensive Renal, and Heart Disease	10	8

The top three leading causes of emergency department (ED) visits in NCHD are diseases of the musculoskeletal system and connective tissue, unintentional injury and genitourinary system diseases.

- Diseases of the musculoskeletal system and connective tissue are diseases that affect the joints, bones, muscles and tissues that connect the different parts of the body together (example: osteoporosis, rheumatoid arthritis, lupus, etc).
- Unintentional injuries are injuries that that occur accidentally or without harmful intent such as injuries due to falls or as a result of poisoning.
- Genitourinary diseases are diseases that affect the urinary and genital organs (example: urinary tract infections and polycystic kidney disease).

Ranked Significantly High Causes and State/County Comparison, Age-Adjusted Emergency Room Visit Rate, North Central Health District (Macon), 2016 - 2020



The table and dials show the top 10 causes of ED visits from 2016-2020 in NCHD, and how each compare in rank to the same causes for the State.
Three of all top three leading causes of ED visits rank the same for NCHD as well as the state of Georgia.
During the five-year period, there were a total of 117,090 emergency room visits due to diseases of the musculoskeletal system and connective tissue, 96,337 emergency room visits due to all other unintentional injury and 78,317 emergency room visits due to diseases of the genitourinary system in NCHD.

Leading Causes of Hospitalizations

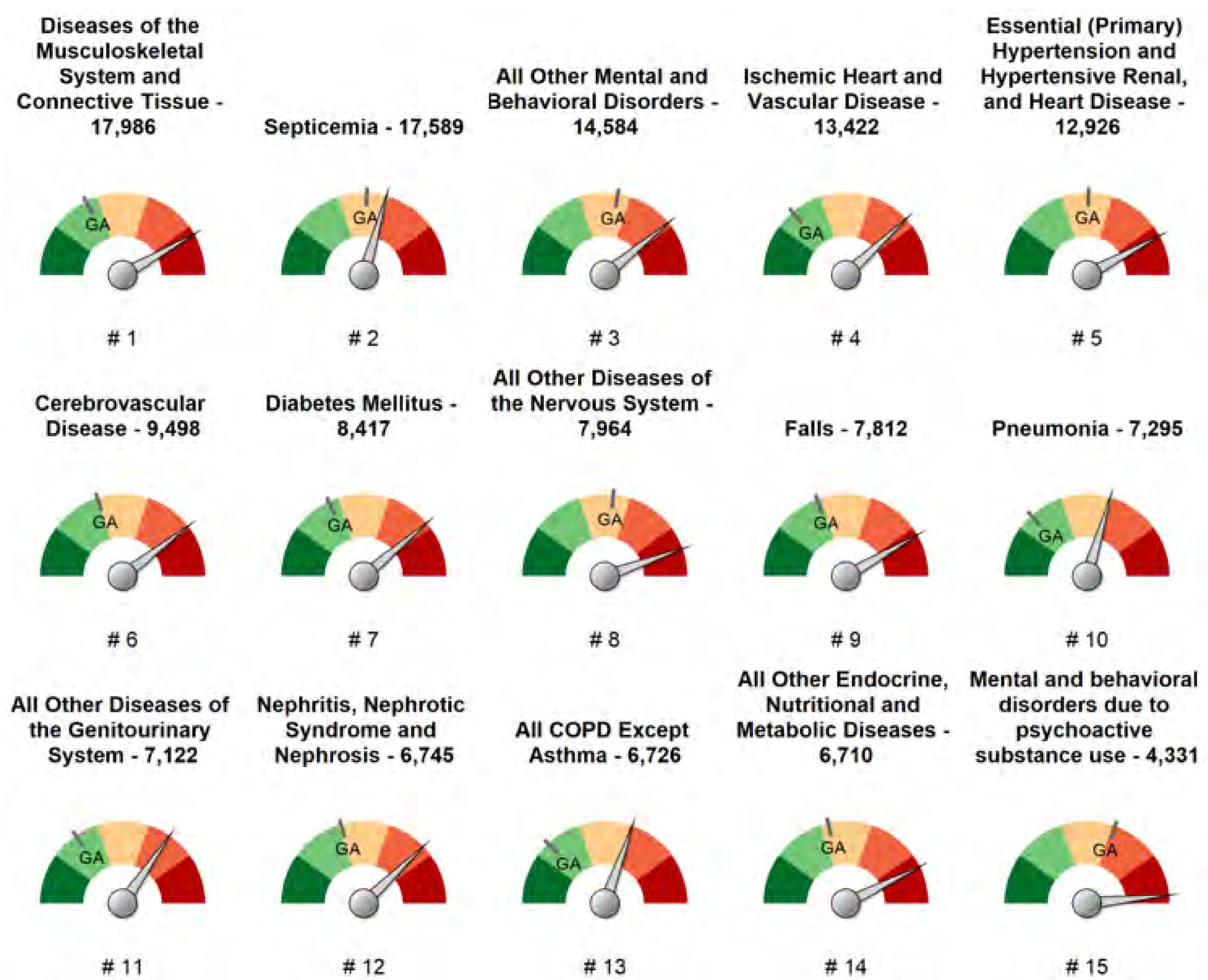
Public Health District Comparison with Georgia

Cause	Selected Geography Rank	Georgia Rank
Diseases of the Musculoskeletal System and Connective Tissue	1	2
Septicemia	2	1
All Other Mental and Behavioral Disorders	3	3
Ischemic Heart and Vascular Disease	4	5
Essential (Primary) Hypertension and Hypertensive Renal, and Heart Disease	5	4
Cerebrovascular Disease	6	6
Diabetes Mellitus	7	7
All Other Diseases of the Nervous System	8	8
Falls	9	9
Pneumonia	10	11

The top three leading causes of hospitalizations in NCHD are diseases of the musculoskeletal system and connective tissue, septicemia and all other mental and behavioral disorders.

- Diseases of the musculoskeletal system and connective tissue are diseases that affect the joints, bones, muscles and tissues that connect the different parts of the body together (example: osteoporosis, rheumatoid arthritis, lupus, etc).
- Septicemia, or sepsis, refers to infection or blood poisoning caused by bacteria that enter the bloodstream.
- Mental and behavioral health disorders include a range of psychological disorders that affect the mind namely autism spectrum disorder, attention deficit hyperactivity disorder and anxiety disorders.

Ranked Significantly High Causes and State/County Comparison, Age-Adjusted Hospital Discharge Rate, North Central Health District (Macon), 2016 - 2020

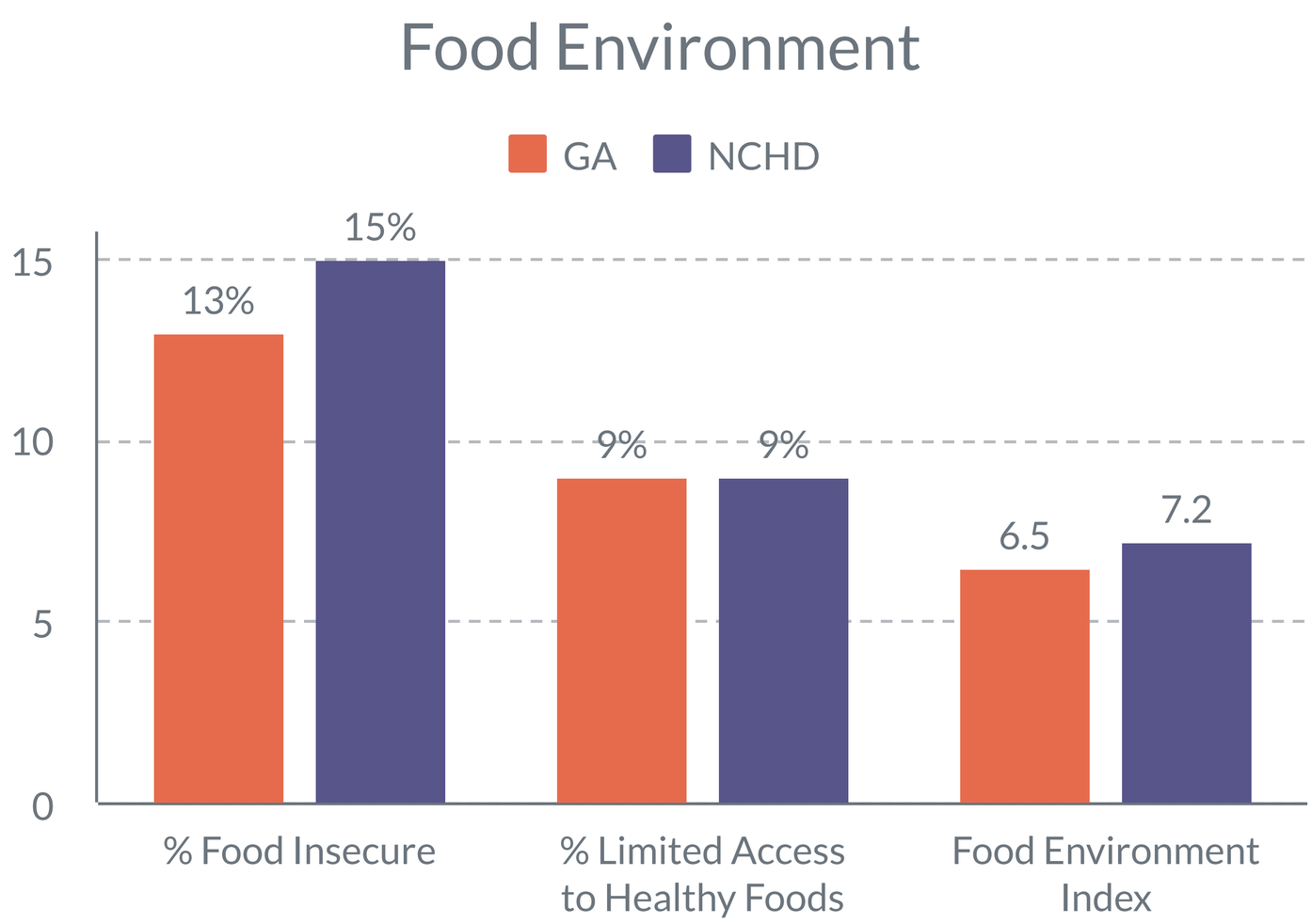


The table and dials show the top 10 causes of hospitalizations from 2016-2020 in NCHD, and how each compare in rank to the same causes for the State.

- Three of the top three leading causes of hospitalizations are the same for NCHD as well as the state of Georgia, however, the ranking order differs between the two.
- During the five-year period, there were a total of 17, 986 hospitalizations due to diseases of the musculoskeletal system and connective tissue, 17, 589 hospitalizations due to septicemia and 14, 584 hospitalizations due to mental and behavioral disorders in NCHD.

Health Behaviors

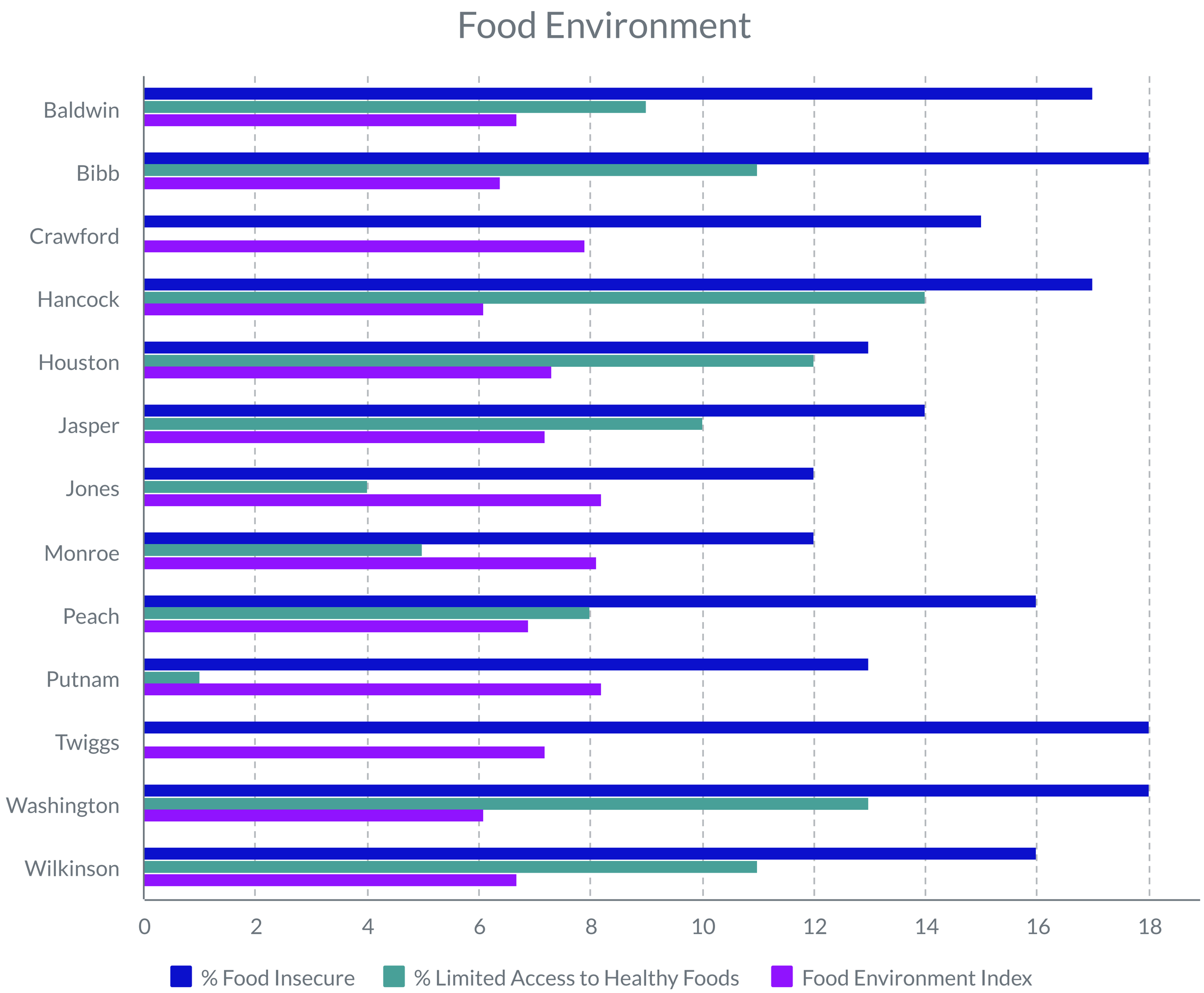
ACCESS TO HEALTHY FOODS



There are many facets to a healthy food environment, such as the cost, distance, and availability of healthy food options.
Food Environment Index ranges from 0 (worst) to 10 (best) and equally weighs 2 indicators: limited access to healthy foods and food insecurity.

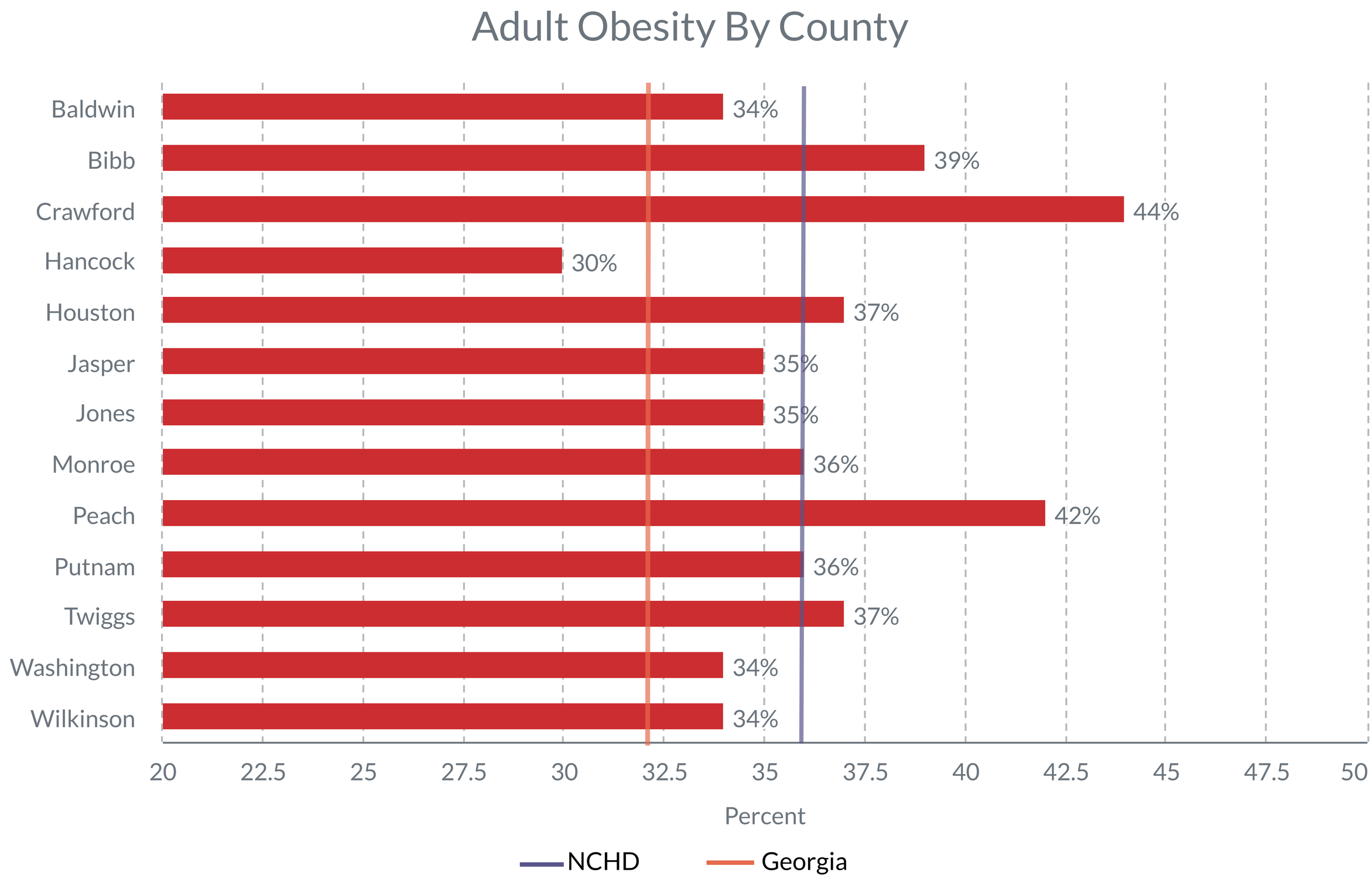
15% of NCHD residents report being food insecure, meaning residents did not have access to a reliable source of food during the past year, which is a slightly higher rate than the overall state of GA (13%).

The average food environment index for NCHD residents (7.2) is slightly better than the index for the state of GA (6.5).



OBESITY

Adult Obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.



36% of NCHD residents over 20 years old are Obese, compared to 32% of Georgia residents. All counties in NCHD, with the exception of Hancock County were above the state average.

OBESITY IN CHILDREN AND YOUTH

20,500 (15%) children in Georgia aged 2-4 years in the Women, Infant and Children (WIC) program are obese.

28,000 (24%) third grade children in Georgia are obese.

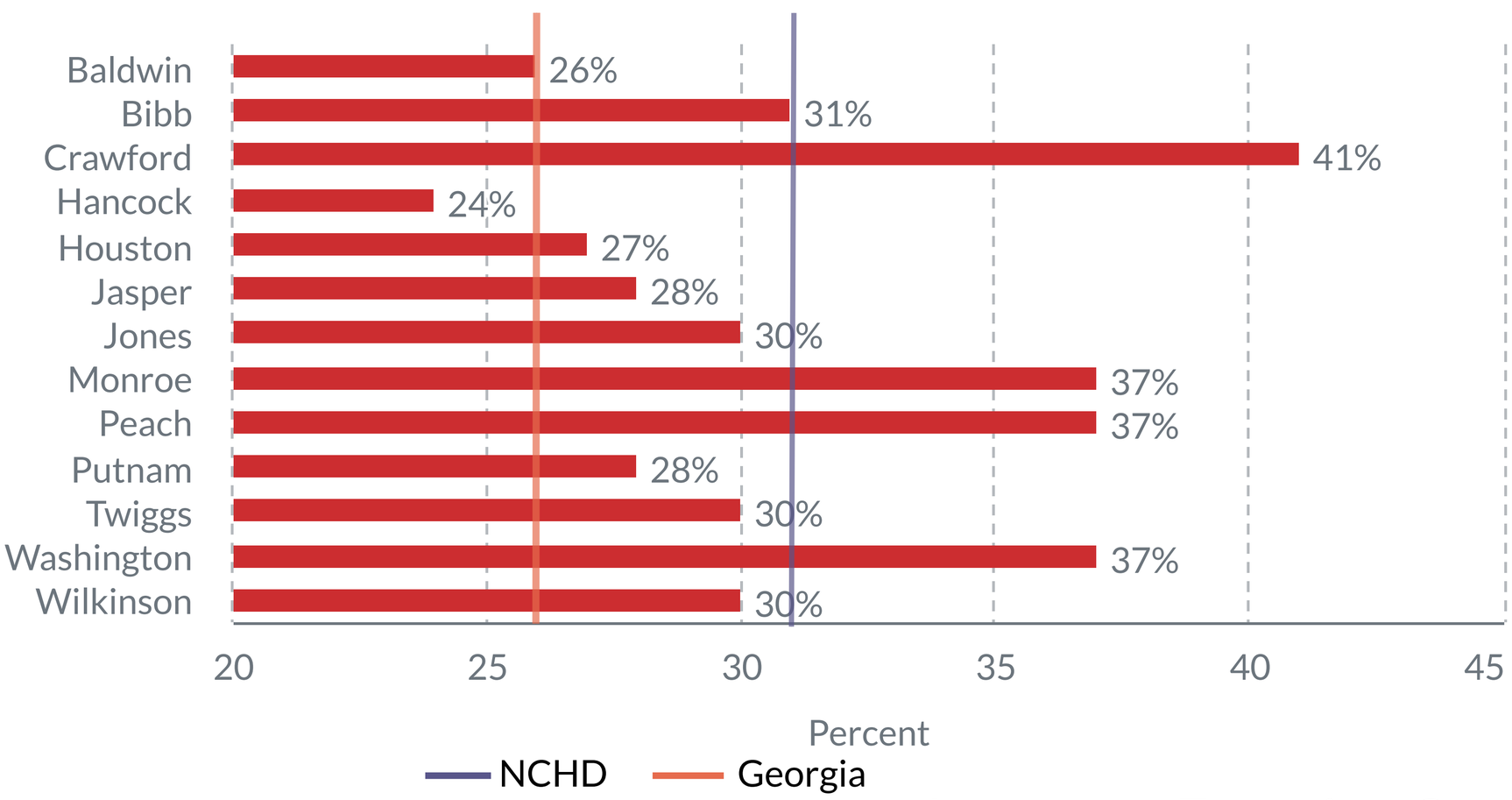
43,000 (15%) middle school students in Georgia are obese.

55,000 (15%) high school students in Georgia are obese.

PHYSICAL ACTIVITY

Decreased physical activity, independent of obesity, has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality. Inactivity causes 11% of premature mortality in the United States, and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008.

Physical Inactivity by County

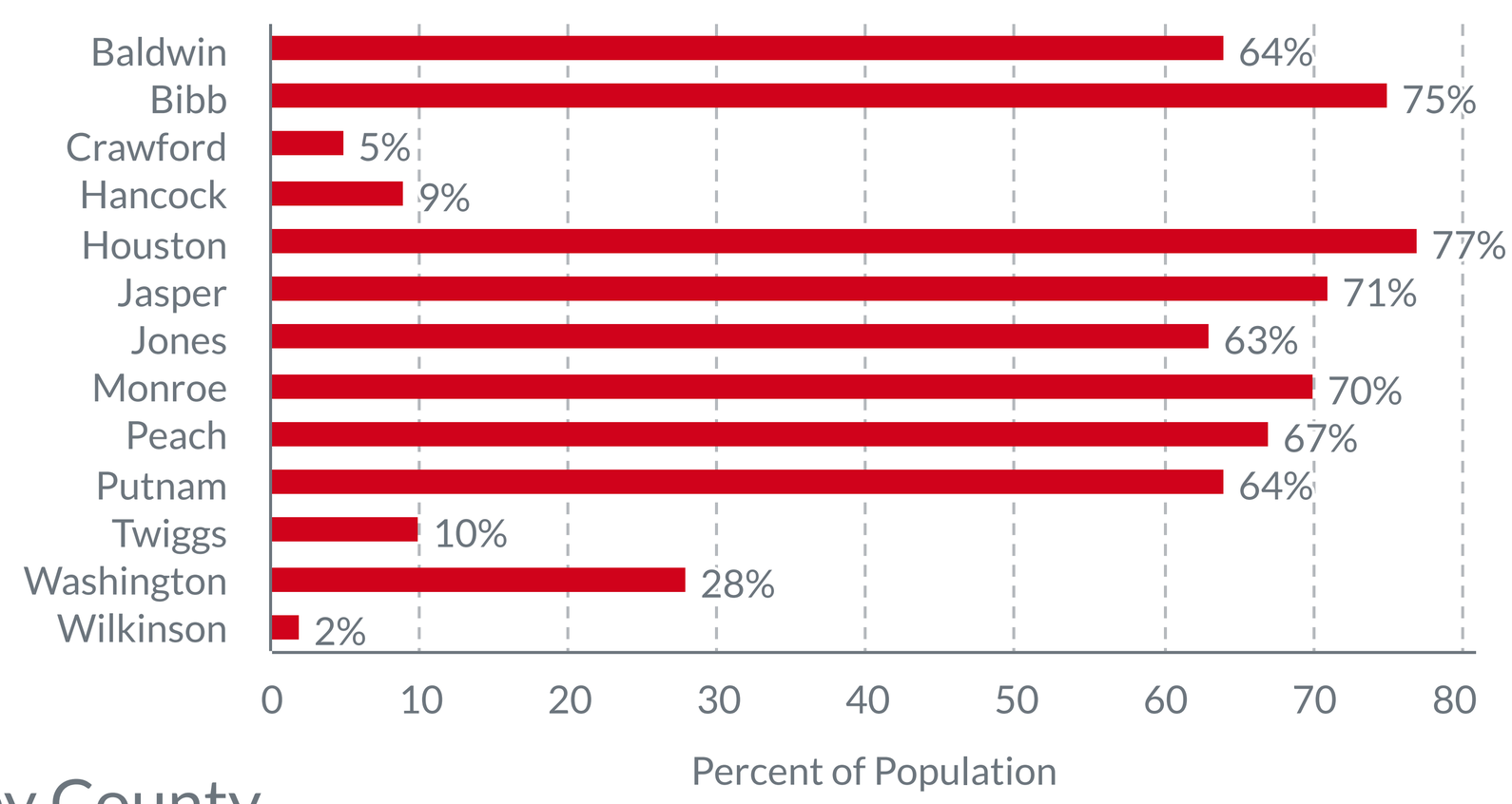


31% of NCHD residents over 20 report no leisure-time or physical activity, compared to 26% of Georgia residents.

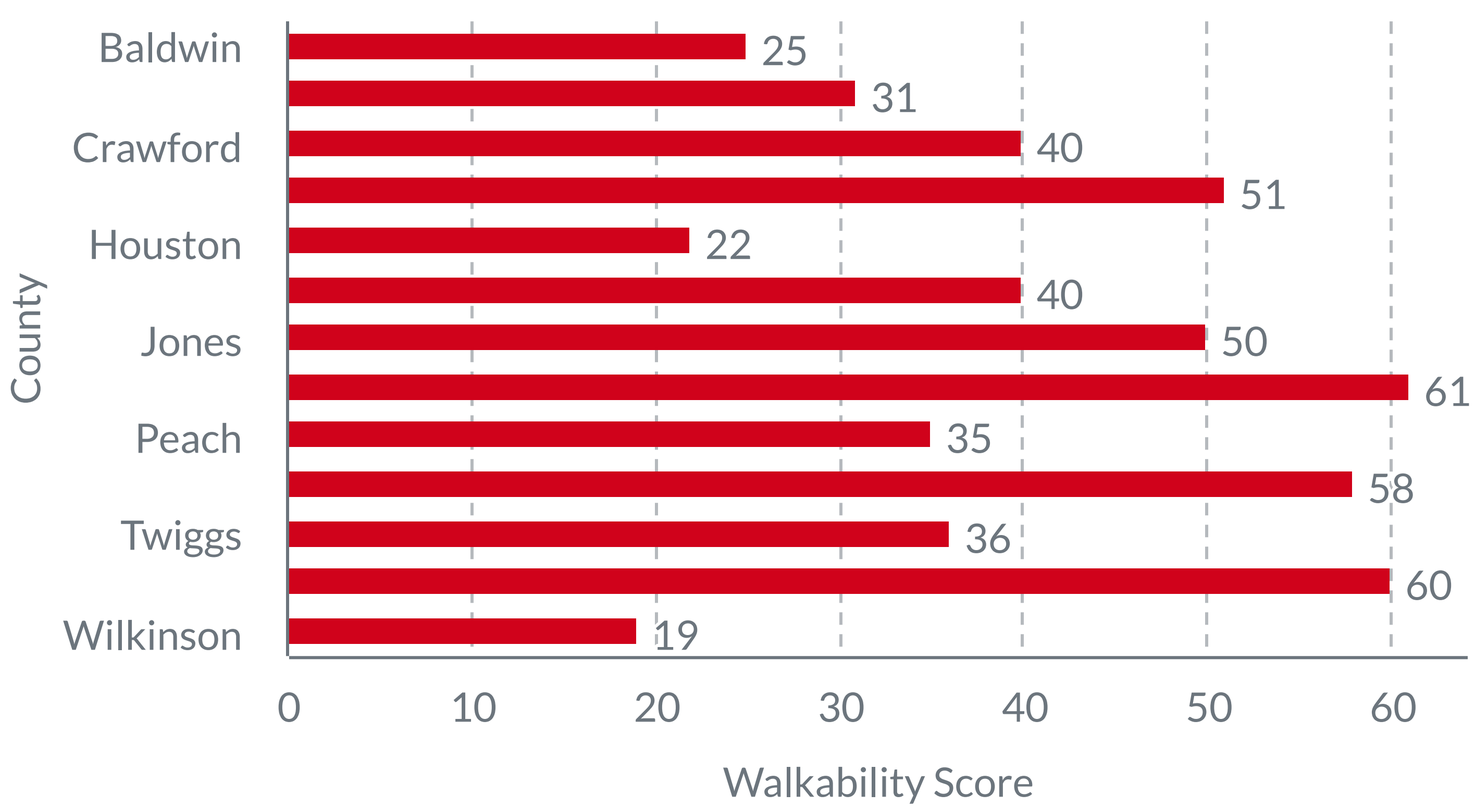
Baldwin, Hancock and Houston Counties showed the least amount of physical activity in the district.

Access to Exercise Opportunities by County

The state average for percentage of population with adequate access to locations for physical activity is 75%. Every county in NCHD with the exception of Houston (77%) and Bibb (75%) fell below the average.



Walkability Scores by County



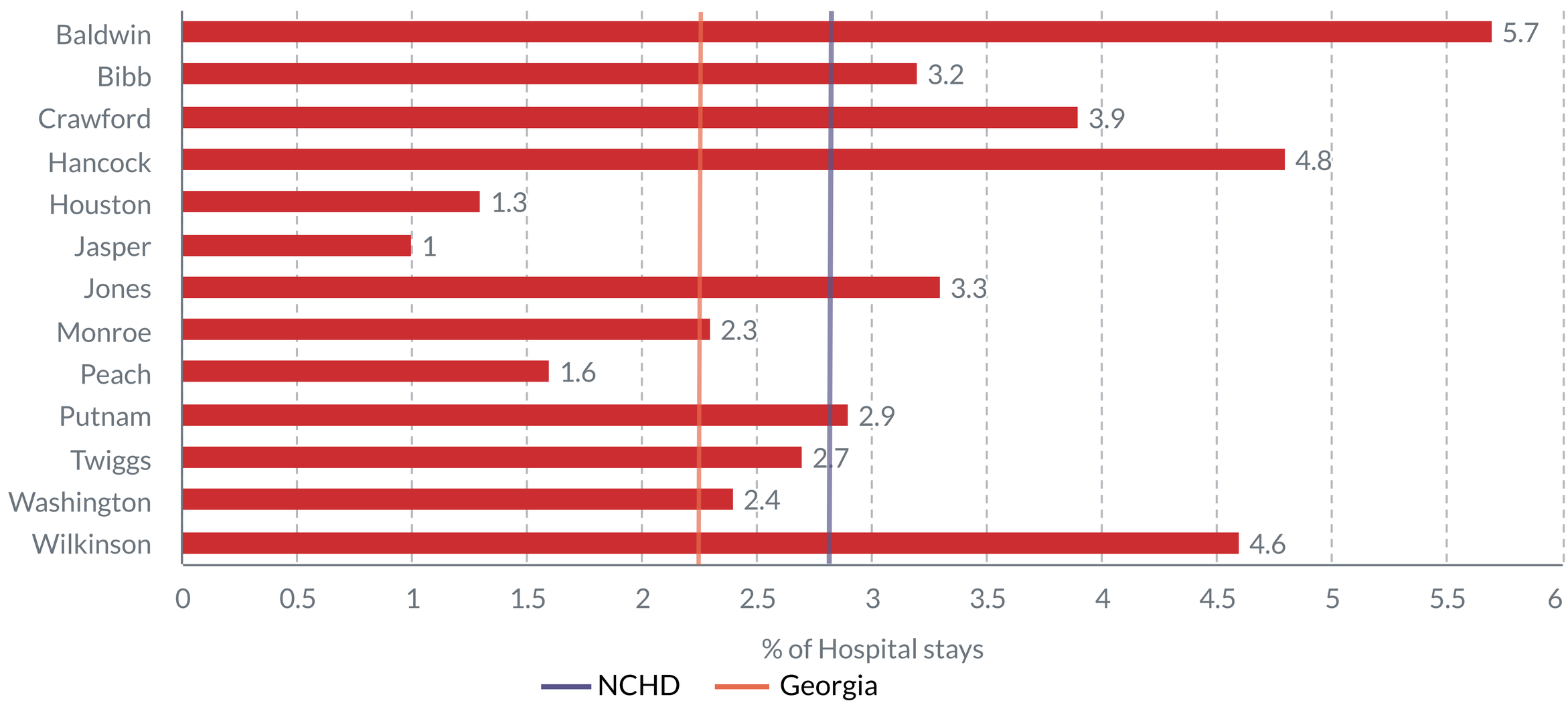
The higher the walkability, the more opportunities residents have to walk to get to their destination instead of using a car. Walkability scores were based on the largest cities or metro areas in the county.

Monroe County had the highest walkability score in the district with 61, while Wilkinson County had the lowest walkability score with 19.

PREVENTABLE HOSPITAL STAYS

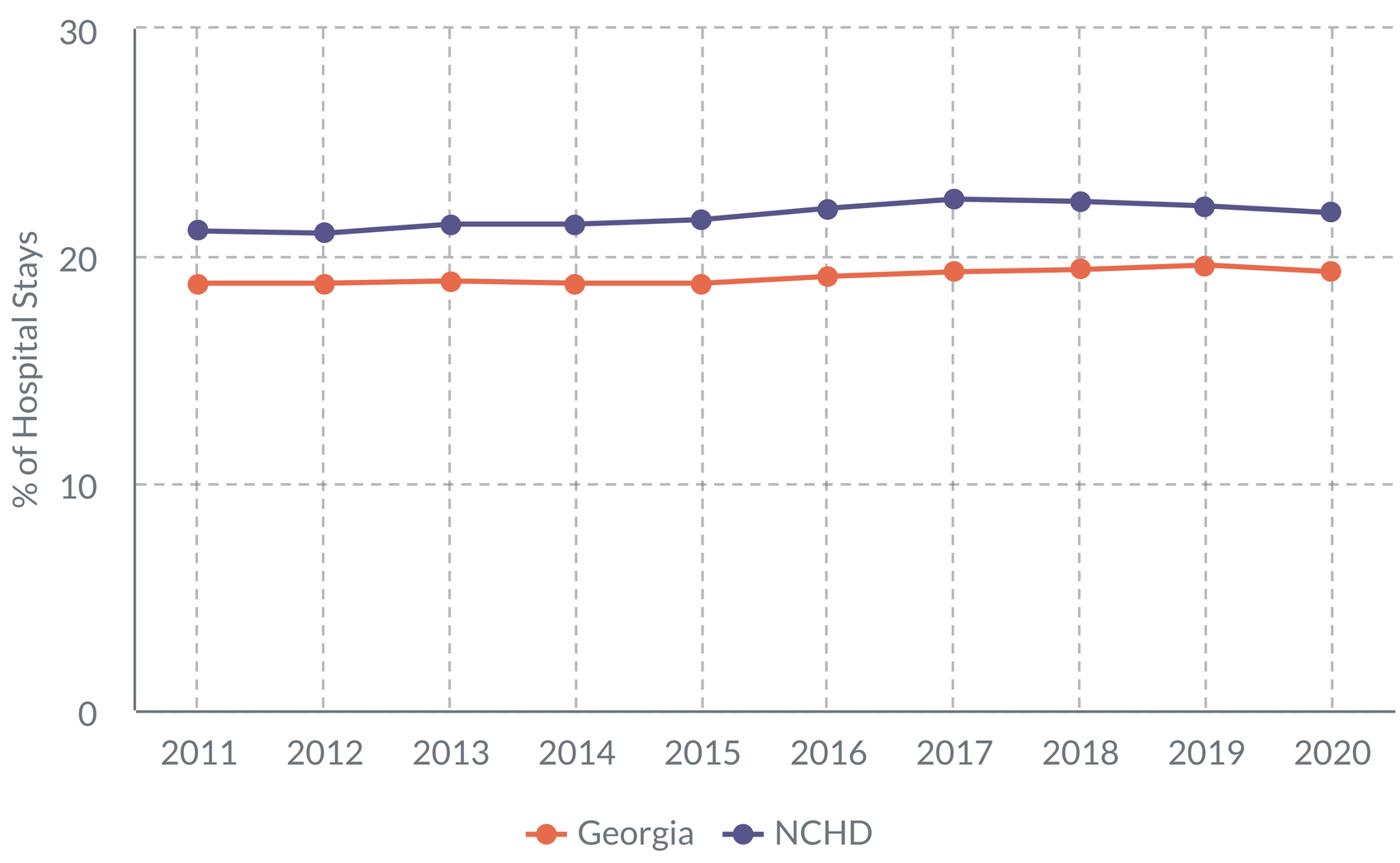
Hospitalization for ambulatory-care sensitive conditions and diagnoses usually treatable in outpatient settings are considered preventable hospital stays. It is represented as a percentage of all hospital stays. They include congenital syphilis, vaccine preventable illnesses/Immunization-related and preventable conditions, dental conditions, iron deficiency anemia and nutritional deficiencies.

Percent of Hospitalizations due to Avoidable Illnesses



In NCHD the percent of hospitalizations related to avoidable illnesses in 2020 is 2.8%, the state average is 2.3%. Baldwin County had the highest percent of visits with 5.7%, with Bibb, Crawford, Hancock, Jones, and Wilkinson also having a higher percentage of hospitalizations due to avoidable illnesses.

Hospitalizations due to Avoidable Illnesses NCHD vs. Georgia, 2001-2020

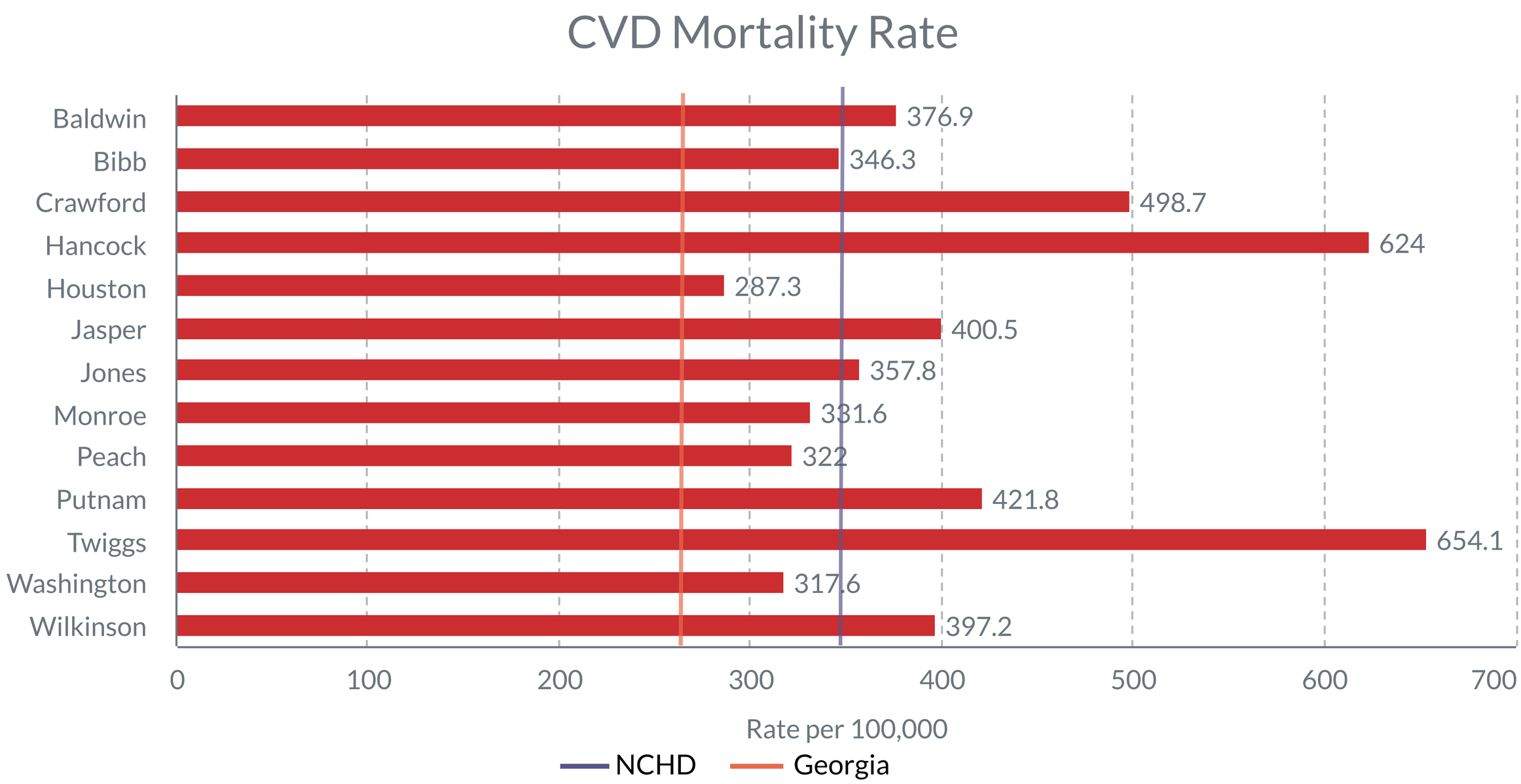


22% Hospitalizations within NCHD between 2007-2020 are associated with avoidable Illnesses from 2007-2020 which is slightly higher than the percent of hospitalizations within the state of GA (19%).

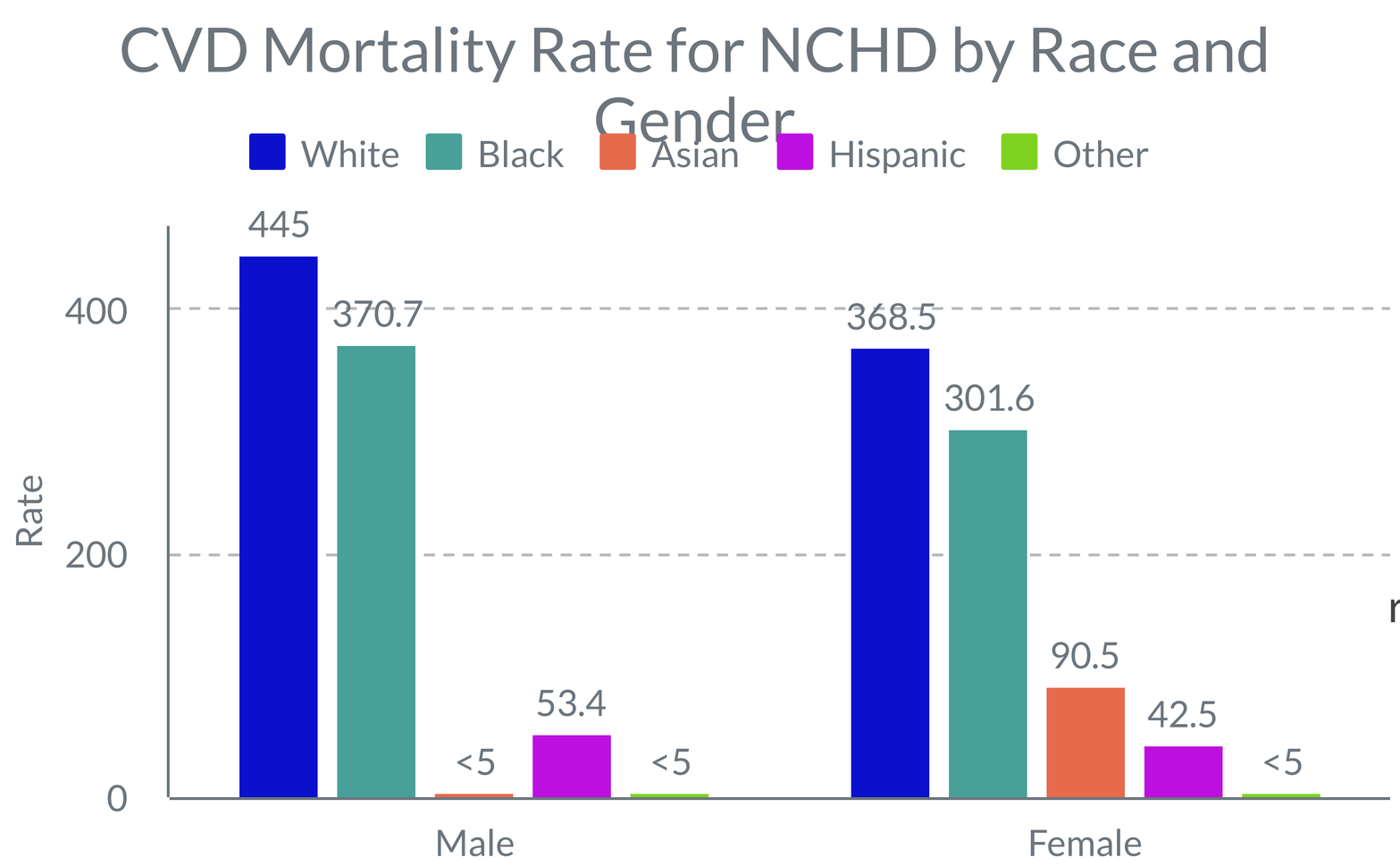
Chronic Disease

CARDIOVASCULAR DISEASE

Cardiovascular disease (CVD) is the leading cause of death, hospitalization, and years of potential life lost in the district and it is the leading cause of disability in the U.S. The cost of CVD in the U.S. is estimated at $444 billion, and treatment accounts for $1 for every $6 spent on health care. CVD includes all diseases of the heart and blood vessels; such as obstructive heart disease, stroke, high blood pressure, hypertension, atherosclerosis, and aortic aneurysms. Risk factors of CVD include high cholesterol, high blood pressure, diabetes, and behavior and lifestyle choices such as tobacco use, diet, physical activity, obesity, and alcohol. Family history of CVD can also make an individual more susceptible.



