

UAB Callahan Eye Hospital & Clinics



COMMUNITY HEALTH NEEDS ASSESSMENT 2019

University of Alabama at Birmingham Callahan Eye Hospital & Clinics, dedicated to the preservation and restoration of vision through excellence in clinical care, education and research

UAB MEDICINE

• Mission •

- Provide a continuum of vision care services of the highest quality, delivered by highly skilled professionals.
- Offer the most advanced clinical practice, treatments, and technology.
- Deliver compassionate care to meet the changing needs and expectations of our patients and community.



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• Executive Summary •

On March 23, 2010, the Patient Protection and Affordable Care Act (ACA) was signed into law and created new requirements for not-for-profit hospitals including a requirement for a Community Health Needs Assessment (CHNA) to be completed every three years. This CHNA was prepared by the Alabama Quality Assurance Foundation (AQAF) in conjunction with UAB Callahan Eye Hospital & Clinics to meet the CHNA requirement for UAB Callahan Eye Hospital & Clinics for fiscal year 2018-2019. AQAF is the Quality Improvement Organization (QIO) for the state of Alabama and has more than three decades of experience in identifying and addressing community health needs.

To prepare this CHNA report, data were gathered from a variety of sources in an effort to construct a comprehensive, current and accurate snapshot of the health issues in Jefferson County, Alabama. Data were obtained from multiple public data bases and opinions were solicited from public health experts and community leaders within the community served by UAB Callahan Eye Hospital & Clinics. This information was summarized for final consideration by a CHNA team consisting of hospital and system personnel. This team prioritized the community health needs as follows:

1. Diabetes Education
2. Access
3. Free/Subsidized Healthcare for the Uninsured

An implementation strategy that will address each of these issues is currently in development. The strategy will seek to leverage existing partnerships, identify novel opportunities for synergy and maximize legacy programs while deploying specific interventions within the community. The outcomes and results of these interventions will be followed and re-examined in preparation for the next CHNA scheduled for completion no later than Summer 2022.



• Methodology •

The community needs assessment process was initiated by assembling an internal team responsible for shepherding the entire project. The internal team was comprised of representatives from hospital management, outreach services, strategic planning, and AQAF. This team met initially to review the requirements of the CHNA as established by the ACA and further defined by IRS Notice 2011-52, and to establish the roles and responsibilities for the team members. These decisions were memorialized in a project plan and incorporated into a project dashboard. With the infrastructure created and the purpose and scope of the project identified, the team set about its primary task of gathering data.

The first step in the data gathering process was to obtain several de-identified data sets from the hospital. The initial task was to obtain zip code specific discharges for up to three years. These data sets were then analyzed to compile zip code maps defining the hospital's service area. Additional data sets were requested from the hospital including admission data stratified by age, race, ethnicity, payor mix, and discharge diagnoses. With the service area of the hospital determined, a best fit county was selected for data collection from secondary (public) sources and for the purposes of comparison. Secondary sources utilized for this report include:

- **Behavioral Risk Factor Surveillance Survey 2017**
- **Alabama Department of Labor**
- **Alabama Department of Public Health, Center for Health Statistics**
- **Alabama Department of Public Health, Cancer Registry**
- **Georgia Department of Public Health**
- **U.S. Census Bureau**
- **U.S. Bureau of Labor Statistics**
- **County Health Rankings and Roadmaps**
- **World Population Review**
- **United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released 2018**

The second step was to gather information from various representatives of the community. The CHNA team met to establish a list of key informants who included individuals with public health expertise, state and local officials, and community leaders. Topic areas and interview questions from the previous CHNA were reviewed to determine the appropriateness of utilizing them for this CHNA. The topic areas were then used to develop survey and interview tools that were utilized in discussions and interviews with their identified key informants. The results of these surveys and interviews were then compiled.

Distillation of these data into a prioritized list was the final step of the Community Health Needs Assessment. The CHNA Oversight Committee met to complete this final task. AQAF staff presented the data collected. The Oversight Committee members then established the top 3 health care needs for their community. The information that was presented to the CHNA Oversight Committee and the final prioritized list of health care needs are summarized in this report and will also be displayed on UAB Callahan Eye Hospital & Clinics' website.

• Geographic Area Defined •

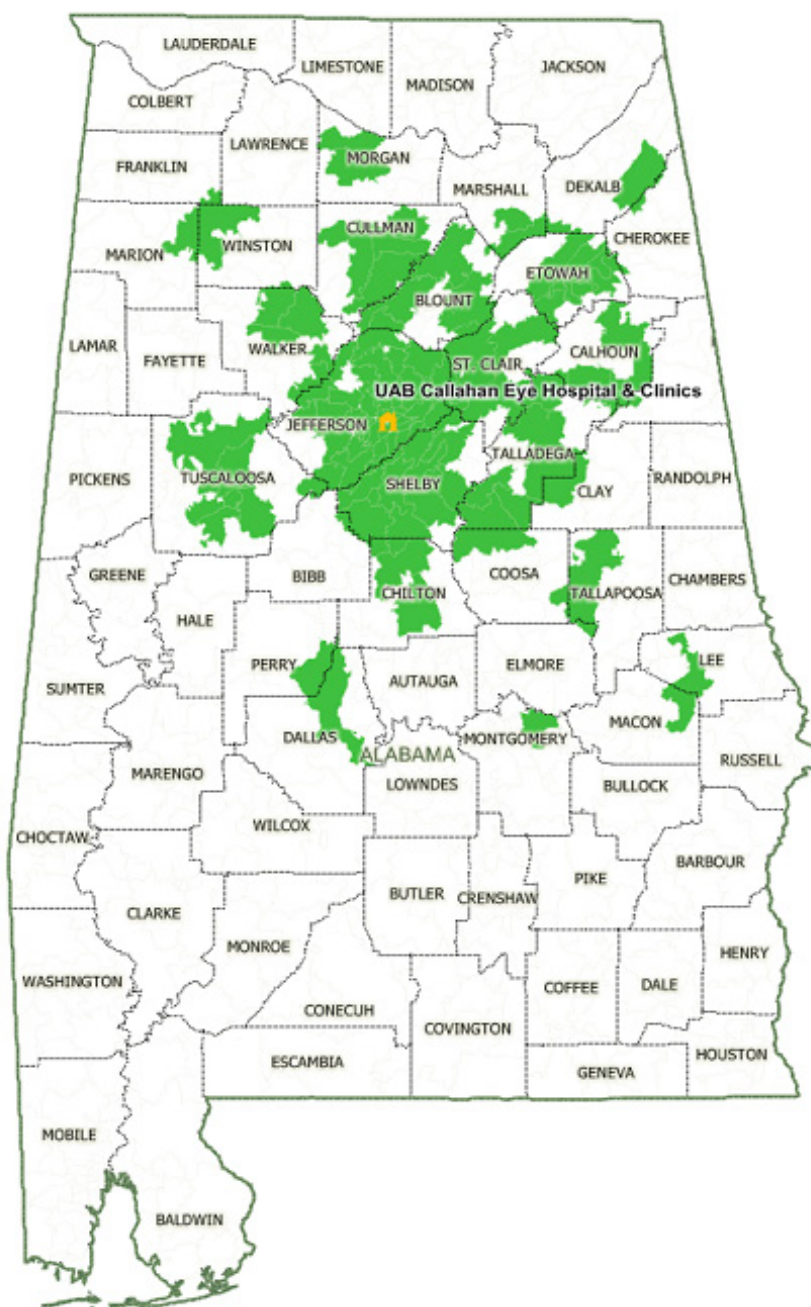
The UAB Callahan Eye Hospital & Clinics community is defined using the 104 zip codes derived from 75% of the hospital's inpatient/outpatient discharges from fiscal year 2018. The zip codes encompass 19 counties, all in the state of Alabama. For the purposes of this study, Central Alabama was used to define the community for the UAB Callahan Eye Hospital & Clinics. Fifty percent of these zip codes are concentrated in two counties: Jefferson (40.3%) and Shelby (10.5%). The zip codes are listed in descending order from highest concentration of discharges to lower concentration of discharges. The zip codes are as follows:

35242	35071	35115	35603	35031
35226	35212	36207	36203	35151
35215	35217	35128	35953	35404
35211	35204	35218	35044	35503
35216	35180	35234	35118	
35244	35222	35224	35114	
35023	35094	35901	35147	
35209	35207	35221	35906	
35214	35160	35077	36701	
35173	35080	35079	35957	
35022	35120	35401	36201	
35205	35062	35045	35058	
35124	35121	35117	35475	
35243	35405	35903	35453	
35020	35228	35125	35096	
35213	35127	35116	35473	
35126	35068	35904	35203	
35223	35146	35051	35406	
35235	35005	35057	35640	
35206	35055	36117	35085	
35007	35150	36265	35967	
35210	35004	35501	35186	
35208	35043	35130	35950	
35111	35040	35010	36830	
35064	35504	35565	35954	

• Service Area •

Jefferson County, Alabama has a total area of 1,122.3 square miles of which 1,111 square miles are land and 11.2 square miles are water (Graph 16). Jefferson County is the most populous county in the state. Birmingham is the county seat and also the state's largest city. There are 34 municipalities located within the county. The county is governed by five commissioners elected from specific county districts. The county is 89% urban and 11% rural areas. The neighboring counties are Bibb, Blount, St. Clair, Shelby, Tuscaloosa and Walker. Due to its location in the north central part of the state and the foothills of the Appalachian Mountain, the county is characterized by rolling hills and valleys.