In NCHD the rate of ED visits related to Cardiovascular disease was 346.8 per 100,000, surpassing the state number of 260.9 visits per 100,000. Twiggs County had the highest rate of 654.1.

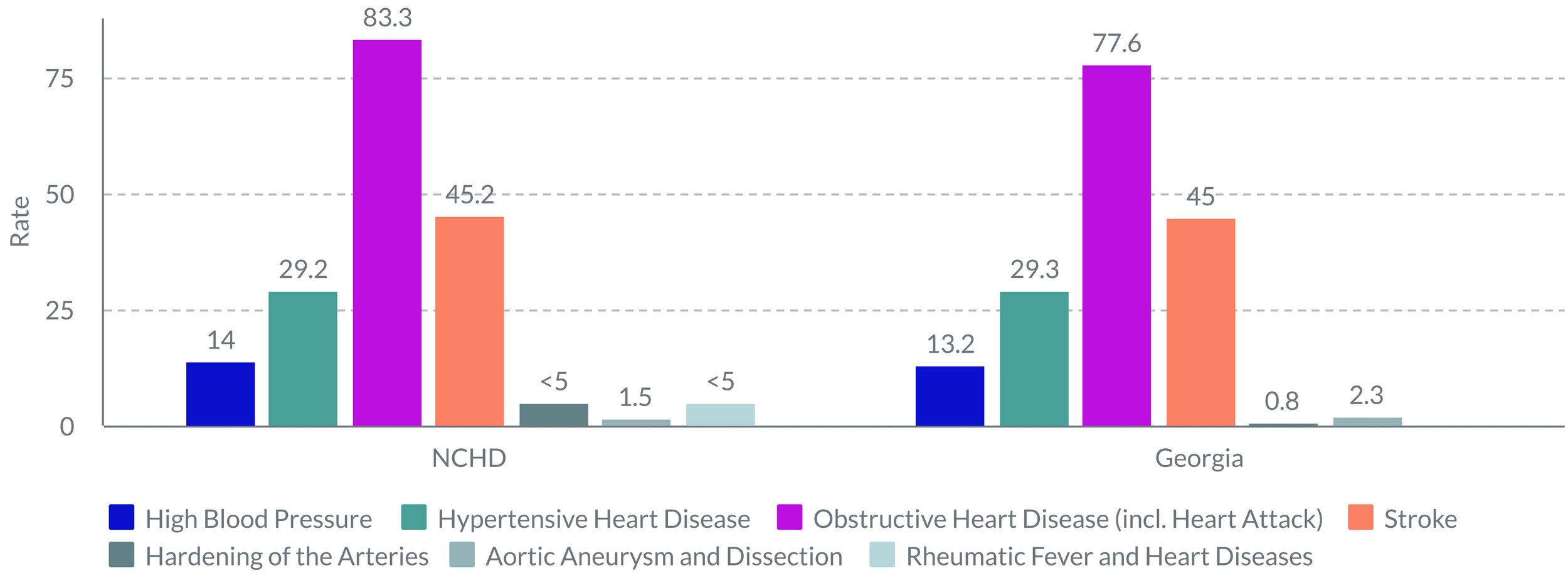


The CVD death rate for NCHD is highest for white males 445 followed by black males 370.7 per 100,000.

The Asian population had a significant difference in CVD death rate between men <5 and women 90.5 per 100,000.

The Hispanic population had the lowest CVD death rate among all racial groups and genders. Yet, also had the closest CVD death rate between men 53.4 and women 42.5 within the same race.

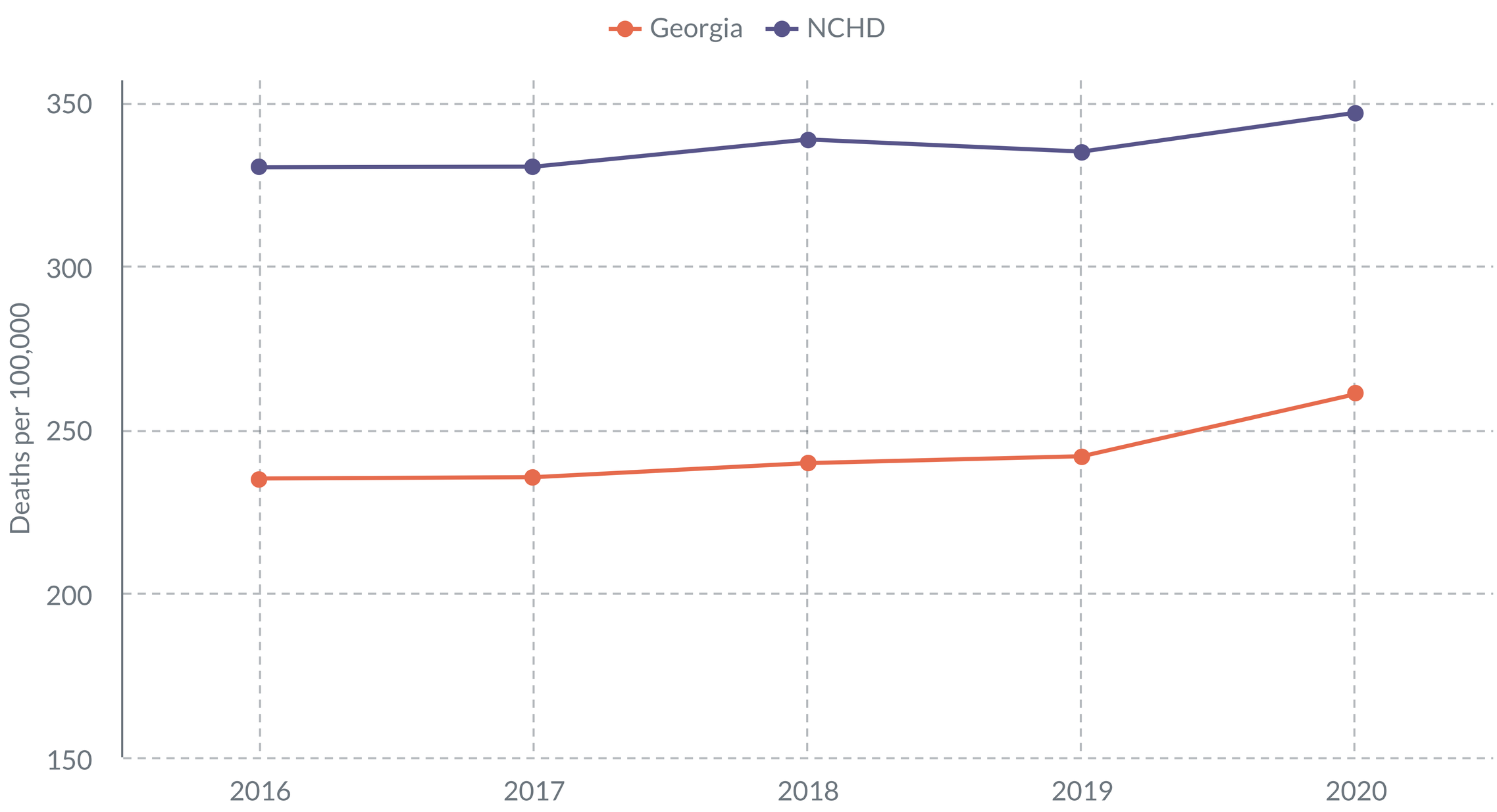
CVD Related Deaths By Type



Obstructive heart disease is the #1 ranking contributor to CVD related deaths with a rate of 83.3 per 100,000. The second highest ranking contributor are strokes at a rate of 45.2. Conditions such as rheumatic fever and heart disease, hardening of the arteries and aortic aneurysm and dissection have rates that show, they are much less associated with CVD related deaths.

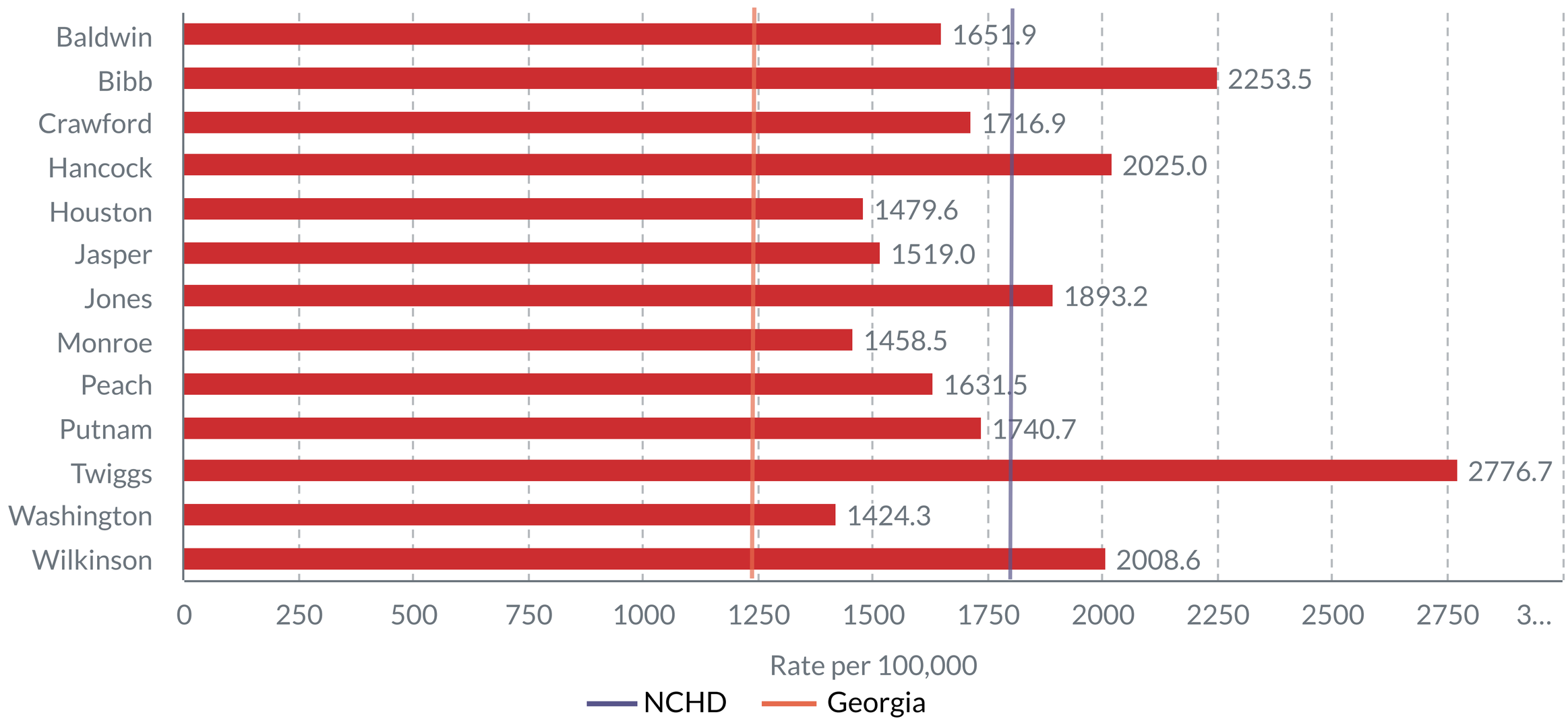
<5 signifies that there were only 1-4 events in a specific morbidity.

CVD Mortality NCHD vs. Georgia, 2016-2020



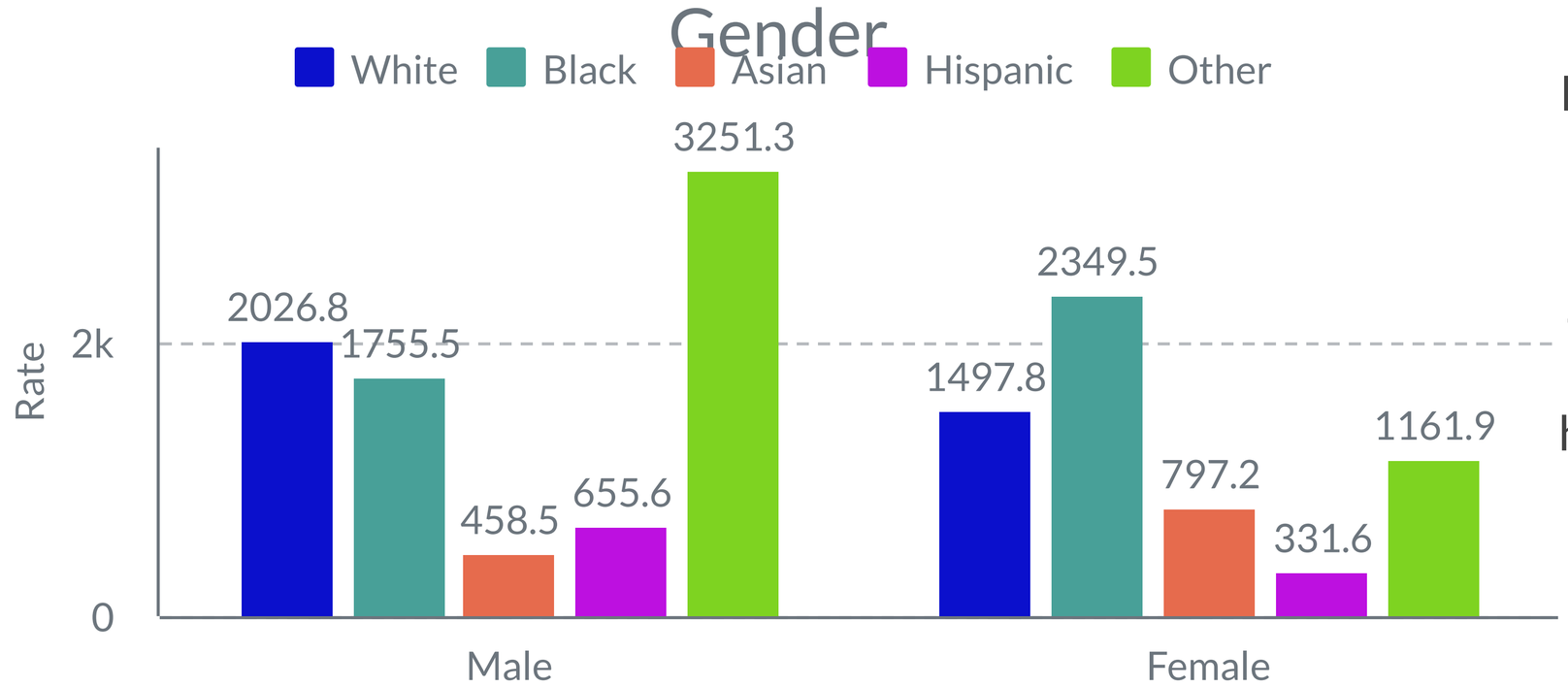
Between 2016-2020 the mortality rate associated with cardiovascular diseases was 242.7 per 100,000 population, with white males and white females having a higher risk than their counterparts.

CVD Hospitalization Rates



In NCHD the rate of hospitalizations related to Cardiovascular Disease was 1795.1 per 100,000, surpassing the state number of 1243.5 visits per 100,000. Twiggs County had the highest rate of 2776.7.

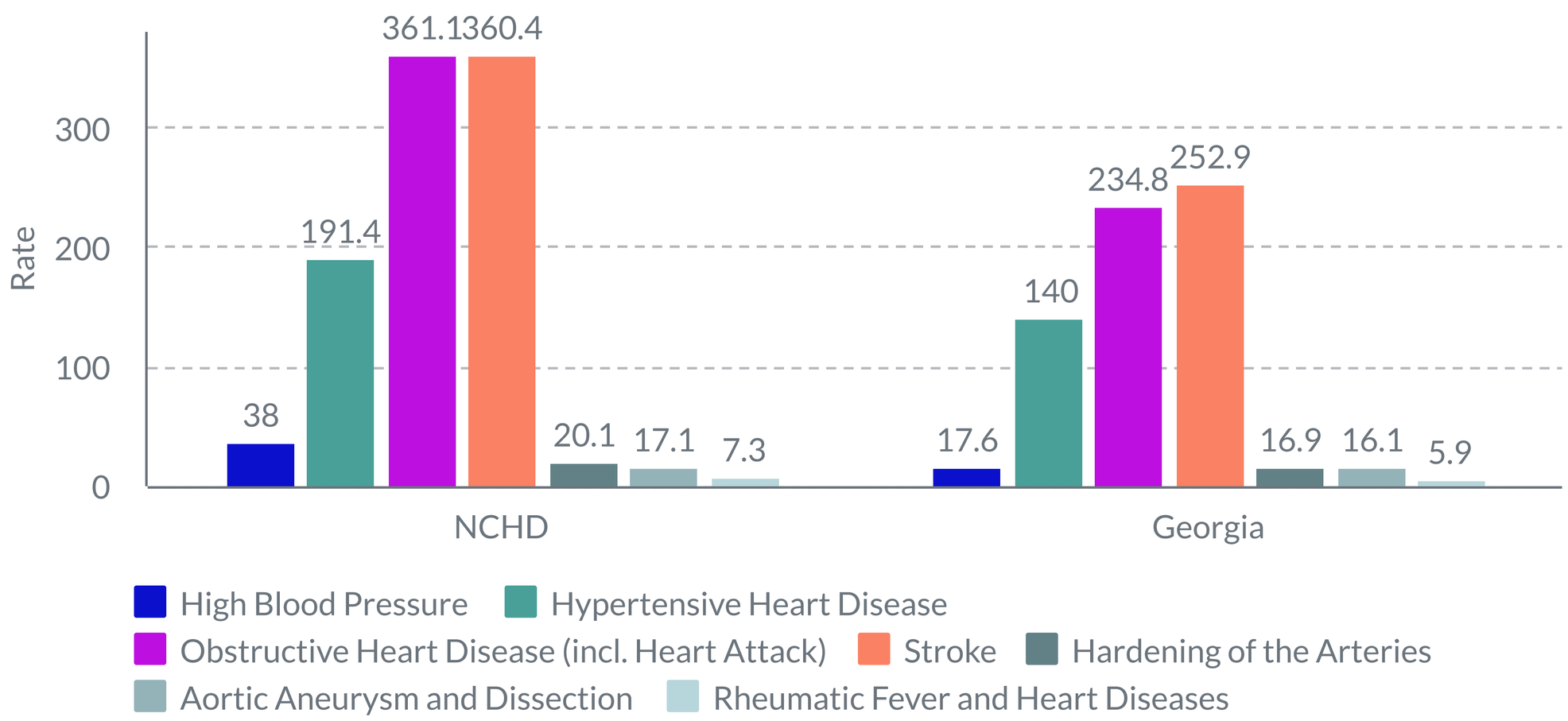
CVD Hospitalizations for NCHD by Race and Gender



In this graph, the category "other" includes American Indian or Alaska native, native Hawaiian or other pacific islander, multiracial and unknown.

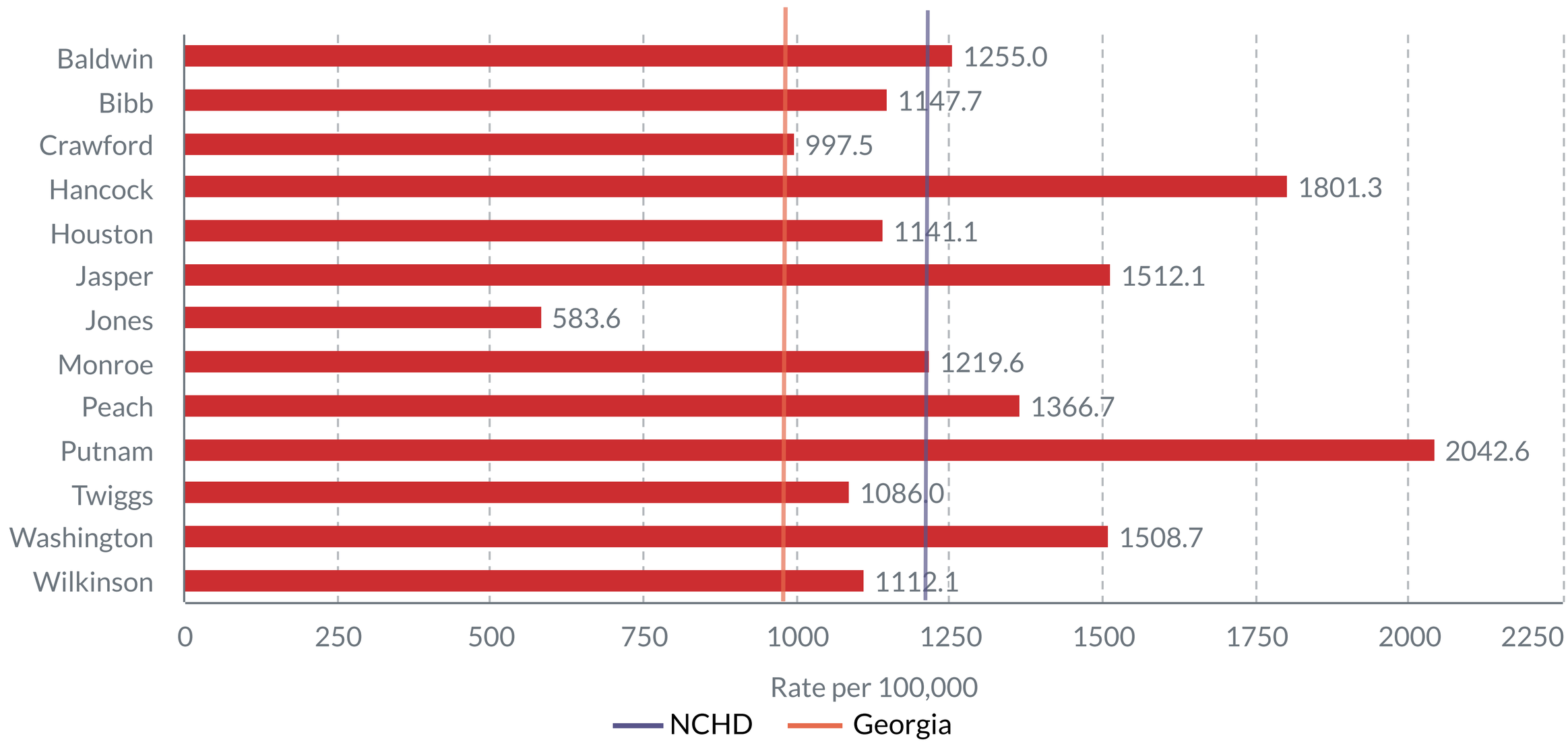
The males in category "other" had the highest rate of CVD hospitalizations within NCHD. Second highest for CVD hospitalization rate are black women.

CVD Related Hospitalizations By Type



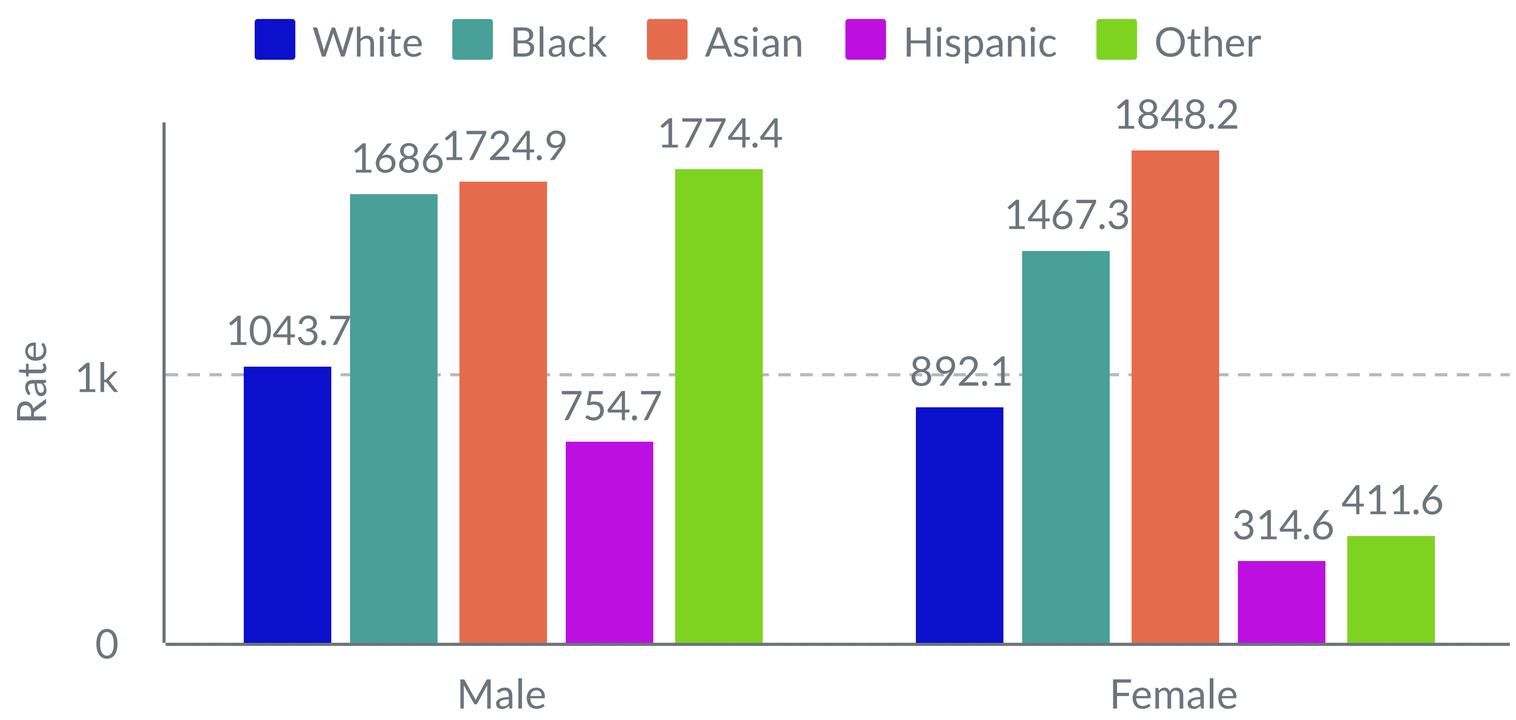
Obstructive heart disease and stroke were the highest conditions associated with CVD related hospitalizations at rates of 361.1 and 360.4 respectively per 100,000.

CVD ER Visit Rates



In NCHD the rate of ED visit rates related to Cardiovascular Disease was 1205.9 per 100,000, surpassing the state number of 989.9 visits per 100,000. Twiggs County had the highest rate of 2042.6.

CVD ER Visits for NCHD by Race and Gender

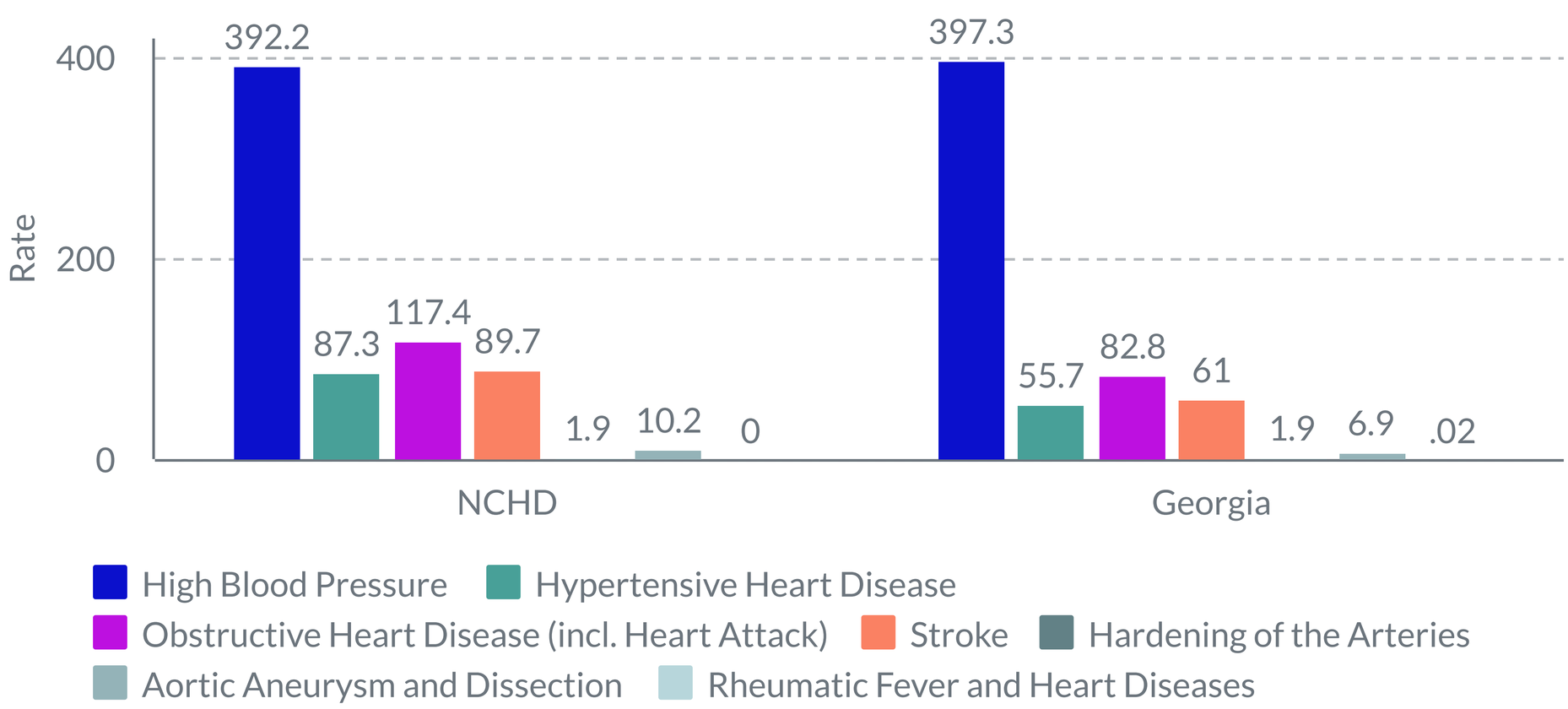


The rates across races and gender for CVD ER visits were all relatively high.

The races and genders with the lowest rates per 100, 000 were females in the other category and Hispanic males and females.

In this graph, the category "other" includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, Multiracial and Unknown.

CVD Related ER Visits By Type

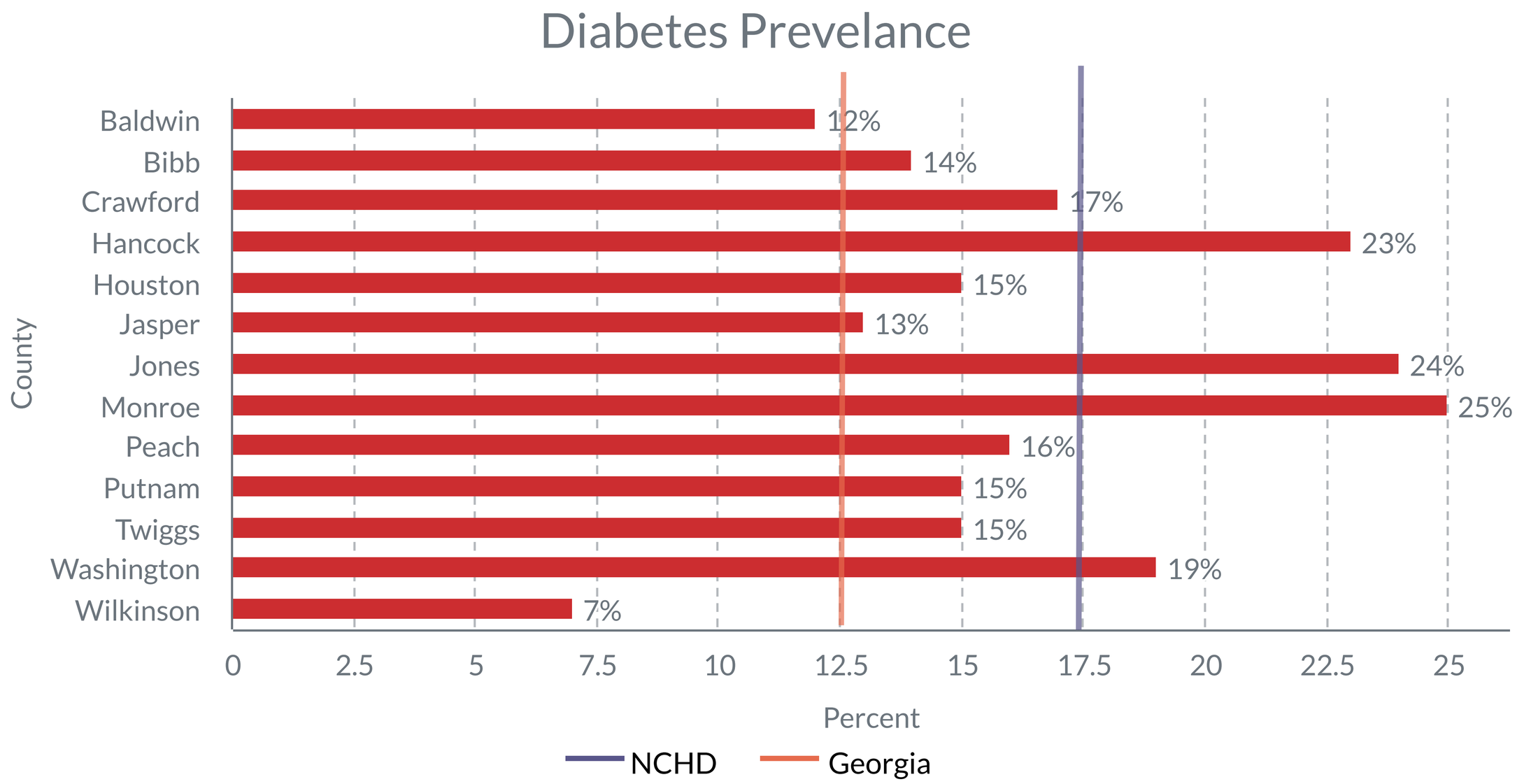


High blood pressure had the highest rate of 392.2 per 100,000 for CVD related ER visits.

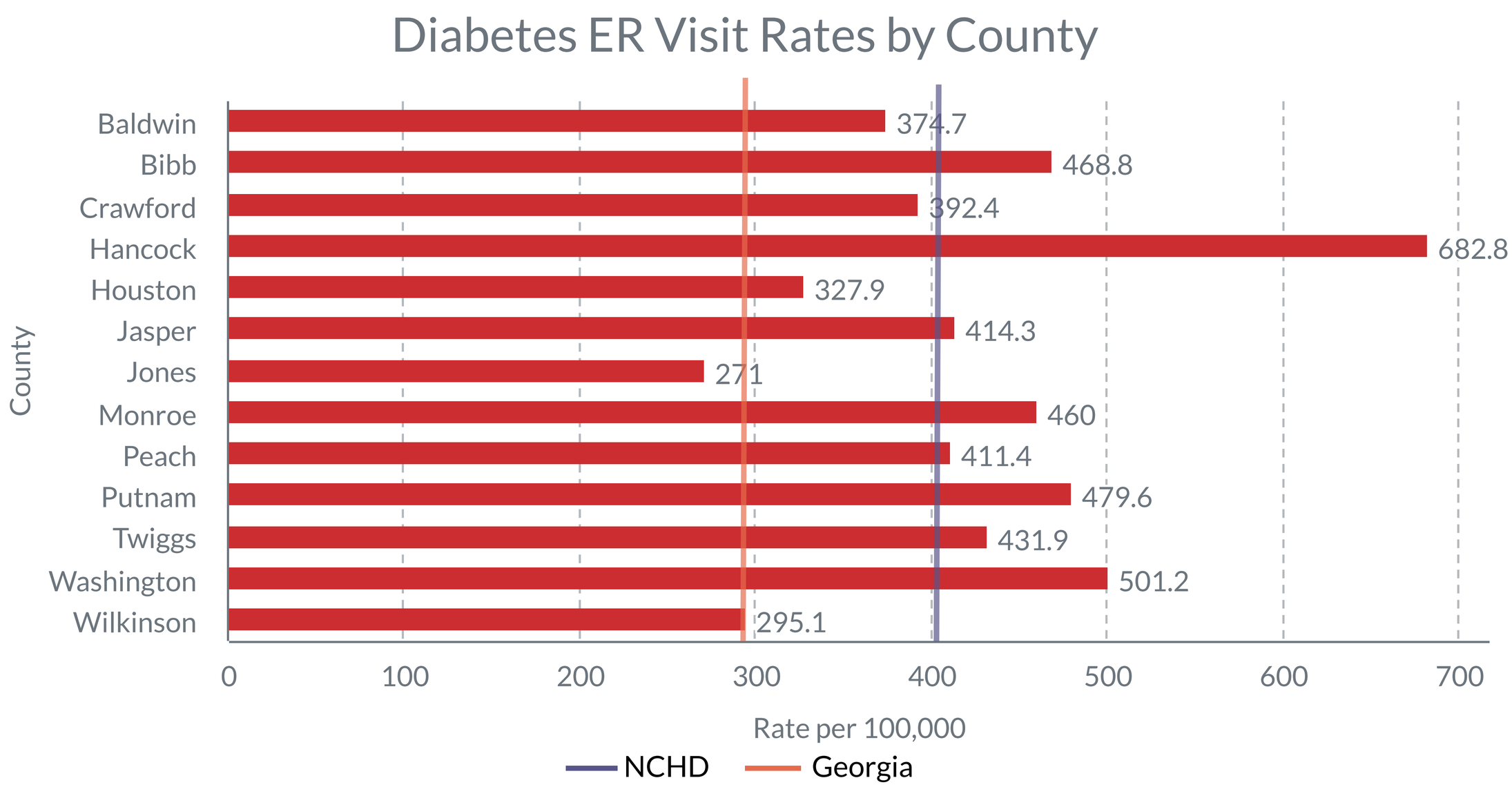
Rheumatic fever and Heart disease had a rate of 0 per 100,000 for CVD related ER visits

DIABETES

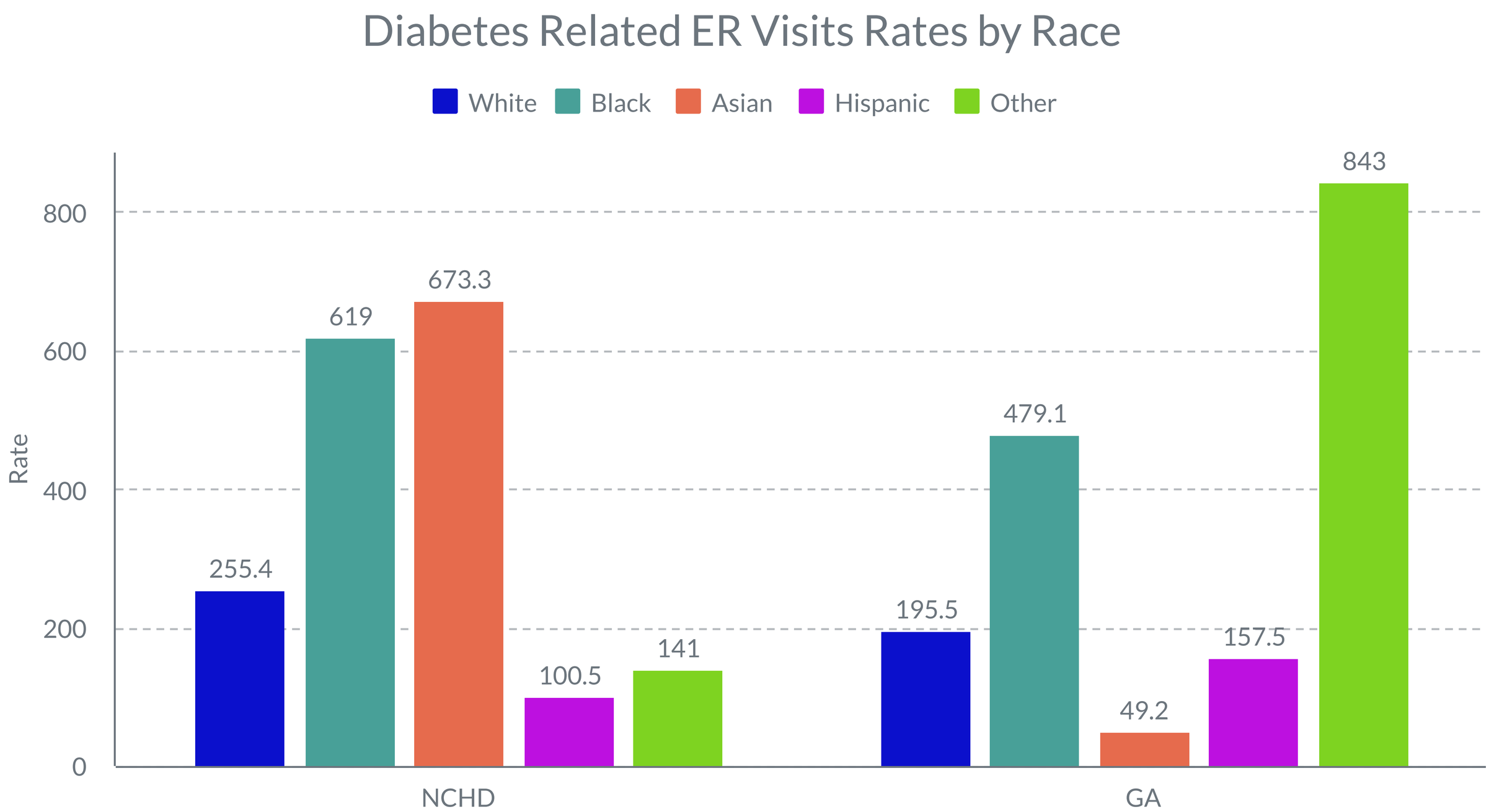
Diabetes mellitus is a disease characterized by high blood sugar levels. It is the result of the body's inability to produce and/or use insulin made by the pancreas. It can cause serious health complications including heart disease, blindness, kidney failure, and lower extremity amputations. Risk factors which contribute to the development of adult onset diabetes (type 2) include older age, obesity, genetics, history of pregnancy related diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity.



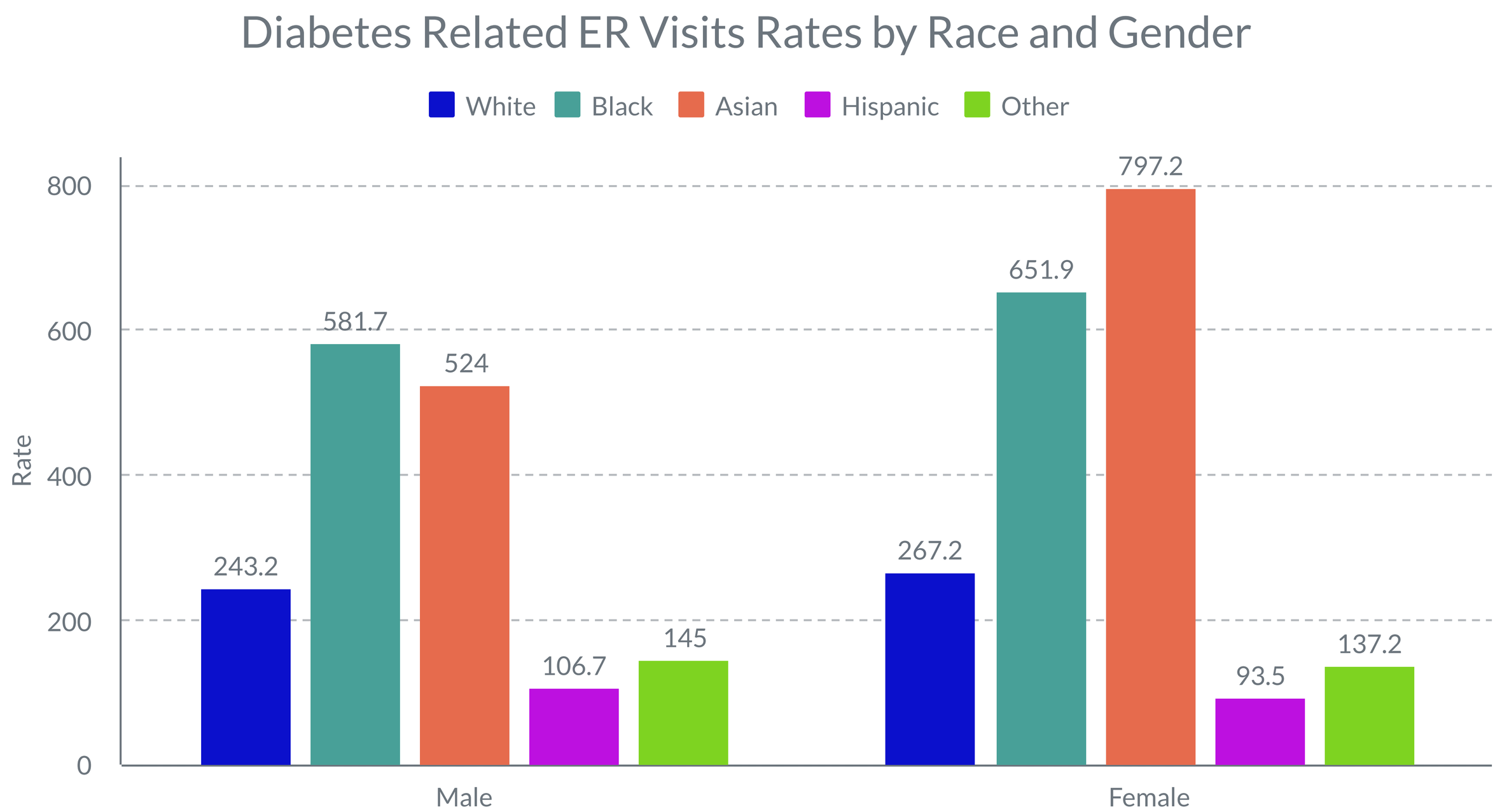
In NCHD diabetes prevalence percent was 17%, far surpassing the state prevalence of 12%. Wilkinson county was the only one in NCHD that had a rate lower than the state average.



In NCHD the rate of ED visits related to diabetes was 403.3 per 100,000, far surpassing the state number of 295.4 visits per 100,000. Jones county was the only one in NCHD that had a rate lower than the state average.