Illustration 1. UAB Callahan Eye Hospital & Clinics Service Area



• Demographics •

Population

Located in central Alabama, Jefferson County is a mix of urban, suburban, and rural environments. There are 67 communities within the county, 34 of which are incorporated municipalities. According to the U.S. Census Bureau, the most recent population estimate for Jefferson County is 659,197 (**Table 1**). The dominant language is English, with 5.9% speaking another language in the home.

Race/Ethnicity

The population of Jefferson County is 53.2% white, 43.4% black, and 3.1% other (**Graph 20**). The U.S. Census Bureau considers Hispanic/Latino heritage as an ethnicity and not a race. Of Jefferson County residents responding to the most recent census, 3.9% consider themselves to be of Hispanic/Latino origin. Persons of Hispanic/Latino origin may be of any race, and are included in the applicable race categories above. The Hispanic/Latino population of Jefferson County is 4.3%.



Education

Of Jefferson County's 659,197 residents, 22.9% are under 18 years old (**Graph 18**) and are served by 12 school systems. There are 11 city systems and one run by the Jefferson County Board of Education. This county system is Alabama's second largest school district with 57 schools, 4,500 teachers, and over 36,000 students. The system offers a multitude of academic, career technical and extracurricular opportunities for students. The Birmingham City School System serves students in the city of Birmingham with 43 schools, (18 elementary, 8 middle, 10 K-8 schools, and 7 high schools). Of the county's residents, 89.4% graduated from high school (**Graph 22**).

Jefferson County offers many post-secondary education opportunities. Birmingham Southern, The University of Alabama at Birmingham, and Samford University provide the area with major colleges of medicine, dentistry, optometry, pharmacy, law, engineering, and nursing. Of the county's residents, 31.9% hold a Bachelor's degree or higher (**Graph 23**). Birmingham has been the home of The University of Alabama at Birmingham School of Medicine since 1947. Birmingham is also home to three of the state's five law schools.

• Employment •

Jefferson County is an economic catalyst for the state. Not only does it have many companies and organizations with a large employment base, but it is a hub for medical care. UAB has an extensive healthcare complex and is the second largest employer in the state. The per capita income of a Jefferson County resident in 2017 was \$29,456 and median household income was \$49,321 (**Graph 24**). The percentage of residents living below the poverty level is 16.7% (**Graph 25**). As of February 2019, the unemployment rate for Jefferson County was 3.7% which is the same as the state of Alabama.

UAB is the largest healthcare provider in the state, while Blue Cross Blue Shield of Alabama is the major health insurance carrier in the state with corporate headquarters in Birmingham. Honda Manufacturing of Alabama (4,500 employees) and Mercedes-Benz U.S. International, Inc. (3,600 employees) are the major manufacturing employers. Both are located in adjacent counties within driving distance of Birmingham.



In April 2019, the Birmingham Business Alliance lists the largest employers in Jefferson County as follows:

TOP TEN EMPLOYERS:

- **University of Alabama at Birmingham (23,000)**
- **Regions Financial Cooperation (9,000)**
- **St. Vincent's Health System (5,100)**
- **Children's of Alabama (5,000)**
- **AT&T (4,517)**
- **Brookwood Baptist Health (4,459)**
- **Jefferson County Board of Education (4,400)**
- **City of Birmingham (4,200)**
- **Blue Cross-Blue Shield of Alabama (3,100)**
- **Alabama Power Company (3,092)**

U.S. Bureau of Labor Statistics reported that employment increased in five of Alabama's six largest counties from June 2017 – June 2018. Jefferson County had a 1.4% increase in employment during that time period.

• Roads & Transportation •

The roadway system in Jefferson County provides residents and companies transportation access to all major cities in the southeast and throughout the United States. The five major interstates located throughout the county are I-20, I-22, I-59, I-65, and I-459. U.S.

Highways 31 and 280 carry travelers through downtown Birmingham and over Red Mountain into surrounding counties.

Public transportation is limited in Jefferson County. The Birmingham-Jefferson County Transit Authority (BJCTA) operates public transportation for the county. Bus service runs regularly, along fixed routes, from the transportation center to multiple points in Birmingham, Bessemer, Center Point, Woodlawn, Homewood, Ensley, Mountain Brook, Hoover, Tarrant and Vestavia Hills. The downtown natural gas trolley service is available for three routes through the City Center. Greyhound provides intercity bus transportation to cities across the United States. Current service area is 200 square miles with a demand population of 400,000.



The Birmingham Shuttlesworth International Airport is home to four major airlines and offers 130 daily flights to 48 airports in 45 cities throughout the U.S. They have more than 2.6 million passengers who travel through the airport each year.



The Birmingham region has rail transportation for both passenger and freight. There are daily Amtrak stops connecting to most major cities in the U.S. with daily passenger services to Atlanta, New Orleans and New York. Metropolitan Birmingham has three rail hubs: Norfolk Southern, CSX, and BNSF.

The state of Alabama contains an extensive waterway system. Port Birmingham is located in the western part of Jefferson County on the Warrior River. River service connects to the deep water Port of Mobile. It offers fleeting and shifting services as well as access to inland and international ports.

• Weather & Air Quality •

Jefferson County has a humid subtropical climate, characterized by hot summers, mild winters, and abundant rainfall. The spring and fall months are pleasant but variable as cold fronts frequently bring strong to severe thunderstorms and tornadoes to the region. The fall season features less rainfall and fewer storms, as well as lower humidity than the spring, but it is also a secondary severe weather season. Birmingham is located in the heart of a tornado alley due to the frequency of tornadoes in Central Alabama. In 2016, there were 65 tornadoes in Alabama resulting in 18 injuries and 4 fatalities. During 2017 - 2018, there were 103 tornadoes resulting in 29 injuries, but no fatalities. 2019 has proven to be a more destructive year than the past 3 years with 12 tornadoes touching down on March 3rd with a devastating EF - 4 tornado killing 23 in Lee County. In the late summer and fall months, the area experiences the results of occasional tropical storms and hurricanes due to its proximity to the central gulf coast.

From the 1970s to the early 2000s, Jefferson County was classified at times as a non-attainment area for ground-level ozone and particle pollution by the Environmental Protection Agency (EPA). This occurs when pollution levels exceed federal limits. Through the cooperation of the community and other entities, Jefferson County has been designated as an attainment area for the eight-hour ozone standard since 2006.



• Medically Underserved •

Jefferson County residents are well served by an abundance of hospitals in the area. A small area of West Central Jefferson County is currently designated as a Medically Underserved Area Population (MUAP) according to criteria developed by the Department of Health and Human Services

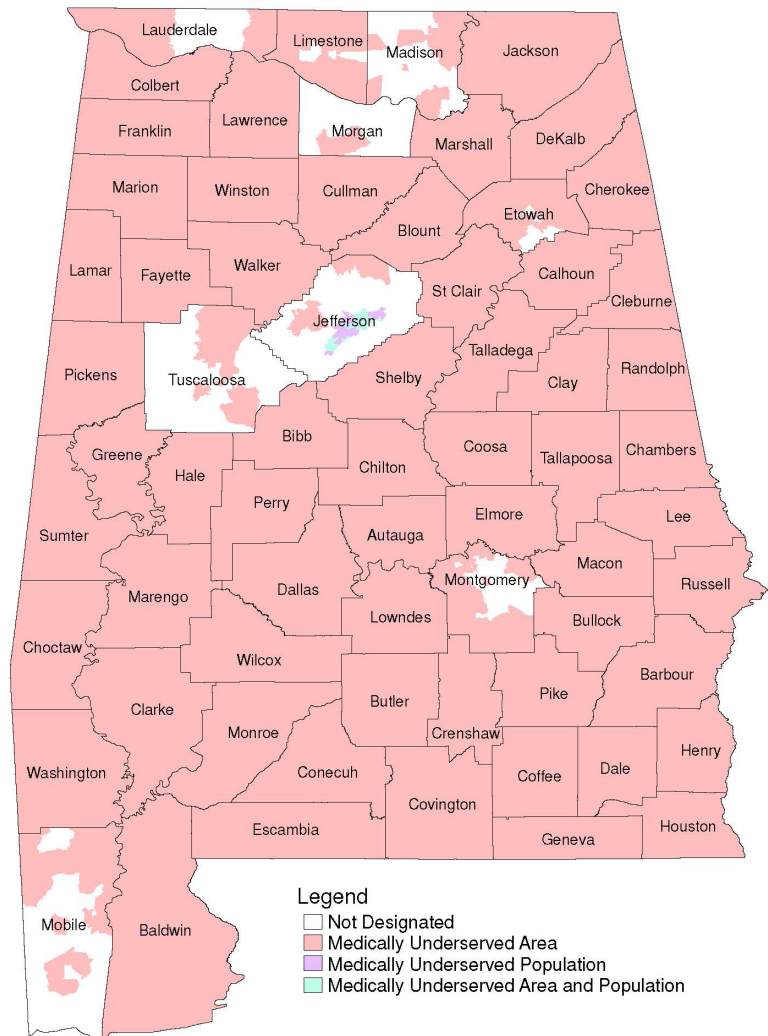
(Illustration 2.). This designation is based on an index of four variables:

1. The Ratio of Primary Care Physicians per 1,000 Population
2. The Infant Mortality Rate
3. Population Living Below the Poverty Level
4. Population Over the Age of 65

Jefferson County is considered a Health Professional Shortage Area (HPSA) for low-income residents in areas of primary care, dental care, and mental health care. Low income residents of Jefferson County are able to utilize the county's charity healthcare system, Cooper Green Mercy Hospital. Due to financial concerns, the inpatient services were discontinued in late 2012, but the facility continues to provide chronic and urgent care to those in need of free or subsidized healthcare. Although many in the community have the healthcare services they need, UAB Callahan Eye Hospital & Clinics remains committed to the preservation and restoration of vision for all the residents of Jefferson County.