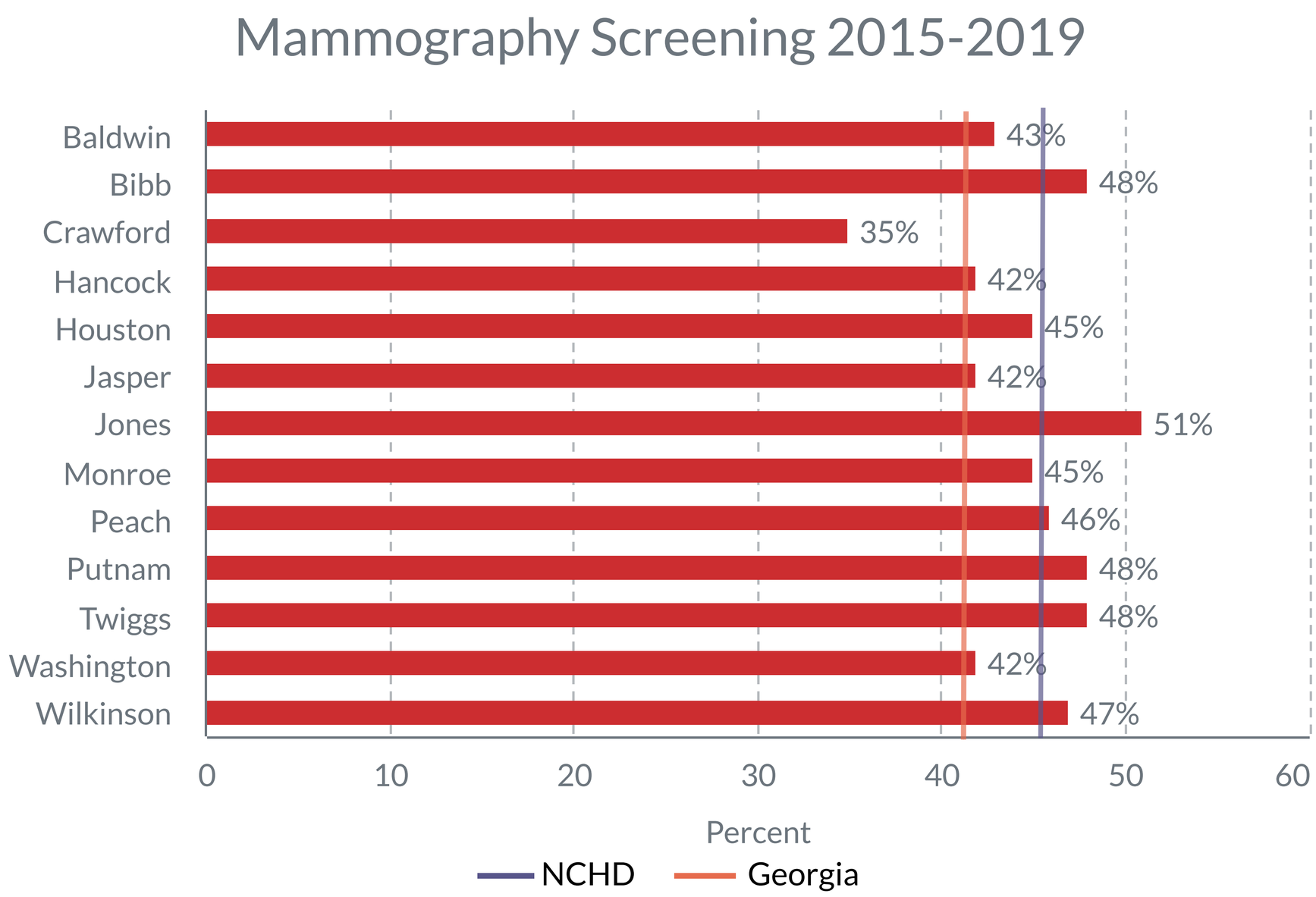
In NCHD ED visits were highest among the Asian (673.3 visits per 100,000) and black (619 visits per 100,000) communities. State wide the Black community also has a high rate of ED visits second to those who fall into the other race category.
The other category is made up of those who are of American Indian or Alaska Native, Native Hawaiian or Pacific Islander and Multiracial.



The highest overall ER visit rate are among Asian women in NCHD, second highest are black women. In the male category black men had the highest visit rate.

CANCER

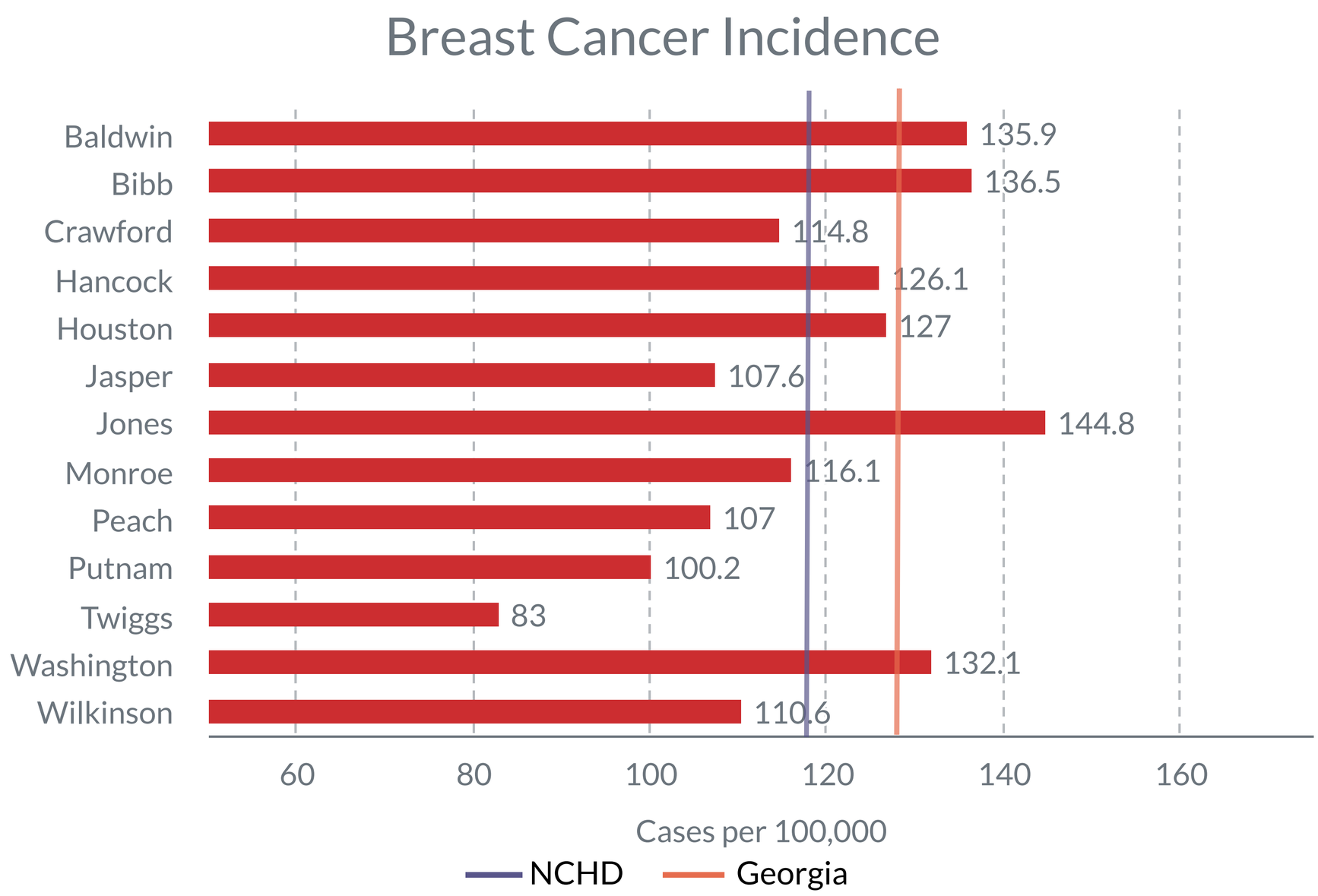
Cancer is a disease in which cells divide abnormally without control and can invade adjacent tissues. The cells can also metastasize and spread to other parts of the body through the blood and lymphatic system. Nearly 2/3 of cancer deaths are associated with behavioral factors such as tobacco use, diet, obesity, and lack of physical activity.



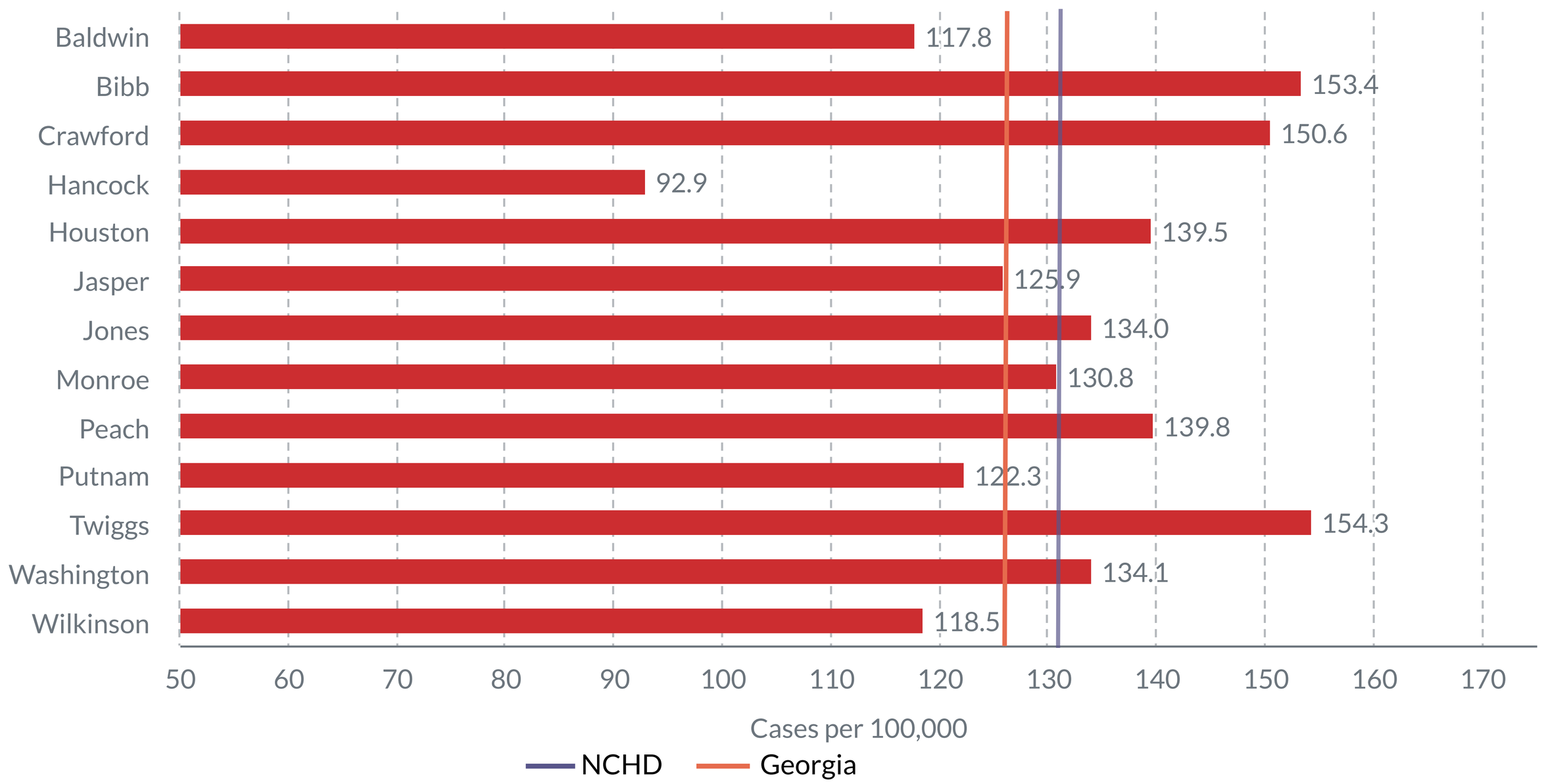
45% of eligible women in NCHD received mammography screening from 2015-2019, compared to 41% of women in Georgia during the same time period.

Crawford county has the lowest percentage of eligible women receiving mammograms within the district.

The rate of Breast Cancer per 100,000 for the district is 118.6. Jones County had the highest Breast Cancer rate with 144.8 which is higher than the district rate as well as the state rate of 128.4. Washington, Jones, Bibb and Baldwin counties all have a higher incidence rate than both the state and district average.

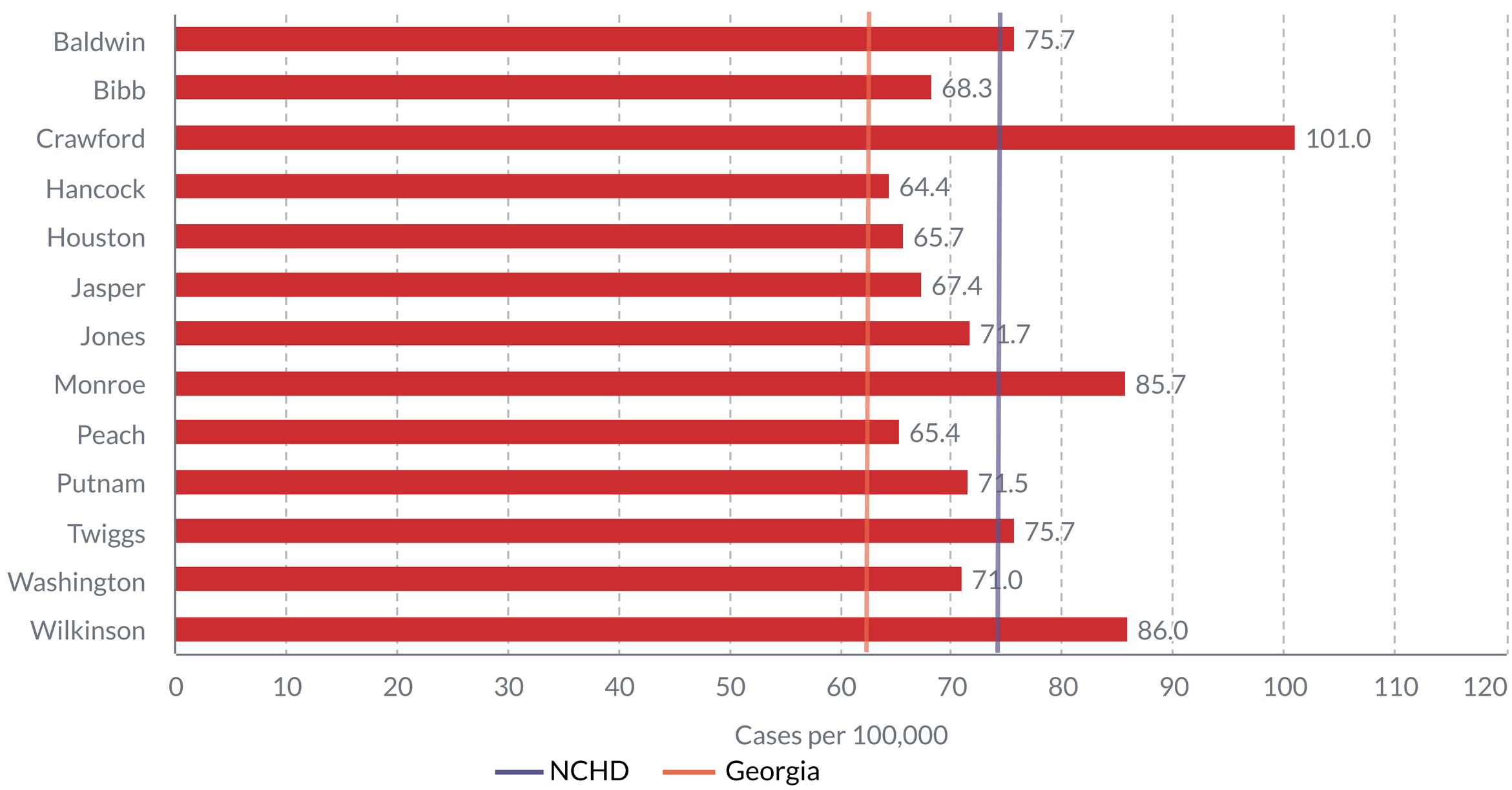


Prostate Cancer Incidence

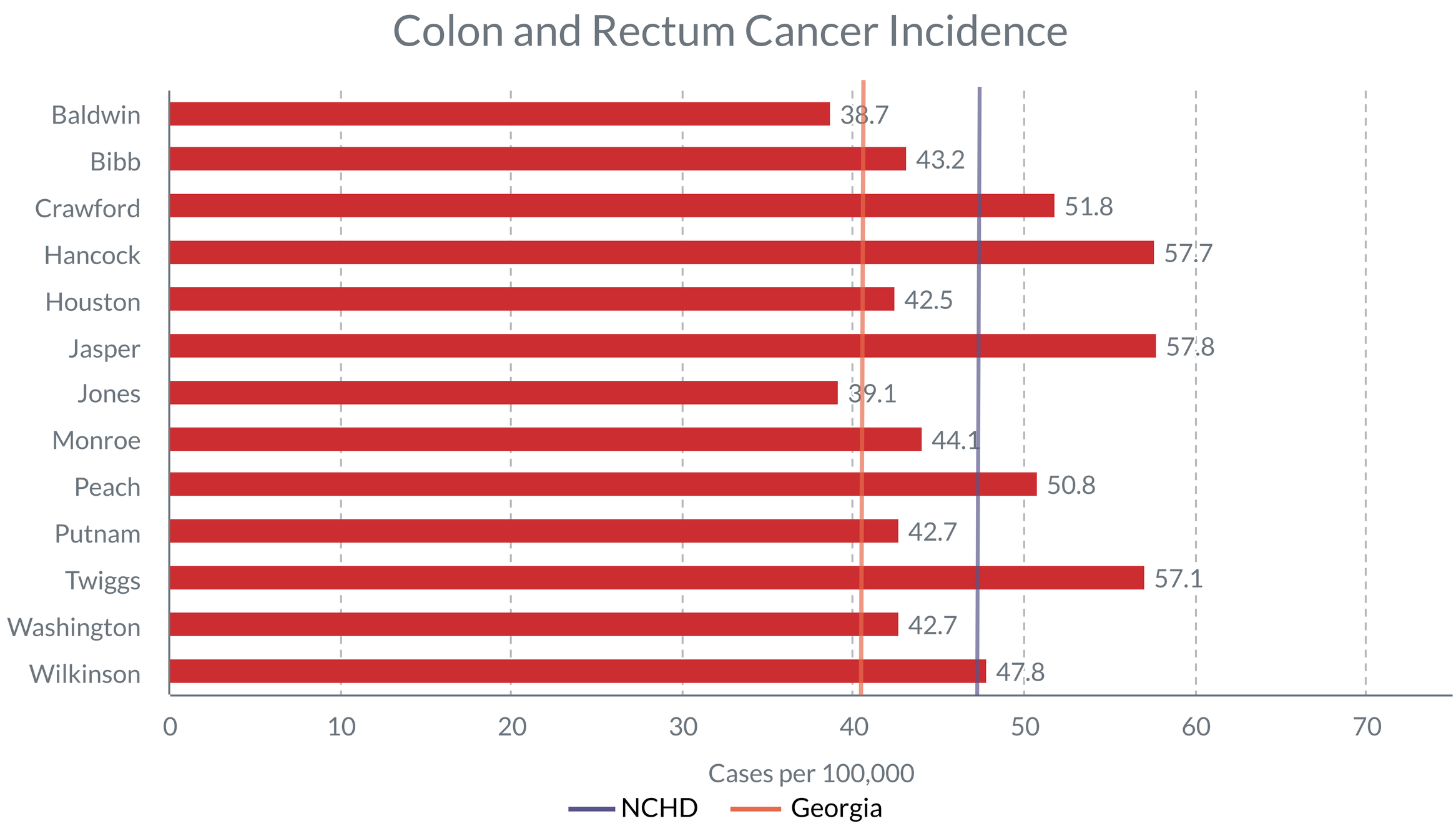


The rate of Prostate Cancer per 100,000 for the district is 131.8. Twiggs County had the highest Prostate Cancer rate with 154.3 which is higher than the district rate as well as the state average of 126.6. The only counties under the state rate were Hancock, Jasper, Putnam and Wilkinson.

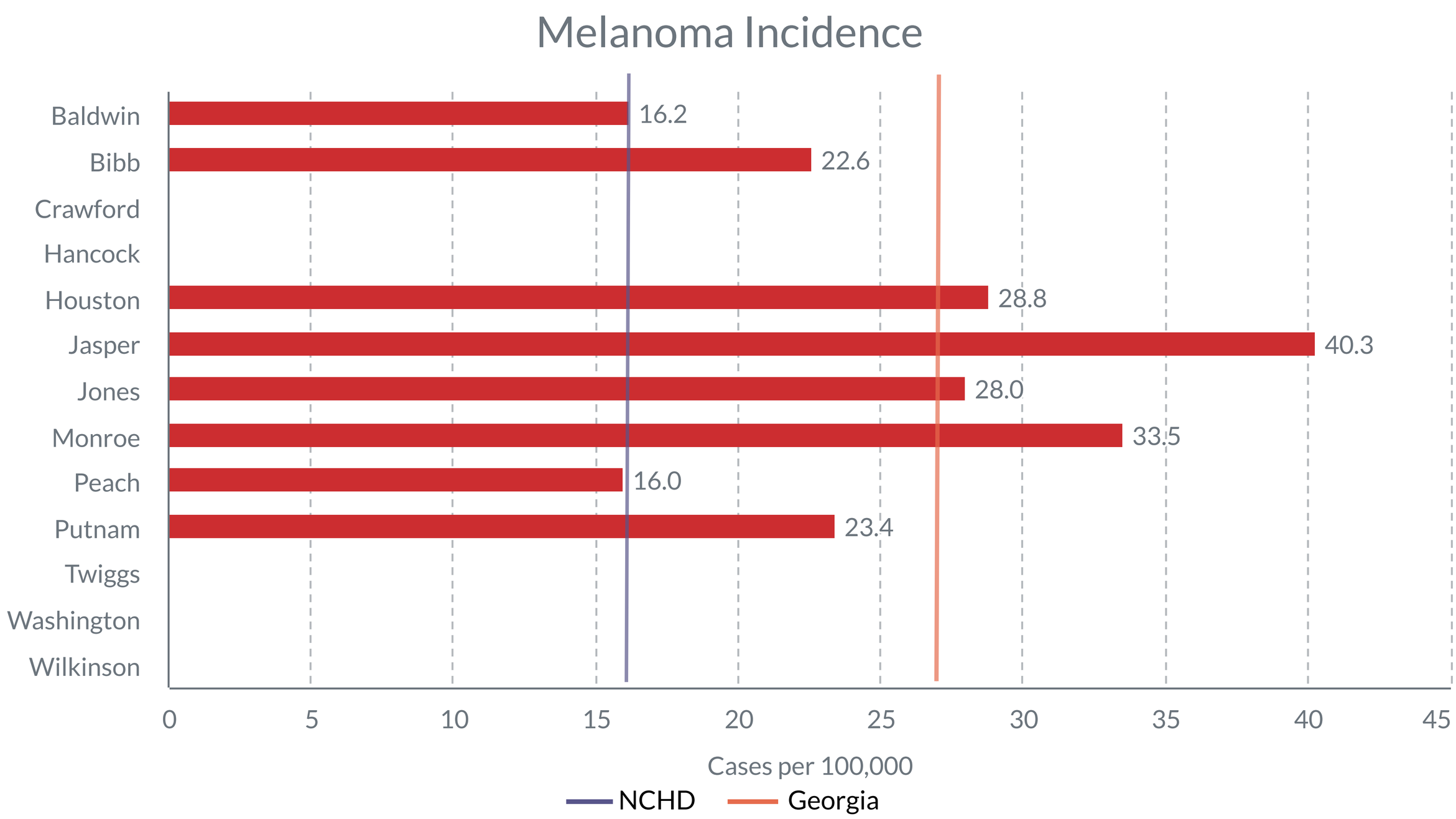
Lung and Bronchus Cancer Incidence



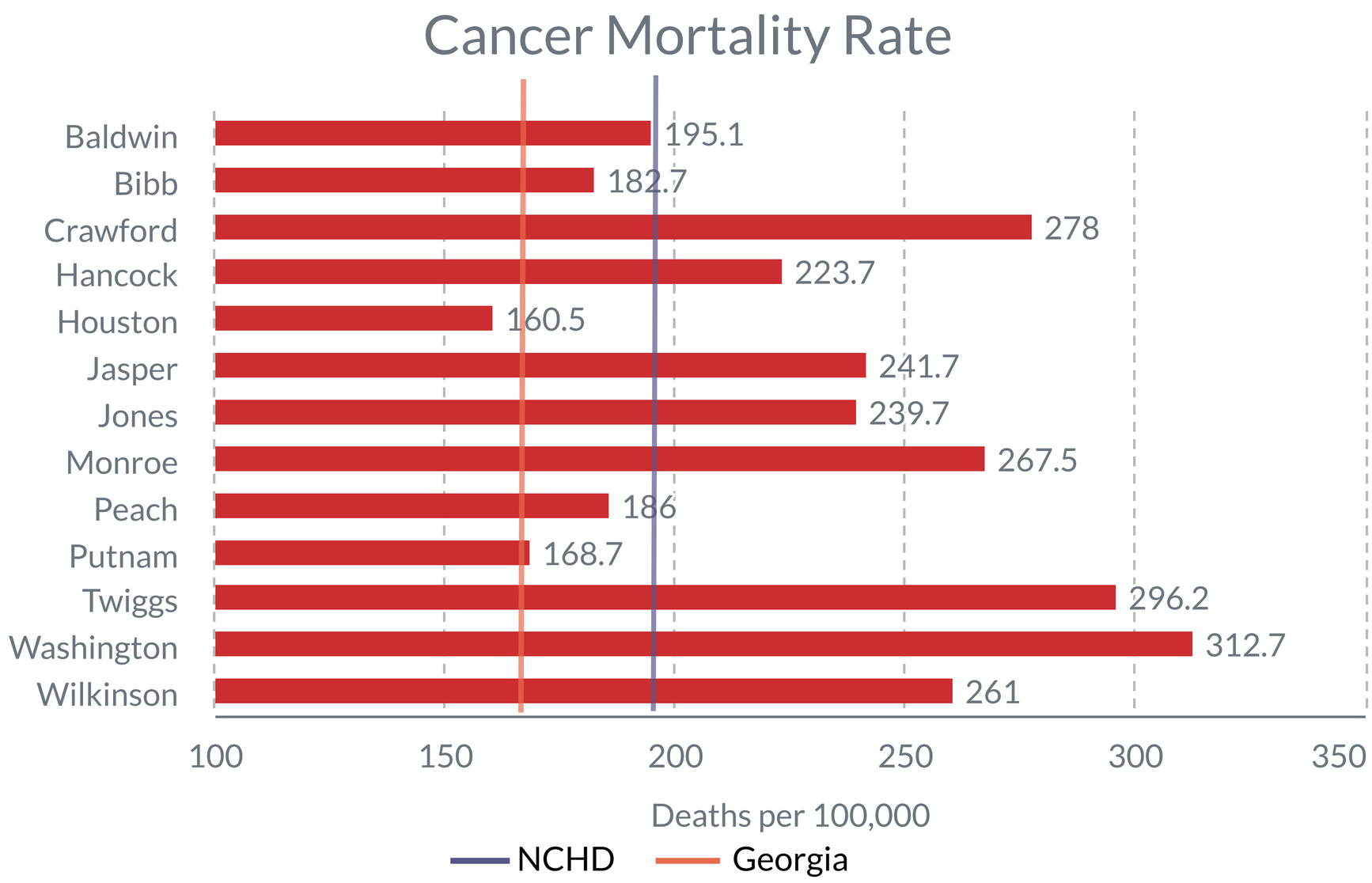
The rate of Lung and Bronchus Cancer per 100,000 for the district is 74.6. Crawford County had the highest Lung and Bronchus Cancer rate with 101.0 which is higher than the District average as well as the State average of 61.3. Crawford, Monroe and Wilkinson counties all have a much higher incidence rate than both the state and district average.



The rate of Colon and Rectum Cancer per 100,000 for the district is 47.4. Jasper County had the highest Colon and Rectum Cancer rate with 57.8 which is higher than the district average as well as the state average of 40.9 . All counties were higher than the state average besides Baldwin and Jones.



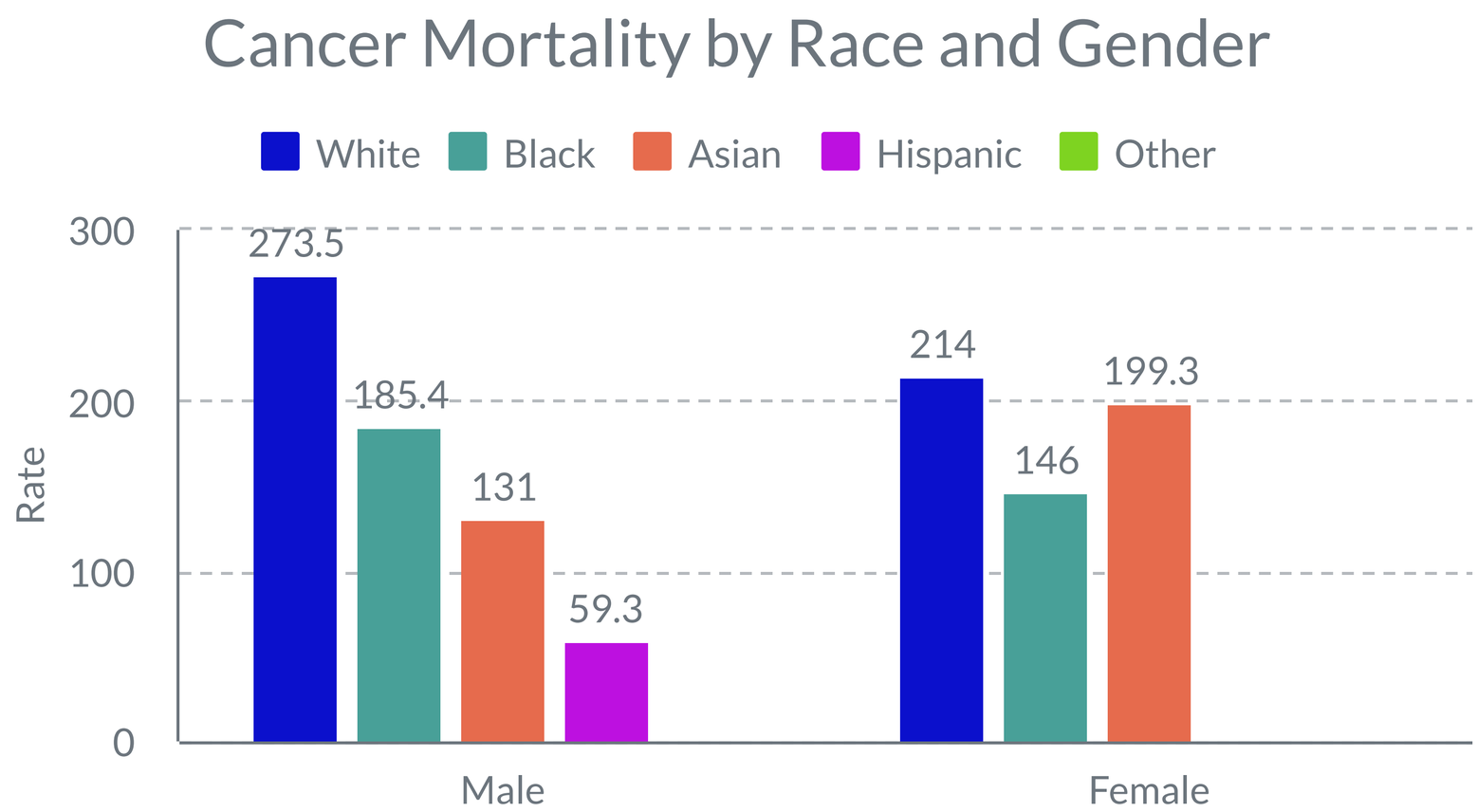
The County with the highest rate of Melanoma incidence is Jasper with 40.3 per 100,000. Monroe County followed with a rate of 33.5 per 100,000. Counties with no rates shown are due to less than 4 events recorded in the County. The average incidence rate for NCHD is 16 per 100,000, for the state 26.8 per 100,000.

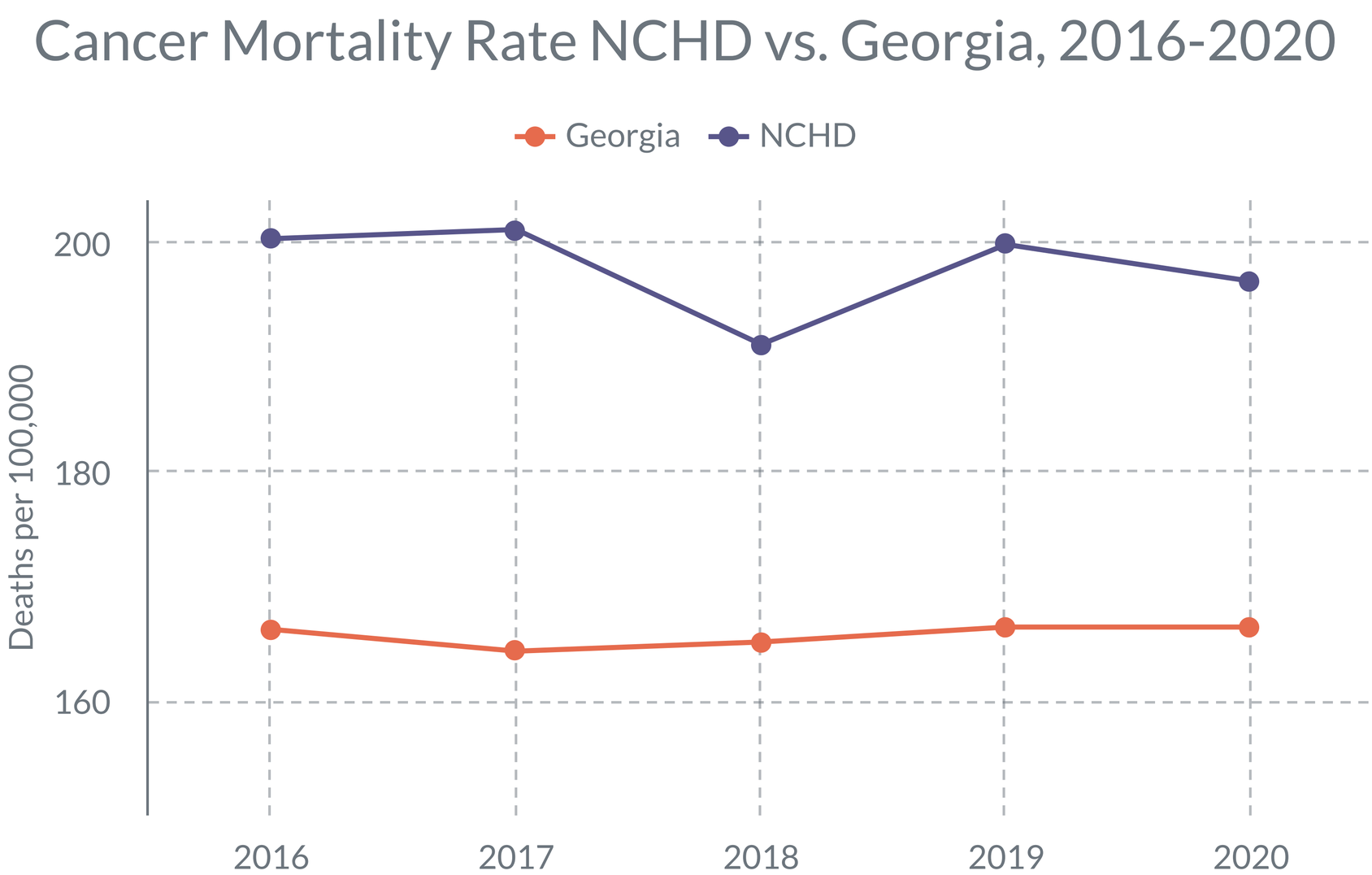


The cancer mortality rate for the district is 196.5 and the state rate is 166.4 per 100,000 population.

Washington County has the highest cancer mortality rate with 312.7 in the district, with Crawford, Hancock, Jasper, Jones, Monroe, Twiggs, and Wilkinson all having higher rates than the district average.

The cancer mortality rate for the district was highest among White Non-Hispanic Males; 273.5 and White Non-Hispanic Females; 214. ** The Other race category and Female Hispanic category had less than 5 cases per 100,000 and are not shown.



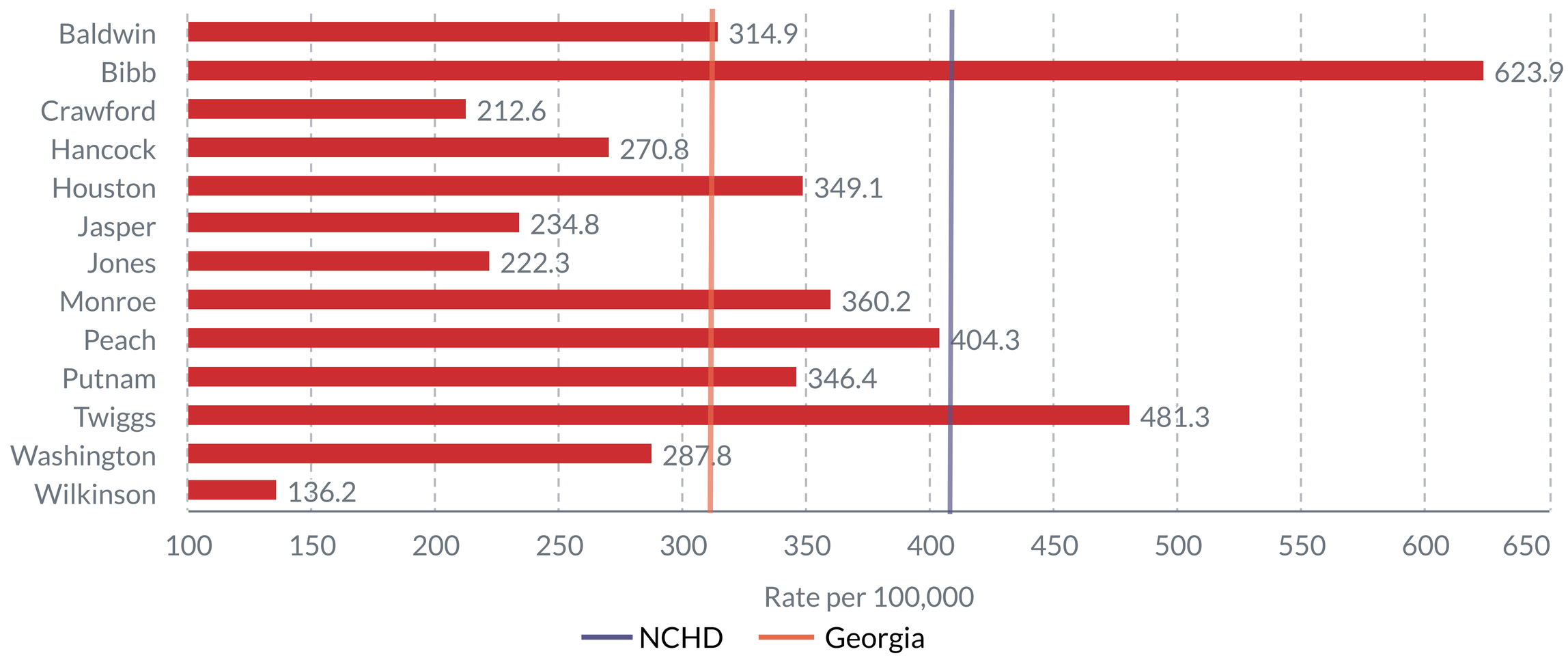


The mortality rate associated with cancer from 2016-2020 for NCHD was 196.5 per 100,000 population, with white males and white females having a higher risk than their counterparts.

ASTHMA

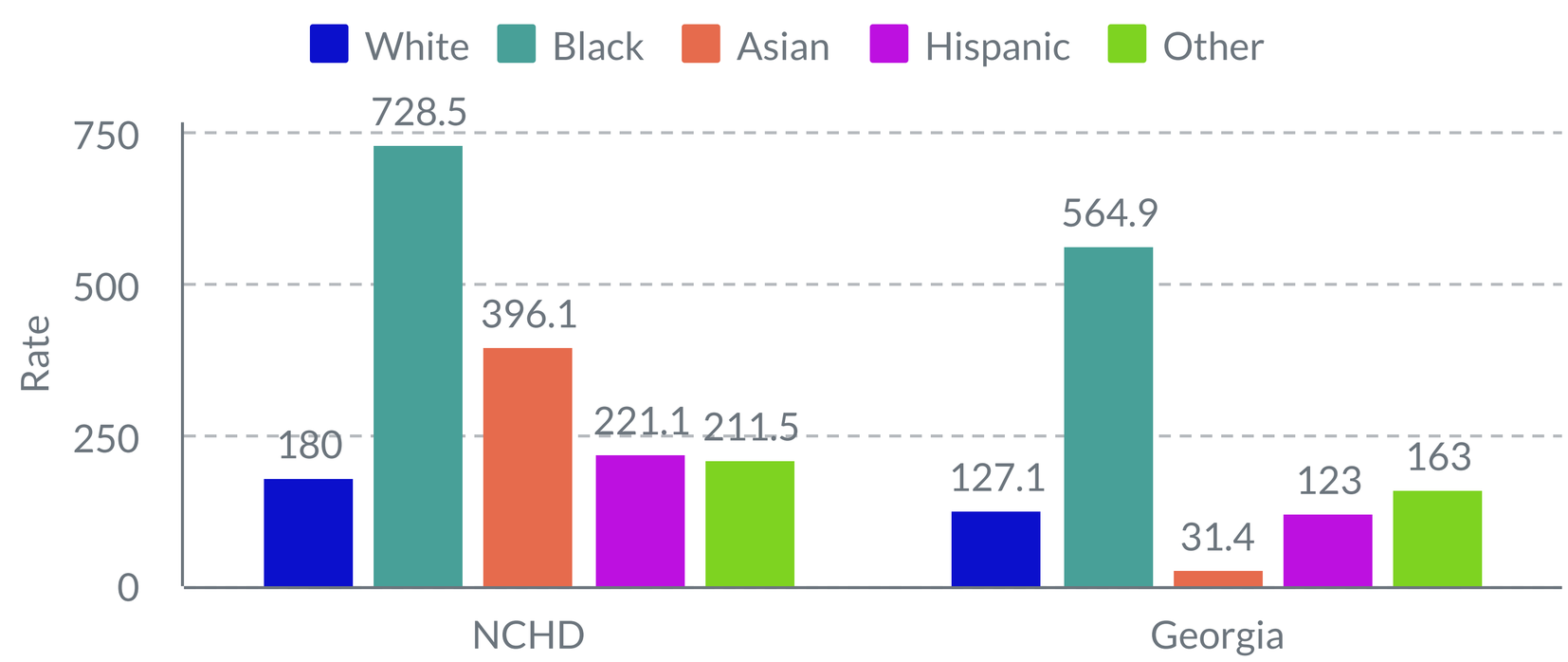
Asthma is a chronic respiratory disease that affects the lungs. It causes recurring incidents of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthma can be controlled by medication and by staying away from environmental triggers that can cause an attack. Common asthma triggers include tobacco smoke, dust mites, pollution, cockroaches, pets, and mold.

Asthma Related ER Visit Rates

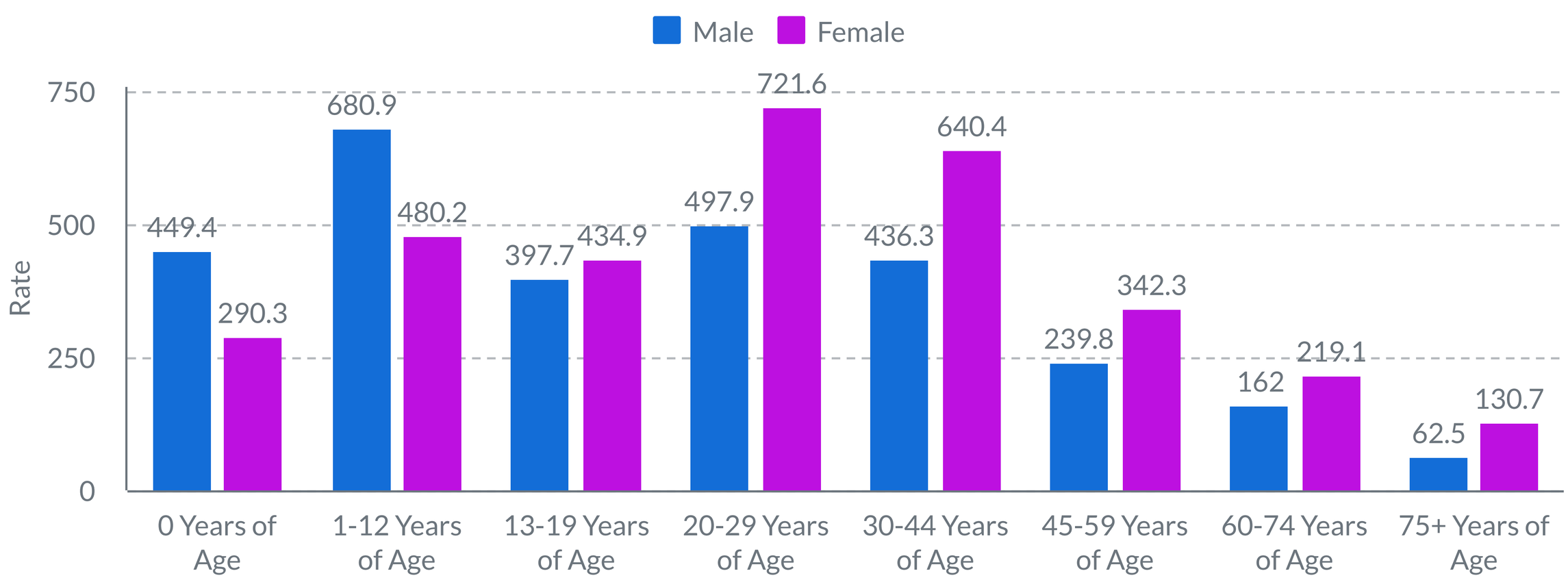


Asthma Related ER Visits Rates by Race

Asthma related ER visits occur at the highest rate in Bibb County when compared to the state. Females in early adulthood (20-29 years) have the highest rates, with the black community having higher rates of asthma ER visits than compared to all other races.



Asthma Related ER Visits Rates by Age Groups and Gender

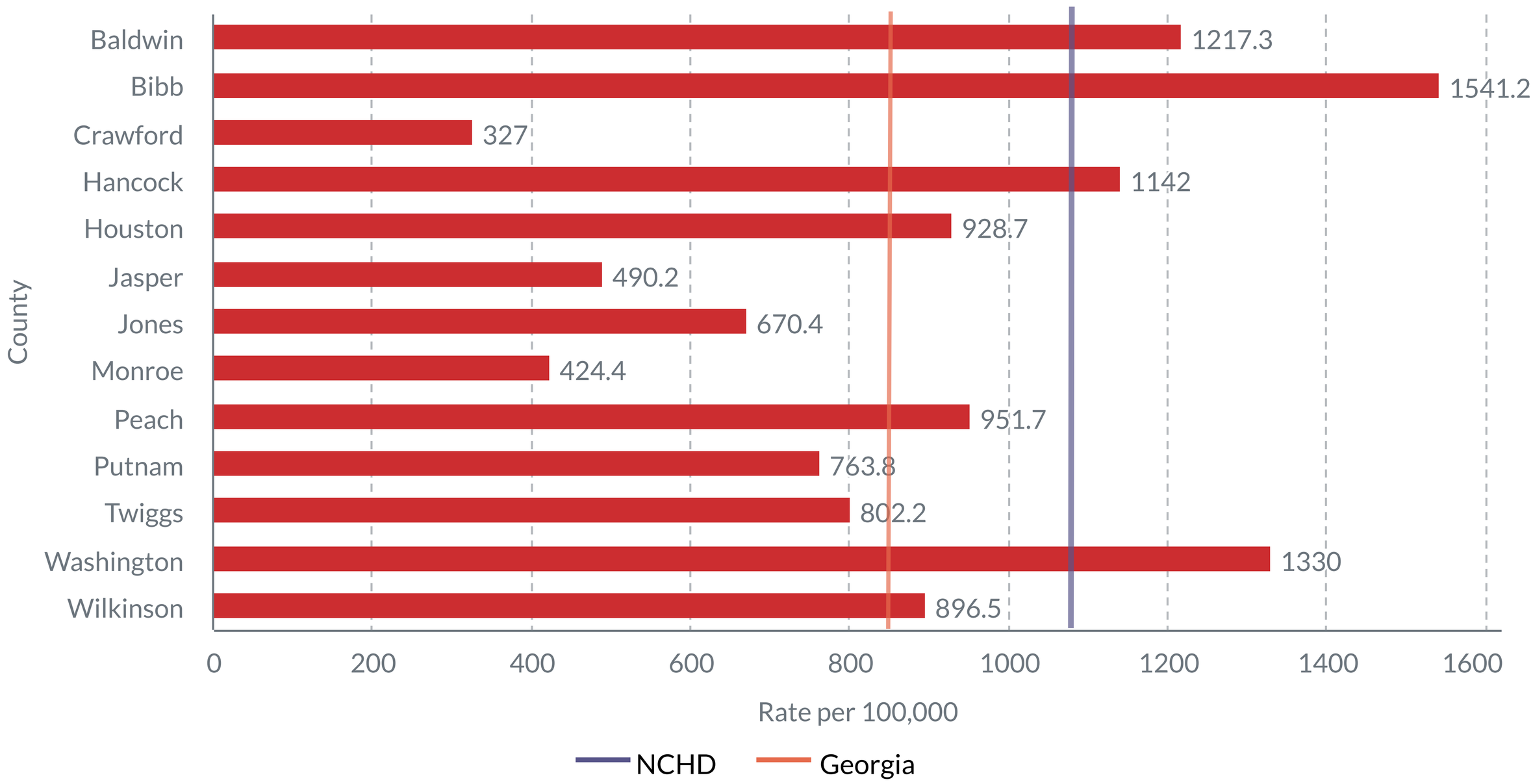


Infectious Disease

SEXUALLY TRANSMITTED DISEASE

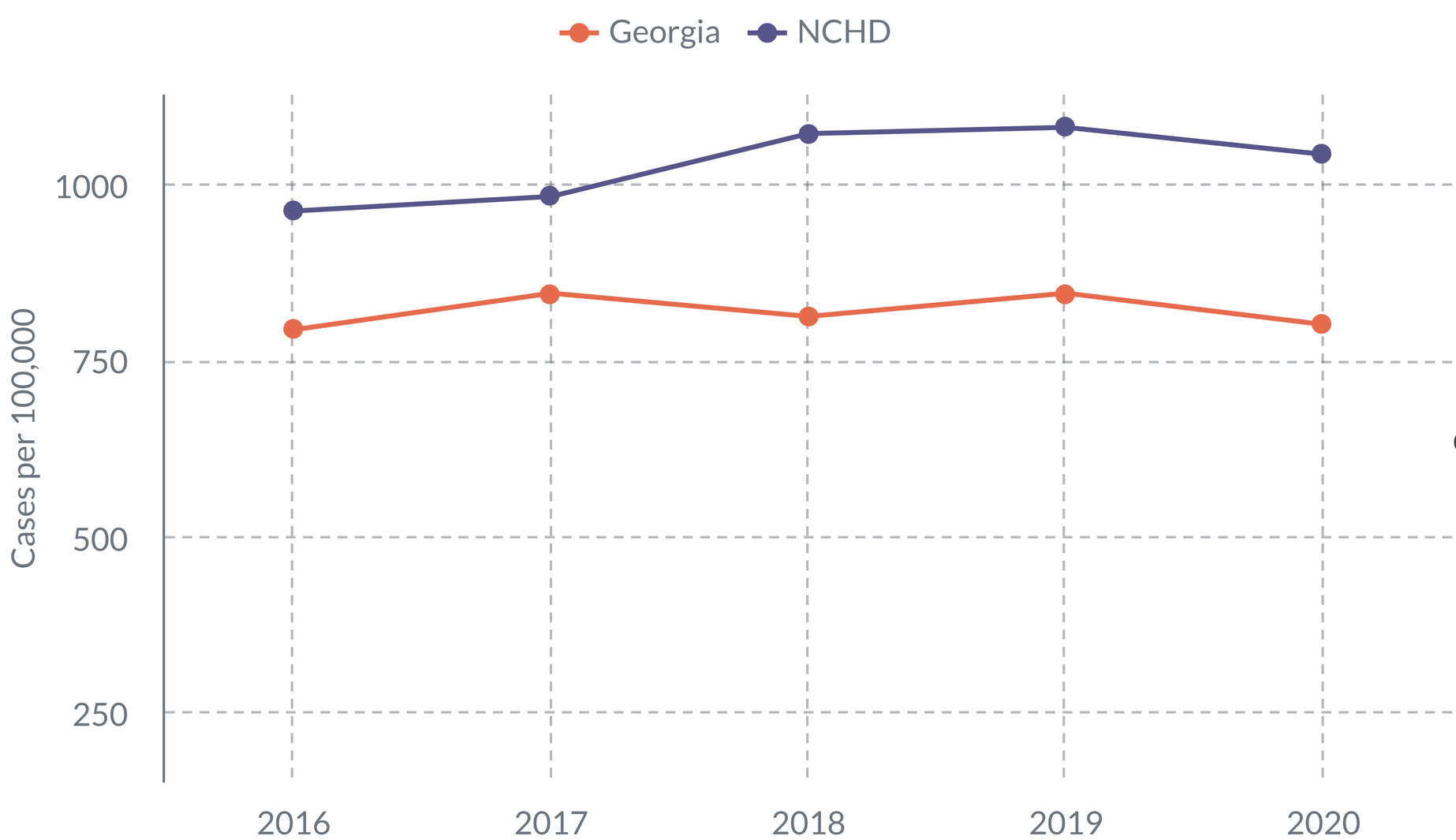
CDC estimates indicate about 20 percent of the U.S. population – approximately one in five people in the U.S. – had a sexually transmitted disease (STD) on any given day in 2018, and STDs acquired that year will cost the American healthcare system nearly $16 billion in healthcare costs alone.

STD Rates by County



The district rate per 100,000 for sexually transmitted disease is 1027.9 compared to 819.3 per 100,000 in the entire state. Baldwin, Bibb, Hancock, and Washington Counties have STD rates higher than that of the district. Bibb County has the highest STD rate in the district with a rate of 1541.2.

STD Prevalence Rate NCHD vs. Georgia, 2016-2020

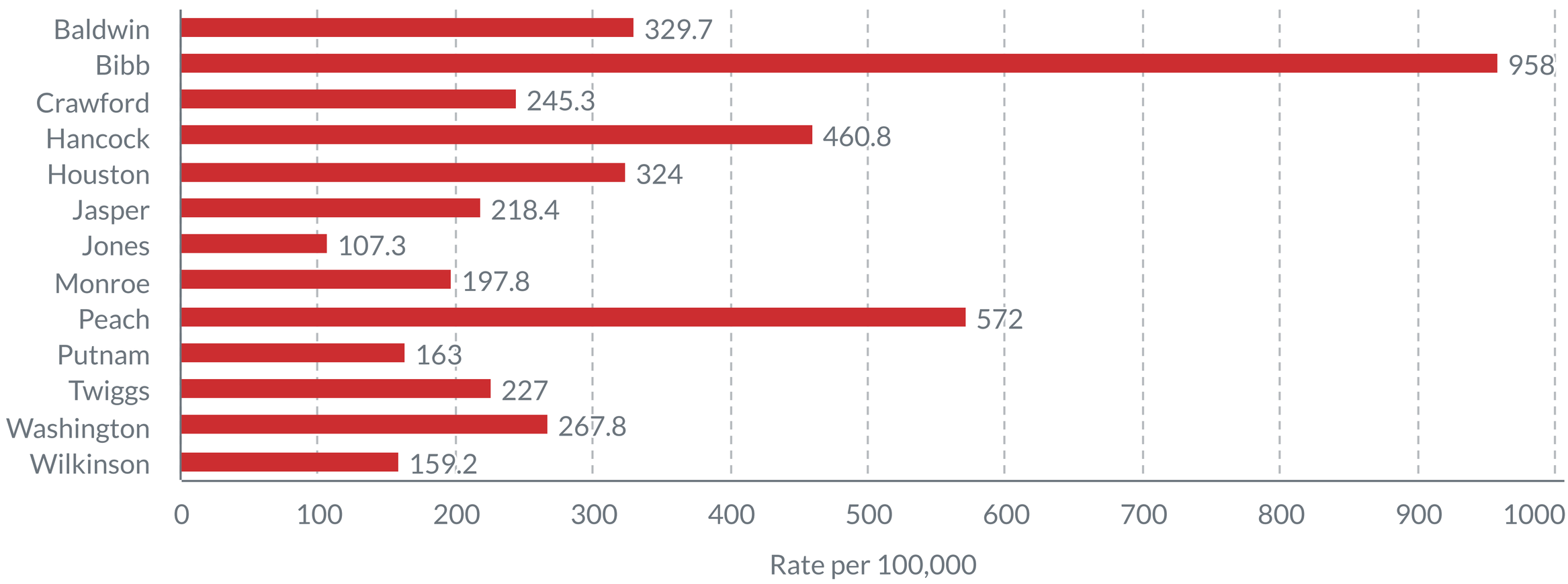


From 2016-2020 NCHD had an STD rate of 1027.92 per 100,000 compared to the state rate of 819.

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

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). There is no cure but with treatment HIV can be controlled. HIV Prevalence is the rate of diagnosed cases of HIV for people aged 13 years and older in a county per 100,000 population.

2019 HIV Prevalence Rates by County

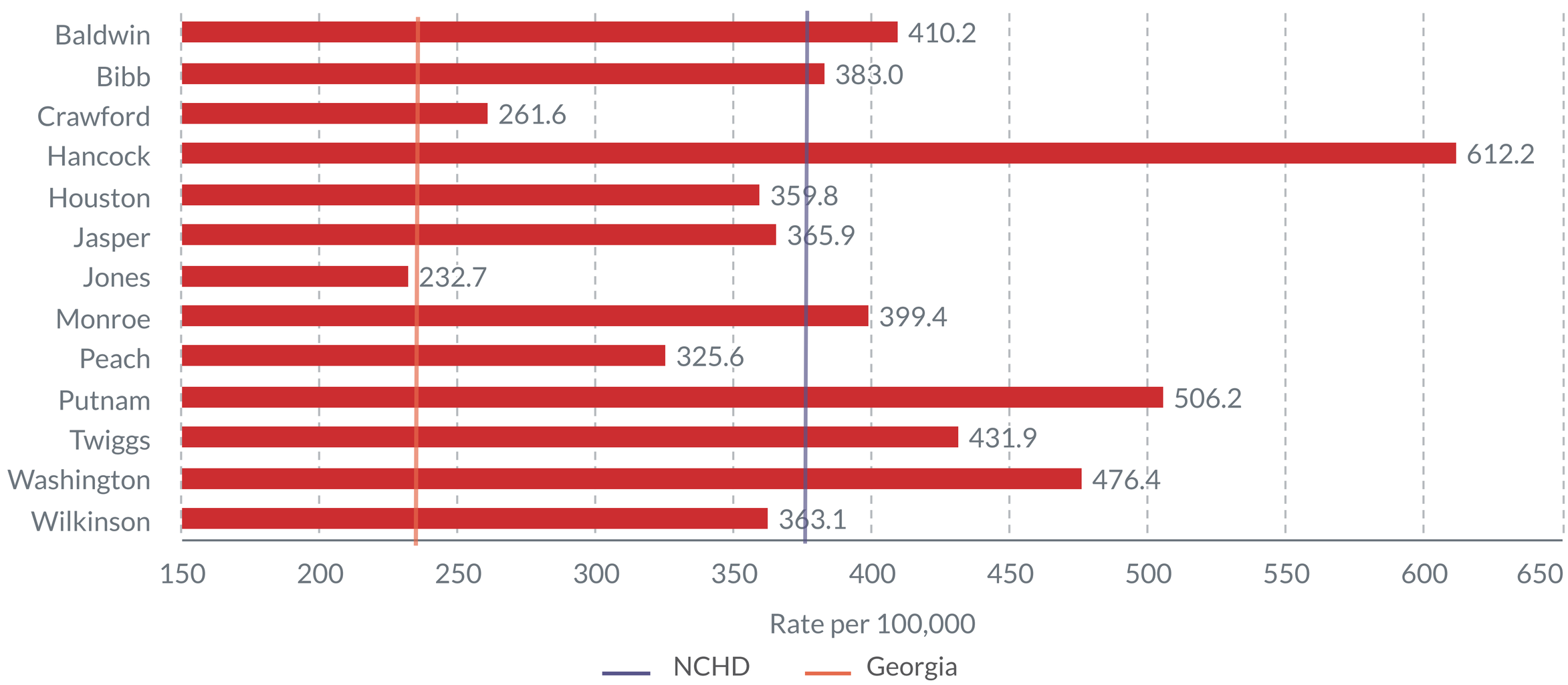


In 2019 the HIV prevalence rate in Georgia was 315.7 per 100,000 population. In NCHD the HIV prevalence rate is highest in Bibb county (958) and lowest in Jones county (107).

RESPIRATORY ILLNESS

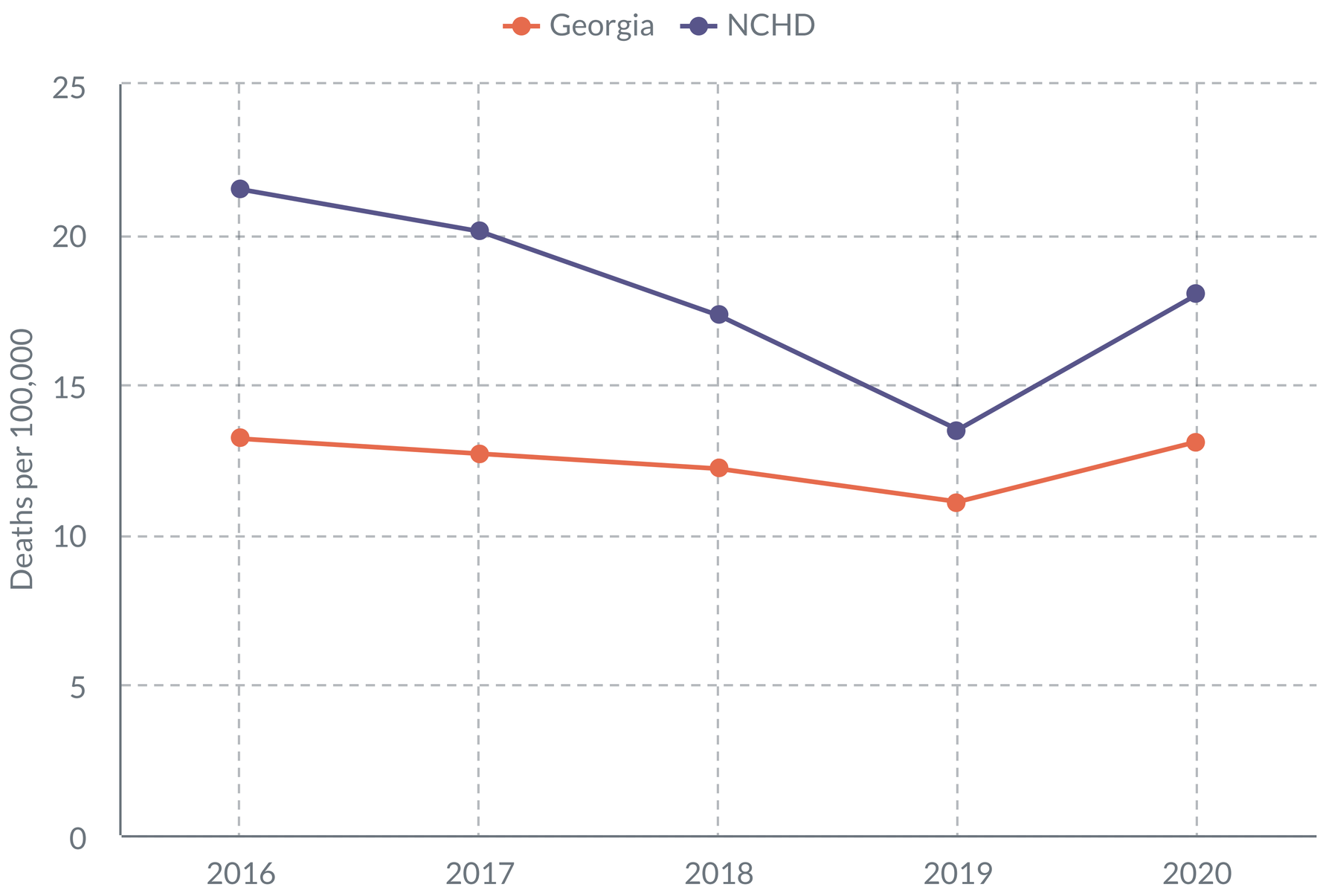
Pneumonia is an infection of the lungs that can cause mild to severe illness in people of all ages and is caused by bacteria or viruses and chemical agents. Globally, pneumonia causes more deaths than any other infectious disease. There are vaccines available that prevent pneumonia.

Pneumonia Related ER Visit Rates



The ER visit rate per 100,000 due to pneumonia for NCHD is 377.7. Of the individual Counties with available data, Hancock County had the highest ER visit rate with 612.2, while Jones County has the lowest ,with 232.7. The state average is 234.

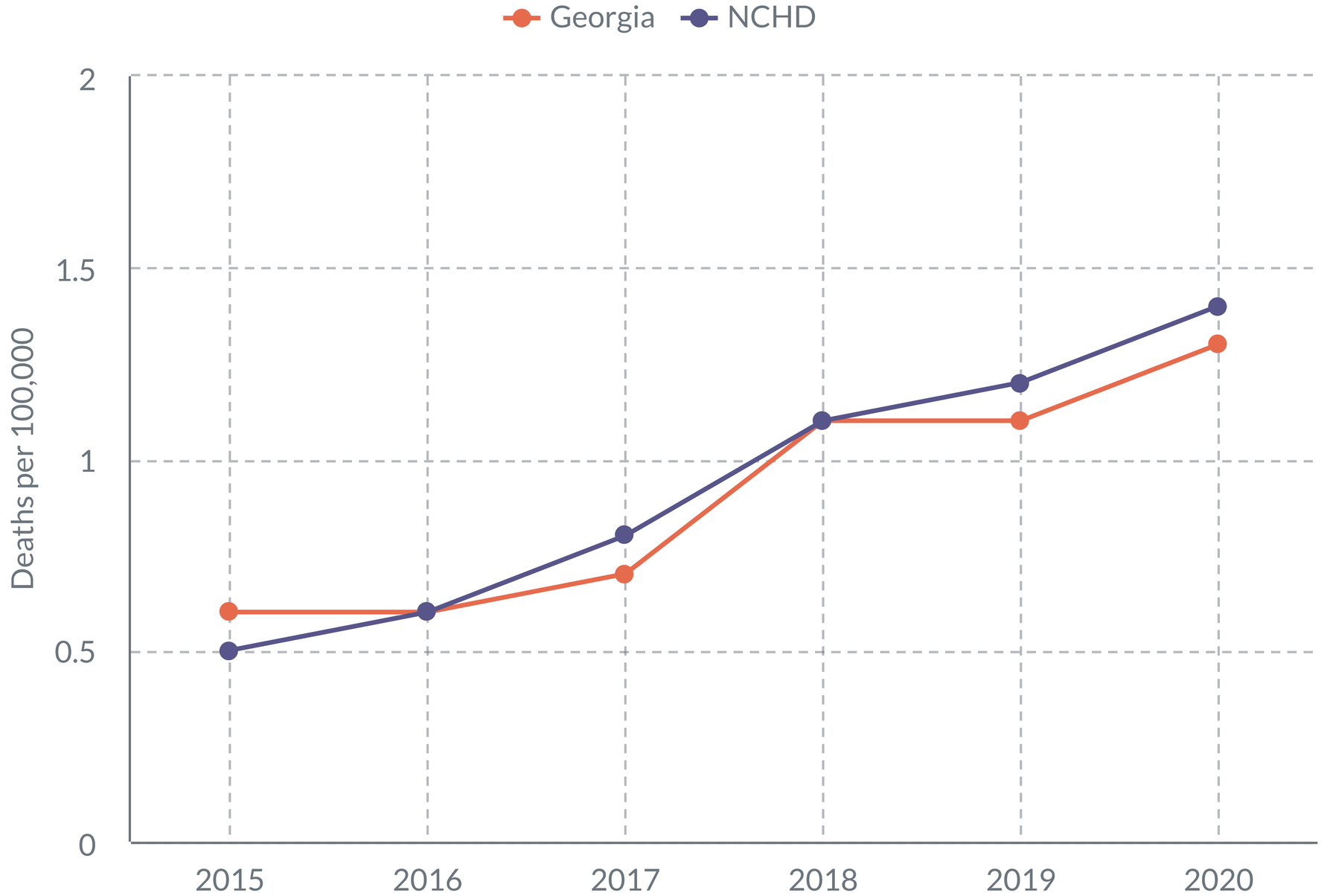
Deaths Due to Pneumonia NCHD vs. Georgia, 2016-2020



From 2016-2020 the deaths related to pneumonia is at a slightly higher rate in NCHD (18 per 100,000) than the state of GA during the same time period (12.5).

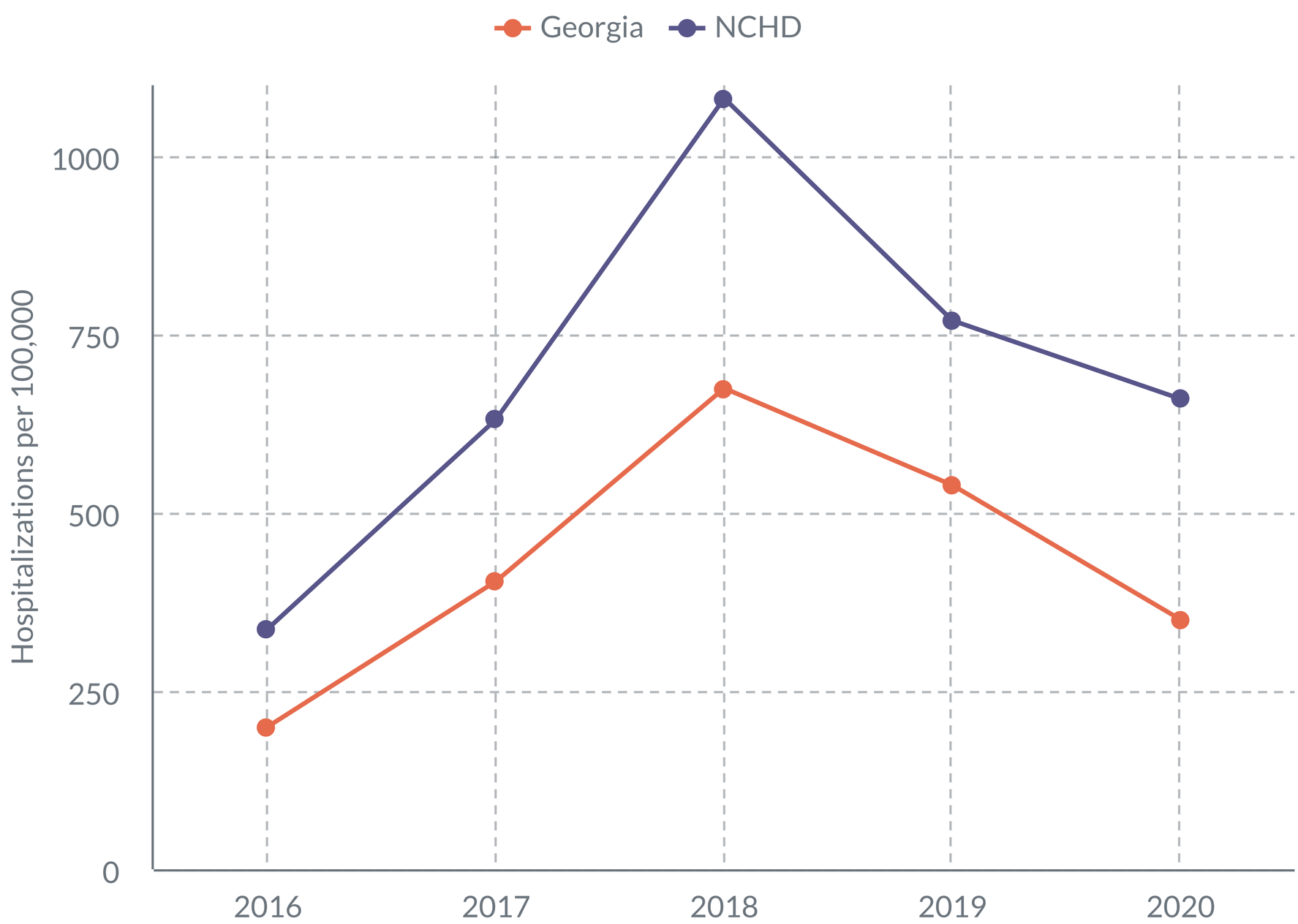
Influenza (flu) is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs. Some people, such as older people, young children, and people with certain health conditions, are at higher risk of serious flu complications. The influenza A and B viruses that routinely spread in people (human influenza viruses) are responsible for seasonal flu epidemics each year. The best way to reduce the risk of flu and its potentially serious complications is by getting vaccinated each year.

Influenza Death Rate NCHD vs. Georgia, 2011-2020



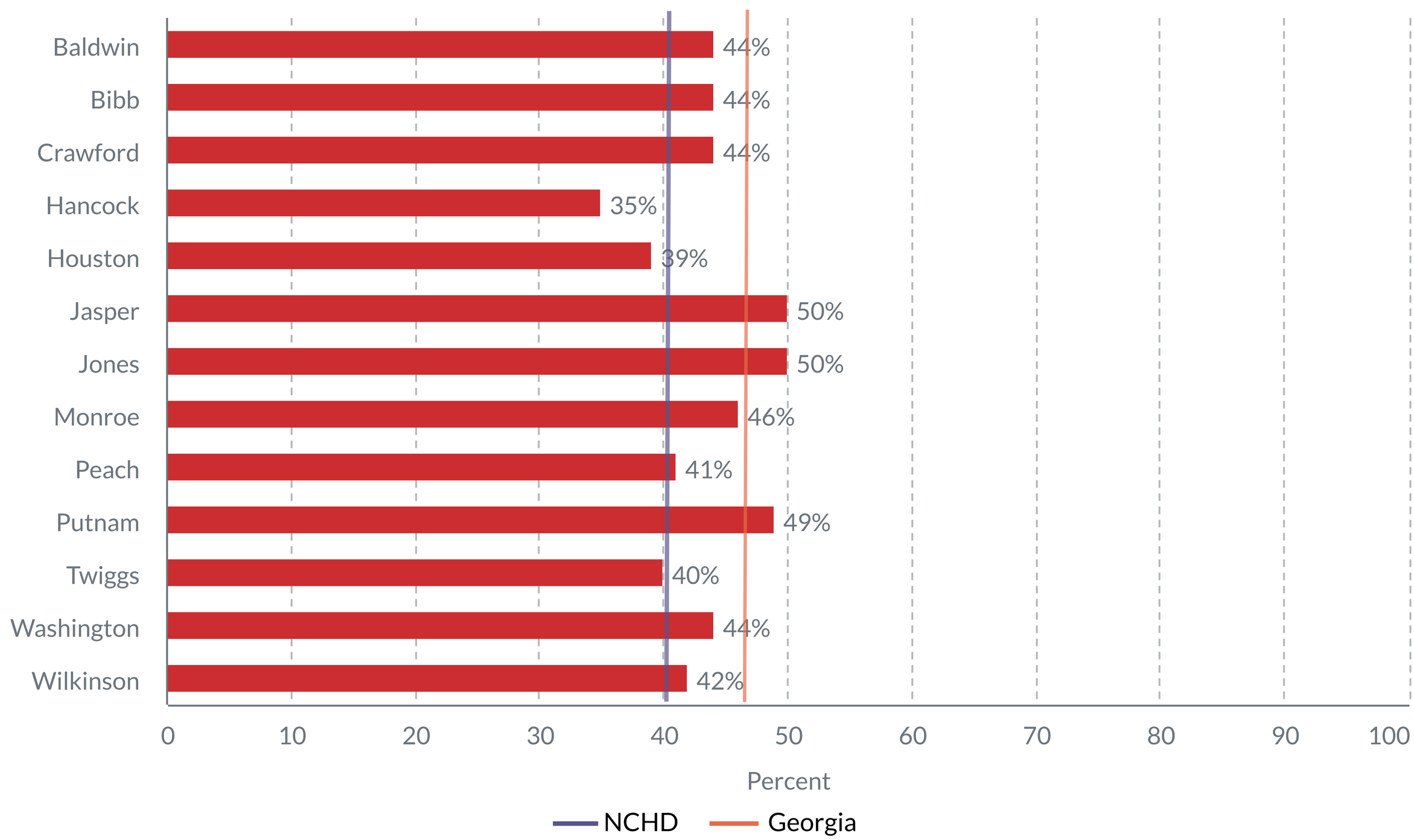
From 2011-2020, the deaths related to Influenza have increased. The death rate is for both the district and the state during this time is 0.9 per 100,000 population.

Influenza ER Visit Rates NCHD vs. Georgia, 2016-2020



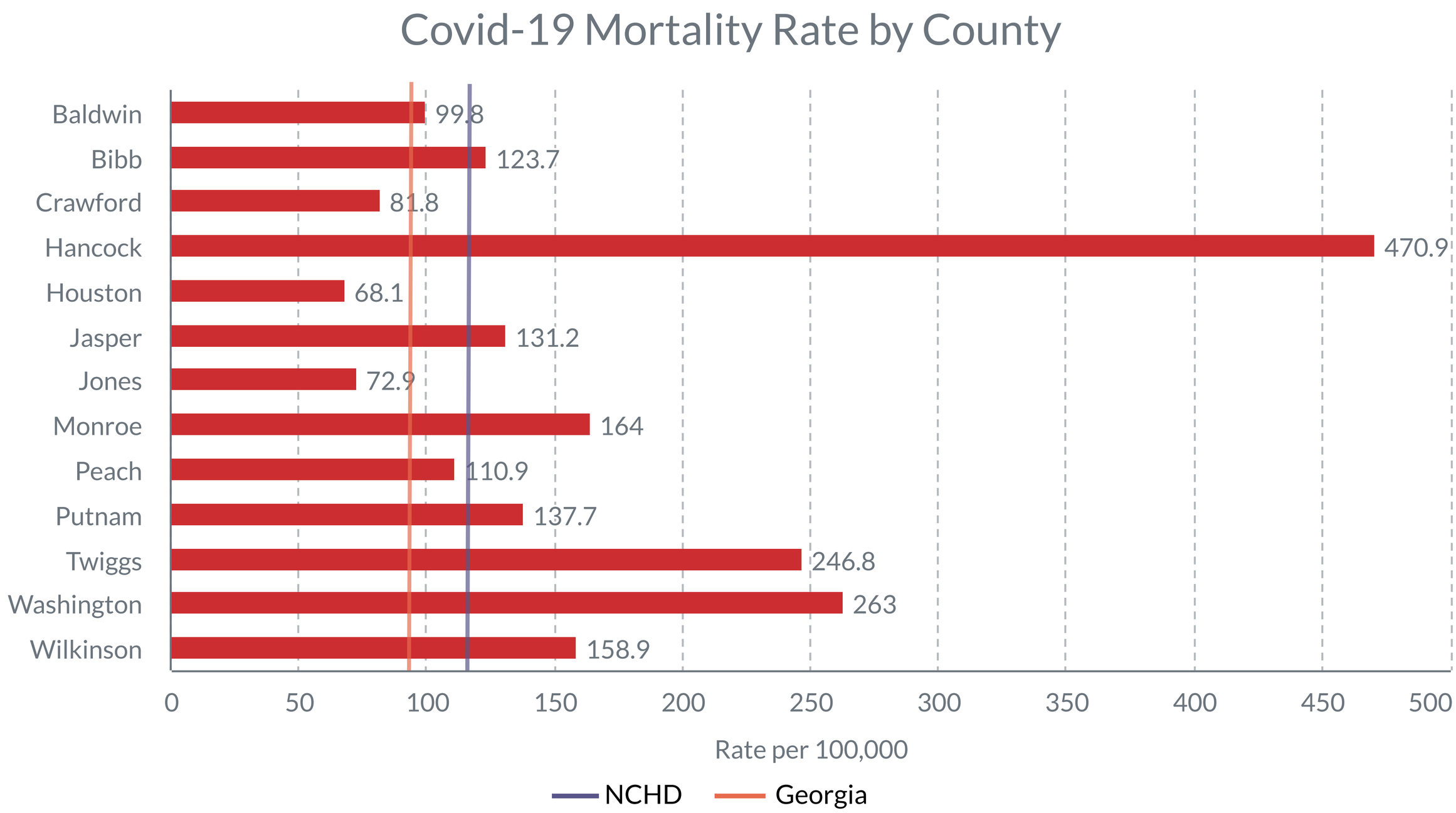
From 2016-2018 the rate of ER visits increased in both the district and state, and then declined in 2019 and 2020. The aggregate ER visit rate during this time in the district was 696.9 per 100,000 population which is higher than the state rate of 434.6.

Influenza Vaccination

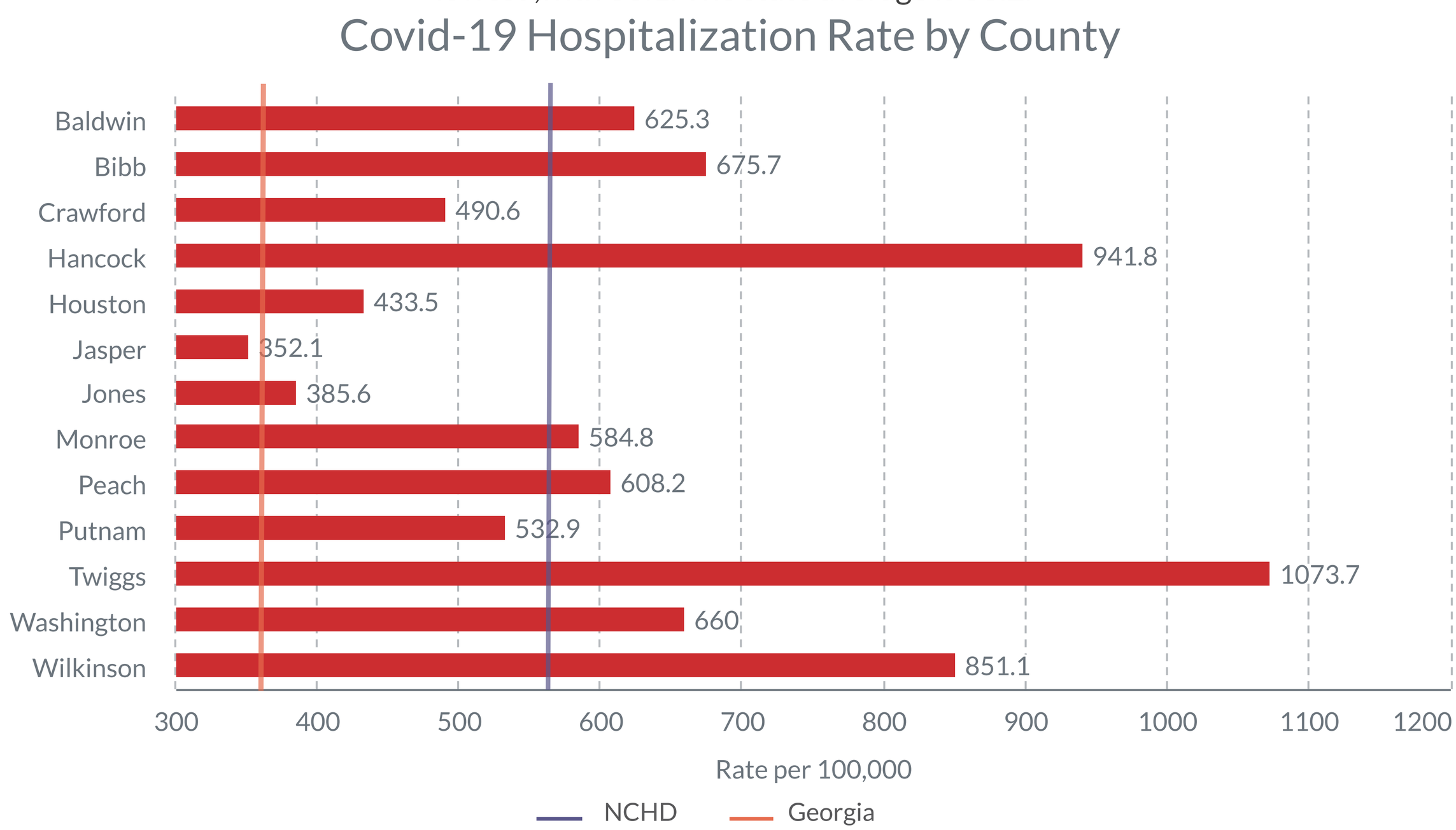


According to County Health Rankings, 40% of the population have received an Influenza vaccination in NCHD which is a lower vaccination rate when compared to the state vaccination rate of 46%. Jasper, Jones, and Putnam counties have higher influenza vaccination rates than compared to the state.

The SARS-CoV-2 virus was identified in 2020 and causes the illness known as COVID-19. Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness.

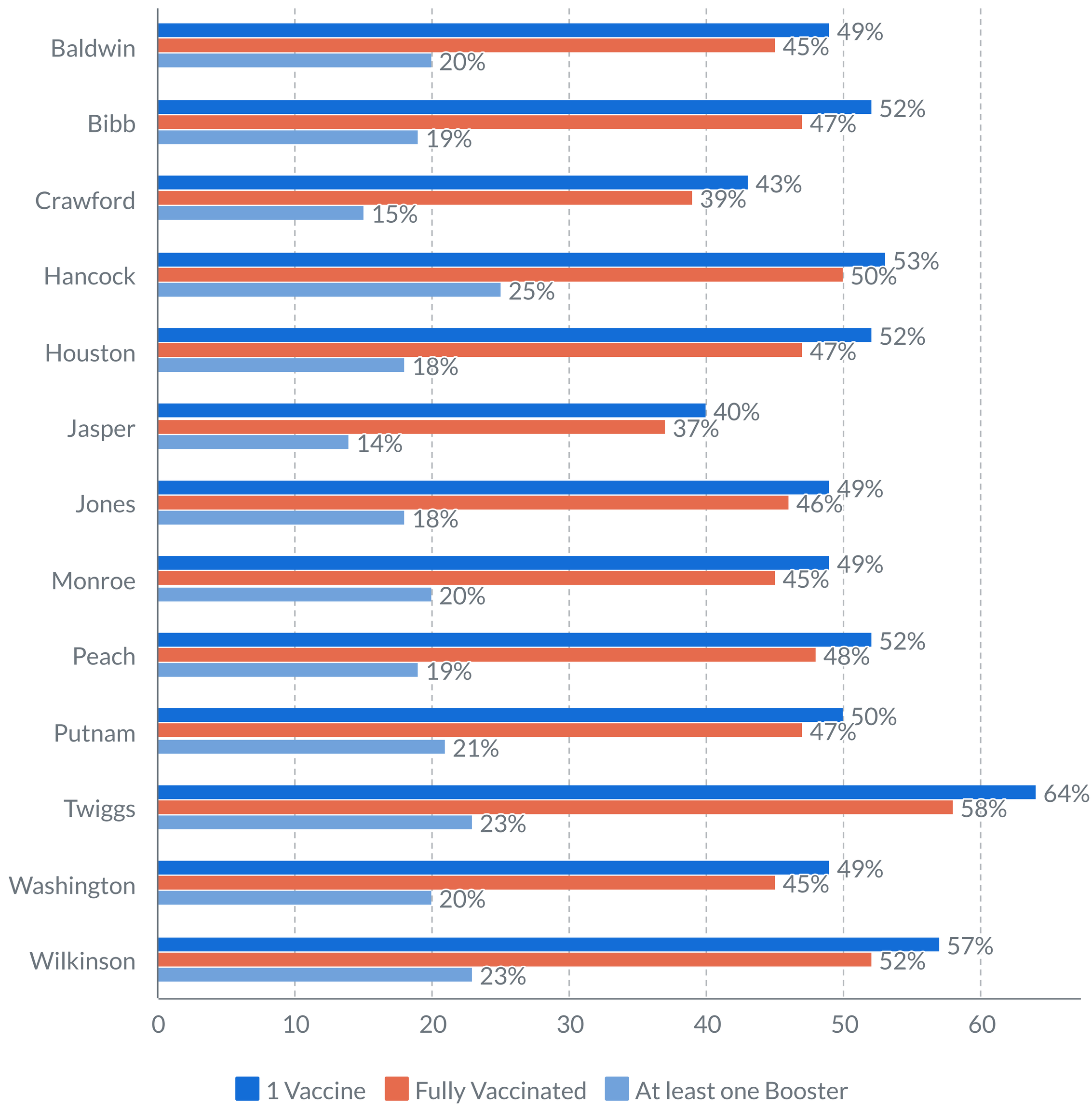


The Mortality rate per 100,000 due to Covid-19 for NCHD in 2020 is 116.8. Of the individual Counties with available data, Hancock County had the highest mortality rate with 470.9, while Houston County has the lowest ,with 68.1. The state average is 88.2.



The hospitalization rate per 100,000 due to Covid-19 for NCHD in 2020 is 569.1 . Of the individual Counties with available data, Twiggs County had the highest hospitalization rate with 1073.7, while Jasper County has the lowest ,with 352.1. The state average is 361.4.

Covid-19 Vaccination Rates

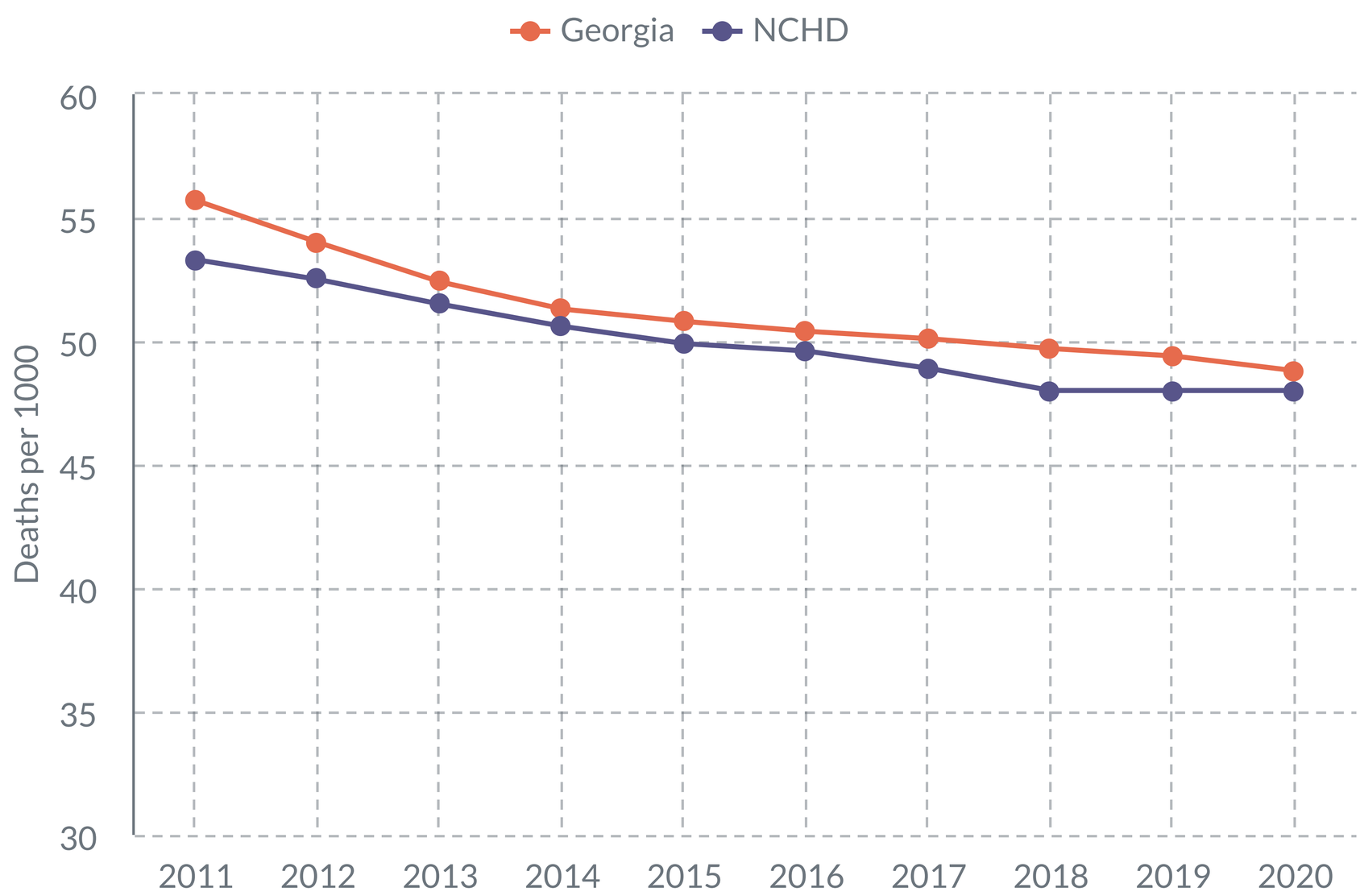


56% of residents of the state are fully vaccinated, compared to 51% of NCHD residents. In NCHD the county with the highest rate of fully vaccinated residents is Twiggs county with 58%. The county with the least amount of fully vaccinated residents is Jasper county with 37%.