Illustration 2. Medically Underserved Populations (MUAs)

Medically Underserved Areas/Populations (MUA/Ps)



• UAB Callahan Eye Hospital & Clinics •

Opened in 1963, the UAB Callahan Eye Hospital & Clinics has a history of clinical excellence in vision preservation and restoration. The ophthalmology residency program began in 1971 in cooperation with the University of Alabama at Birmingham. Today, the Department of Ophthalmology is considered by many to be the best in the country. In July, 1997, the hospital became part of the University of Alabama at Birmingham Health System. As a part of the UAB Health System, the UAB Callahan Eye Hospital & Clinics continues its mission to provide quality eye care, offer an ophthalmology residency program, and participate cooperatively with UAB in eye disease research. UAB Callahan Eye Hospital & Clinics provides quality medical and surgical eye care to the people of Alabama and the Southeast. The hospital is a short term acute care facility with a primary business focused on outpatient ophthalmology and other ambulatory surgery. It is one of the busiest eye surgery centers in the country. UAB Callahan Eye Hospital & Clinics offers a 24-hour, 7 day a week emergency room, and is the region's only Level 1 Ocular Trauma Center. The Lions Eye Clinic has been a visible part of the UAB Callahan Eye Hospital & Clinics since 1977 and enables the hospital to treat patients regardless of their ability to pay.



• UAB Callahan Eye Hospital & Clinics •

As one of the leading eye hospitals in the Southeast, the UAB Callahan Eye Hospital & Clinics provide a complete range of optometric and ophthalmic services, as well as the most up to date treatments and innovations in eye care.

CLINICAL CARE:

- **106 Licensed Beds**
 - 81 Specialized Eye Beds
 - 25 General Beds
- **24 - Hour Emergency Department**
 - Regional Level 1 Ocular Trauma Center
 - 6,911 Visits per Year
- **Laser / Surgery Center**
 - 13,010 Surgeries per Year
 - 2,400 Laser Procedures per Year
 - 17 Operating Rooms
 - Recovery Area

OUTPATIENT SERVICES:

- Center for Low-Vision Rehabilitation
- Counseling Services
- Ocular Prosthetics
- Ophthalmic Pharmacy
- Optic Nerve Imaging Center
- UAB Callahan Eyewear
- Professional Office Building
- UAB Connection Support Groups to Improve:
 - Eye Health
 - Quality of Life
 - Independence
- UAB Health Library
- UAB Laboratory Services



• Services •

For more than 50 years, the UAB Callahan Eye Hospital & Clinics has been a national leader in eye care while expanding its care to other surgical specialties.

- Cataract Removal / Lens Implants
- Dermatology
- Emergency Department
- Facial & Plastic Surgery
- Glaucoma Care
- Lab Services
- Neuro-Ophthalmology
- Ocular Oncology
- Oral Surgery
- Retinal & Vitreous Care
- Thyroid Ophthalmopathy
- Corneal Transplants
- Diabetic Eye Disease
- ENT
- General Eye Exams
- Gynecology & Urology
- Laser Treatment
- Neurosurgery
- Ocular Trauma Care
- Pediatric Ophthalmology
- Strabismus & Amblyopic Treatment
- Surgical Oncology



• Community Resources •



- Black Belt Eye Care Consortium
- Community Eye Care Services - Jefferson County Health Department Eye Clinics
- Corporate Ocular Screening
- Equal Access Birmingham - Clinic on Wednesday, M-Power / Community Education
- Diabetes Education
- Direct Partnerships
- Fundraising
- Grant Writing
- Health Career Opportunity Programs
- Into the Streets Community Service Programs
- Lions Club Eye Clinic
- Math & Science Mentors - Development
- Media Production
- Safety Vision Seminars
- Sarrell Regional Dental & Eye Center
- UAB School of Education - Teacher Training the Blind & Visually Impaired
- UAB School of Medicine, Department of Ophthalmology - Mental Health Service for Vision Impaired / Clinical Research Unit

• Education/Hospitals •

Education:

- UAB School of Medicine, Department of Ophthalmology
- 3 Year Accredited Residency Program (15 Residents, 7 Fellowships)
- 12 Dedicated Researchers
- 5 Physician Scientists



Additional Hospitals in Jefferson County:

- Brookwood Baptist Health
- Children's of Alabama
- Grandview Medical Center
- Encompass Health Lakeshore Rehabilitation Hospital
- Hillcrest Behavioral Health Services
- Princeton Baptist Medical Center
- Ascension Health System
 - St. Vincent's Birmingham
 - St. Vincent's East
- The University of Alabama at Birmingham Hospital (UAB)
 - Spain Rehabilitation Center
 - UAB Hospital Highlands
- Medical West (Affiliate)
- Veterans Affairs Medical Center

• Patient Data •

SURGICAL PROCEDURES FY 2018

Procedure	Cases
Cataract Surgical Procedures	5,495
Retinal Surgical Procedures	3,090
Plastics	836
Glaucoma Surgical Procedures	783
Corneal Surgical Procedures	506
MOHS Surgical Procedures	392
DCR Surgical Procedures	135
ENT	365
Other	1,408
Total	13,010



INPATIENT & OUTPATIENT RACE DISTRIBUTION FY 2018

Race/Ethnicity	%
Caucasian	69.74
African American	27.33
Hispanic	1.77
Other	0.39
Asian	0.71
Unknown	0.05
Indian	0.02

INPATIENT & OUTPATIENT PAYOR SOURCE FY 2018

Payor	%
Medicare	34.07
Blue Cross Blue Shield	26.12
Medicare HMO	24.09
Other	3.41
Commercial	4.92
Medicaid	3.95
Self Pay	3.44

• Resources for the Blind/Visually Impaired •

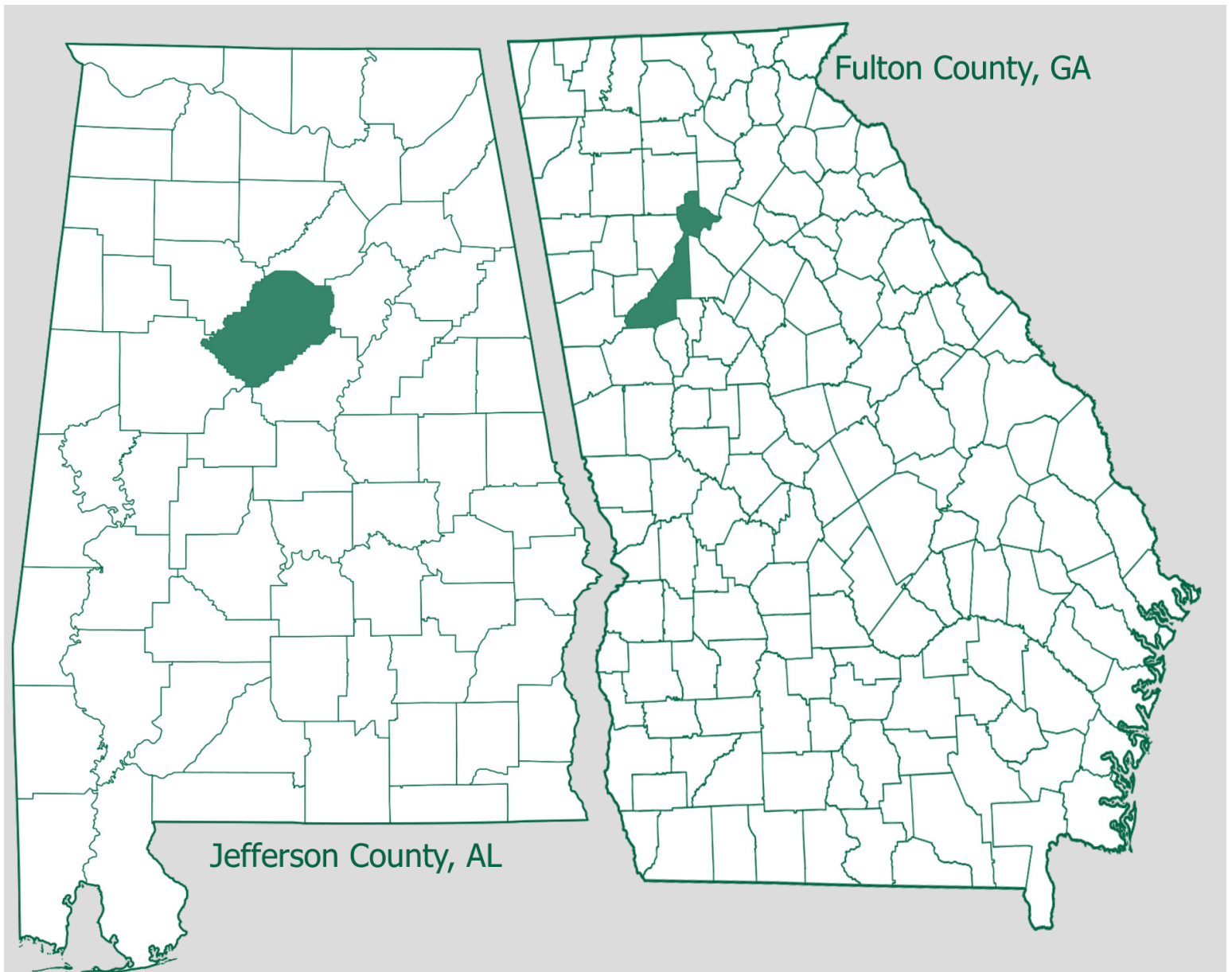
- Alabama Department of Rehabilitation Services
- Alabama Eye & Tissue Bank
- Alabama Industries for the Blind
- Alabama Institute for the Deaf and Blind
- Alabama Library for Blind & Physically Handicap
- Alabama Lions Clubs of America Sight Conservation Programs
- American Academy of Ophthalmology
- American Optometric Association
- Alabama Radio Reading Services Network
- Alabama Relay Services-- Dial 711
- American Diabetes Association
- Bell Center
- Birmingham Museum of Art Visually Impaired Program
- Cahaba Valley Healthcare
- ClasTran Specialized Public Transportation
- The Dance Foundation
- Easter Seals
- Eye Sight Foundation of Alabama
- Focus First
- International Retinal Research Foundation
- Kid Check
- KidOne Transport
- Lakeshore Foundation
- Liz Moore Low-Vision Center
- M-Power Ministries
- Movement to Music for Special Needs
- Preschool Peepers
- Sight Saver America, Alabama
- Southeastern Blind Rehabilitation Center
- Department of Veterans Affairs
- United Cerebral Palsy of Greater Birmingham
- United Way of Central Alabama 2-1-1
- YMCA Metropolitan Birmingham

• Comparison Community •

Fulton County, Georgia

In an effort to measure how the UAB Callahan Eye Hospital & Clinics' community of Jefferson County compared to a peer county, the 2019 County Health Rankings and Roadmaps report was utilized. CHR&R uses population size, poverty level, age distribution, population density and 15 other demographic data points to establish comparison communities across the United States. Of the 33 counties considered to be peer counties to Jefferson County; Fulton County, Georgia was selected for this CHNA based on its similar location in the southeastern section of the United States.

Illustration 3. Jefferson County, AL & Comparison Fulton County, GA



• Population Data •

Table 1. U.S. Census 2018 Population Estimates

JEFFERSON COUNTY, ALABAMA		FULTON COUNTY, GEORGIA
659,197	POPULATION	1,041,423
593	DENSITY (PER SQUARE MILE)	1,748
16.7	POVERTY LEVEL (% BELOW)	14.8
Under 18 - 22.9% 19 to 64 - 61.7% 65 & Older - 15.4%	AGE DISTRIBUTION (GRAPH 18 & 19)	Under 18 - 22.3% 19 to 64 - 66.3% 65 & Older - 11.4%
White - 53.2% Black - 43.4% Other - 3.4%	RACE (GRAPH 20)	White - 45.8% Black - 44.6% Other - 9.6%
3.9%	HISPANIC OR LATINO ORIGIN (GRAPH 21)	7.3%
89.4%	HIGH SCHOOL GRADUATES (GRAPH 22)	91.7%
31.9%	BACHELOR'S DEGREE OR HIGHER (GRAPH 23)	50.2%

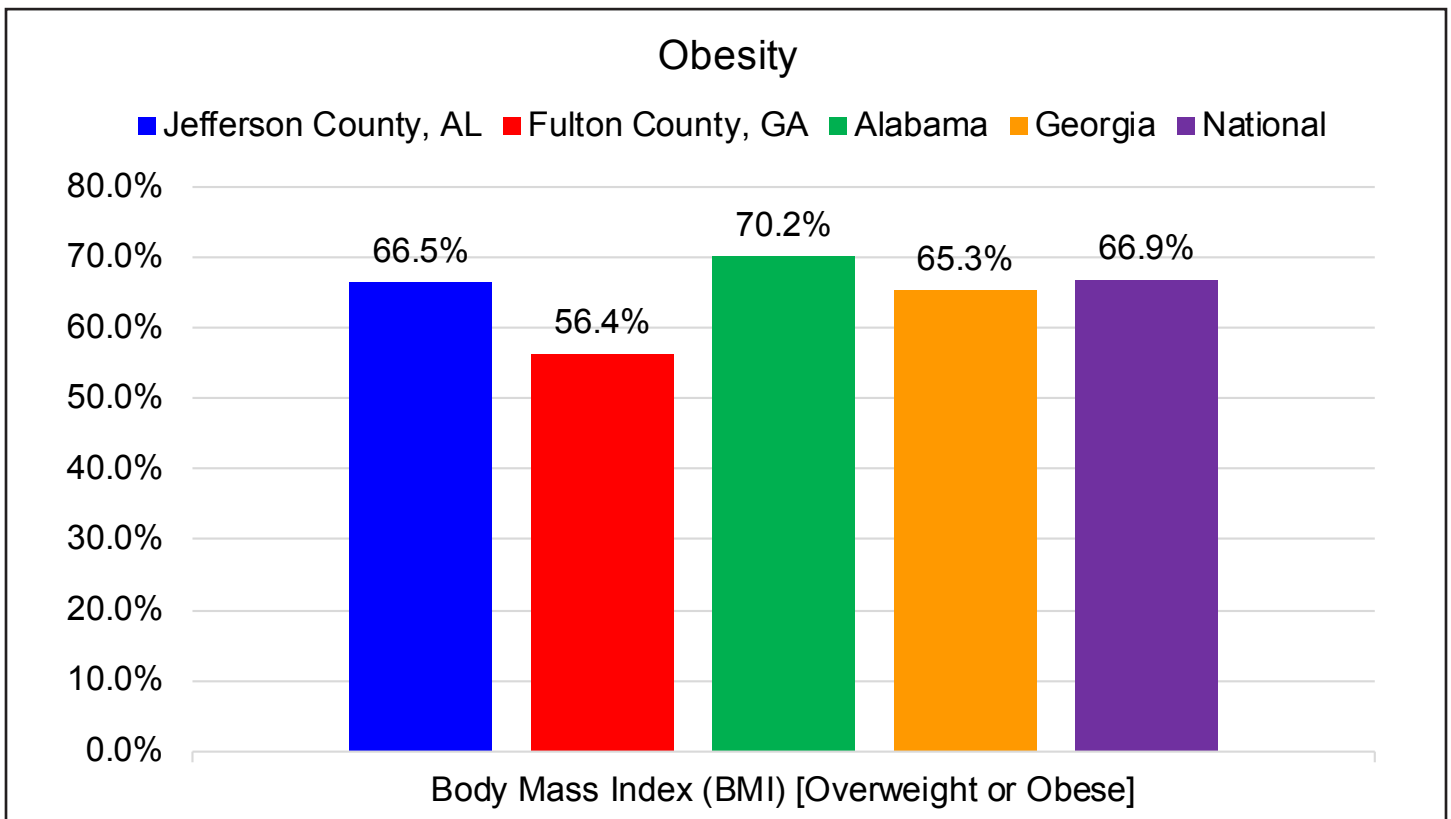
• 2017 BRFSS Data •

Data from primary and secondary sources were analyzed. Secondary source data were aggregated at the smallest unit available - the county. Secondary data reports and other resources were carefully reviewed for this CHNA in order to provide points of comparison for the information and opinions gathered through the primary information collection process. Information from primary sources was obtained via electronic surveys, phone and in-person interviews.