Maternal and Child Health

Maternal and Child health starts before conception with proper nutrition and a healthy lifestyle and continues with appropriate prenatal care and the prevention and treatment of complications when possible.

Pregnancy Rate NCHD vs. Georgia, 2011-2020



The number of pregnancies occurring to females in NCHD per 1,000 females from 2011-2020 was 50.4 and has been declining over the 10 year period. During this same period the pregnancy rate in Georgia has followed the same trend and there was an aggregate rate of 51.7.

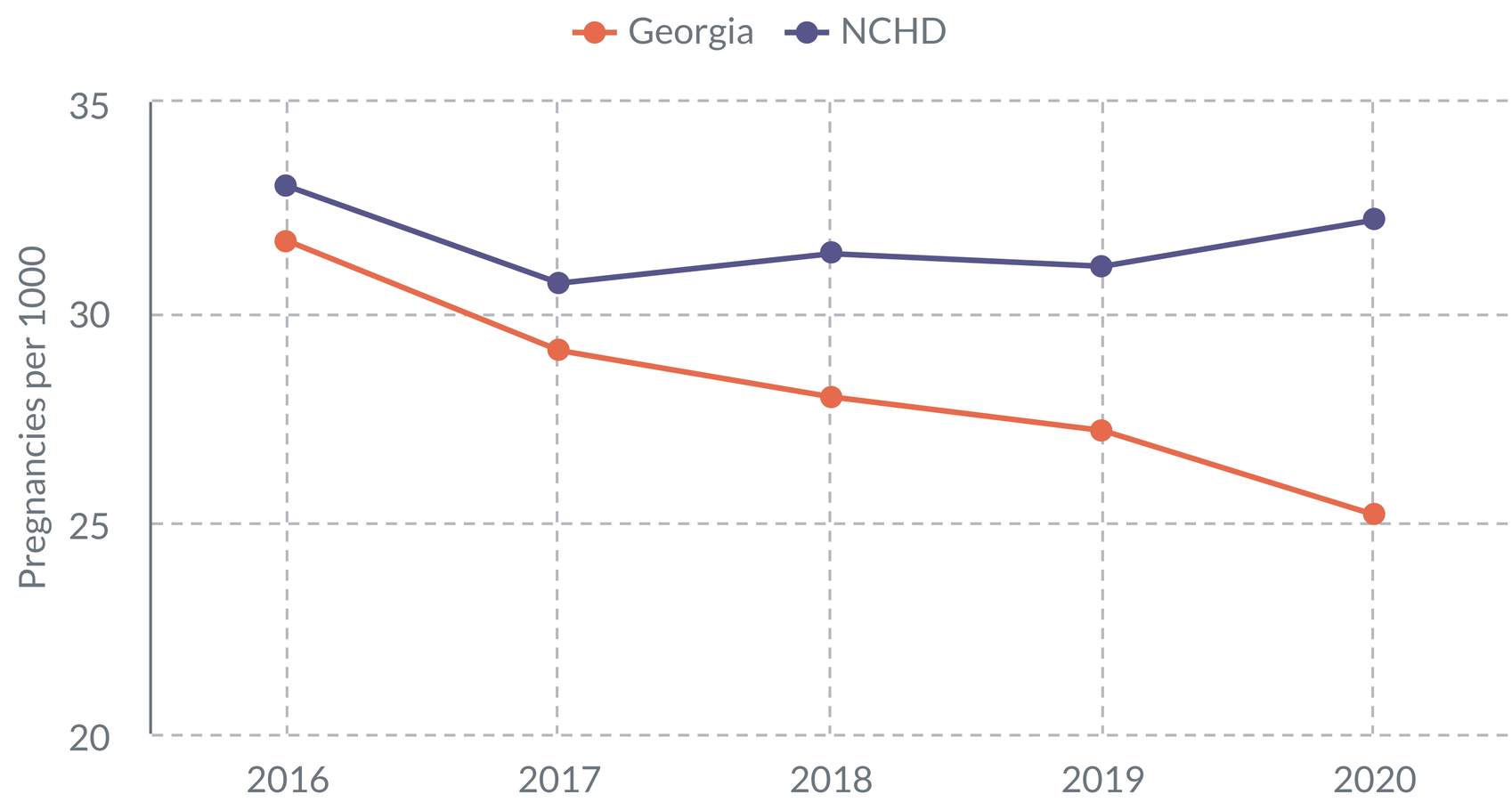
Pregnancy Rate per 1000 by County

The district pregnancy rate is 48.7 per 1000 females. Bibb, Hancock, Peach, Washington and Wilkinson counties have higher pregnancy rates than the district.

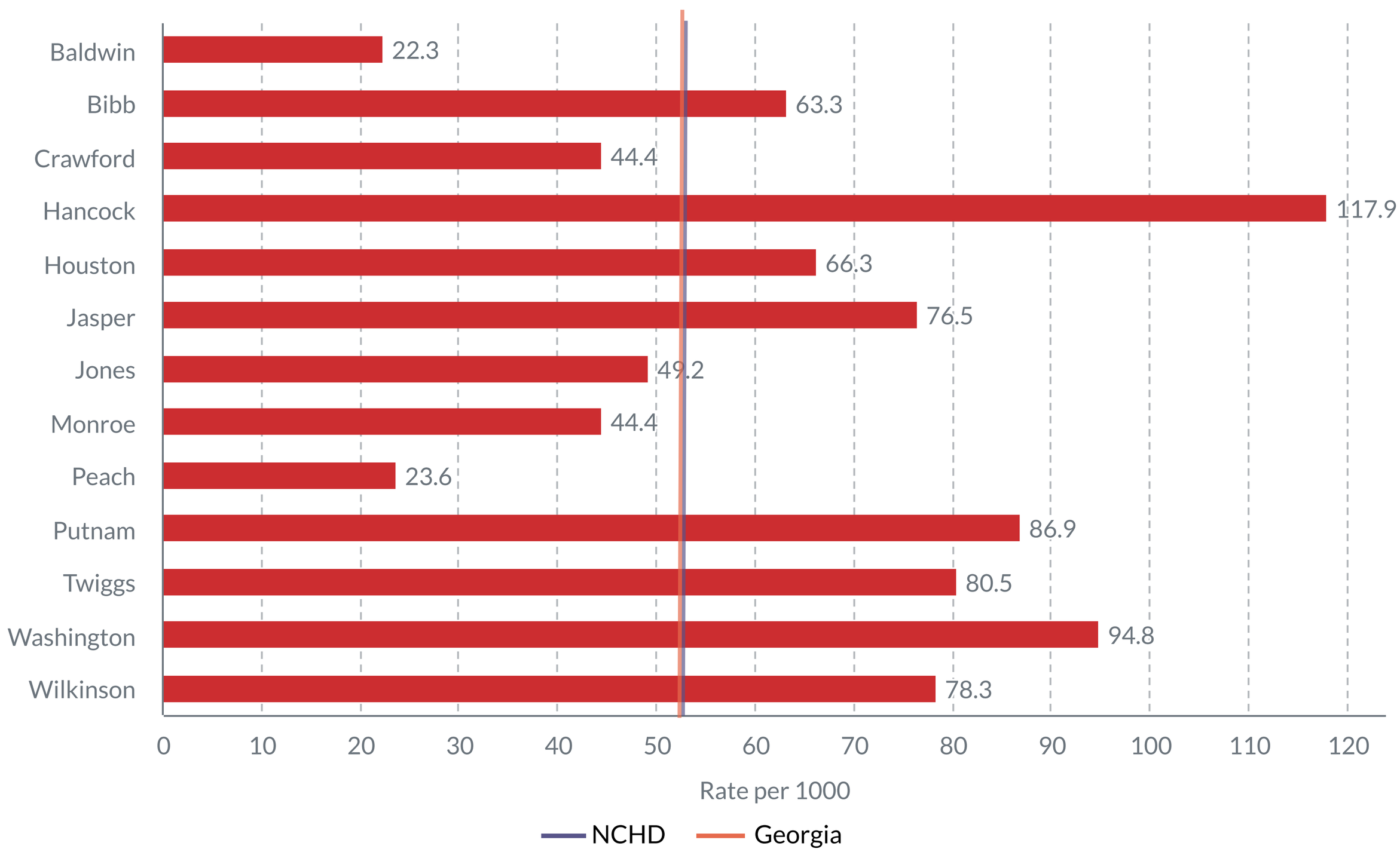
Teen prgnancy is defined as the number of pregnancies occurring to females 15-19 years old per 1,000 14-19 year old females. Teen pregnancy is associated with increased social and economic costs through immediate and long-term effects on teen parents and their children and are seen as a significant contributor to high school dropout rates among girls.

Teen Pregnancy Rates NCHD vs. Georgia, 2016-2020

From 2016-2020 there are 52 teenage pregnancies for every 1,000 females aged 15-19 years old in both Georgia and NCHD.



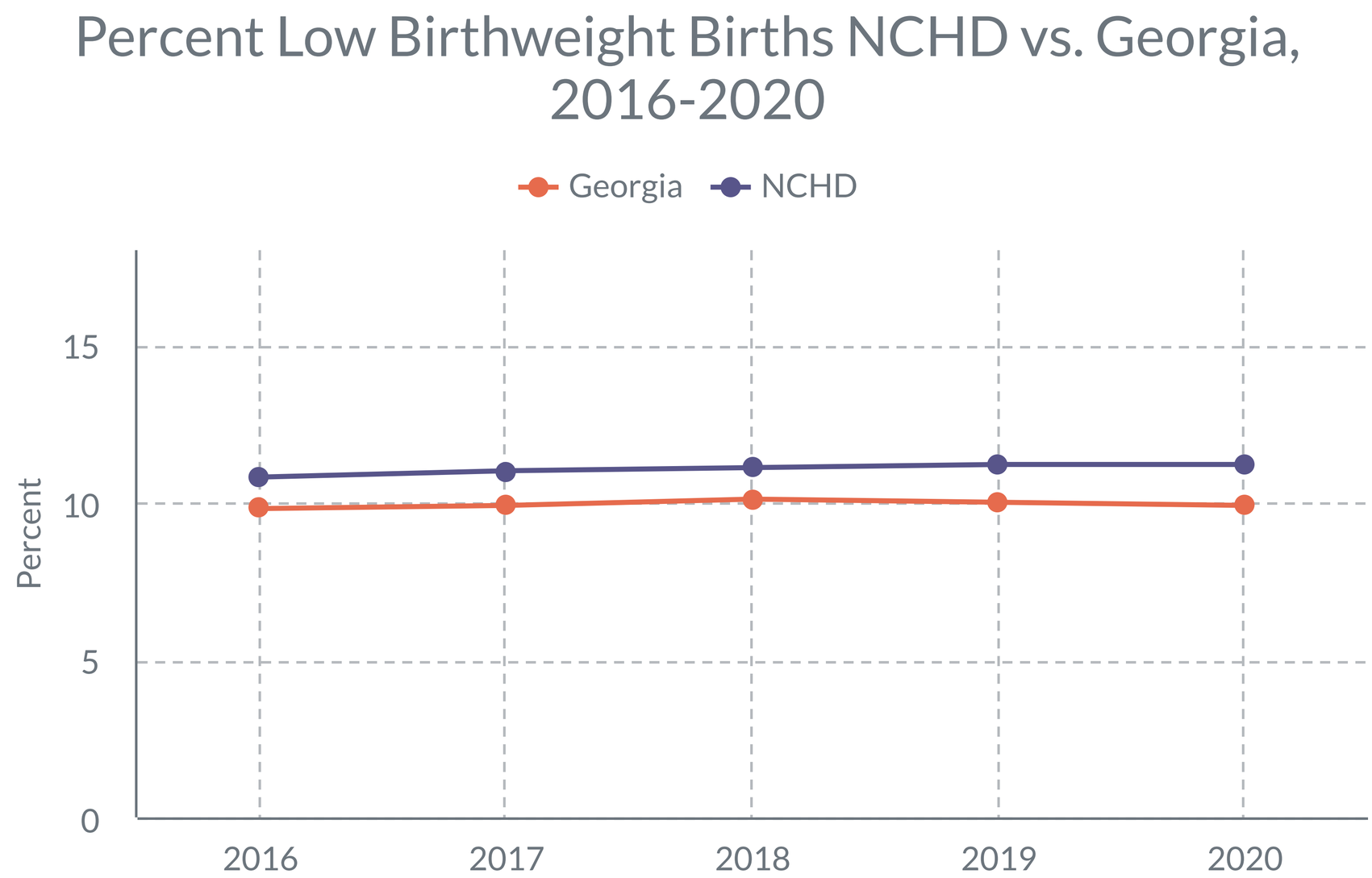
Teen Pregnancy Rate, 2016-2020

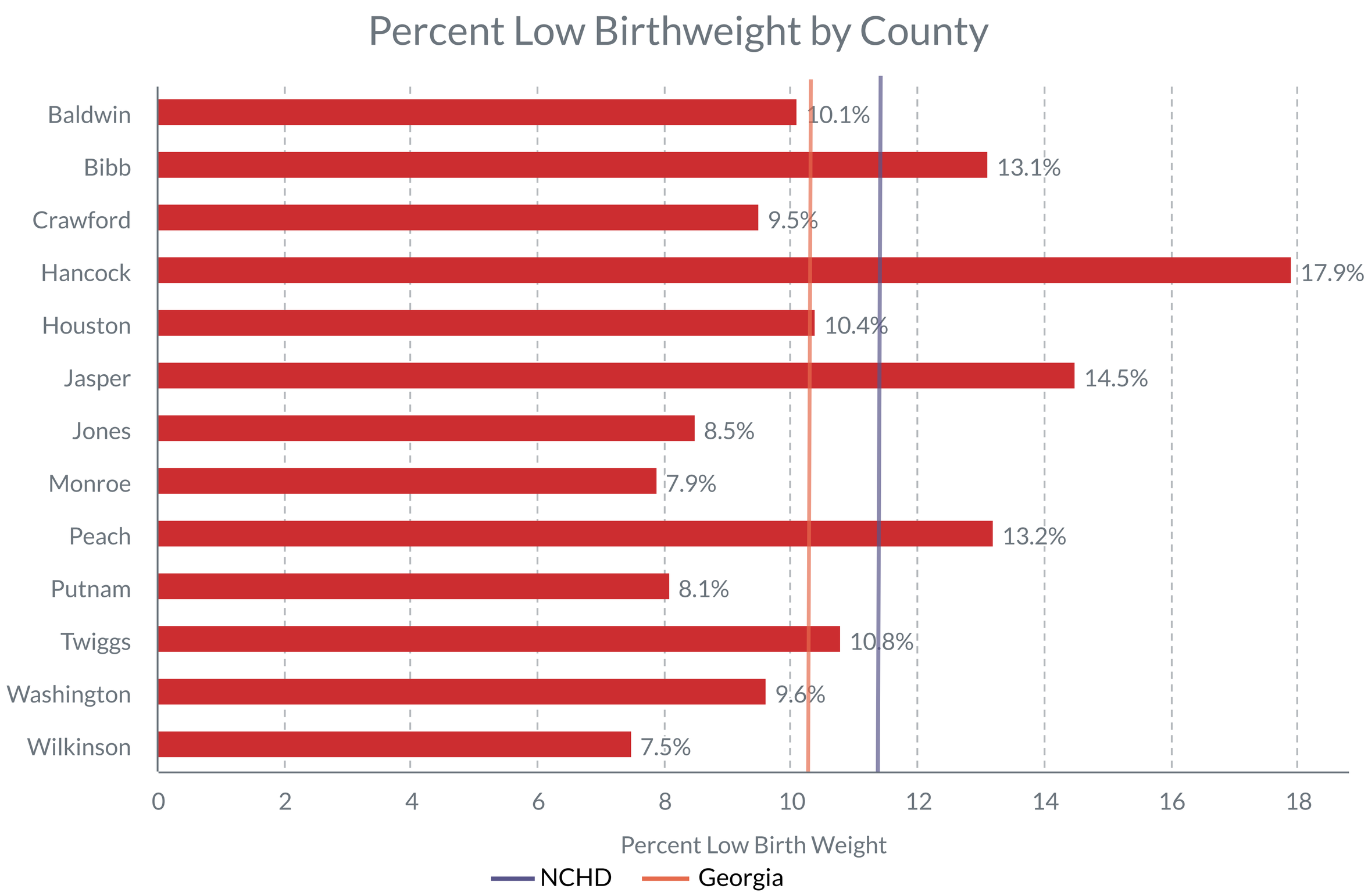


The rate of teen pregnancy per 1000 is highest in Hancock County with a rate of 83.9 per 1,000 females aged 15-19. Bibb, Houston, Jasper, Putnam, Twiggs, Washington, and Wilkinson Counties also had higher teen pregnancy rates than the district rate.

Low birthweight is a major determinant of infant mortality. Most infant deaths occur in the first month of life, or neonatal period. Low birthweight births are defined as a live birth where the infant has a birthweight less than 2500 grams (5lbs. 8oz.) per 100 live births.

From 2016-2020, 11% of the live births in NCHD were had a low birthweight outcome, compared to 10% in the state of Georgia.

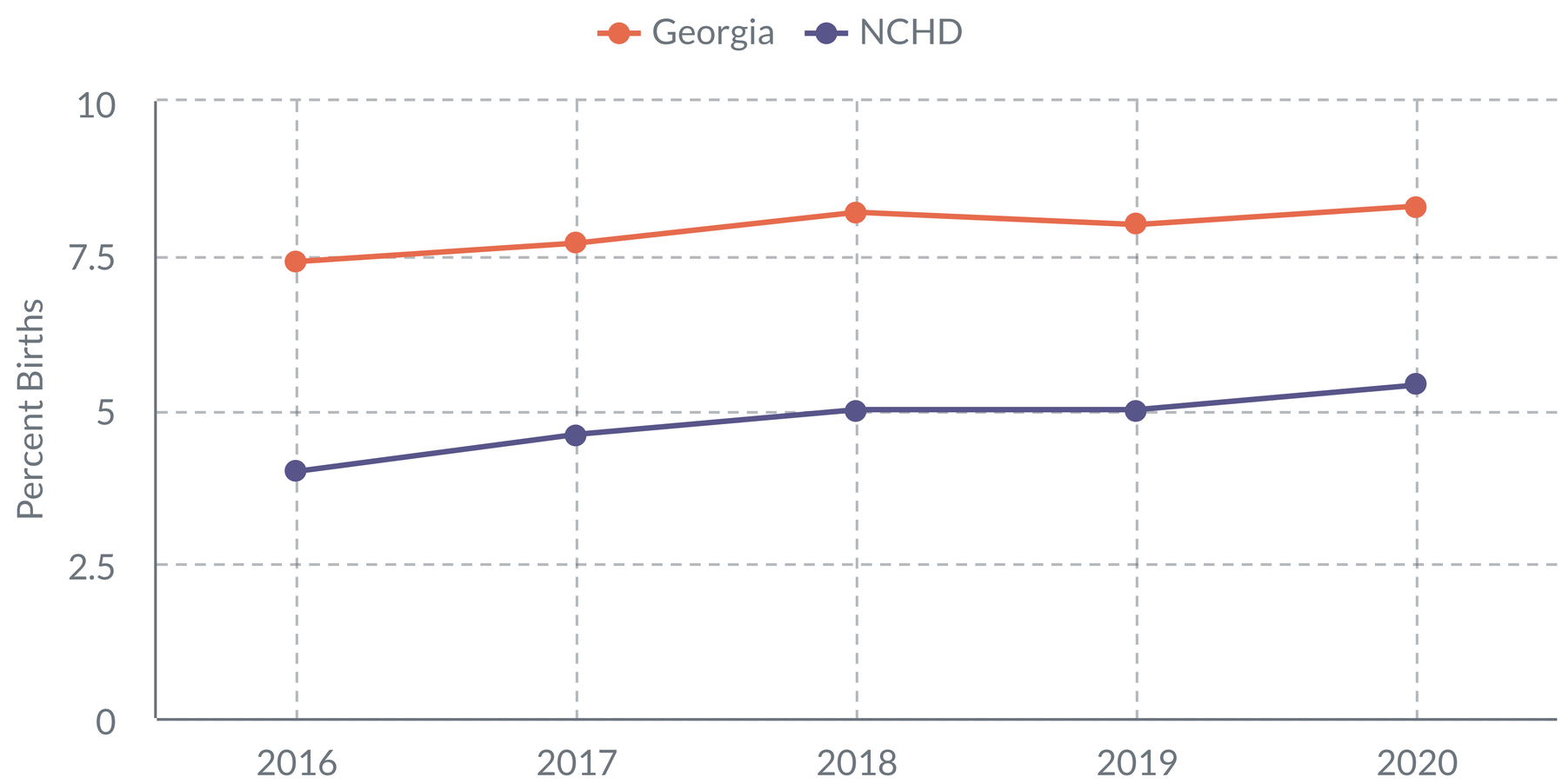




This graph shows the Counties in the district and the percent of low birthweight babies for each County. 11.2 % of births in NCHD were low birthweight babies. The state average is 9.9%.
Hancock county has the highest number of low birthweight babies with 17.9%, higher than the district and state averages. Bibb, Jasper and Peach also had numbers higher than the district average.

Prenatal care can help prevent complications and inform women about important steps they can take to protect their infant and ensure a healthy pregnancy. Low prenatal care is defined in this report as the number of births where the mother had less than 5 prenatal care visits per 100 live births.

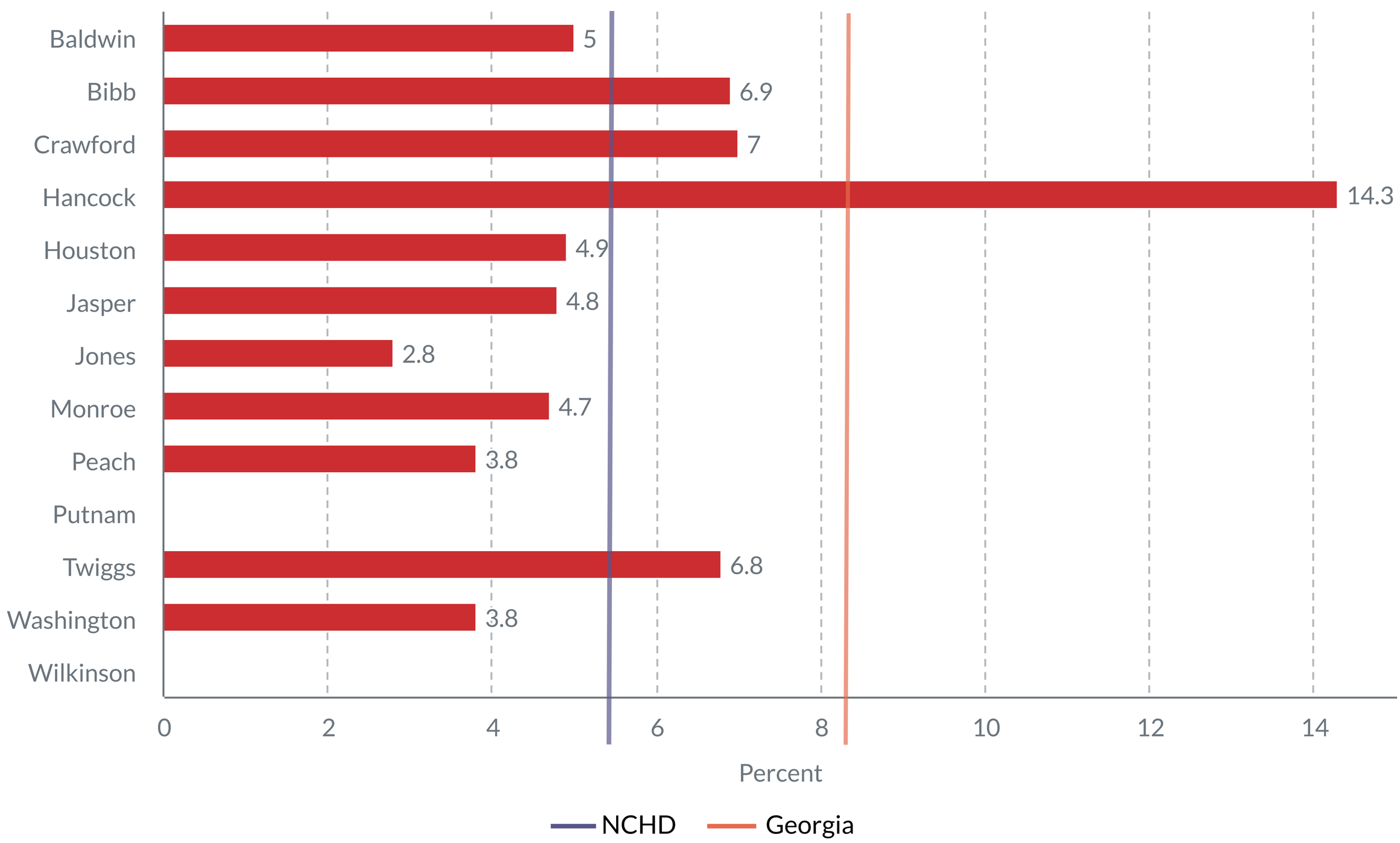
Percent of Births with <5 Prenatal Visits NCHD vs. Georgia, 2016-2020



4.8% of births in NCHD were to mothers who had <5 prenatal care visits which is lower than the state percentage of 7.9%.

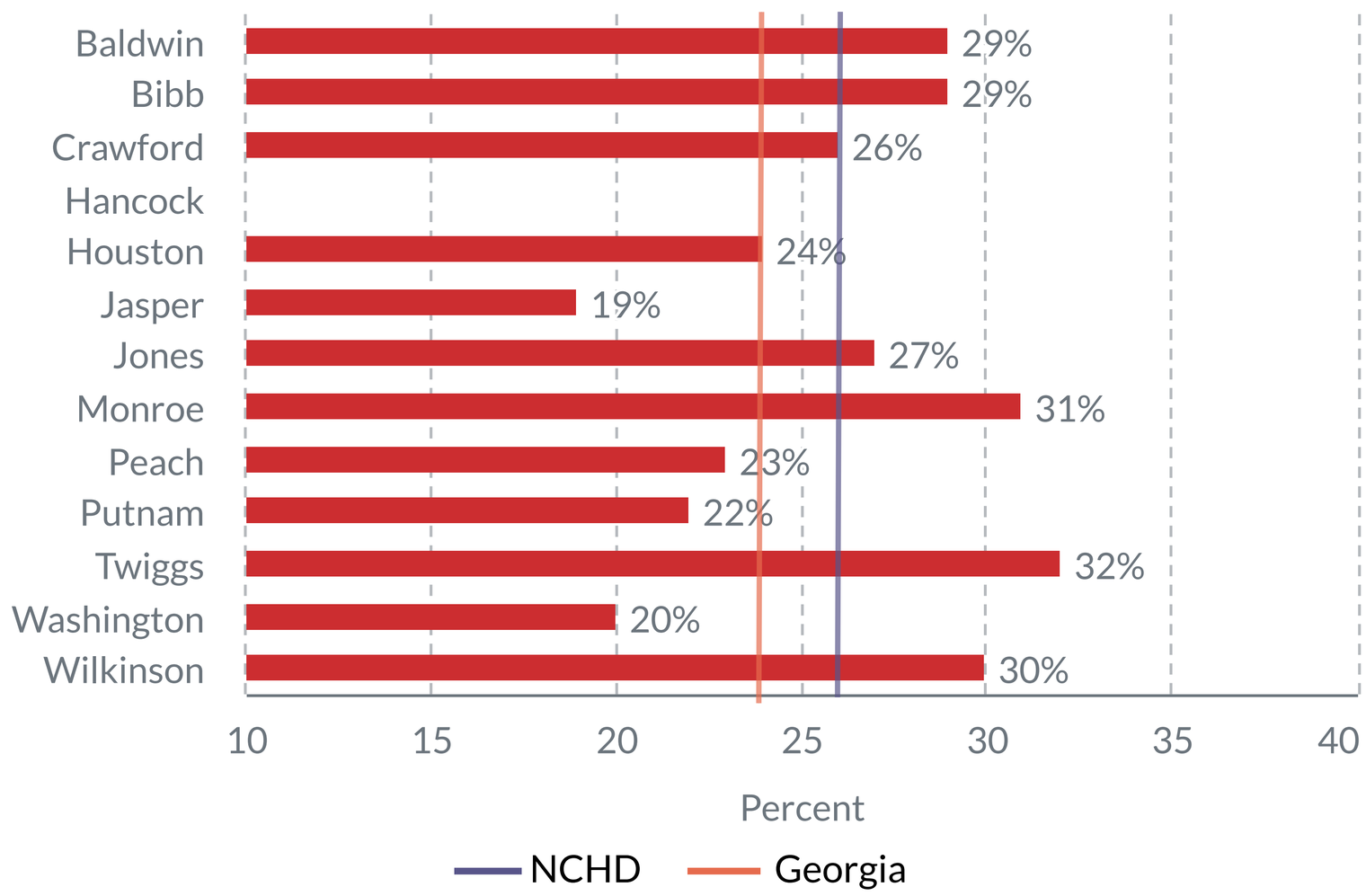
Although the district numbers are lower than the state, both the district and state are experiencing increases in this area.

Percent Births with <5 Prenatal Visit



The district average percent of births with less than 5 prenatal visits is 5.4. Bibb, Crawford, Hancock, and Twiggs Counties all had an average percent higher than the district. Hancock County had the highest percent with less than 5 prenatal visits at 14.3%. Counties that have a percent based on 4 events or less are indicated with a blank on the graph.

Percent of Births Less than 2 Years Apart



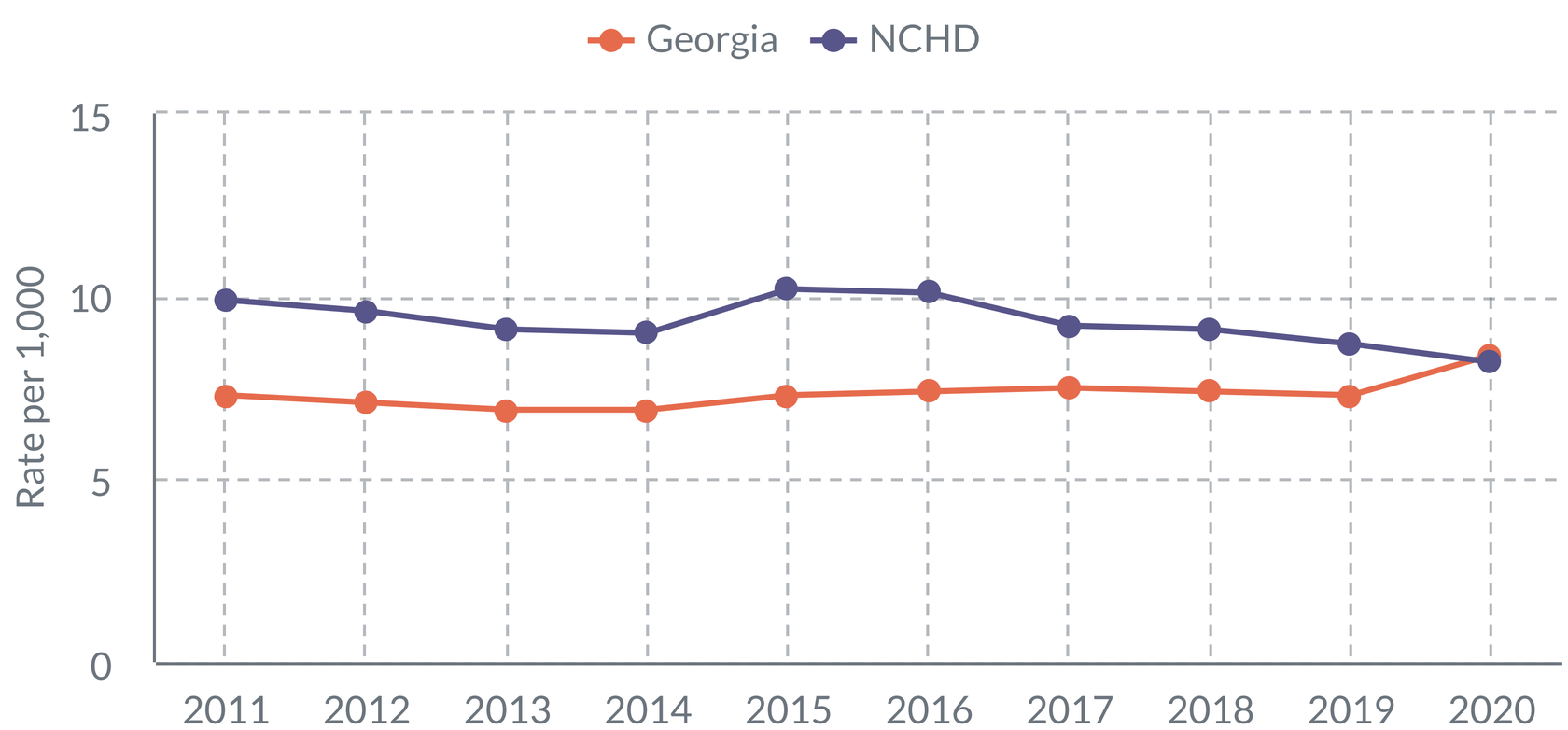
Research shows that the safest interval between pregnancies is 12-18 months, which gives the mothers body time to heal as well as decrease the risk of premature birth.

In the district the percent of births that occur less than 2 years apart is 26.1. Baldwin, Bibb, Jones, Monroe, Twiggs, and Wilkinson Counties had percentages higher than the district average. No data could be displayed for Hancock County since the number of outcomes was less than 4. The state average is 23.8%.

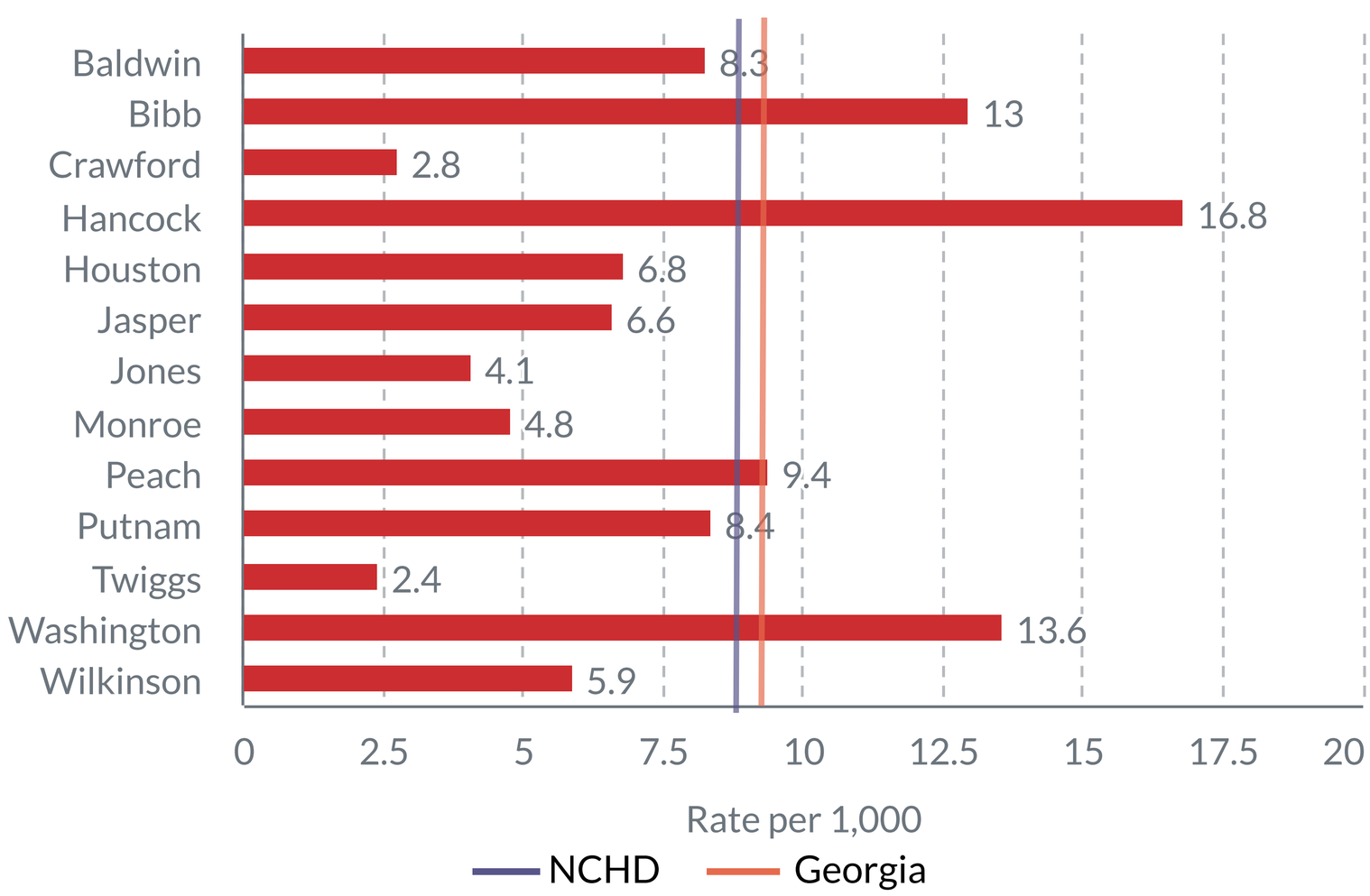
Infant Mortality Rate NCHD vs. Georgia, 2011-2020

Infant mortality is defined as the number of infant deaths per 1,000 live births.

This graph compares the 10 year aggegate mortality rates for infants in the North Central Health District in comparison to Georgia as a whole. The average infant mortality rate for NCHD is 9.5 and the infant mortality rate for GA is 7.2.



Induced Termination of Pregnancy Rates



An induced termination of pregnancy (ITOP) is a purposeful interruption of pregnancy with the intention other than to: 1) produce a live-born infant; or 2) to remove a dead fetus. An induced termination of pregnancy does not result in a live birth. The rate is the number of induced termination of pregnancy that occur per 1,000 females aged 10-55 years old.

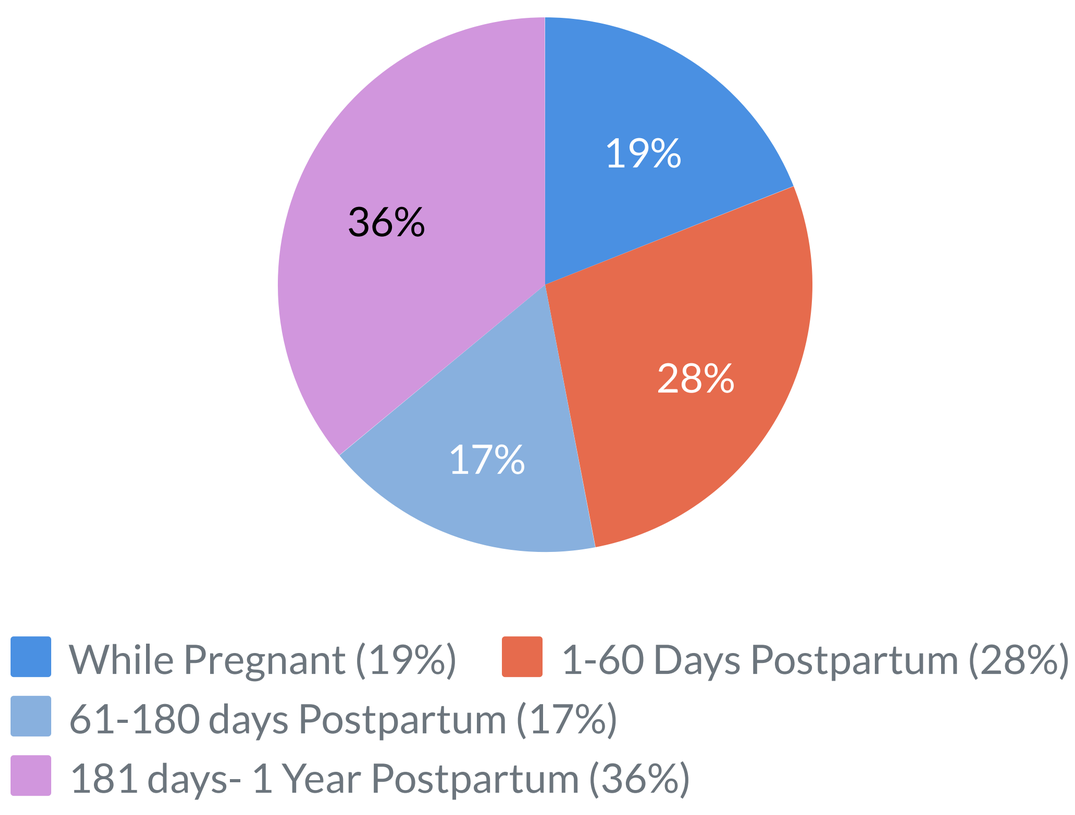
In NCHD the percent of induced termination on pregnancies per 1000 pregnancies is 8.9, the state average is 9.3. The highest rate in the district is Hancock County at 16.8. Bibb and Washington County are also higher than the state and district averages.

MATERNAL MORTALITY

Pregnancy-Related ; A death during pregnancy or within one year of the end of pregnancy from pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.

Pregnancy-Associated, but not related; A death during pregnancy due to a cause that is not related to pregnancy.

Pregnancy Associated Deaths by Timing of Death in Relation to End of Pregnancy Georgia, 2015-2017



The largest number of death that are **associated** to pregnancy occurs between 181 days and 1 year postpartum. Cause of deaths include; motor vehicle accidents, drug toxicity, homicide, cancer and cardiovascular.

The leading causes of deaths that are **Pregnancy-Related**

- **Cardiovascular/coronary**
- **Cardiomyopathy**
- **Hemorrhage**
- **Infection**
- **Cerebrovascular Accidents**

68.9

Pregnancy-Associated deaths per 100,000 live births occurred 2015-2017

25.1

Pregnancy-Related deaths per 100,000 live births occured 2015-2017

87%

87% of pregnancy -related deaths were preventable.

2.3x

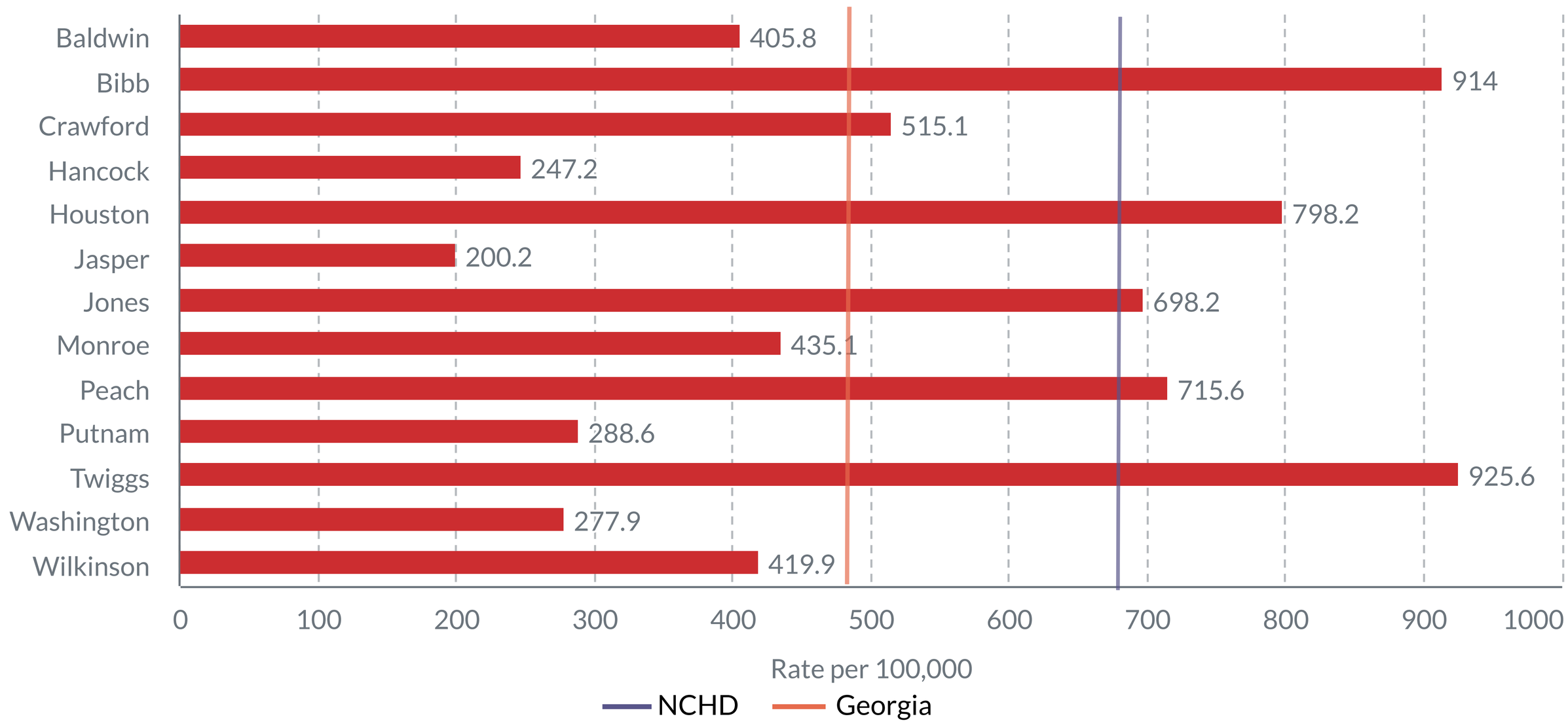
Black, Non Hispanic women are 2.3 times more likely to die from pregnancy-related causes than their White, Non-Hispanic counterparts

** Data at district and county level are not available for NCHD. However, requests for specific data may be filled in some instances.