Behavioral Risk Factors

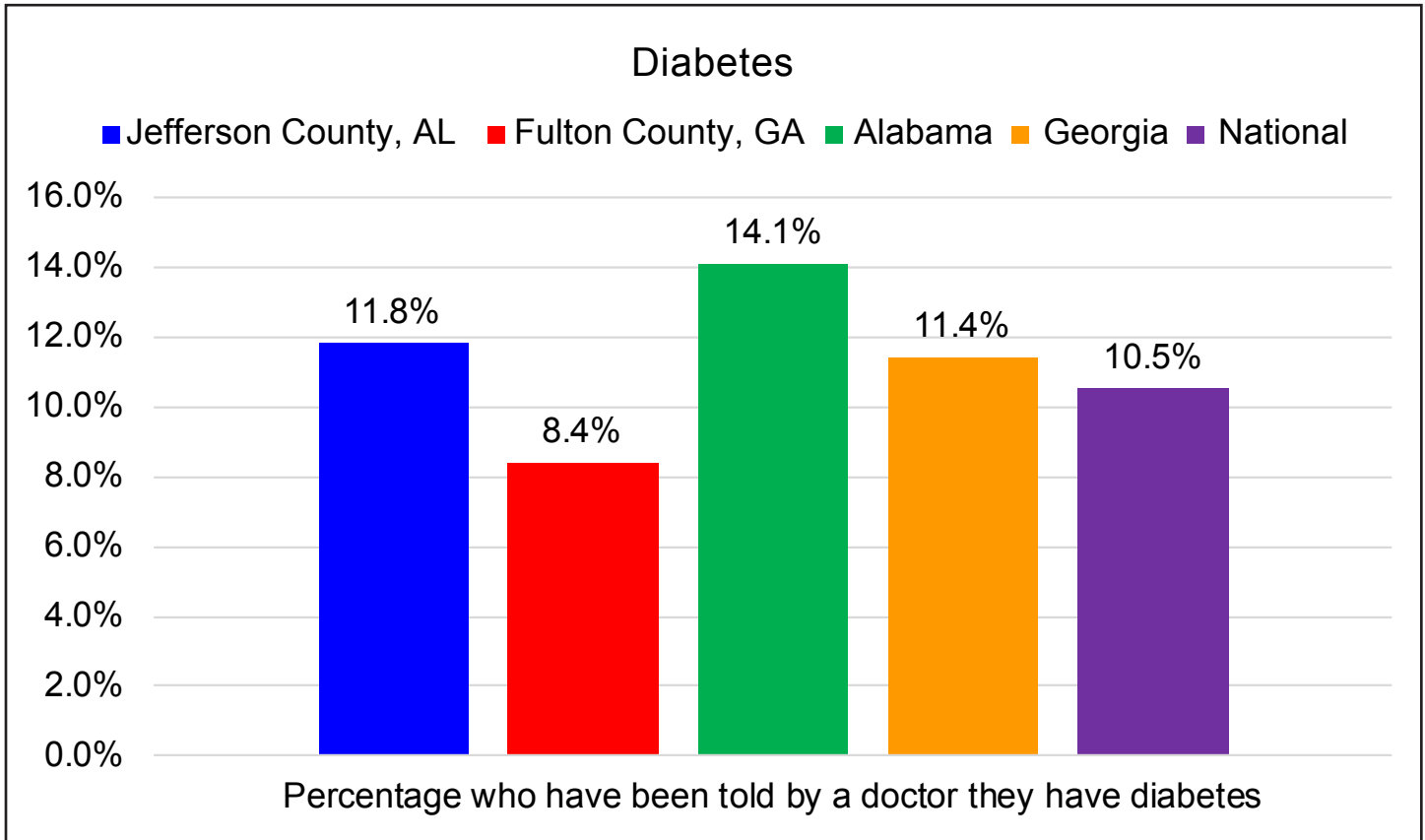
The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. It is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. For many states, the BRFSS is the only available source of timely, accurate data on health-related behaviors.