MENTAL AND BEHAVIORAL HEALTH

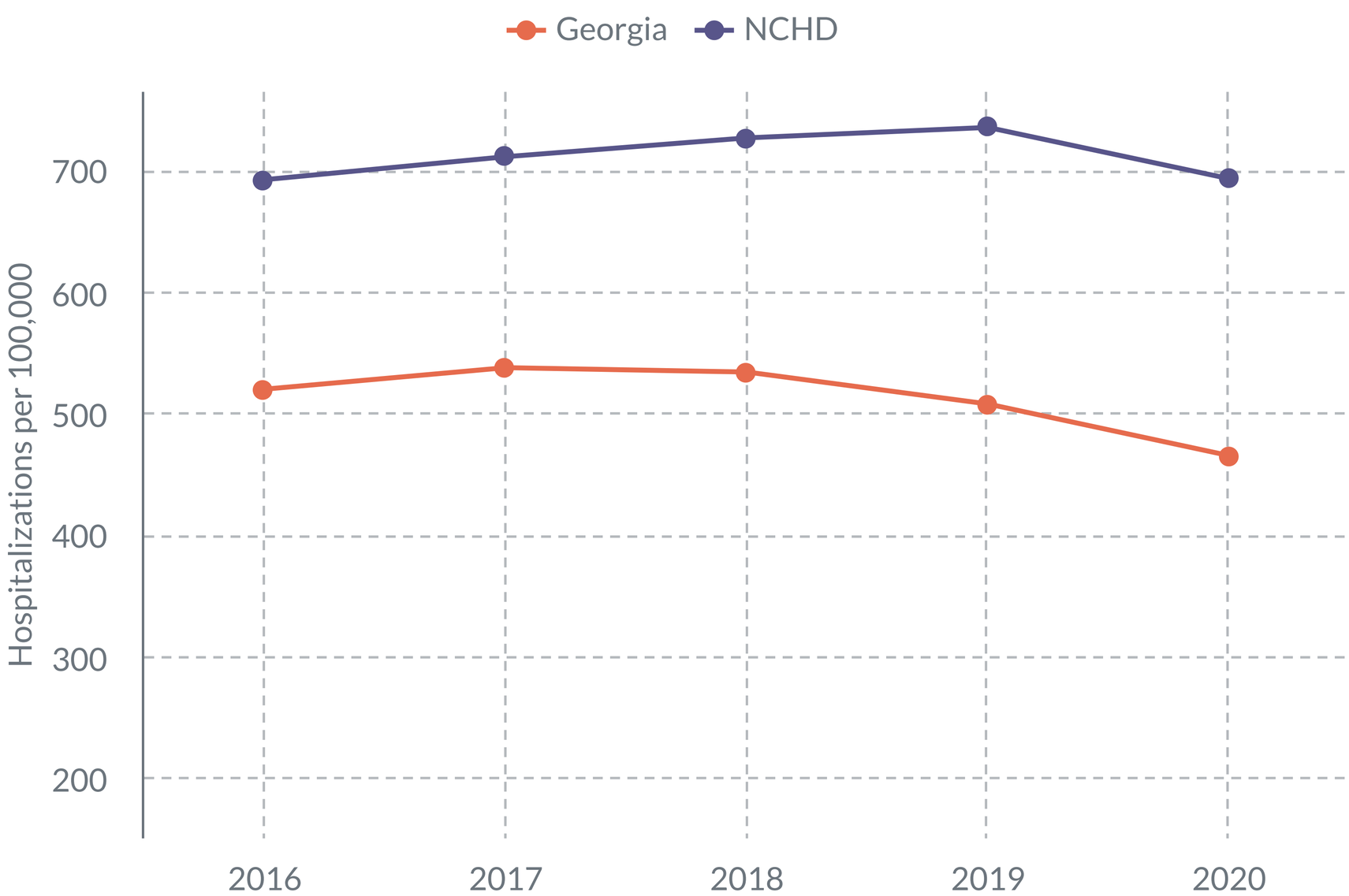
Mental and behavioral health is important at every stage of life and affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices.

Hospitalizations due to Mental and Behavioral Health



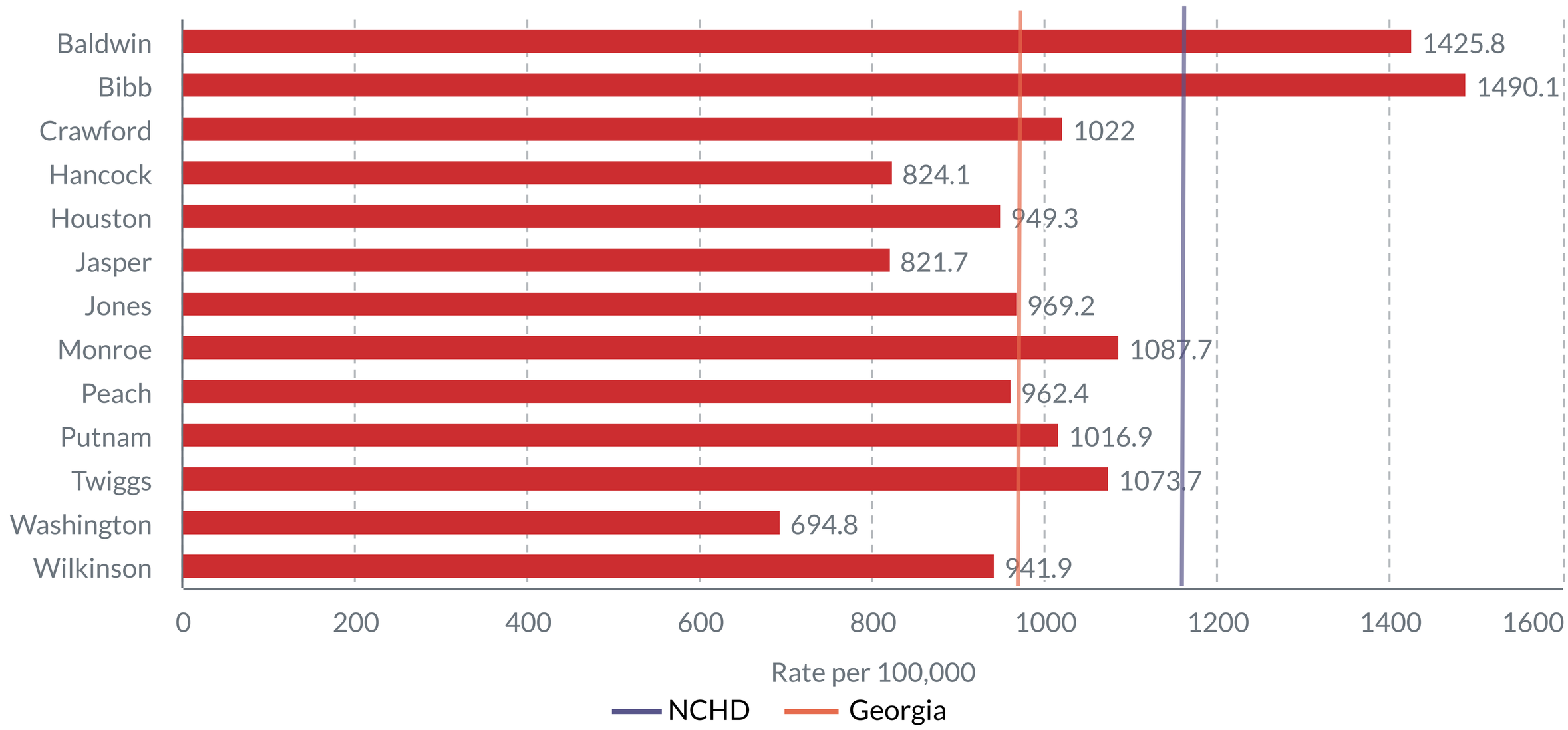
In 2020 there were 12,301 per 100,000 hospitalizations in NCHD, 693 (5.6%) were dues to mental and behavioral health issues. The state average was 465.2. Bibb, Houston, Jones, Peach and Twiggs all had rates higher than the district average.

Hospitalizations due to Mental and Behavioral Health NCHD vs. Georgia, 2016-2020



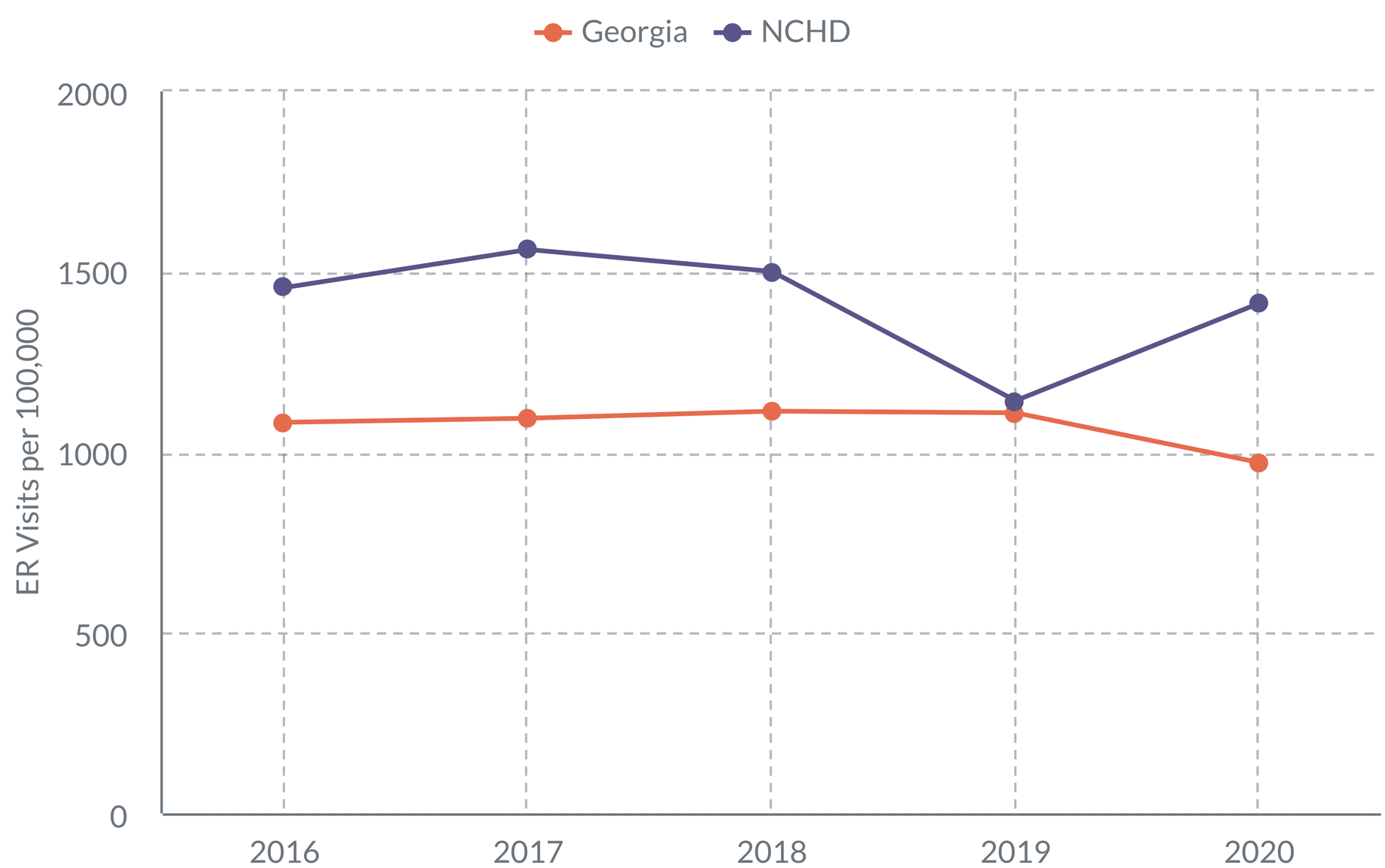
There were 512 hospitalizations due to mental and behavioral health per 100,000 population from 2016-2020 in NCHD. The state rate was 5126 per 100,000.

ER Visits due to Mental and Behavioral Health



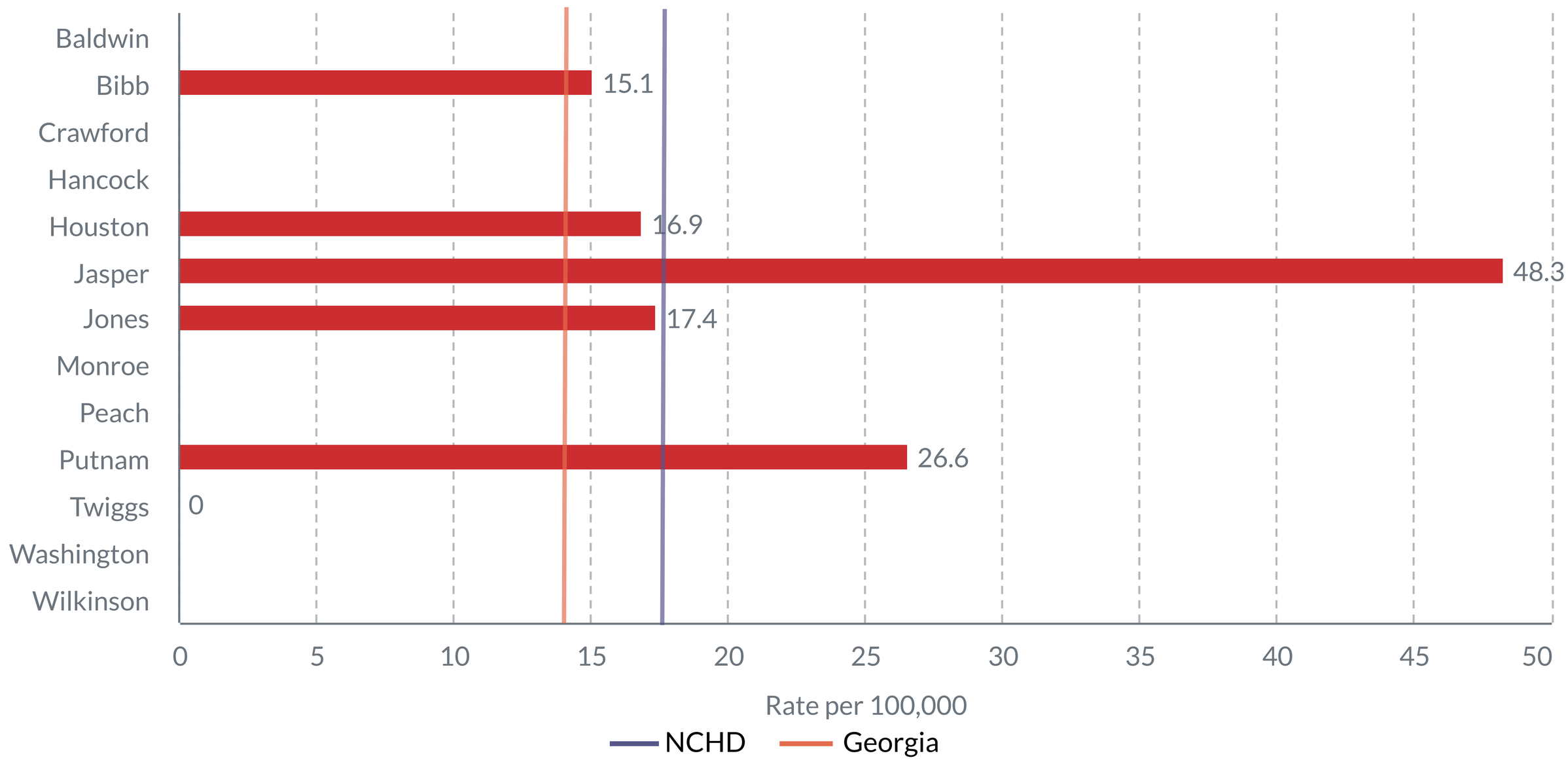
In NCHD the average ER visit rate per 100,000 due to mental and behavioral health is 1143.2, the state average is 972. Mental and behavioral health related visits account for 3% of the 44,000 ER visits in NCHD in 2020.

ER Visits due to Mental and Behavioral Health NCHD vs. Georgia, 2016-2020



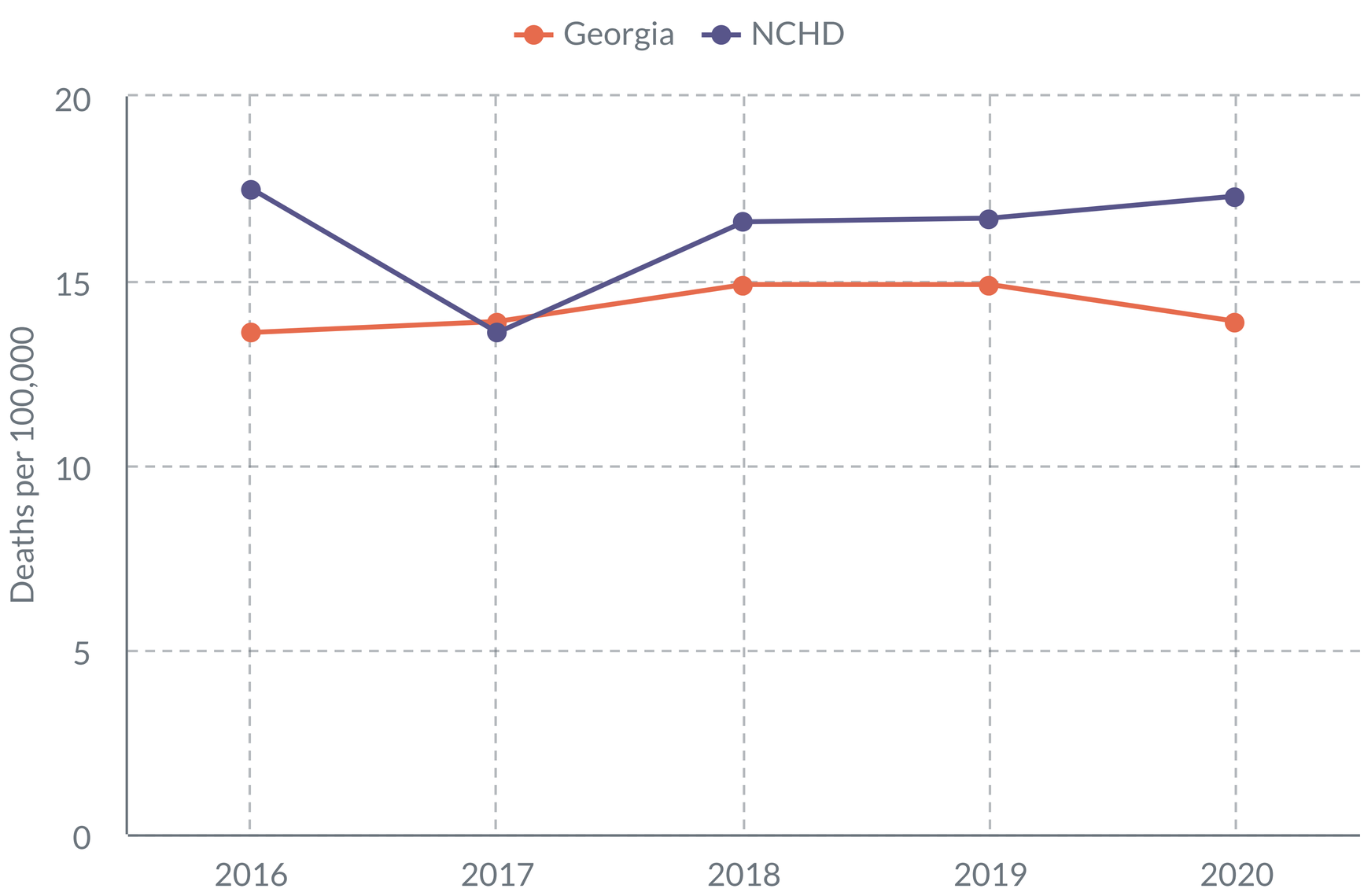
1,413 ER visits were due to mental and behavioral health per 100,000 population in NCHD in 2020 compared to 1074.4 per 100,000 in Georgia in 2020.

Deaths Due to Suicide by County



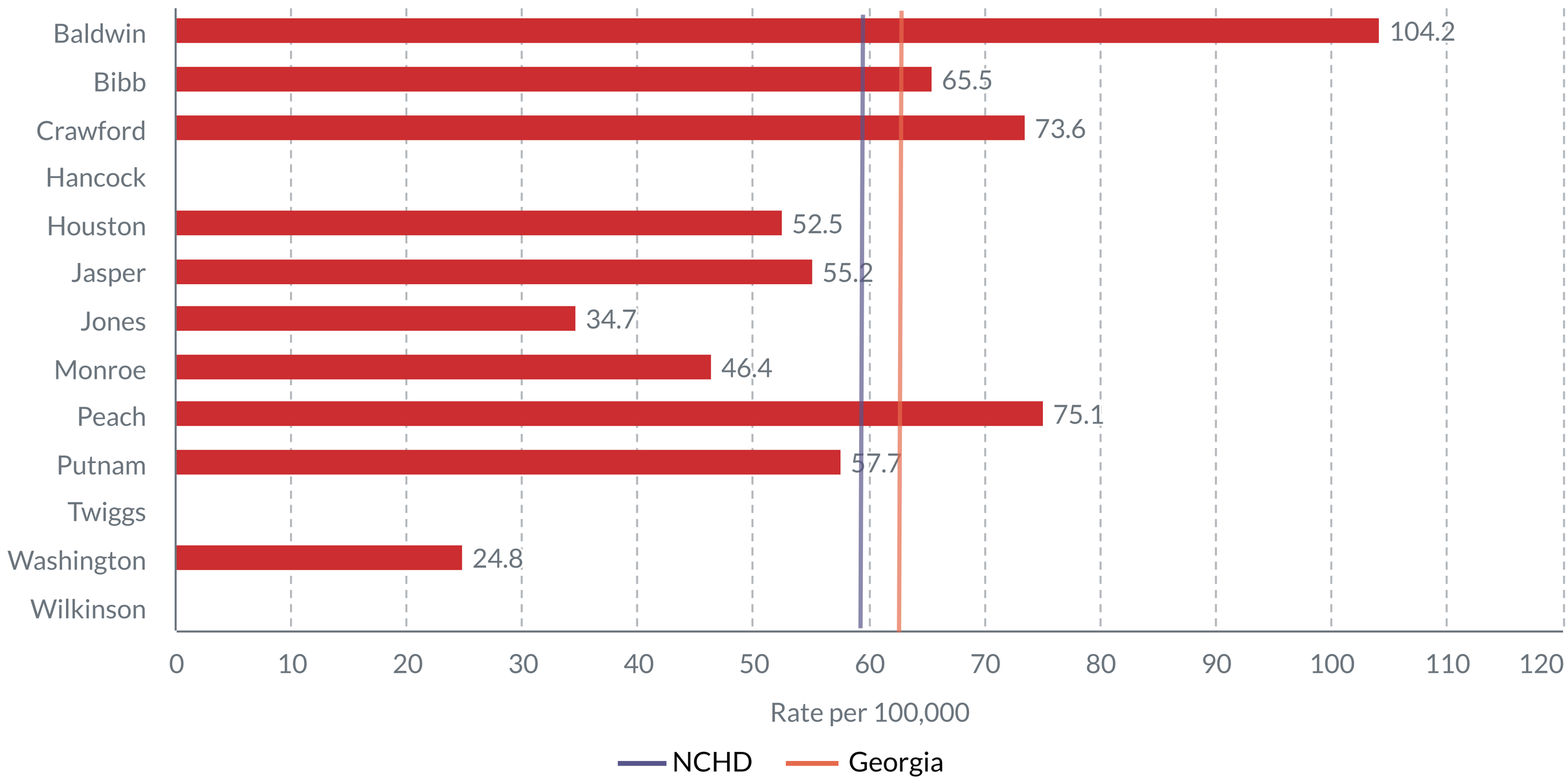
The average suicide death rate per 100,000 for the district is 17.3. Districts with rates based on 4 events or less are indicated with blank information on the graph. Of the individual counties with available data, Jasper County had the highest suicide death rate with 48.3, while Bibb County had the lowest with 15.1.

Suicide Mortality NCHD vs. Georgia, 2016-2020



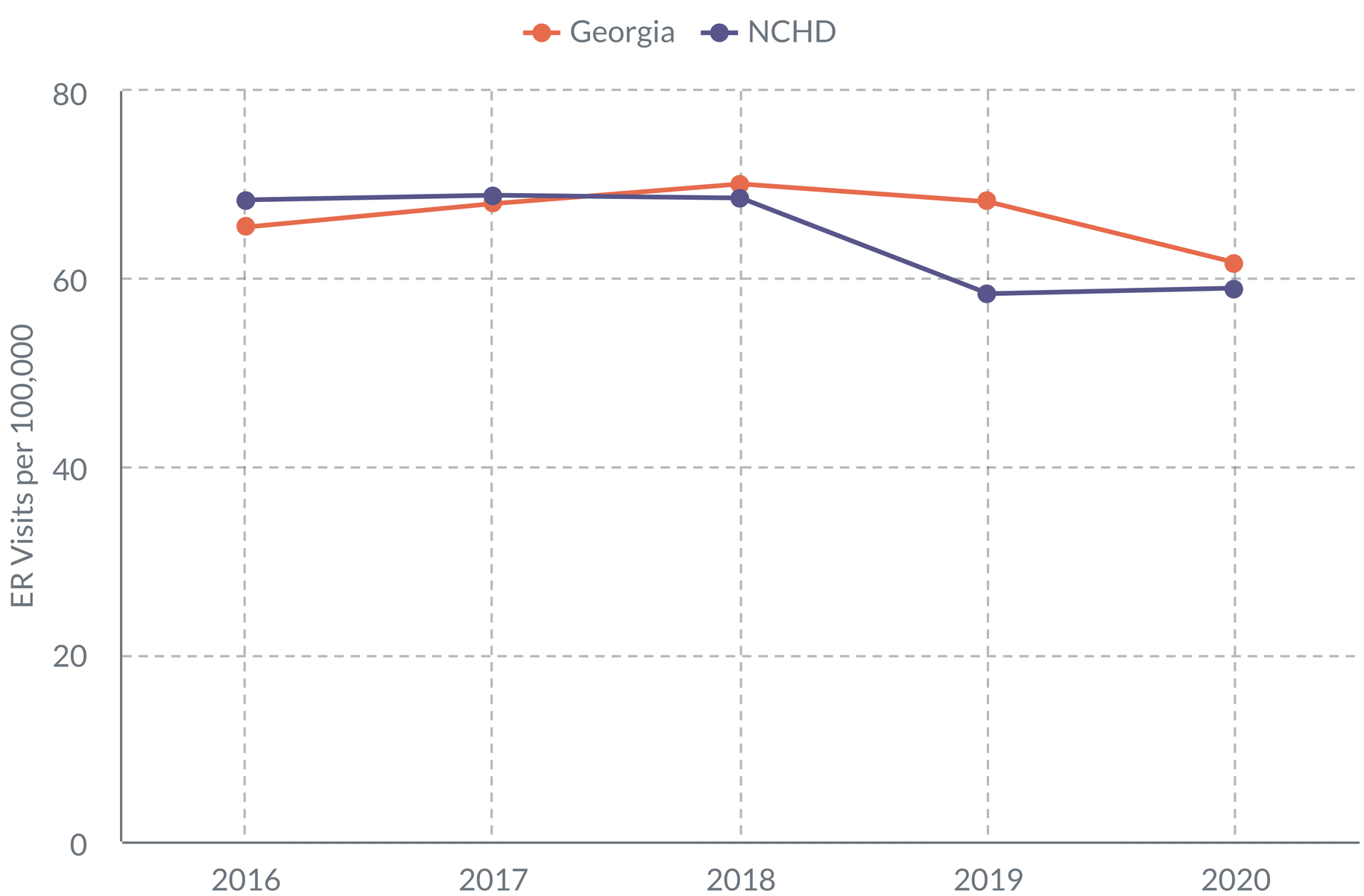
From 2016-2020 the rate of deaths due to suicide was 16.3 per per 100,000 population in NCHD. The state rate during this time was 14.2 deaths per 100,000.

ER Visits Due to Suicide by County



The ER visit rate per 100,000 due to suicide for NCHD is 59. Districts with rates based on 4 events or less are indicated with blank information on the graph. Of the individual counties with available data, Baldwin County had the highest ER visit rate rate with 104.2, while Washington County has the lowest ,with 24.8. The state average is 25.7.

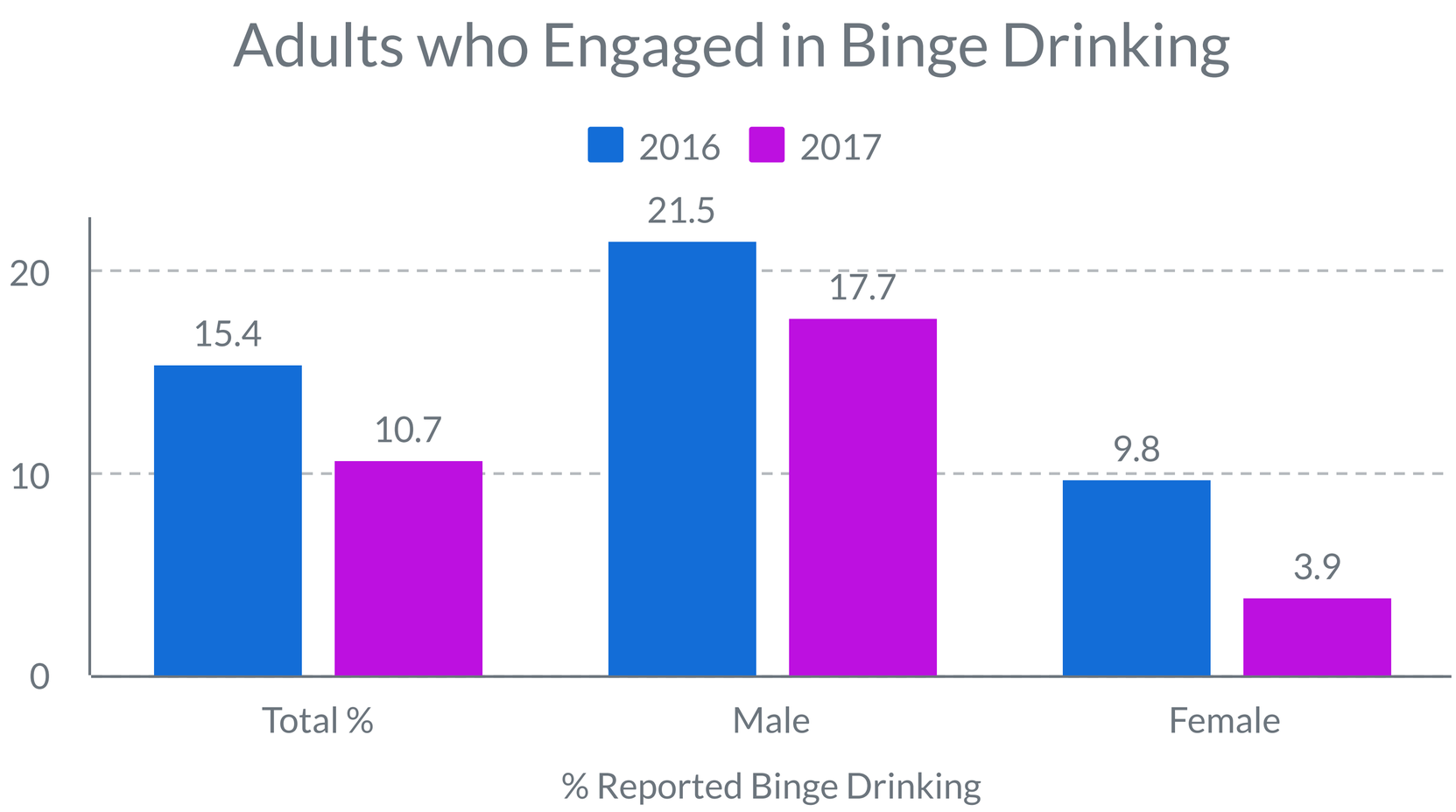
ER Visits Due to Suicide NCHD vs. Georgia, 2016-2020



From 2016-2020 the ER visit rate due to suicide was 65 per 100,000 population, this is similar to the state rate during the same time is 67.

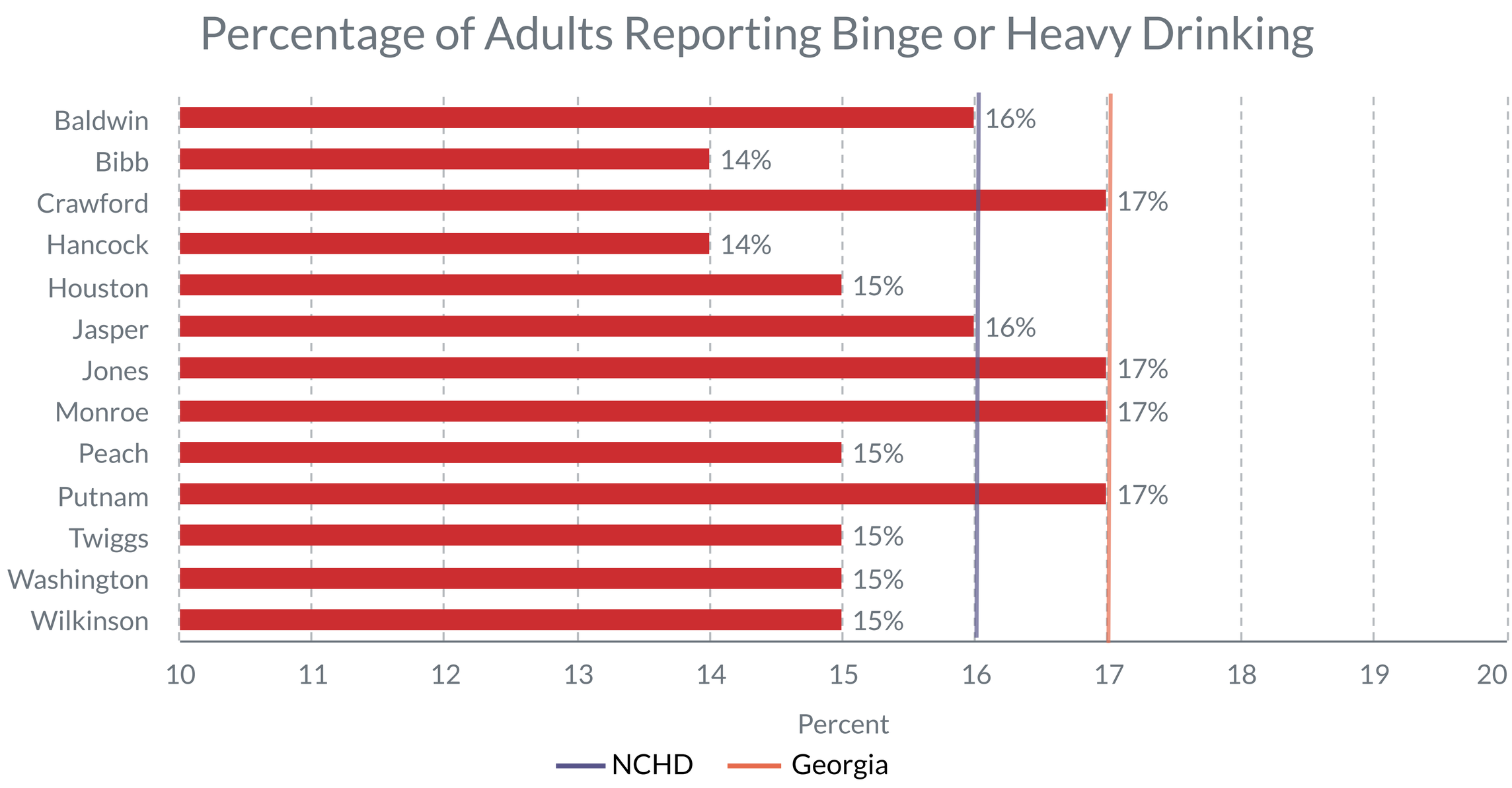
Substance Abuse

Binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average.



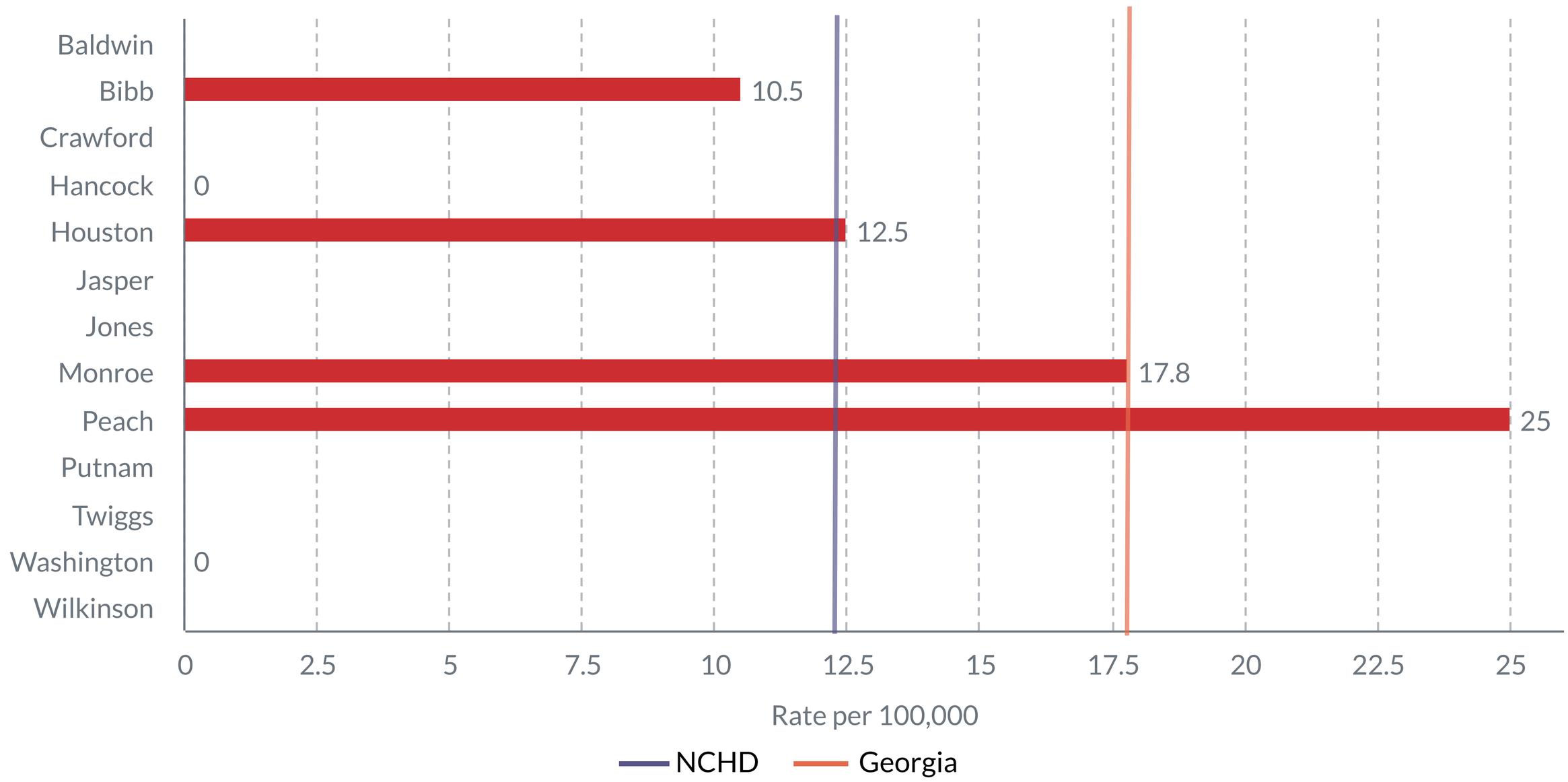
According to the Behavioral Risk Factor Surveillance Survey (BRFSS), in 2016 and 2017 men reported binge drinking more than women. Overall, more people reported binge drinking in 2016 than 2017.

Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States.



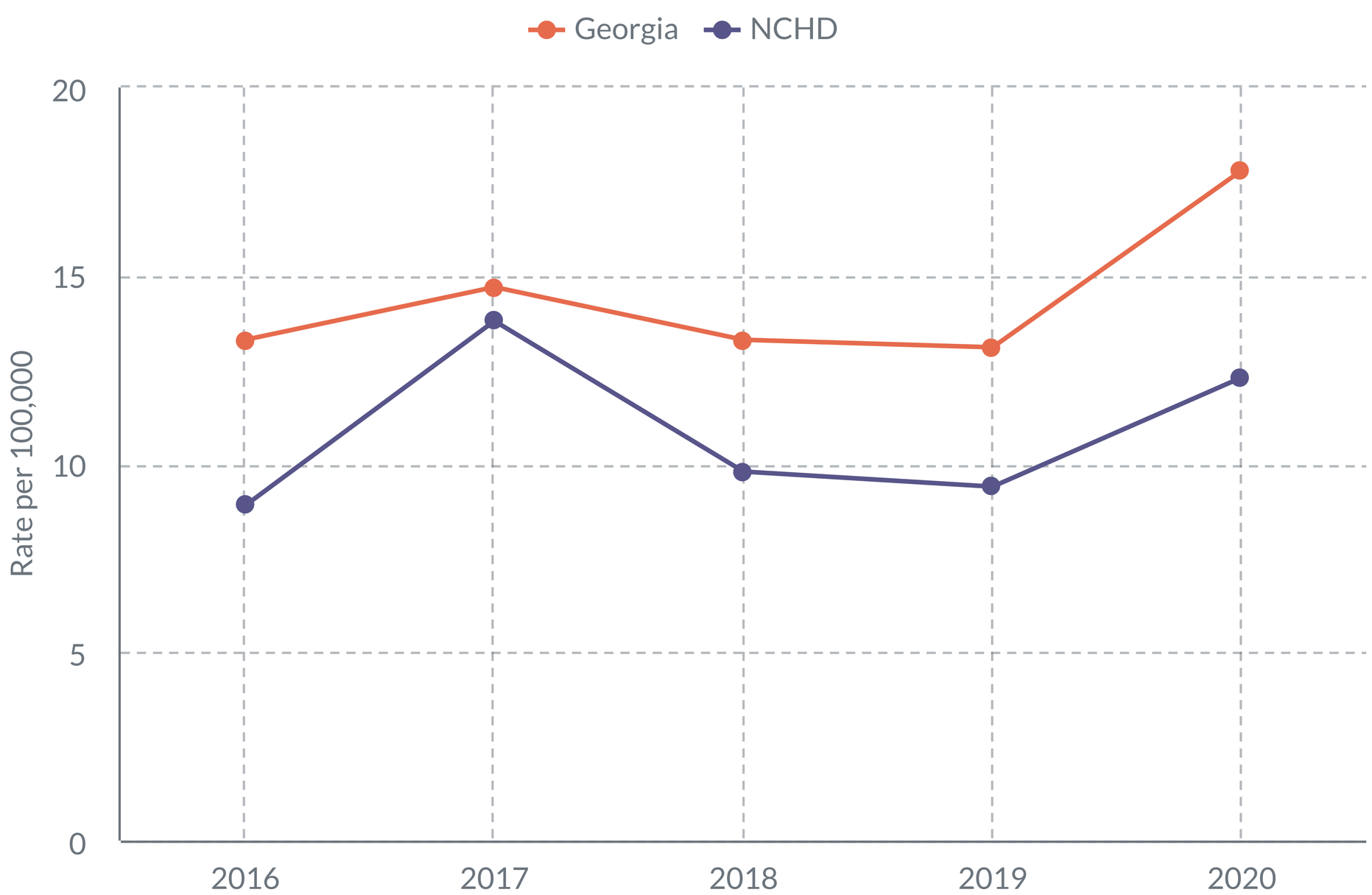
According the County Health Rankings, 16% of NCHD residents reported binge or heavy drinking. The state average was 17%.

Deaths Due to Drug Overdoses



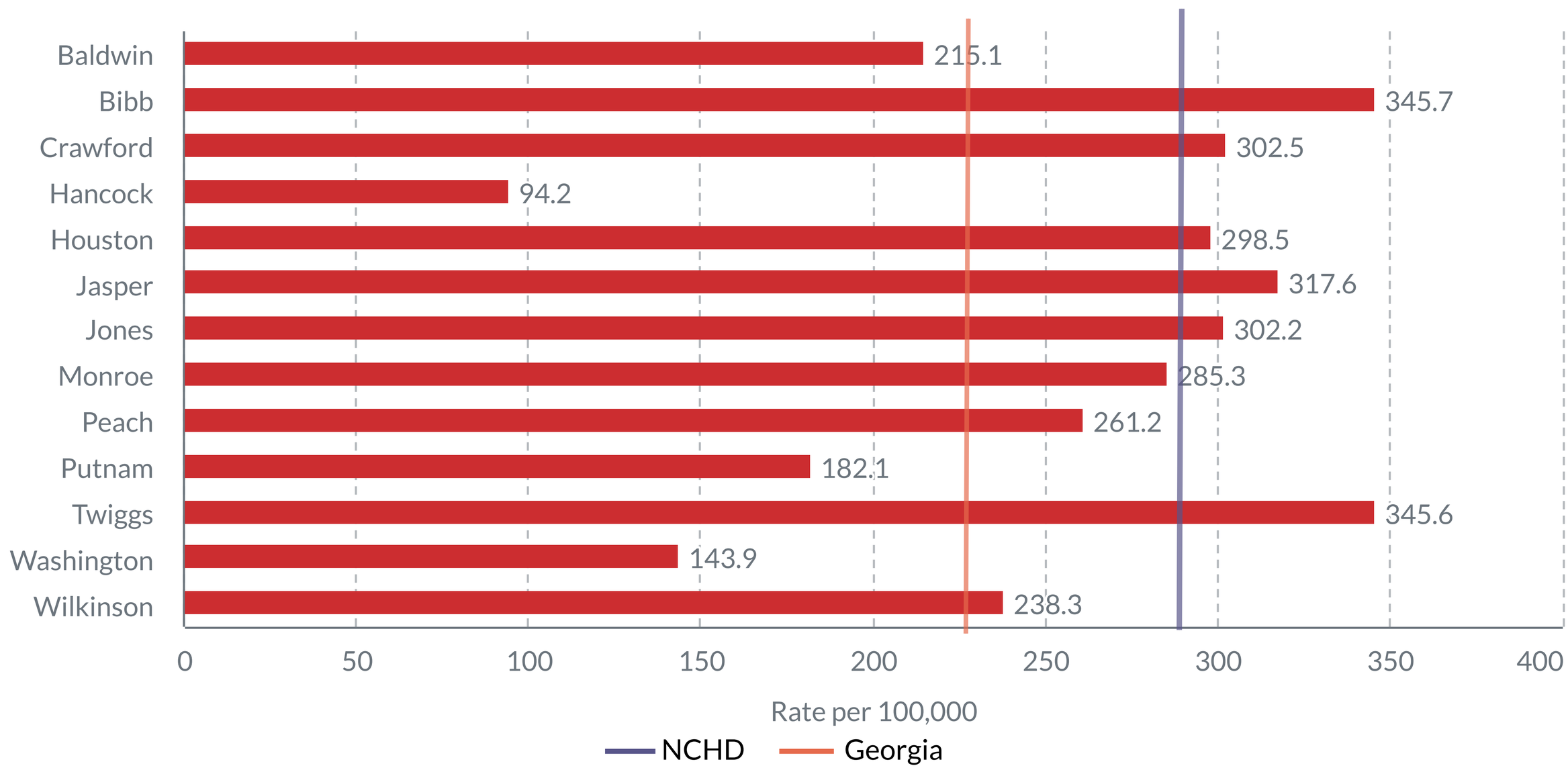
The average rate per 100,000 of deaths due to drug overdose in NCHD is 12.3. The state average is 17.8 per 100,000. Counties with missing numbers are due to there being less than 4 deaths by drug overdose.

Overdose Related Deaths NCHD vs. Georgia, 2016-2020



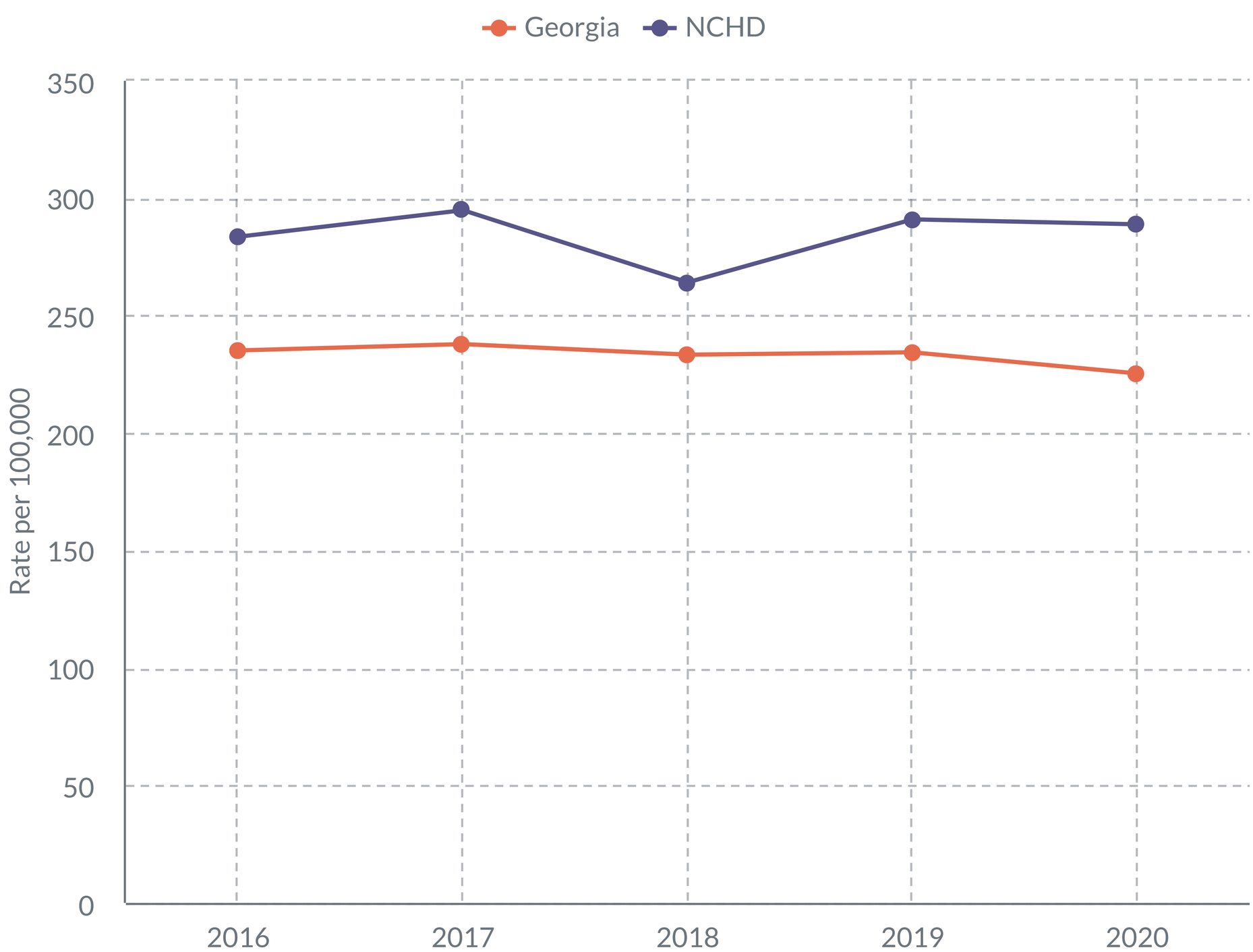
The rate of deaths per 100,000 population due to drug overdoses from 2016-2020 in NCHD was 11. The state average is 14.4.

ER Visits Due to Drug Overdoses



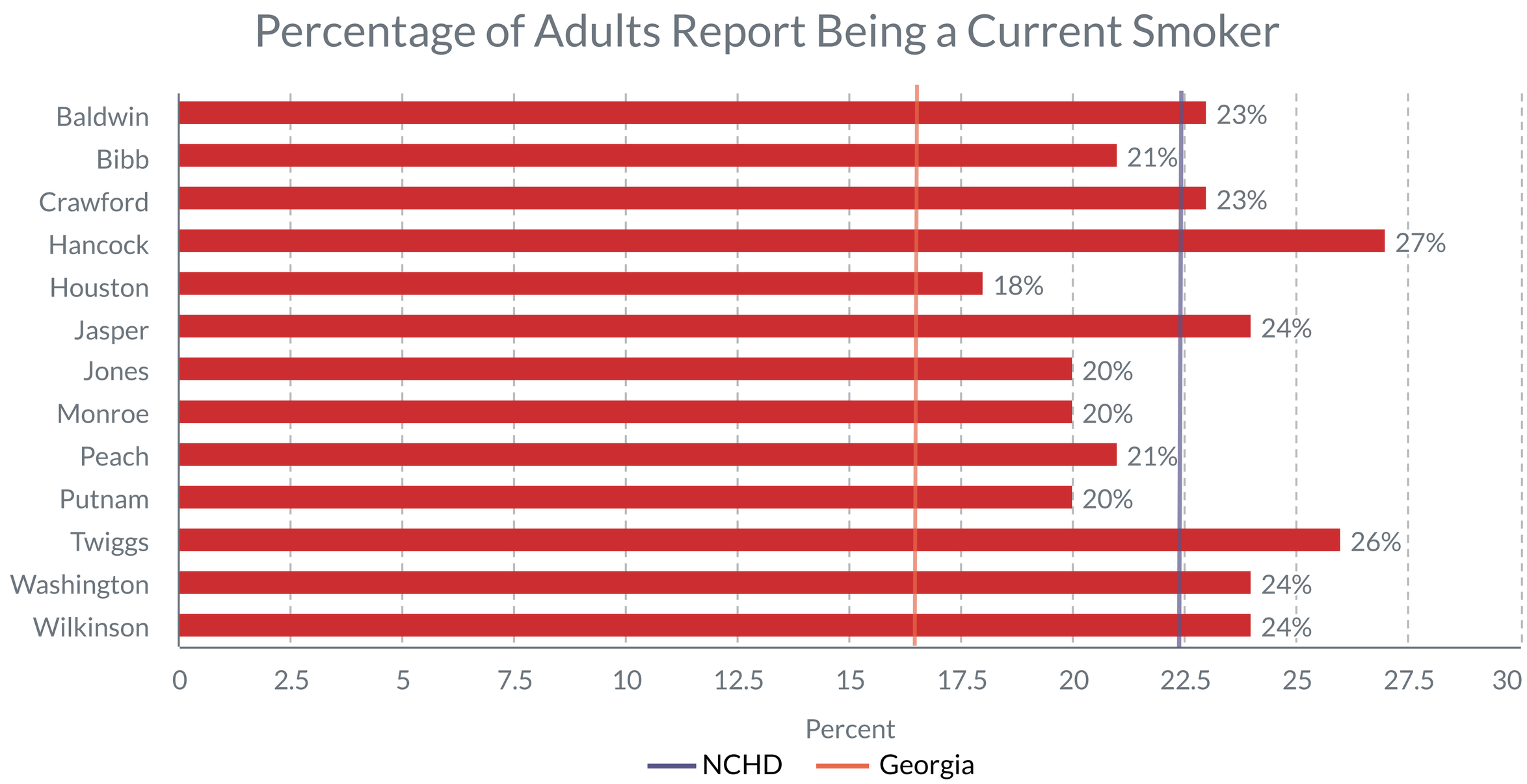
There were 288.9 per 100,000 ER visits due to drug overdose in NCHD, the state rate was 225.4 per 100,000. Bibb, Crawford, Houston, Jasper, Jones, and Twiggs had rates higher than the district average.

Overdose Related ER Visits NCHD vs. Georgia, 2016-2020

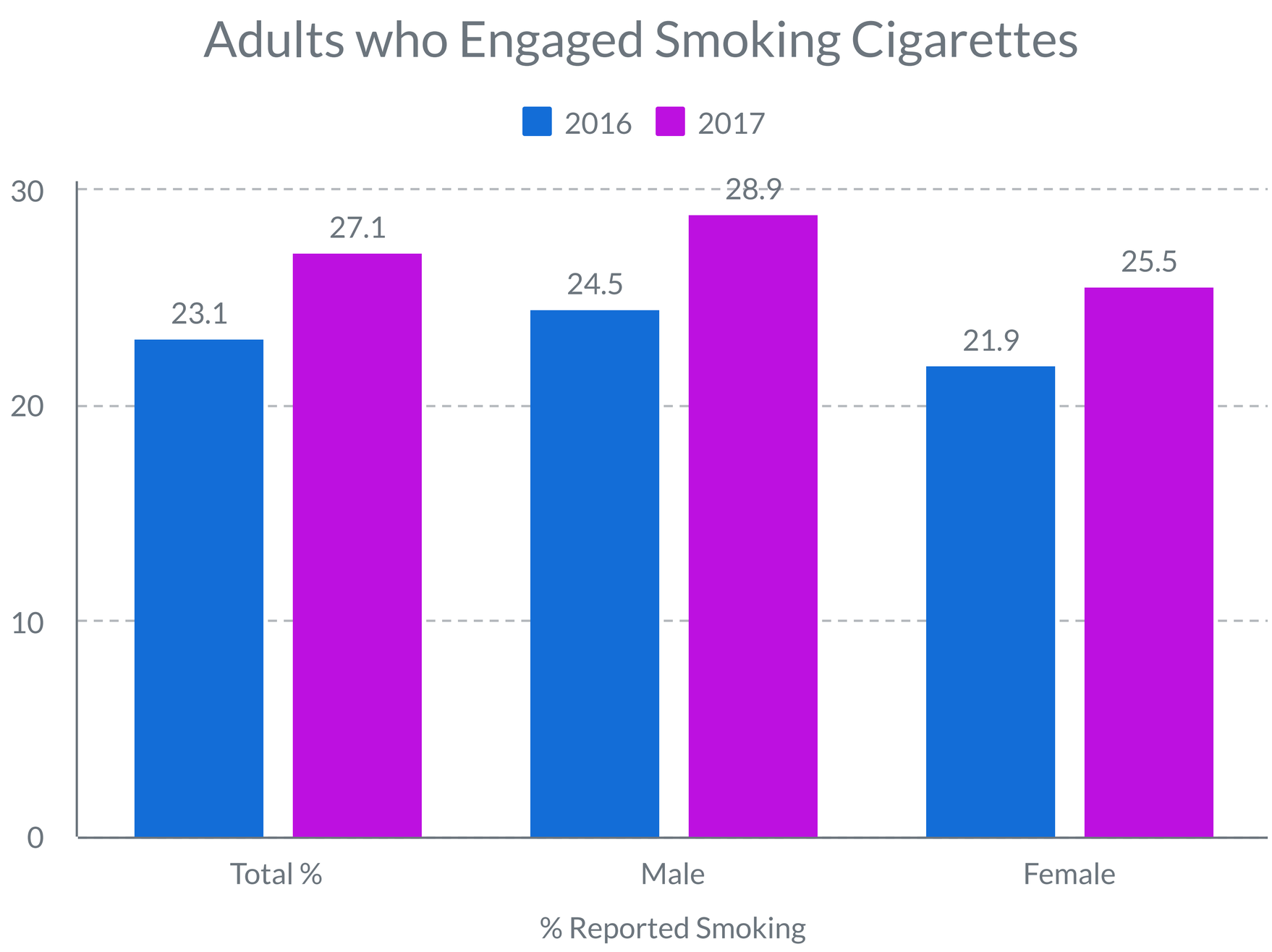


The ER visits per 100,000 population due to drug overdoses from 2016-2020 in NCHD is 285. The state average is 233.2.

Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes.



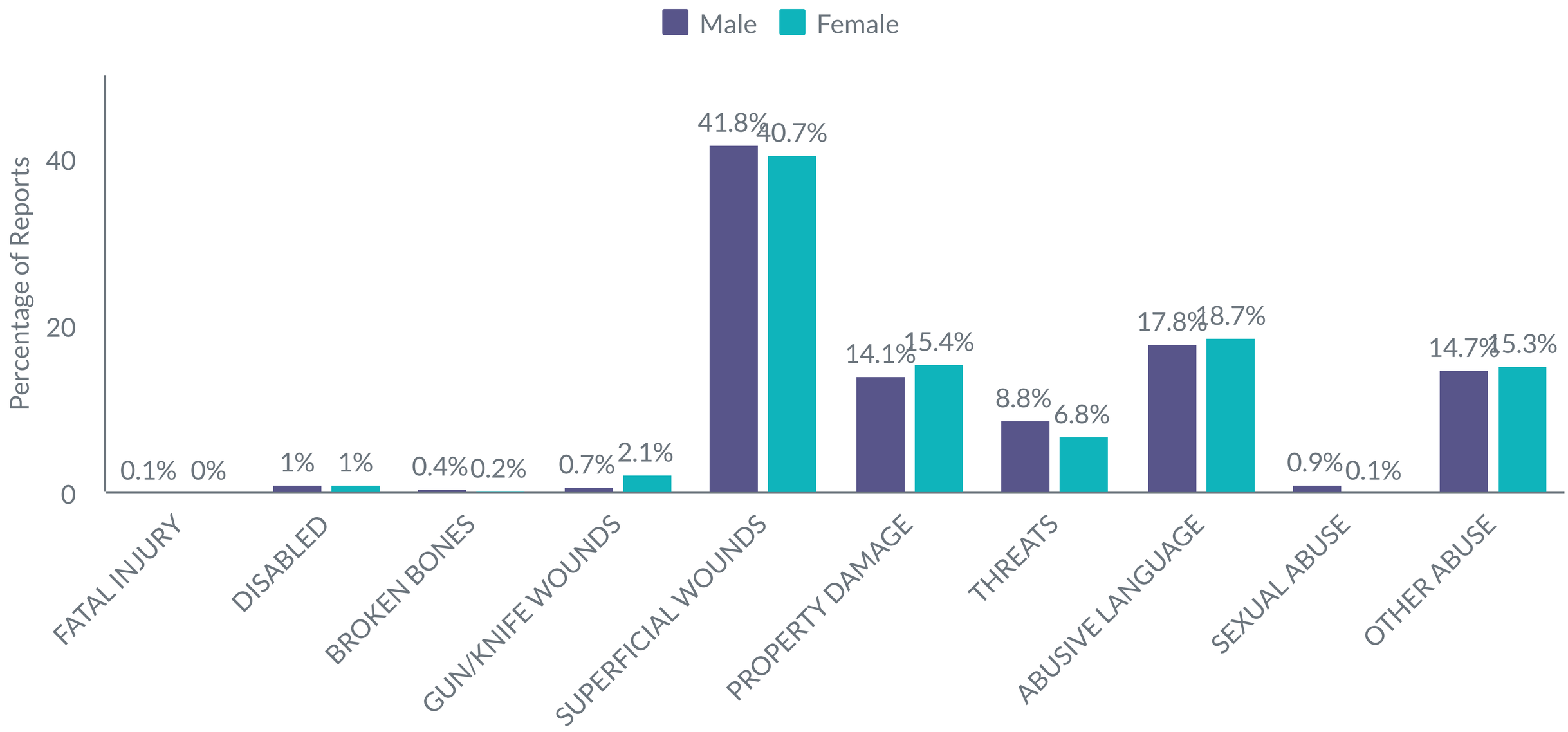
According to County Health Rankings, 22 % of Adults report being current smokers in NCHD, the state average is16%. Baldwin, Crawford, Hancock, Jasper, Twiggs, Washington and Wilkinson counties all have a higher number of smokers than the district average.



According to the Behavioral Risk Factor Surveillance Survey (BRFSS), in 2016 and 2017 women reported smoking cigarettes more than men. Overall, more people reported binge smoking in 2017 than 2016.

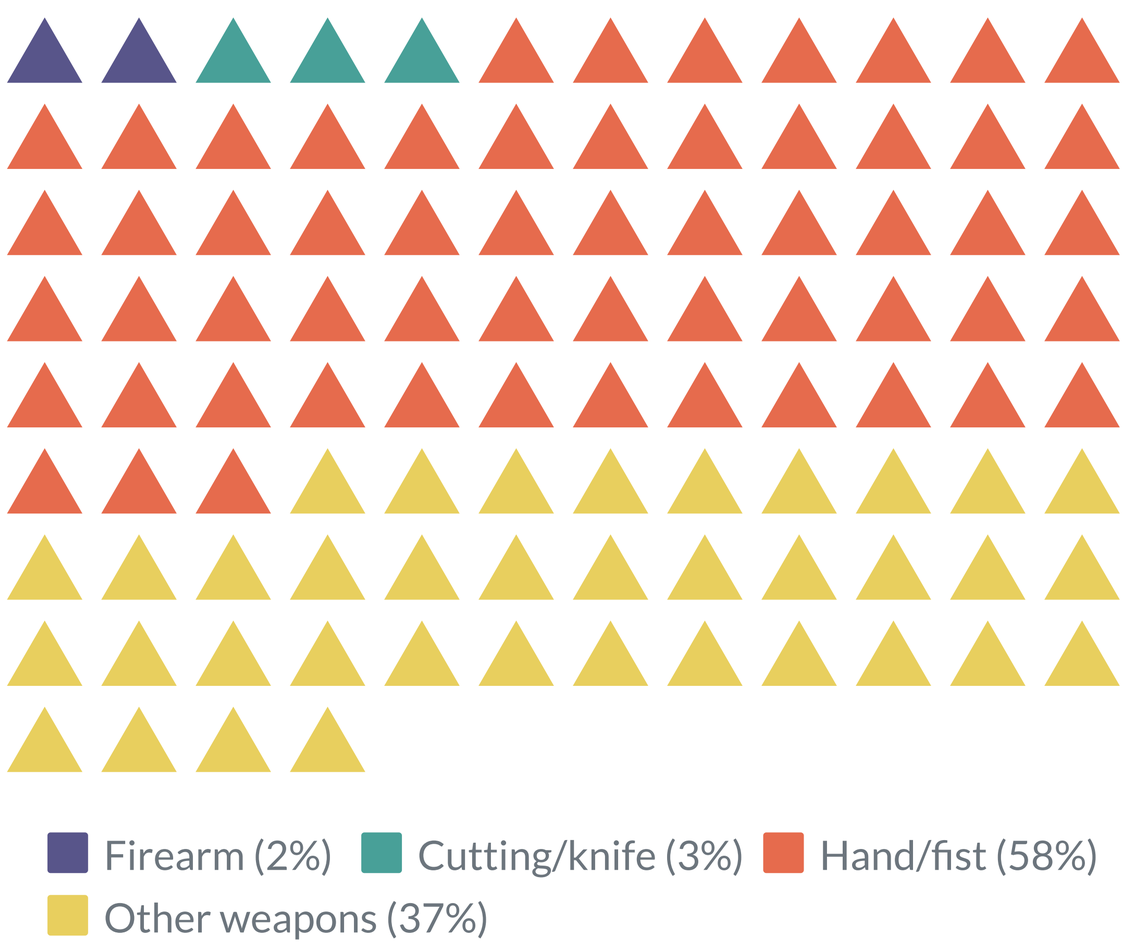
FAMILY VIOLENCE, 2013-2017

Abuse Type by Agressor Gender



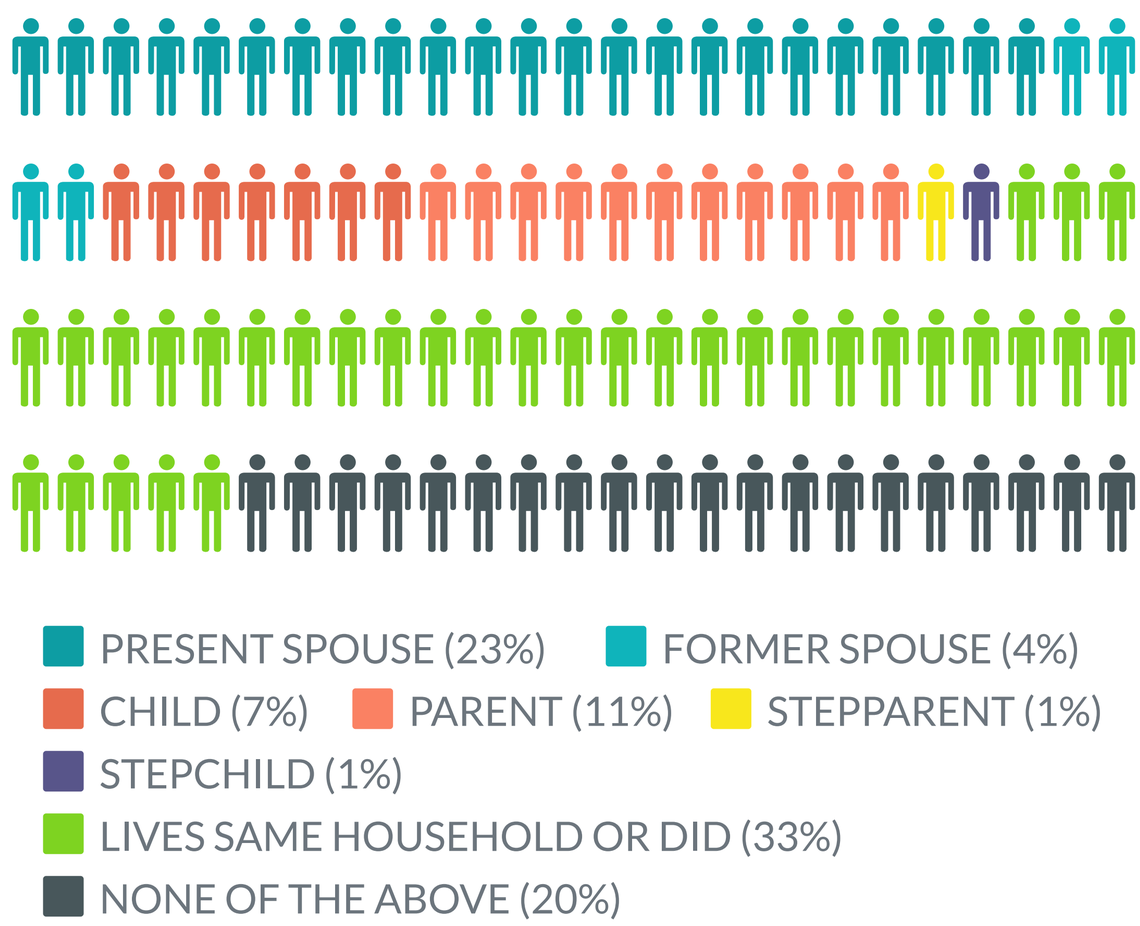
For male and female aggressors, the most common type of violence led to superficial wounds; 41.8% male and 40.7% of females. Property damage, abusive language, threats and other types of abuse were also common occurences when looking at family violence.

Types of Weapons Used



The largest percent of violent acts occur with the aggressor using their hands/fist (58%), second common are weapons other than guns or knives (37%).

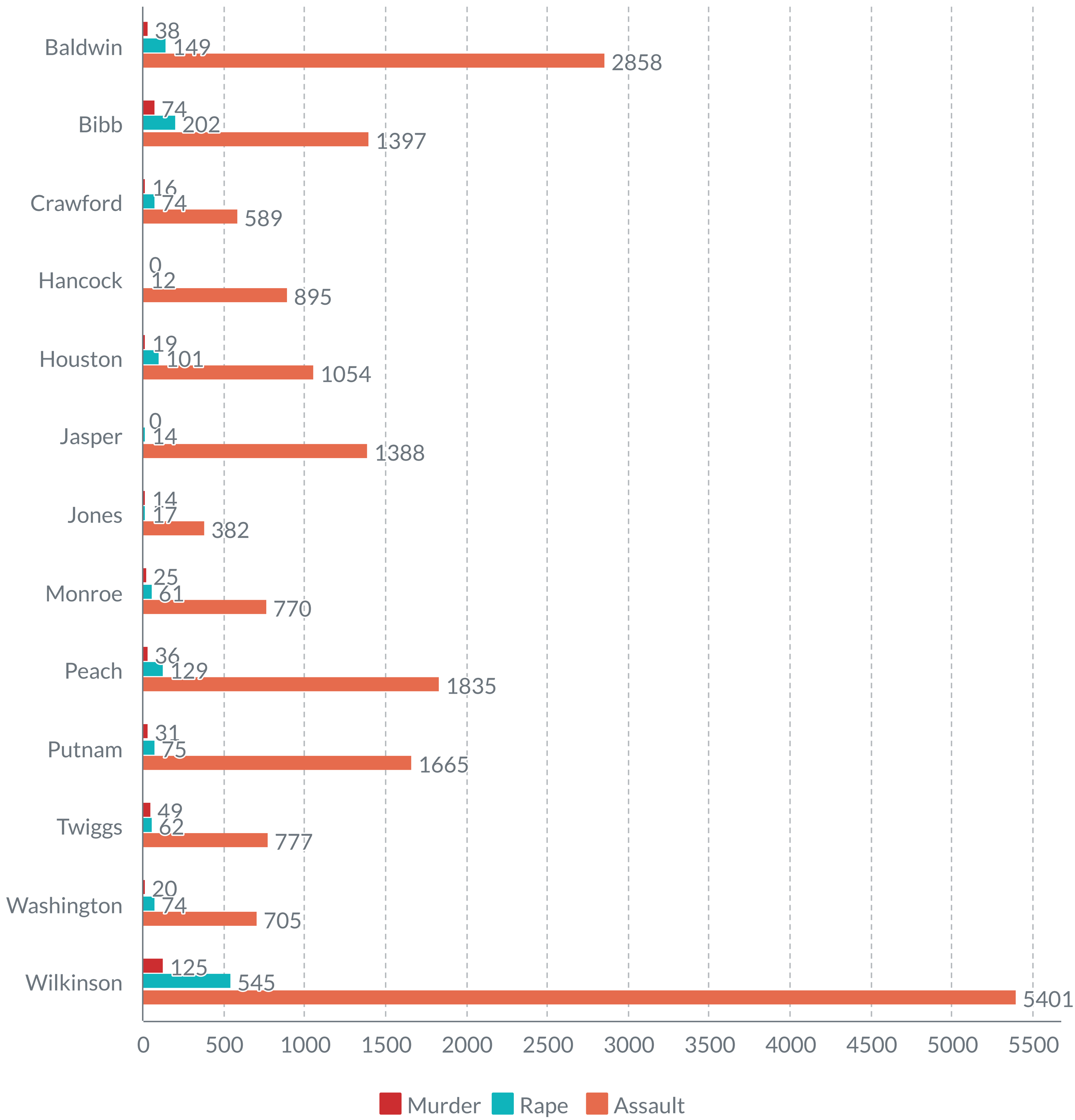
Relationship to Offender



The most common agressor in the home either lives or have lives with the victim at some point in time, the second largest group are present spouses.

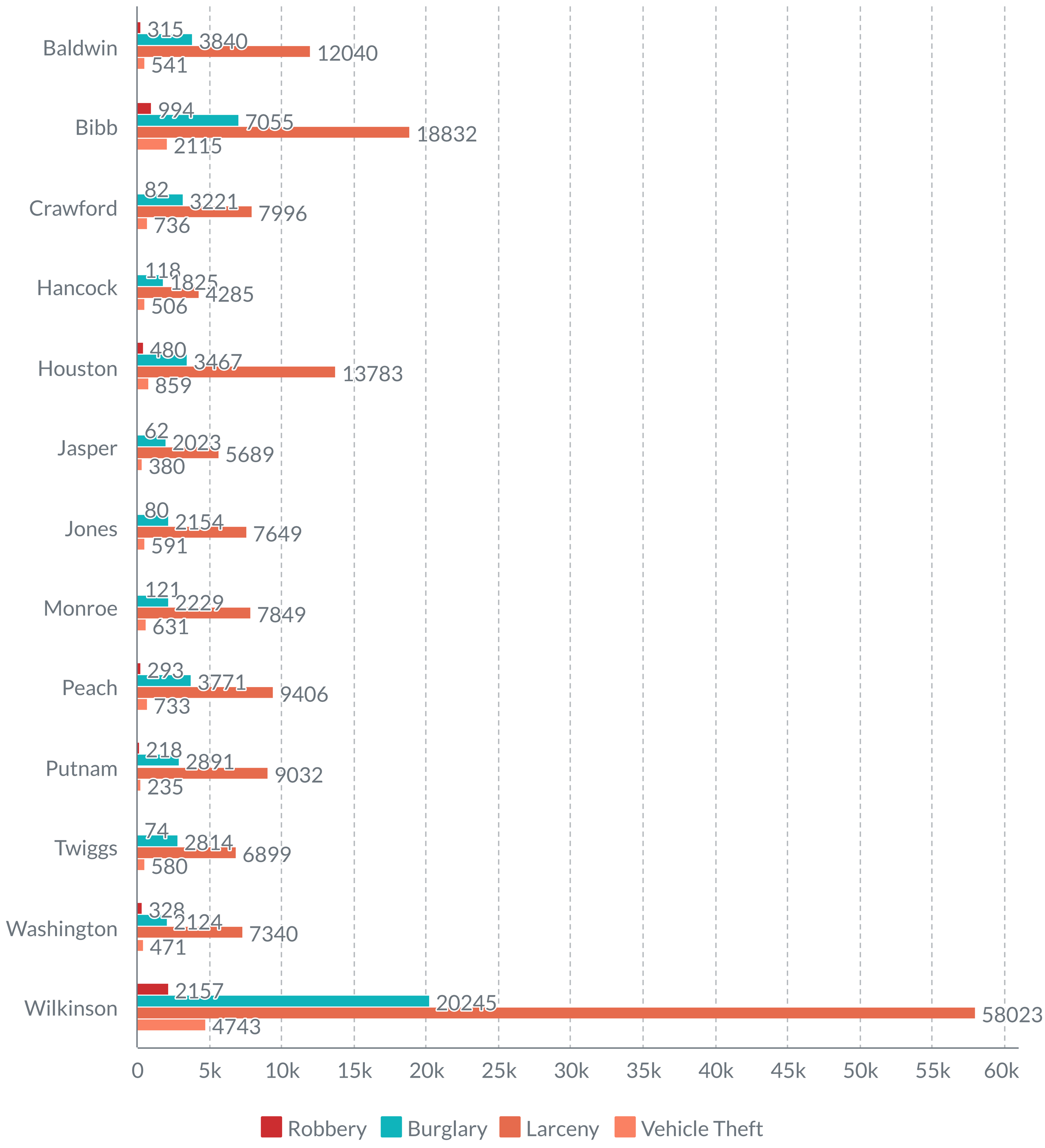
CRIME, 2013-2017

Violent Crime Rate by County



The most common form of violence in NCHD is assault. Wilkinson county had the highest number of assaults in the district. They also had the highest number of rapes which is the second most common type of assault in the district. Jones county had the least amount of crime in the district for all the different categories of crime.

Property Crime Rate by County



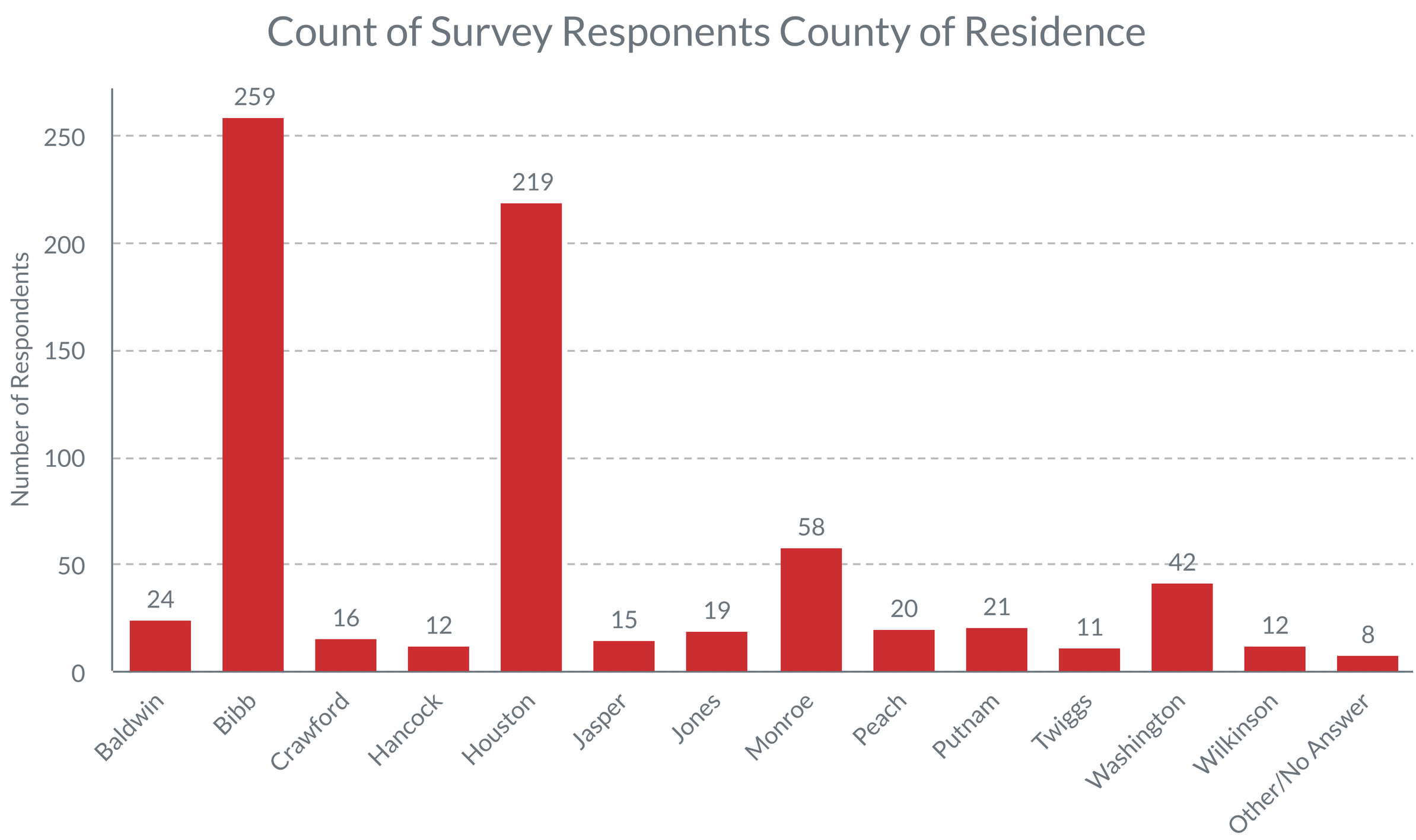
The most common form of property crime in NCHD is vehicle theft ,and Wilkinson county had the highest number in the district. Wilkinson also had the highest number of larcenies , burglaries and robberies.

Community Strengths and Themes

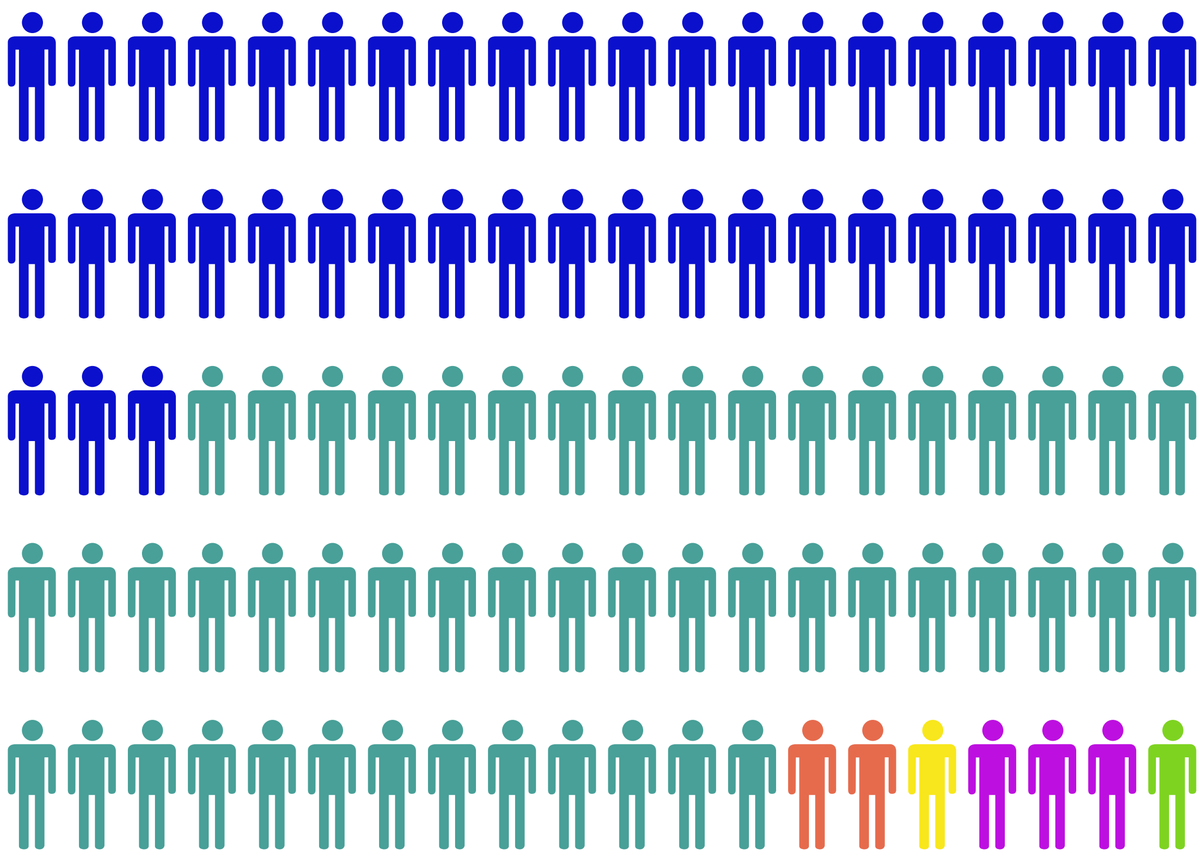
"The Community Themes and Strengths Assessment provides a deep understanding of the issues that residents feel are important by answering the questions: "What is important to our community?" "How is quality of life perceived in our community?" and "What assets do we have that can be used to improve community health?" (NACCHO, 2019)

An electronic survey was distributed based on the NACCHO Quality of Life Questionnaire that was used for NCHD's community health assessments in 2013. Using a margin of error of 5% and a confidence interval of 95%, it was determined that a sample size of 384 was needed to represent the estimated population size at the time, 530,945. The survey was distributed via social media, other electronic sources and paper copies were made available at each health department and every event attended by NCHD staff. The survey respondents that completed the survey were asked to enter a drawing for a $100 VISA Gift Card.

A total of 743 participants completed the survey, with 736 participants included in the final analysis. Most of the responses came from urban Bibb and Houston counties (64.9%). Respondents were primarily female, Black/African American, and at least high school educated. Consistently, a third of the respondents felt that their neighborhood was safe, supportive, collaborative, and had resources available to its members. The top health-related risk behaviors/risk factors of concern to the community were drug abuse, alcohol, and being overweight.

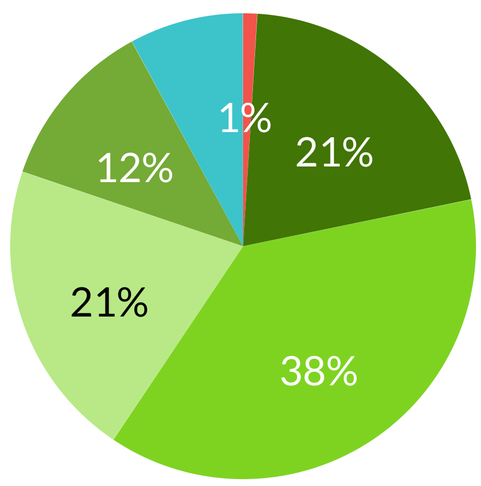


Respondent Race/Ethnicity



White / Caucasian (42.57%)
African American / Black (49.5%)
Asian / Pacific Islander (1.98%)
Native American (0.99%)
Hispanic / Latino (2.97%)
Other (1.98%)

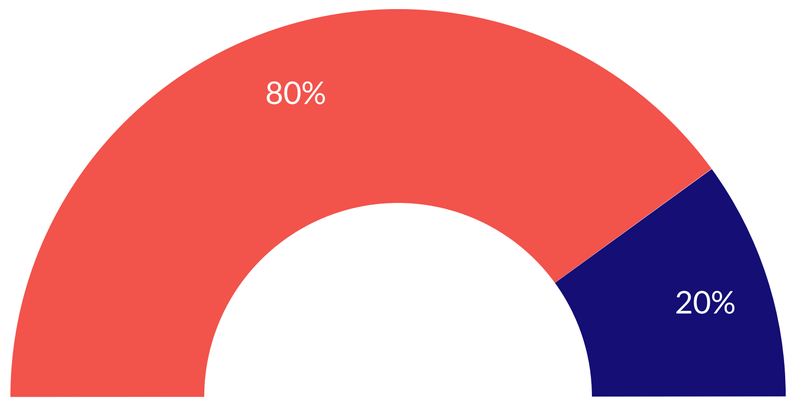
Respondent Age Distribution



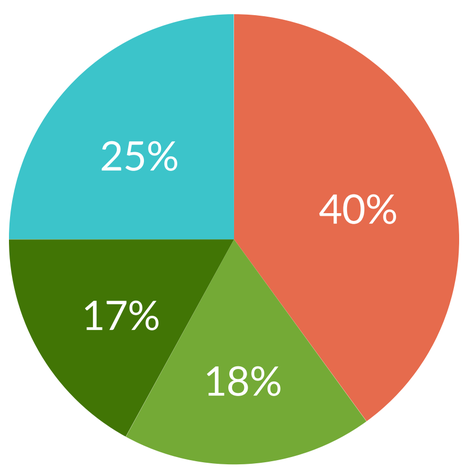
17 or less (0.99%)
18 - 25 (20.79%)
26 - 39 (37.62%)
40 - 54 (20.79%)
55 - 64 (11.88%)
65 or over (7.92%)

Respondent Gender Distribution

Female (80%)
Male (20%)



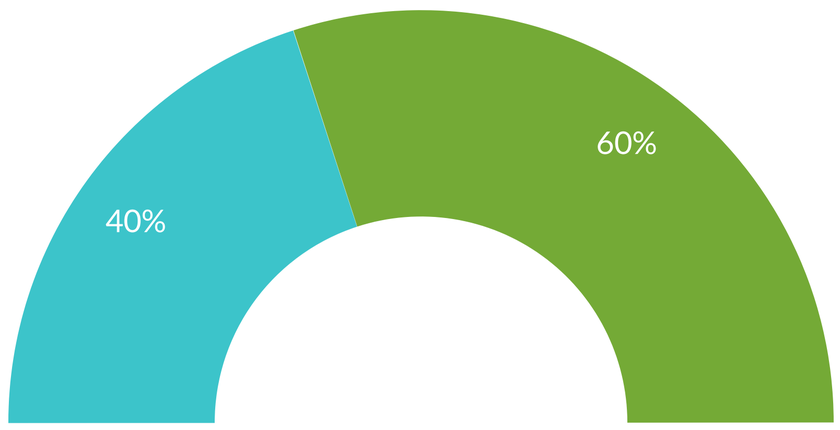
Respondent Household Income



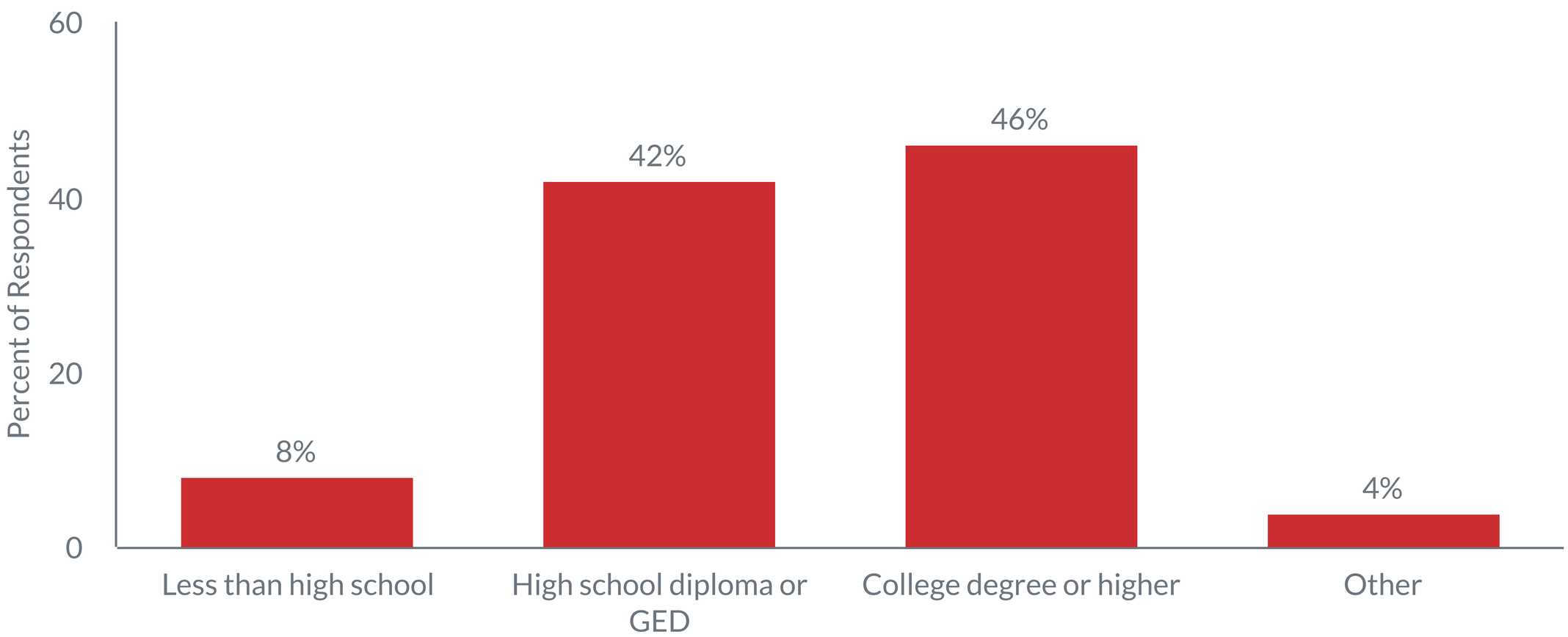
Less than $20,000 (40%)
$20,000 to $29,000 (18%)
$30,000 to $49,000 (17%)
Over $50,000 (25%)