Graph 1. Obesity

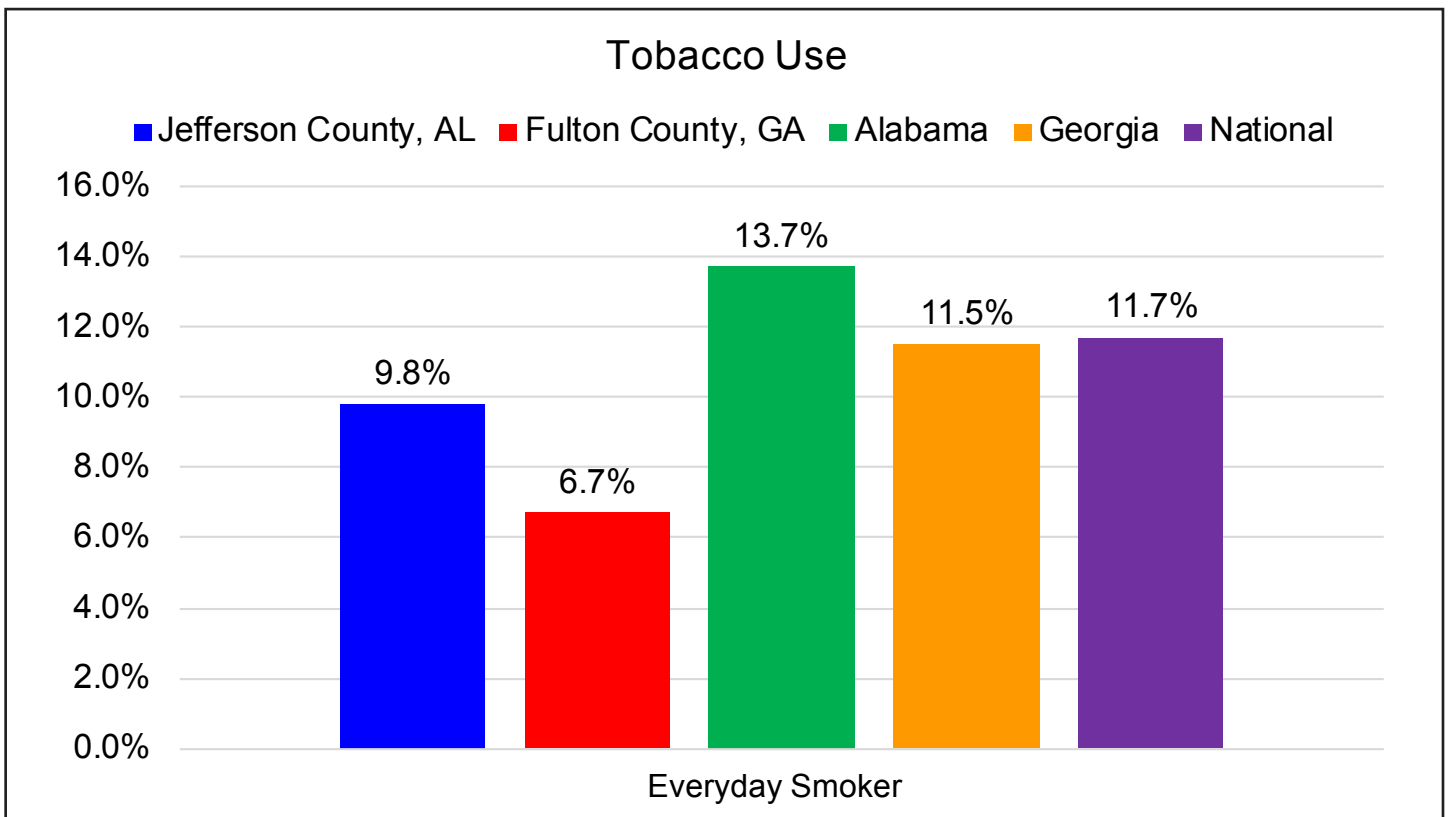


• 2017 BRFSS Data •

Graph 2. Diabetes

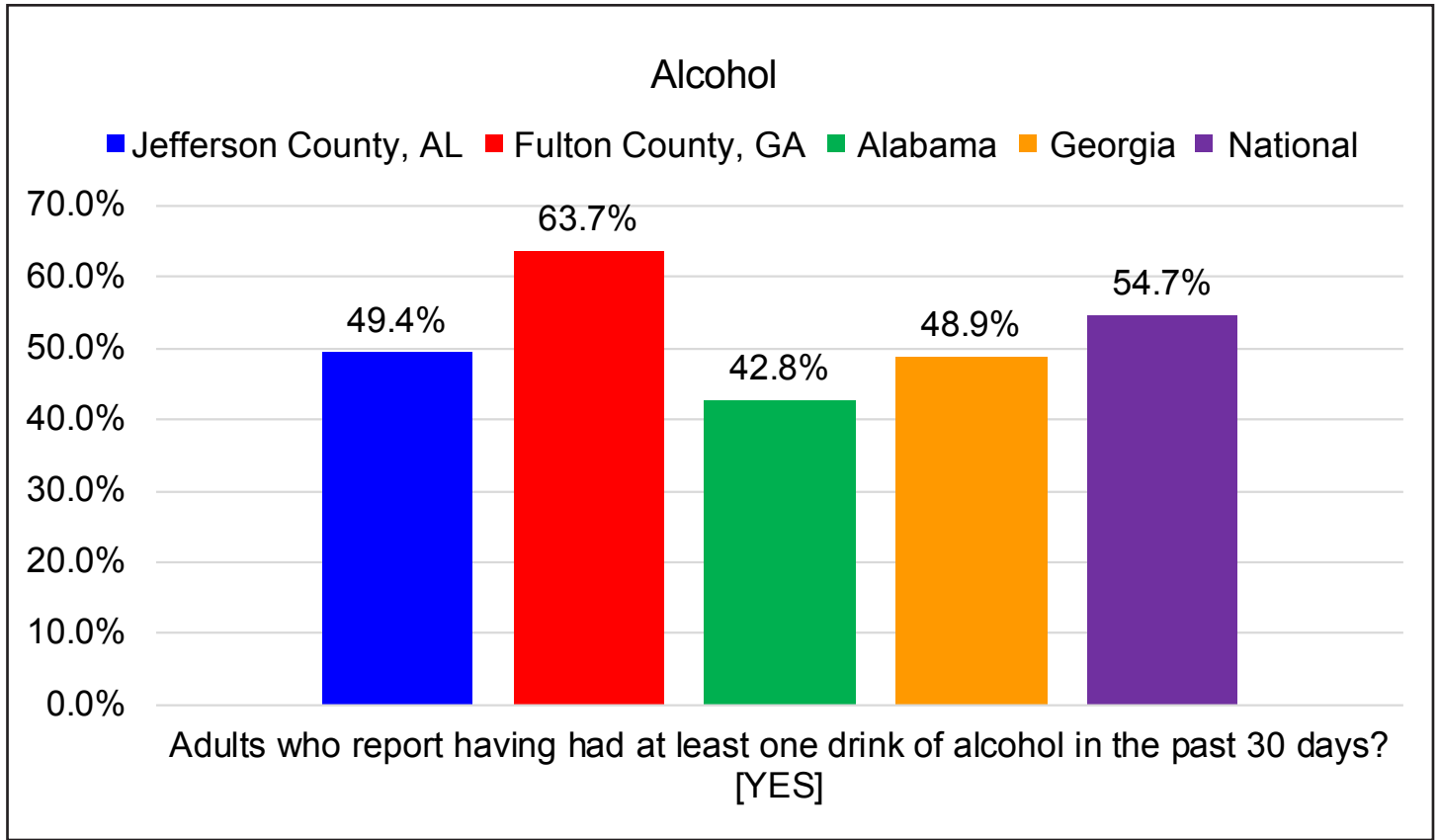


Graph 3. Tobacco Use

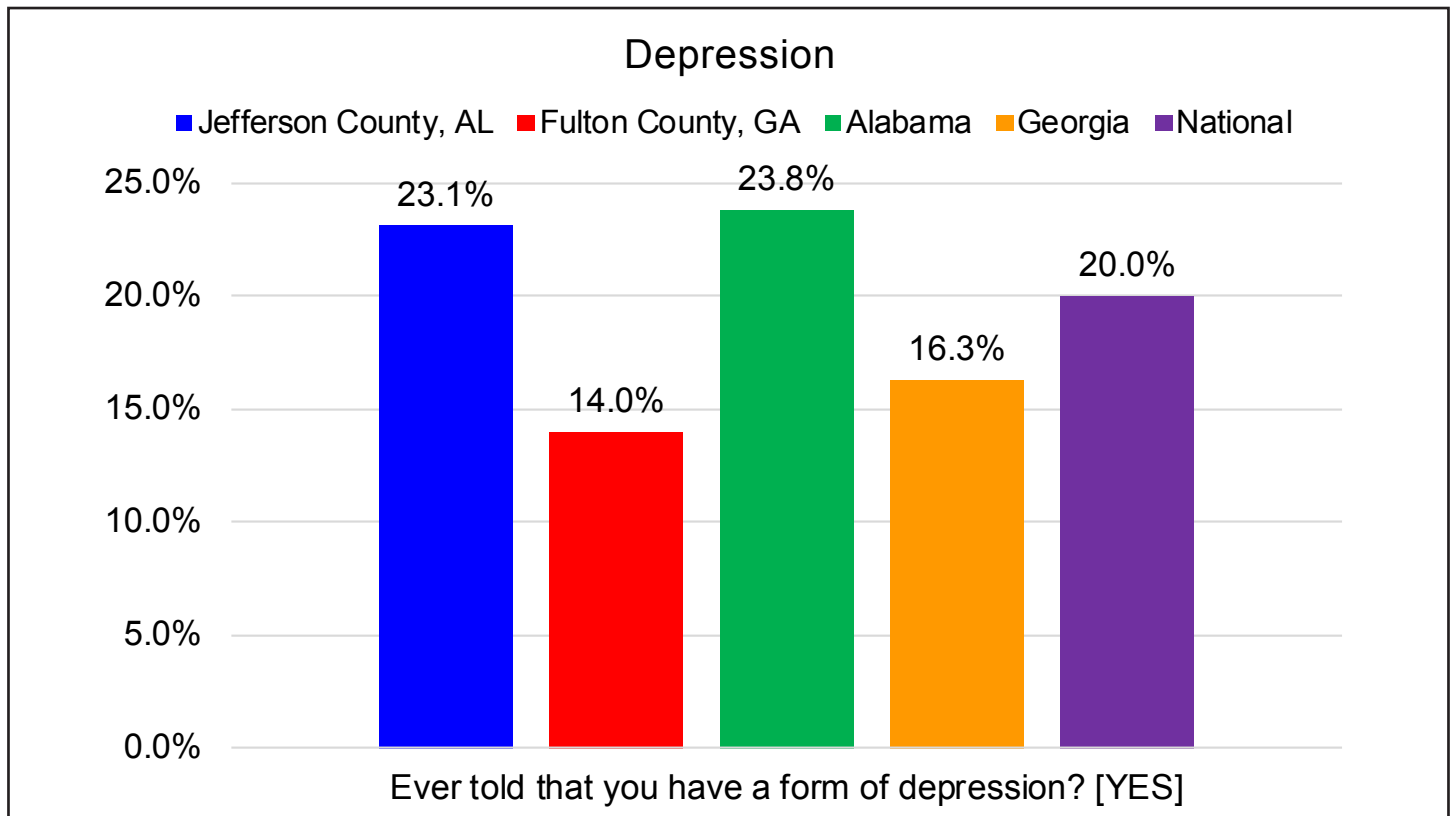


• 2017 BRFSS Data •

Graph 4. Alcohol Use

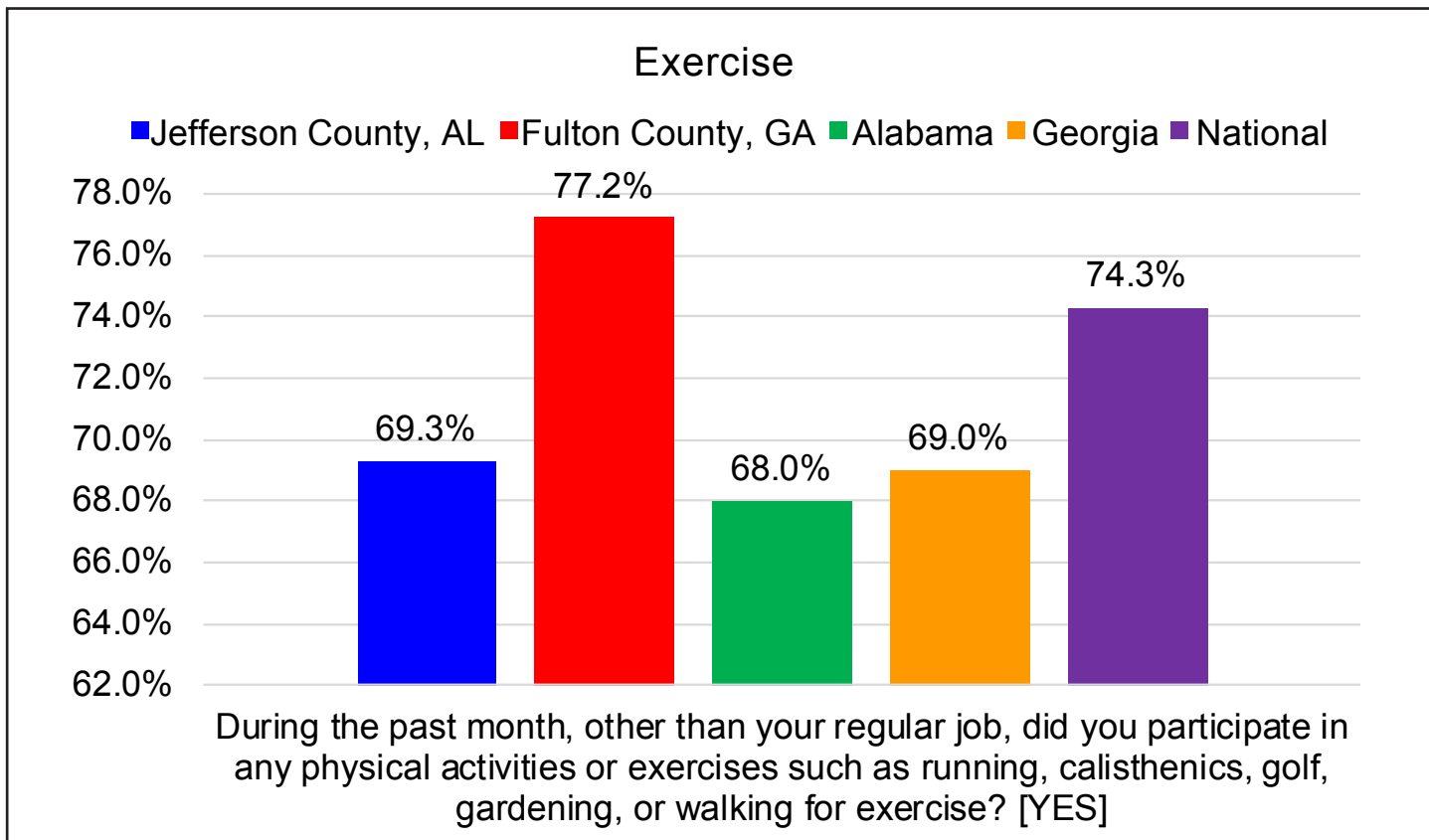


Graph 5. Depression

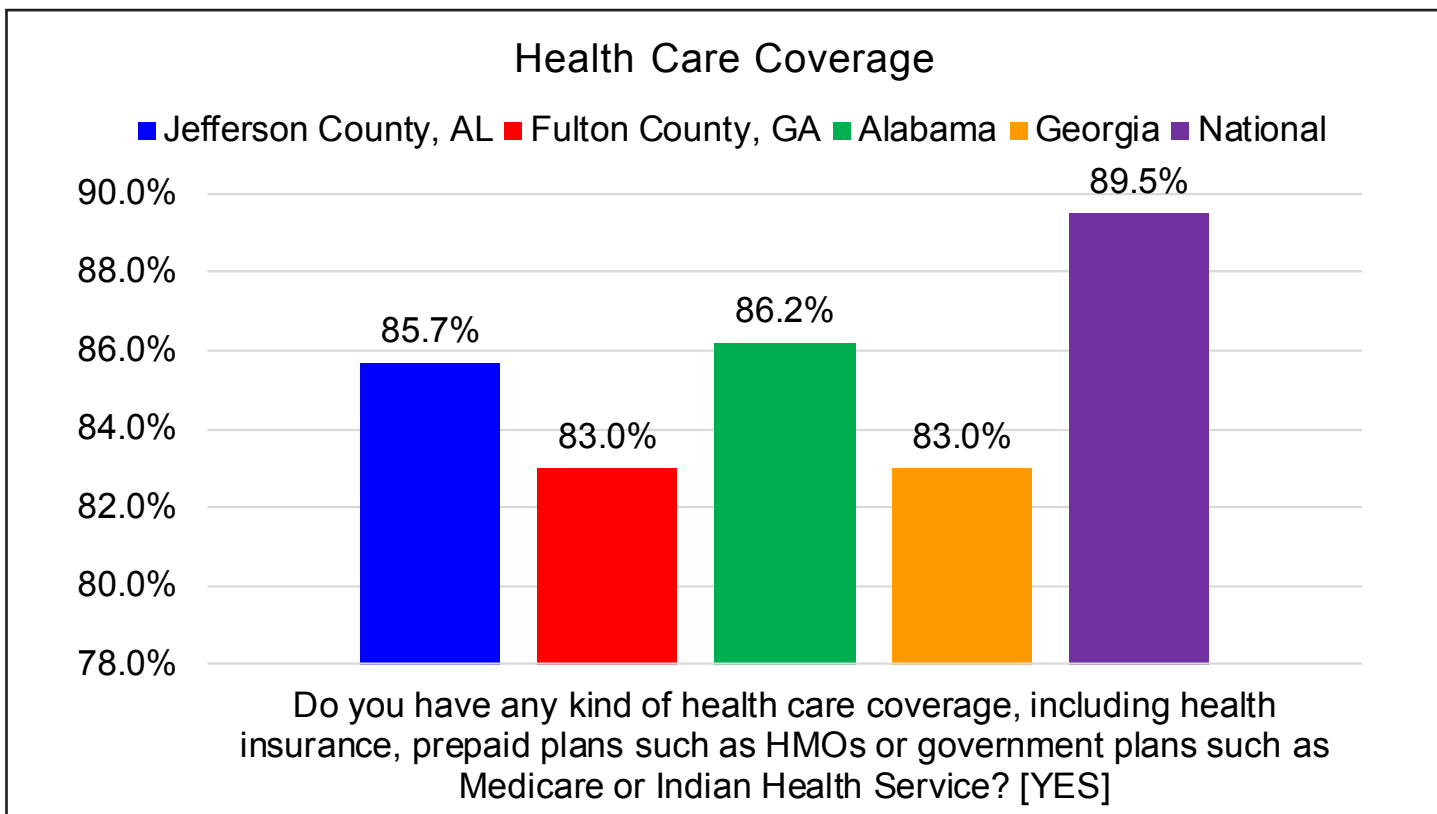


• 2017 BRFSS Data •

Graph 6. Exercise

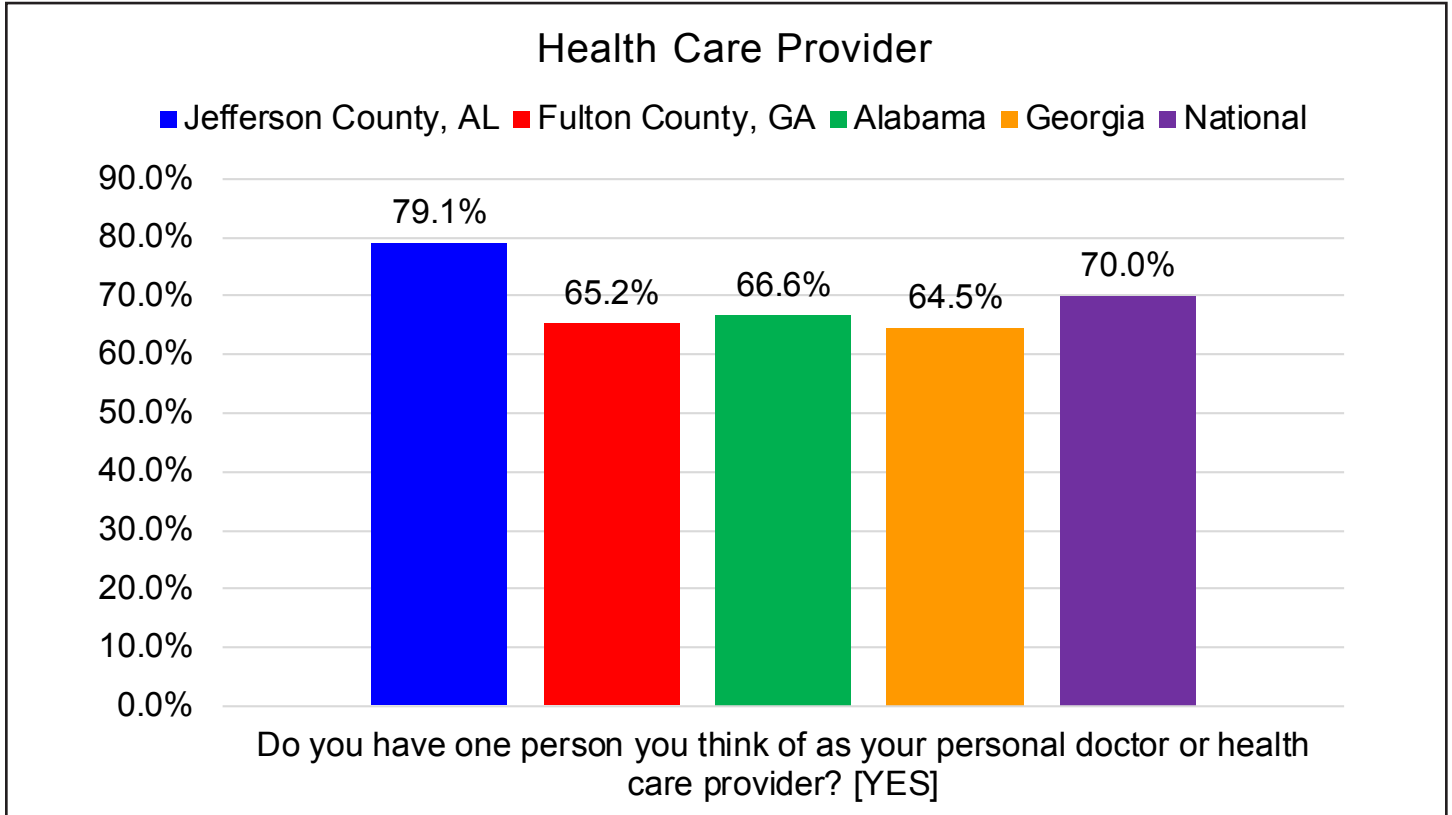


Graph 7. Health Care Coverage