Respondent Marital Status

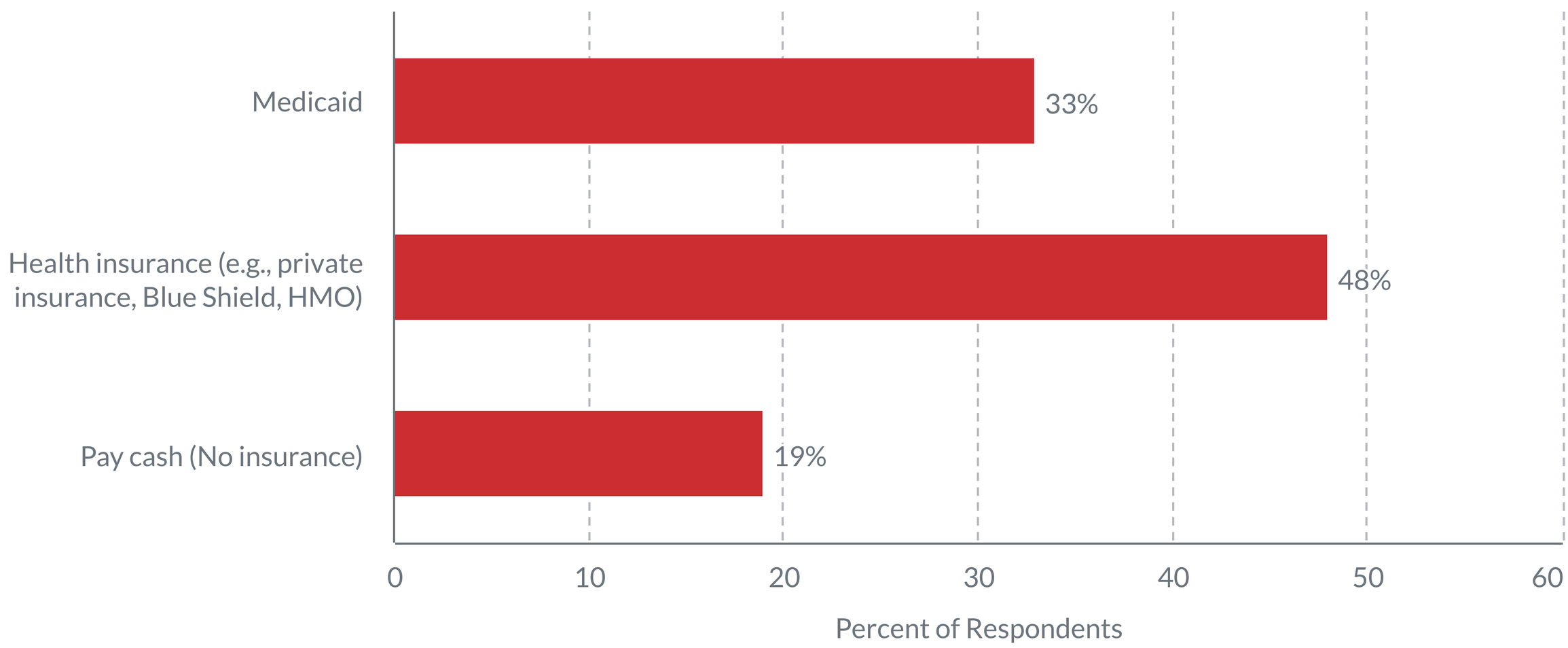
Married / Cohabitating (40%)
Not married / Single (60%)



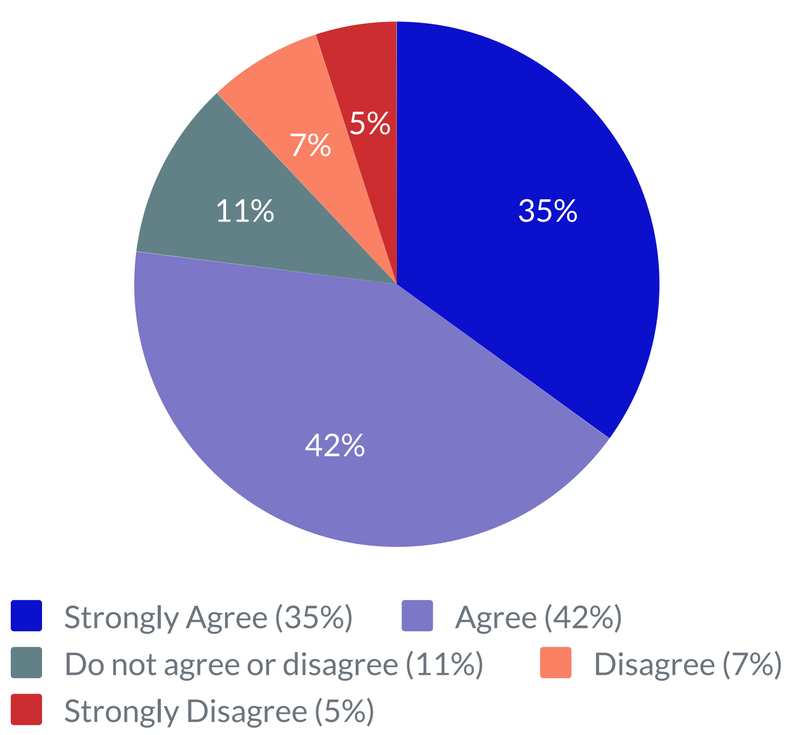
Educational Attainment of Respondents



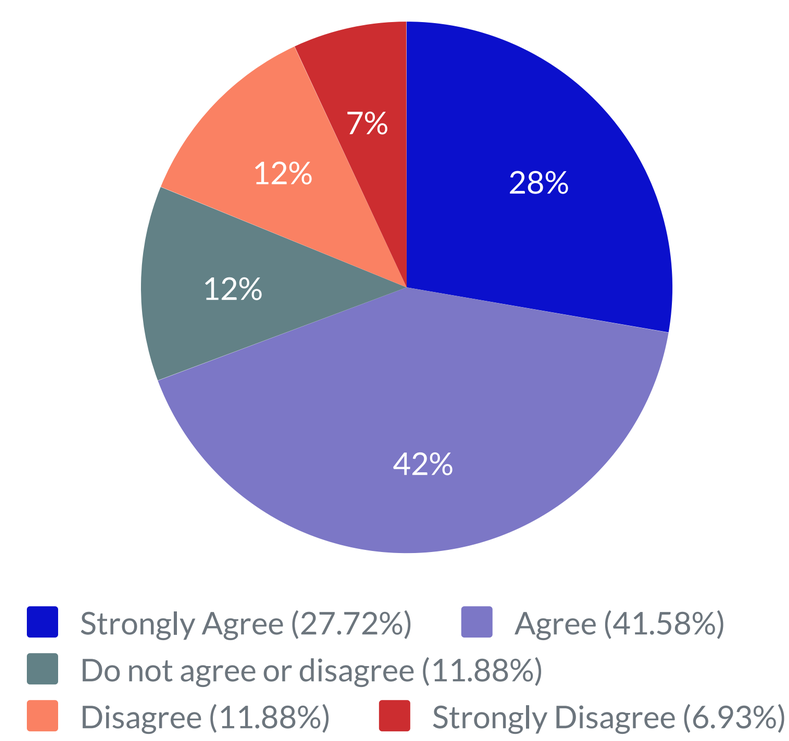
Respondent Health Insurance Status



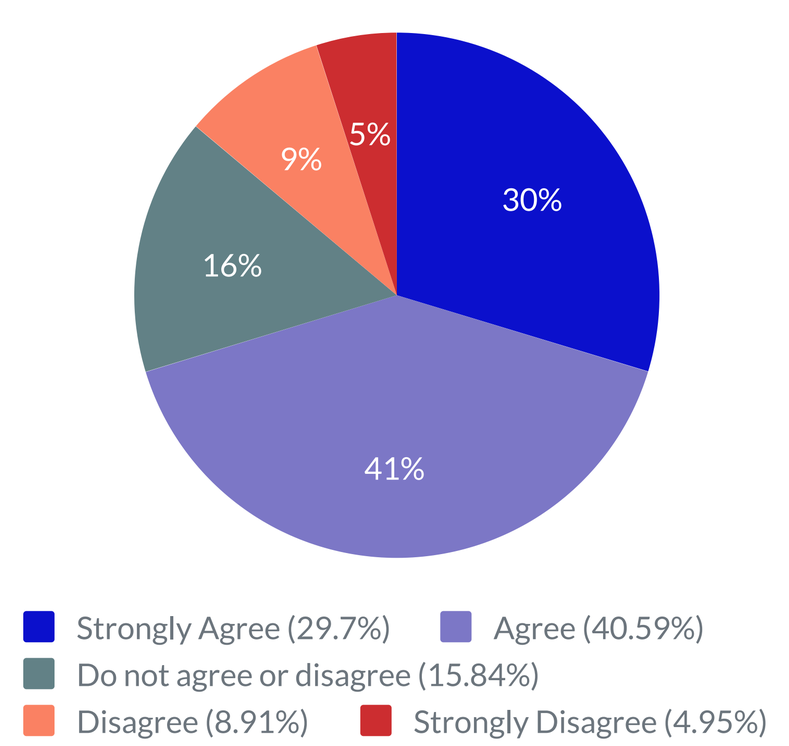
Question: I am satisfied with the quality of life in the county I live in. I feel safe, have a good sense of well-being, and can participate in my community.



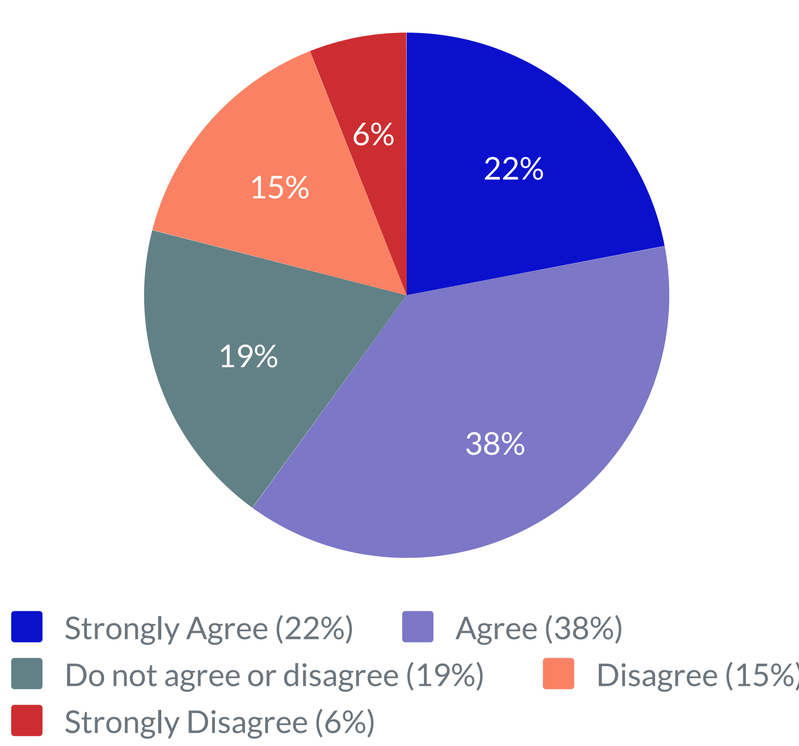
Question: I am happy with the health care options in the county I live in. Health care is affordable and accessible, and I am content with options for health care in the county I live in.



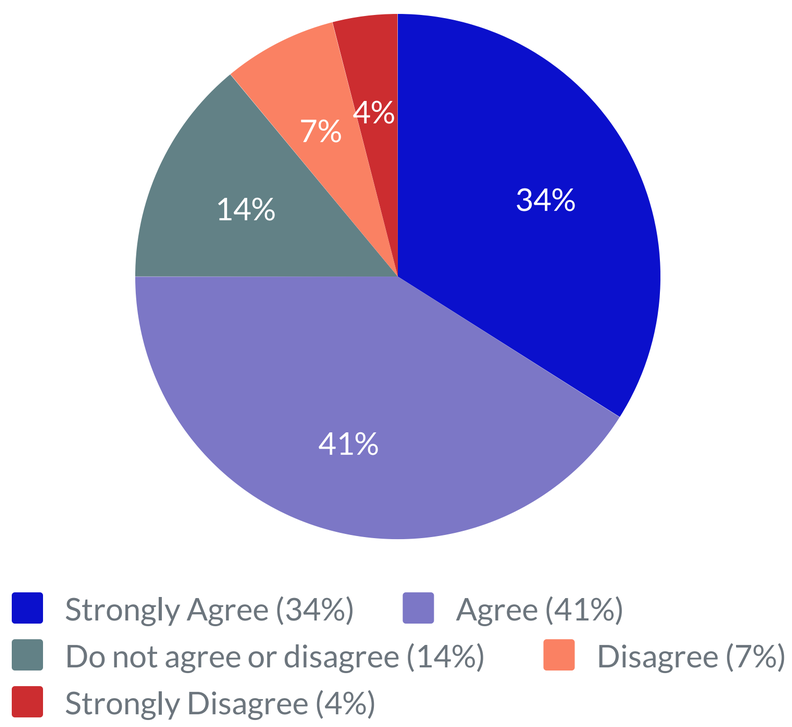
Question: The county that I live in is a good place to grow old.



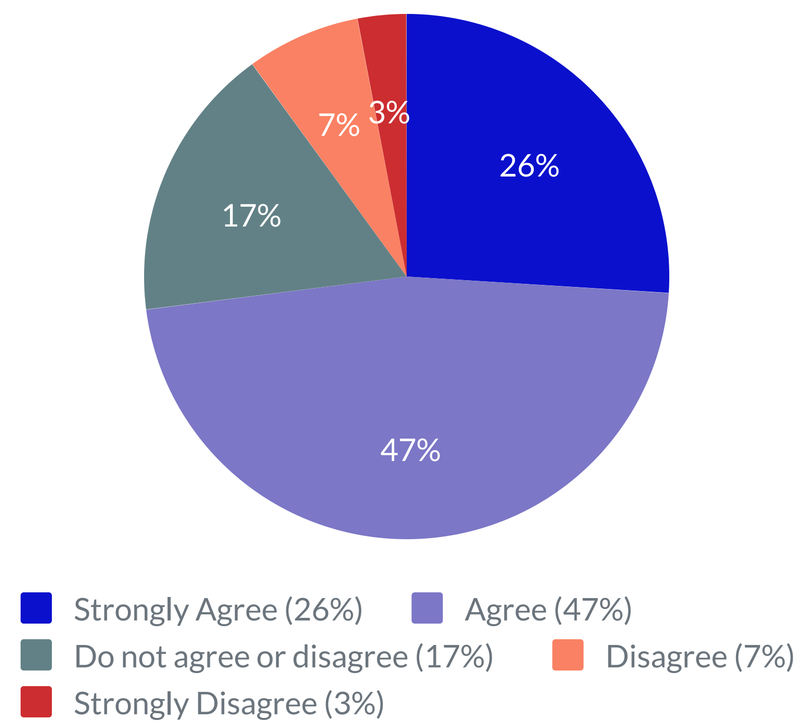
Question: The county that I live in has economic growth opportunities. There are opportunities for jobs, career growth, and education.



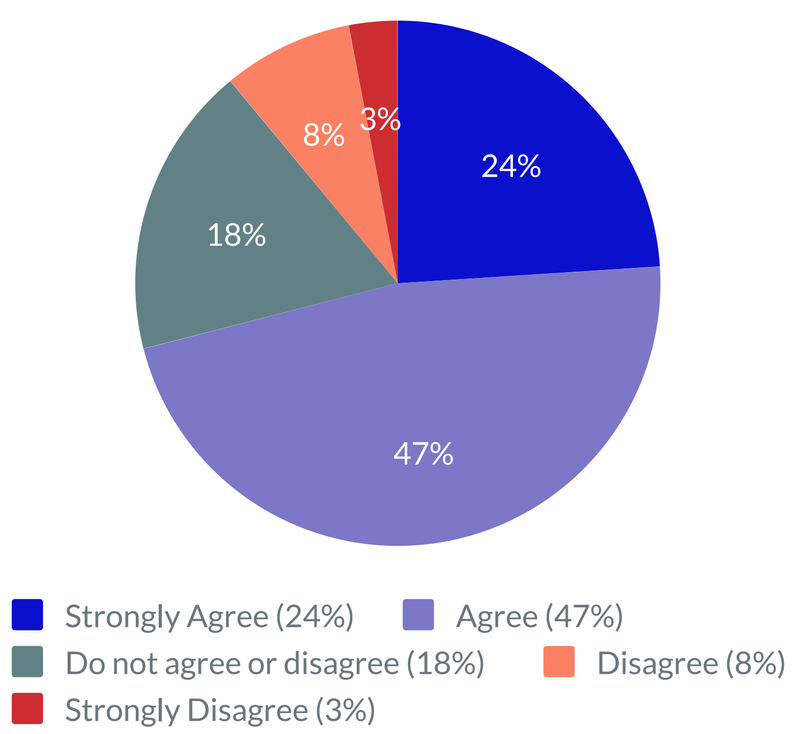
Question: The county that I live in is a good place to raise children.



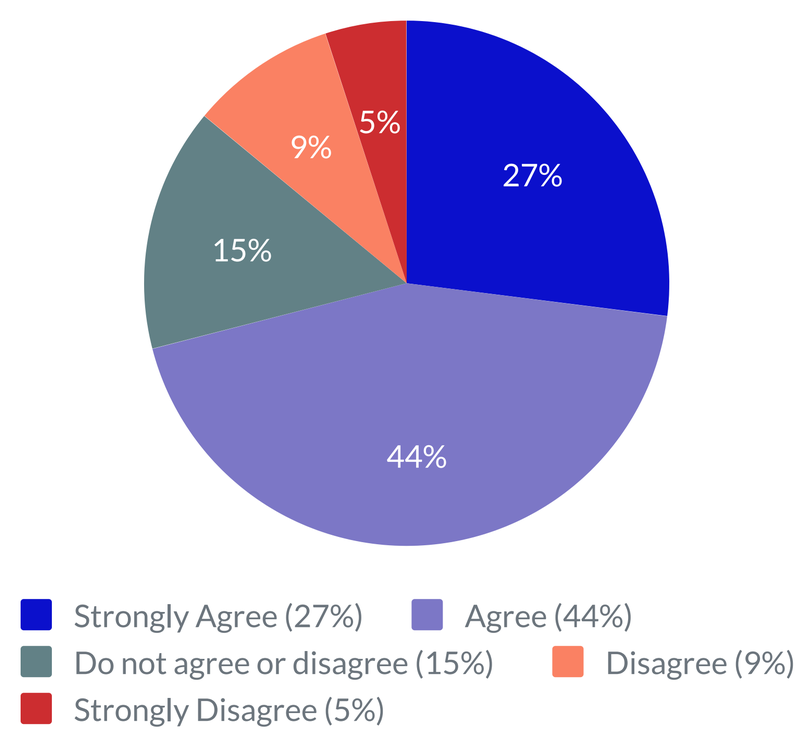
Question: The county that I live in is a community that provides support for individuals and families in times of need.



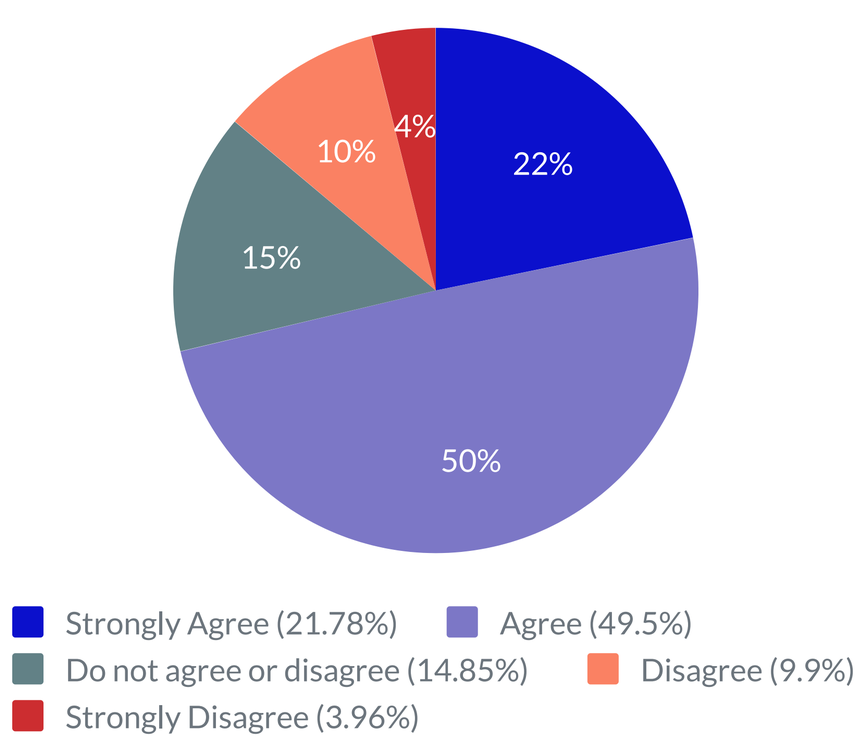
Question: All people and groups within the county that I live have the opportunity to contribute to and participate in the county's quality of life.



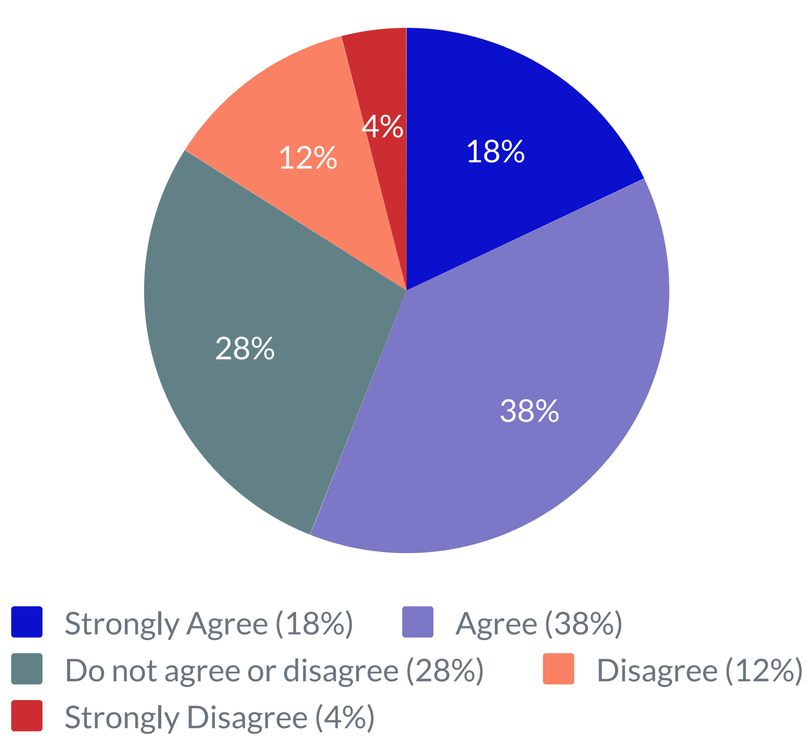
Question: The county that I live in is a safe place to live.



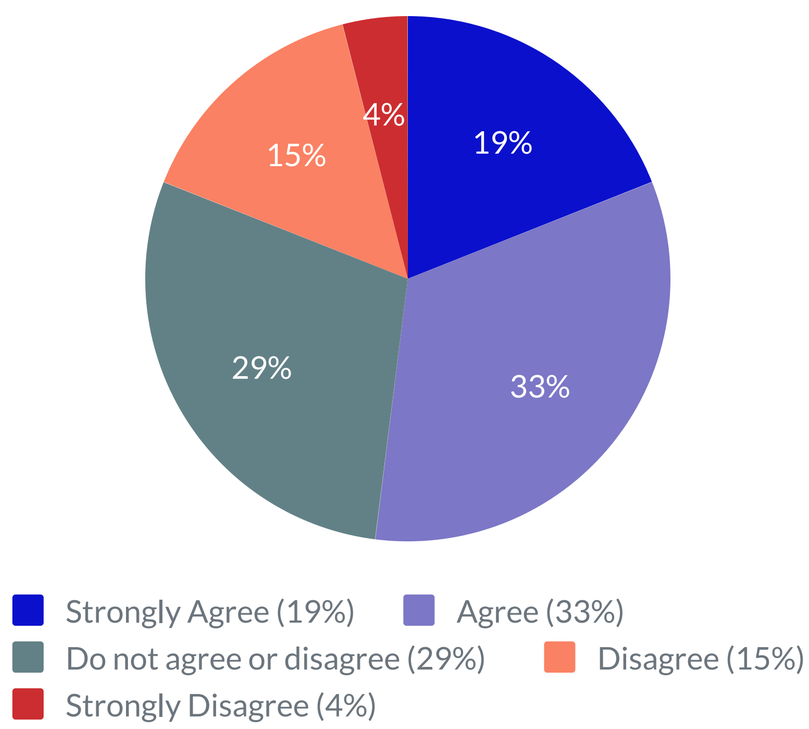
Question: There are a variety of resources available in the county that I live in.



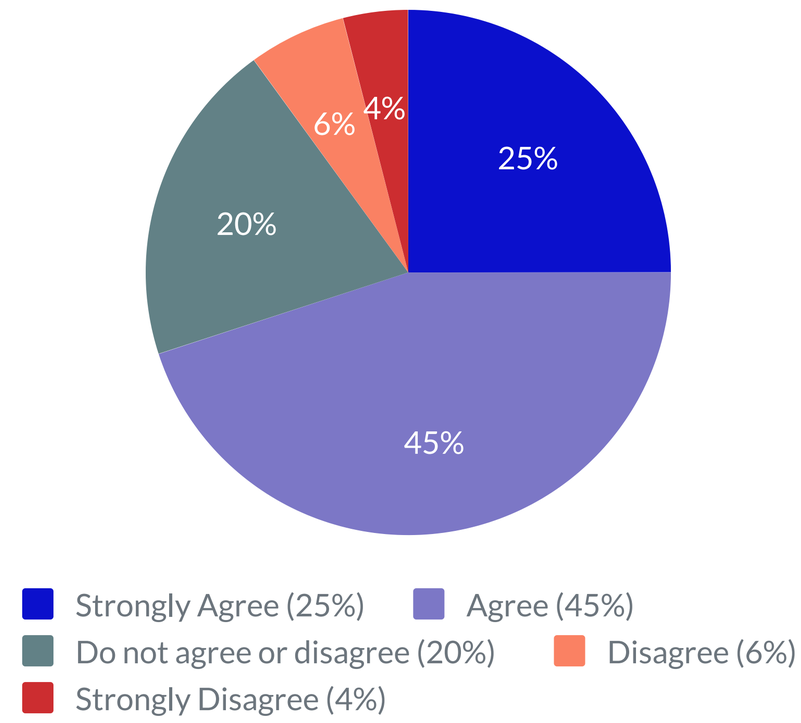
Question: My community members trust and respect each other and can work together.



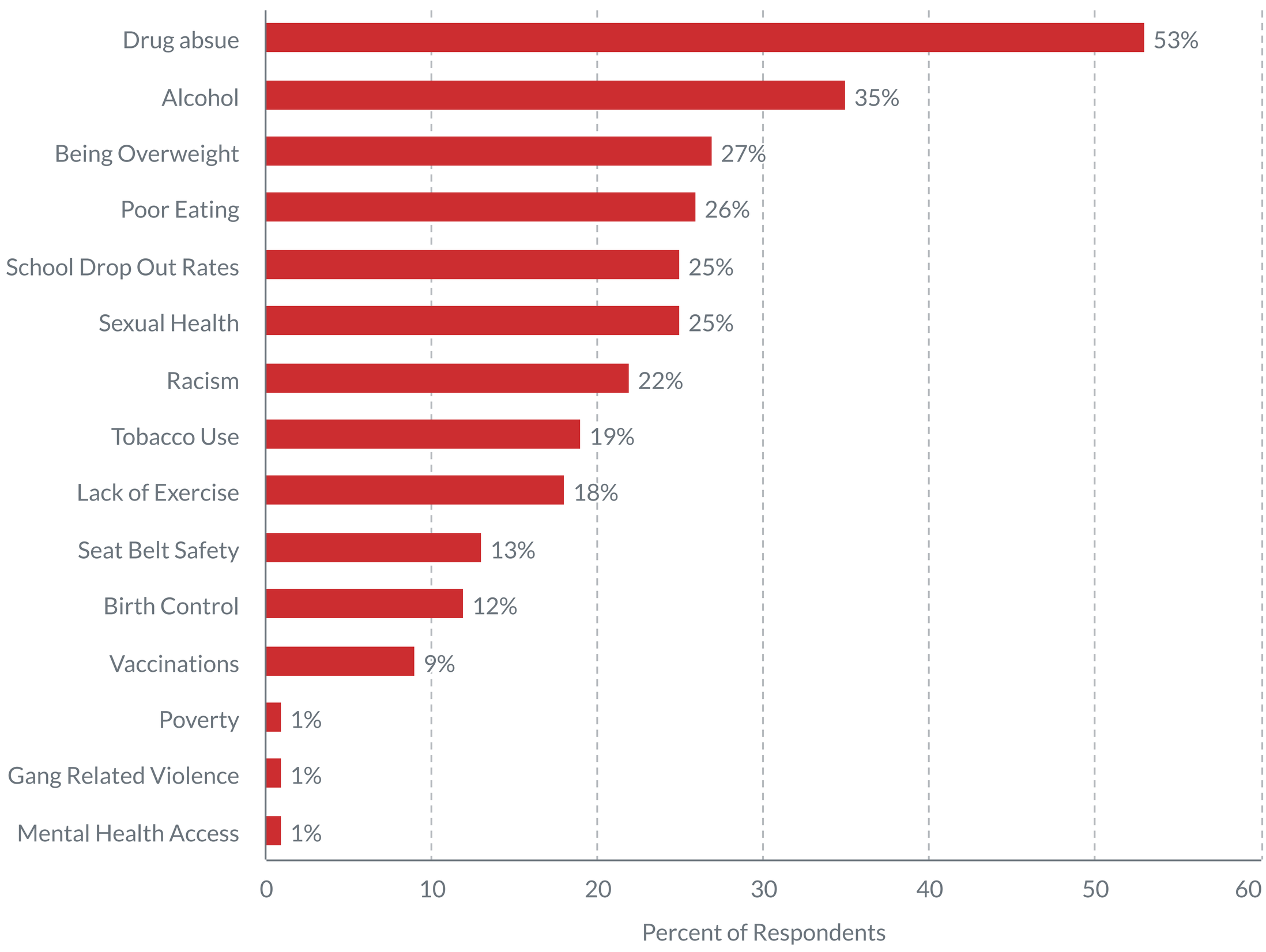
Question: All residents in my community believe that they can make the county a better place to live.



Question: My community has an active sense of civic responsibility and engagement (for example participation in government, church, volunteers and memberships of voluntary associations), and of civic pride in shared accomplishments.



Top Risk Behaviors or Factors



Other risk behaviors or factors mentioned within the survey include: poverty, crime, environmental health issues, jobs, suicide, homelessness, maternal health, access to healthy foods, income inequality, motor vehicle accidents, gun violence, and divides within communities.

Local Public Health Assessment

“The Local Public Health System Assessment (LPHSA) focuses on all of the organizations and entities that contribute to the public's health. The LPHSA answers the questions: "What are the components, activities, competencies, and capacities of our local public health system?" and "How are the Essential Services being provided to our community?"” (NACCHO, 2019)

The 10 Essential Public Health Services (EPHS) describe the public health activities that all communities should undertake and serve as the framework for NPHPSP instruments. These include:

1) Monitor health status to identify and solve community health problems.
2) Diagnose and investigate health problems and health hazards in the community.
3) Inform, educate, and empower people about health issues.
4) Mobilize community partnerships and action to identify and solve health problems.
5) Develop policies and plans that support individual and community health efforts.
6) Enforce laws and regulations that protect health and ensure safety.
7) Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8) Assure competent public and personal health care workforce.
9) Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10) Research for new insights and innovative solutions to health problems.

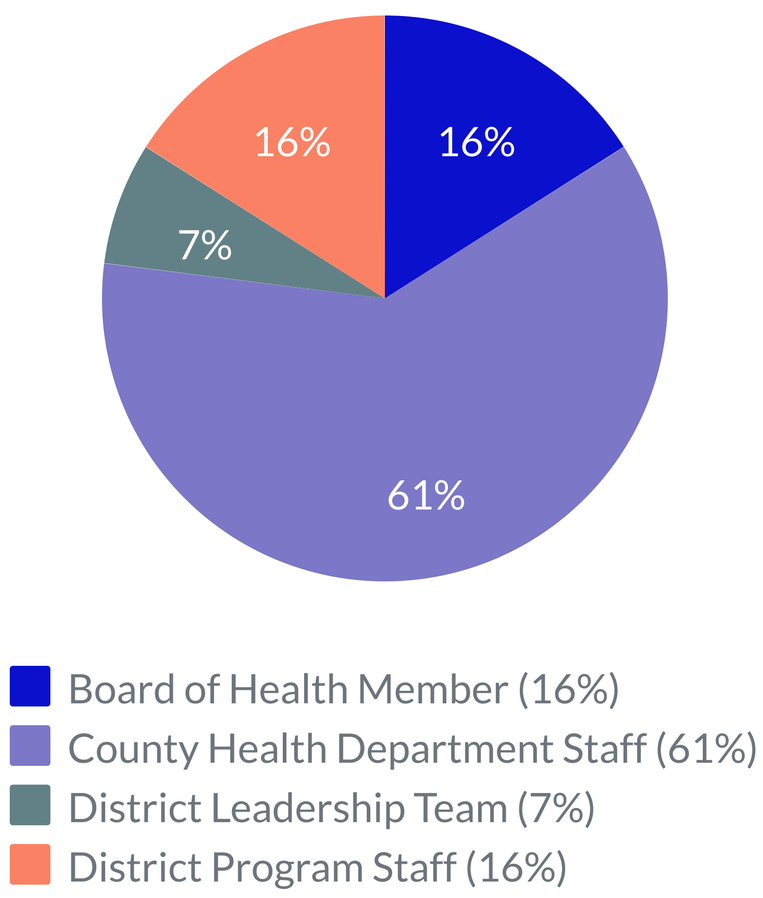
A survey, based on the National Public Health Performance Standards Program’s Local Public Health System Assessment, was sent to District Management Team, County Nurse Managers, Environmental Health Managers, Board of Health Chairpersons, and the Community Health Improvement Planning Steering Committee Leadership.

The survey results include percentage ratings for each of the full standards, based on if the individual indicators within each standard were met. These indicators represent the individual objectives that when joined together, comprise the total standard. The score for each standard category was based on the percentage of separate indicators met within the standard.

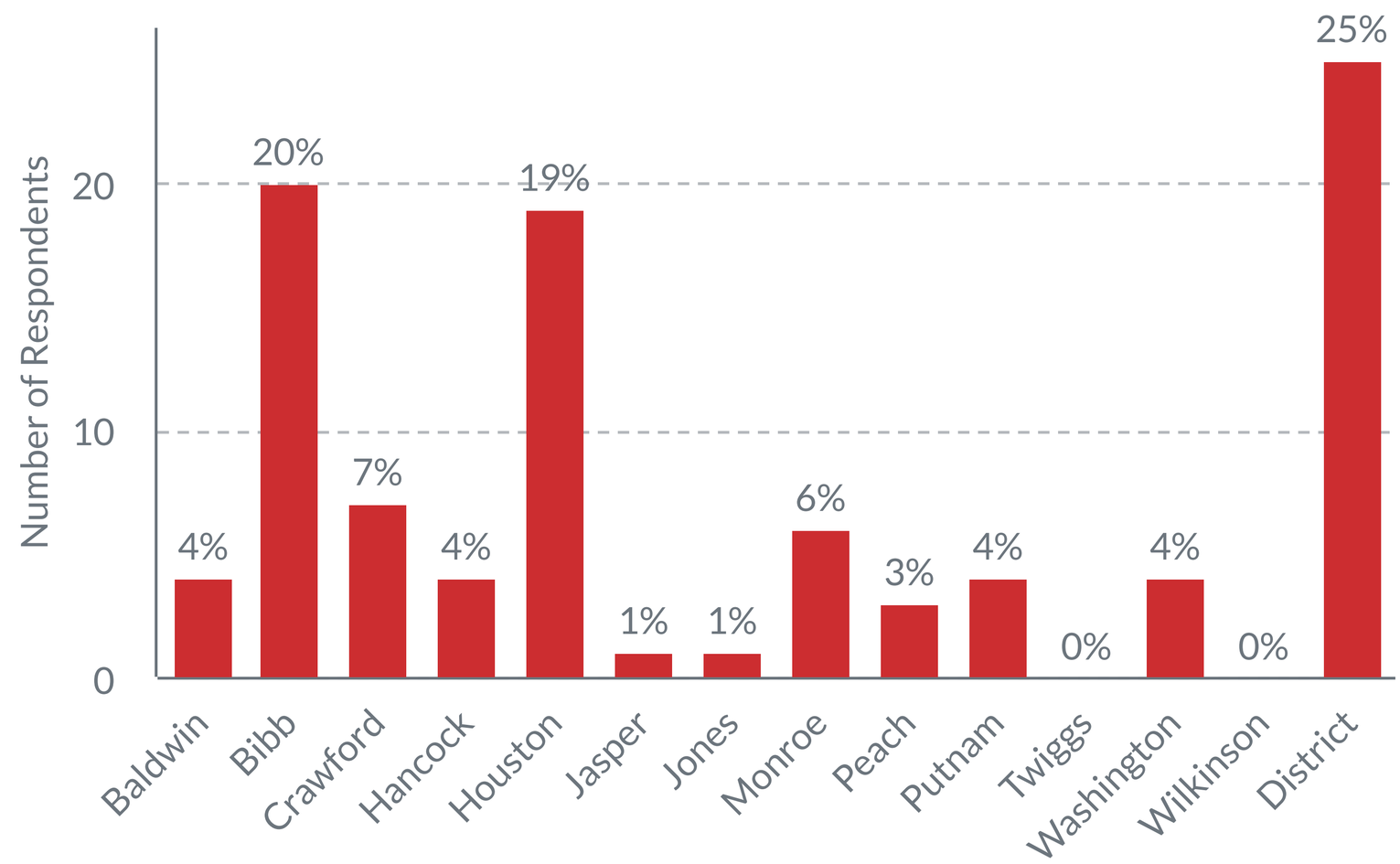
The rating system for the standards was as follows:

- No Activity - 0% or absolutely no activity
- Minimal Activity - 1% to 25% activity
- Moderate Activity - 26% to 50% activity
- Significant Activity - 51% to75% activity
- Optimal Activity - 76% to 100% activity

Type of Respondent



Count of Survey Responents by Location



Model Standards by Essential Services	Performance Scores
ES 1: Monitor Health Status	69.4
ES 2: Diagnose and Investigate	80.6
ES 3: Educate/Empower	66.7
ES 4: Mobilize Partnerships	57.3
ES 5: Develop Policies/Plans	62.5
ES 6: Enforce Laws	70.6
ES 7: Link to Health Services	68.8
ES 8: Assure Workforce	62.1
ES 9: Evaluate Services	60.0
ES 10: Research/Innovations	58.3
Average Overall Score	65.6

This table provides a quick overview of the NCHD's performance in each of the 10 EPHS. Each score is determined by the percentage of how many individual objectives for each EPHS were fulfilled. These scores range from a minimum of 0 to a maximum of 100.

66%

The overall performance score for all 10 Essential Public Health Services in NCHD

While the district-wide public health system's overall rating for the 10 EPHS was categorized at "Significant Activity," it is important to note that this is a perceptual survey and that Essential Public Health Services Standards that were positively rated as a whole do not necessarily reflect a lack of need for improvement.

Forces of Change Assessment

“The Forces of Change Assessment focuses on identifying forces such as legislation, technology, and other impending changes that affect the context in which the community and its public health system operate. This answers the questions: "What is occurring or might occur that affects the health of our community or the local public health system?" and "What specific threats or opportunities are generated by these occurrences?" (NACCHO, 2019)

Two surveys were sent out, one internally and one externally, in 2019 to assess what these forces were. The external survey was sent out to partner agencies and gathered information on their perceived threats to public health. The internal survey was sent to district and county managers along with leadership to assess NCHD staff perceptions on threats and opportunities in public health.

For the partner survey, a question was added to the annual partner satisfaction survey; the question was used to gather information from our partners about perceived threats to public health (**see Table 1**). In total, 38 partners responded to the survey. Community members from education and non-profit organizations were the most represented with 11 participants each. Partners also represented local government, healthcare, for-profit organizations, housing, emergency response, housing, and private sectors.

For the NCHD staff, a brief survey was sent to gather information on the staff’s perceived threats to public health. Twenty-seven staff members responded to the survey. The responses were broken down into external and internal forces of change. The external forces of change were social, economic, political, technology, environmental, and health concerns (**see Table 2**). The internal forces were information distribution, economic, social, access to care, and NCHD health department-specific concerns (**see Table 3**).

In conclusion, both groups perceived that changes in legislation, funding, and health access were the largest threats in the next 3-5 years.

Table 1 – Partners Question: Are there any perceived threats in the next 3-5 years?		
Type of Partner	**Number of Participants**	**Response**
Education	11	Changes in population sizes Serving rural communities Food Desert and access to nutritious foods. Adequate Housing (especially rural communities) Hospital Closures Children with special needs including autism and mental illness
Non-Profit	11	The decrease in women's health services Lack of local infrastructure Public Transportation to health services Access to Food 3rd party food delivery Public safety
Local Government	7	Aging populations
Healthcare Agency	4	HIV and other chronic diseases education. New legislation could pose a threat.
For Profit Organization	2	N/A
Housing	1	Possible legislation concerning women's rights
Emergency Response	1	Population growth could create stress on the system and there are already overwhelmed staffing issues.
Private Sector	1	N/A

Table 2 – NCHD Staff Questions: Current and Future Forces Occurring Locally, Regionally, Nationally, Globally			
Type of Force	**Local**	**Regional**	**National/Global**
Social	Food insecurity in rural counties Acculturation of various ethnic groups Low literacy levels Low education attainment Lack of income to obtain medications Response to child neglect Migrant farm workers LGBTQ+ community growth	Public perception to how easy to change disease Public health officials are actively working on health education materials Food Insecurity Response to child neglect Women and abortion rights Hospitals closings Fear to seek care due to deportation Generational poverty Increase of military personnel on bases New gyms opening New recreational centers Migrant farm workers LGBTQ+ community growth	Food Insecurity Increasing racial tensions leading to negative impacts on social/mental health of minority populations Processed foods over farmtotable options Women's and abortion rights Fear to seek care due to deportation
Economical	The health department experienced a significant budget cut Budget cuts lead to staff shortages Low public health staff salaries Lack of employers in rural areas Economic related lack of resources Insurance Changes Hospital funding	Insurance changes Hospital closings	N/A
Political	Changes to SNAP Benefits Infrastructural and Policy changes Cooperation with elected officials to obtain proper funding Political discourse overshadows health events at the local level Redistricting voting areas Immigration law changes	Political and Infrastructural policy changes Cooperation with elected officials to obtain proper funding Redistricting voting areas Changes in mayor and governing bodies Immigrant law changes	Political upheaval Unstable or warring governments that effect cost of living (e.g., food, gas) Terror attacks Immigrant law changes
Technology	Limited use of technology	Increase of cyber attacks	Exponential growth of social media Technological advances Increase of cyber attacks
Environmental	Transportation, especially the MTA Patients unable to get to their out of town appointments Housing and infrastructure to keep up with population needs Water cleanliness and sewage containment Increasing lowincome targeted facility for rural communities	Unexpected outbreaks, epidemics, or natural disasters Global warming Natural disasters cause an influx of people that disrupt the current systems Natural disasters spread illnesses at increased rates Urban population is moving to rural and suburban areas	Global warming New legislation to increase pollution effecting water tables and drinking water
Health Concerns	Stress and Chronic Conditions leading to disease Inability to conduct proper preventative control measures Personal health denial Access to quality care HIV/AIDS especially among MSM Maternal mortality among African Americans Problems with diabetes management Obesity/overweight management Comorbid conditions (e.g., amputations, vision loss, heart attacks) Opioid addiction Prevention of vaccine diseases (e.g., flu, measles) Tobacco usage and vaping Teen pregnancy prevention Emerging childhood diseases Hepatitis A outbreaks and other foodborne illnesses	Stress and Chronic Conditions leading to disease Access to quality care Increasing Mental Health Concerns Increasing STIs Low vaccination rates in children Opioid addiction Emerging childhood disease	Stress and Chronic Conditions leading to disease Low vaccination rates in children Opioid addiction

Table 3 – NCHD Staff Questions: Jurisdiction characteristics that may pose an opportunity, threat, or barrier			
Type of Force	**Opportunity**	**Threat**	**Barrier**
Information Disbursement	Public health is the starting point to educate the community	Lowering the funding could have adverse effects to the spread of public health information Lack of knowledge/ resources in rural areas Belief that vaccines cause Autism	Changing the culture of health in the country Lack of understanding of how poverty and limited economic resources can lead to more poor health outcomes
Economic	Economic growth in the metro areas Grant funds to provide opportunities for expansion in rural areas Funding available for necessary research and treatment Utilizing current funding to expand services Opportunities in rural GA for commercial job development	Community becomes "dependent" on programs that may lose funding Sudden emergencies result in changes of revenue Lack of funds to support improvements	Budget cuts and available trained personnel Policies to cut funds to the underserved (e.g., developmentally impaired) Abuse of available funds Overall economic instability
Social	Increasing partnerships among organizations to combat issues	Gentrification and increasing racial tensions Poverty Migration from rural or lowincome areas Lack of trust Continued belief that the health department is only for lowincome/uninsured	Business and partnership cooperation/satisfaction Rural GA suffering with the loss of farming communities Inequality to health care Personal health denial Intolerance Disunity Leaders that do not support health and wellness initiatives
Access to Health	Technology support increasing in rural areas More green spaces in rural and urban centers Telemedicine could positively impact rural areas	Physical barriers to healthcare Lack of rural hospitals Inability for clients to access providers	N/A
NCHD Health Departments	Current political atmosphere favors and highlights public health CDC becomes a stronger partner for law making and the control of diseases	High turnover in workforce Private sector pays more than health department Very siloed workforce	Health workforce retention as there is a lack of sustainability of the system Unethical motives of those in authority Lack of unity towards the shared vision Lack of resources towards the shared vision Unsupportive elective officials in the goal of public health

References

- Centers for Disease Control and Prevention. cdc.gov
- County Health Rankings, University of Wisconsin Population Health Institute and Robert Wood Johnson Foundation. www.countyhealthrankings.org
- Georgia Bureau of Investigations. services.georgia.gov/gbi/crimestats
- Georgia Department of Education. gadoe.org
- Georgia Department of Public Health. dph.ga.gov
- Online Analytical Statistical Information System, Georgia Department of Public Health. oasis.state.ga.us
- Mobilizing for Action through Planning and Partnerships, National Association for City and County Health Officials. naccho.org
- United State Census Bureau. data.census.gov
- United States Bureau of Laber Statistics. bls.gov/lau/

Created by Epidemiology Program, North Central Health District, Georgia Department of Public Health

For additional information: http://northcentralhealthdistrict.org/health-assessment-and-improvement/

Published on June 27, 2022

All secondary data was collected from sources between August 2021-March 2022. The most up-to-date data points were used at the time they were collected but these data points may not be the most up-to-date data point at the publication of this document due to ever-changing and updated information from secondary data sources.