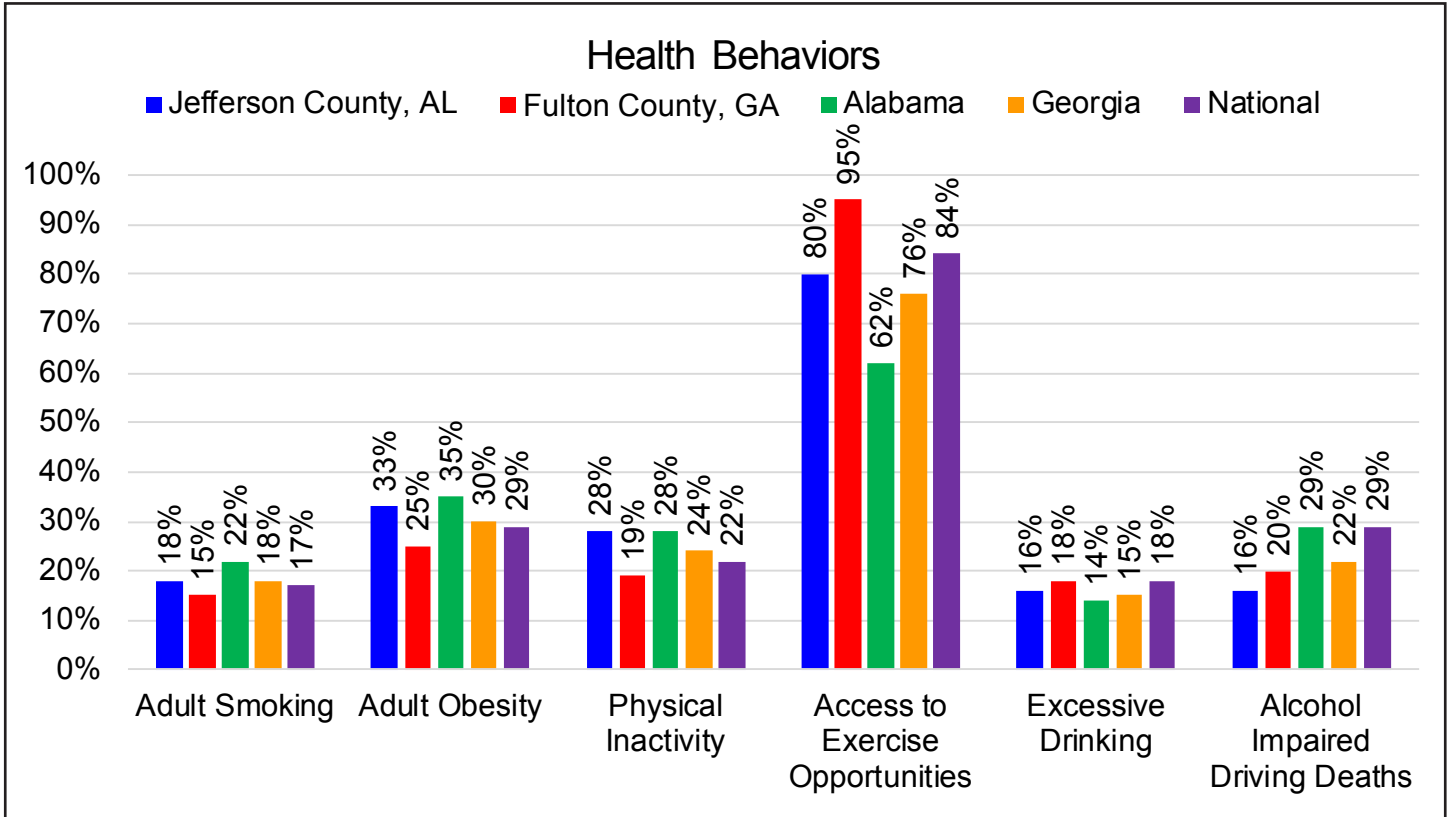
• 2017 BRFSS Data •

Graph 8. Health Care Provider

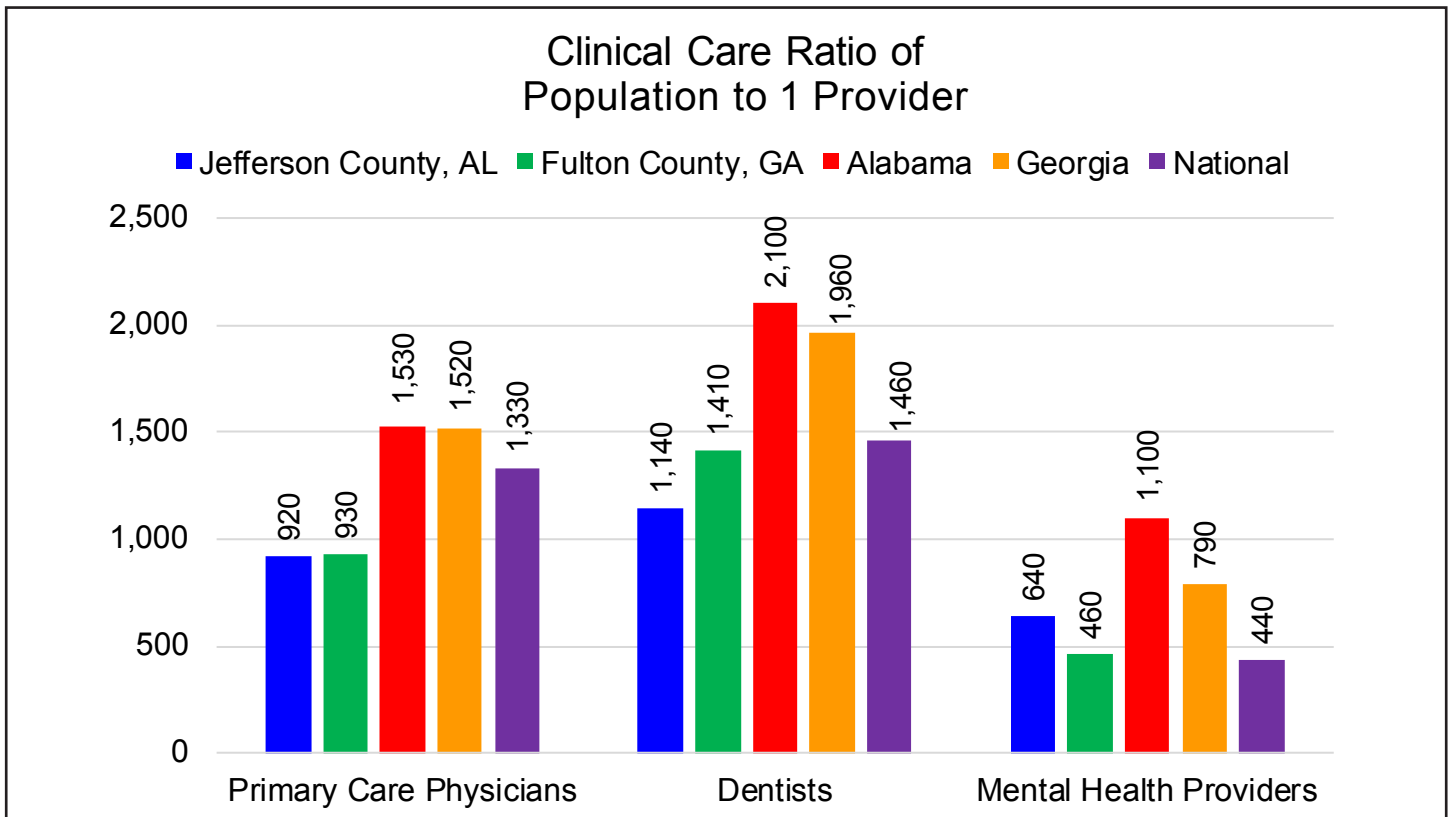


• 2019 County Health Rankings •

Graph 9. Health Behaviors

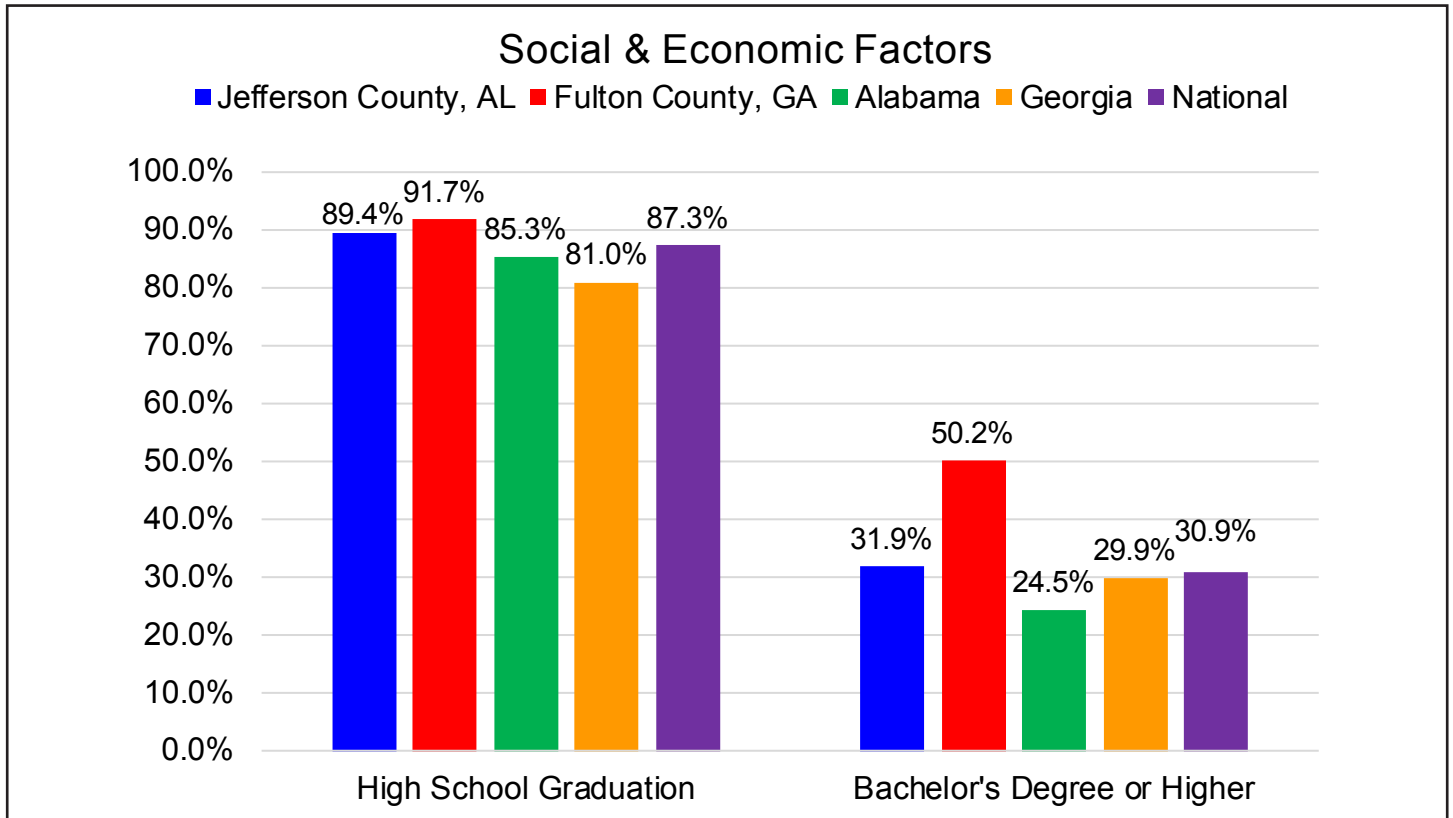


Graph 10. Clinical Care

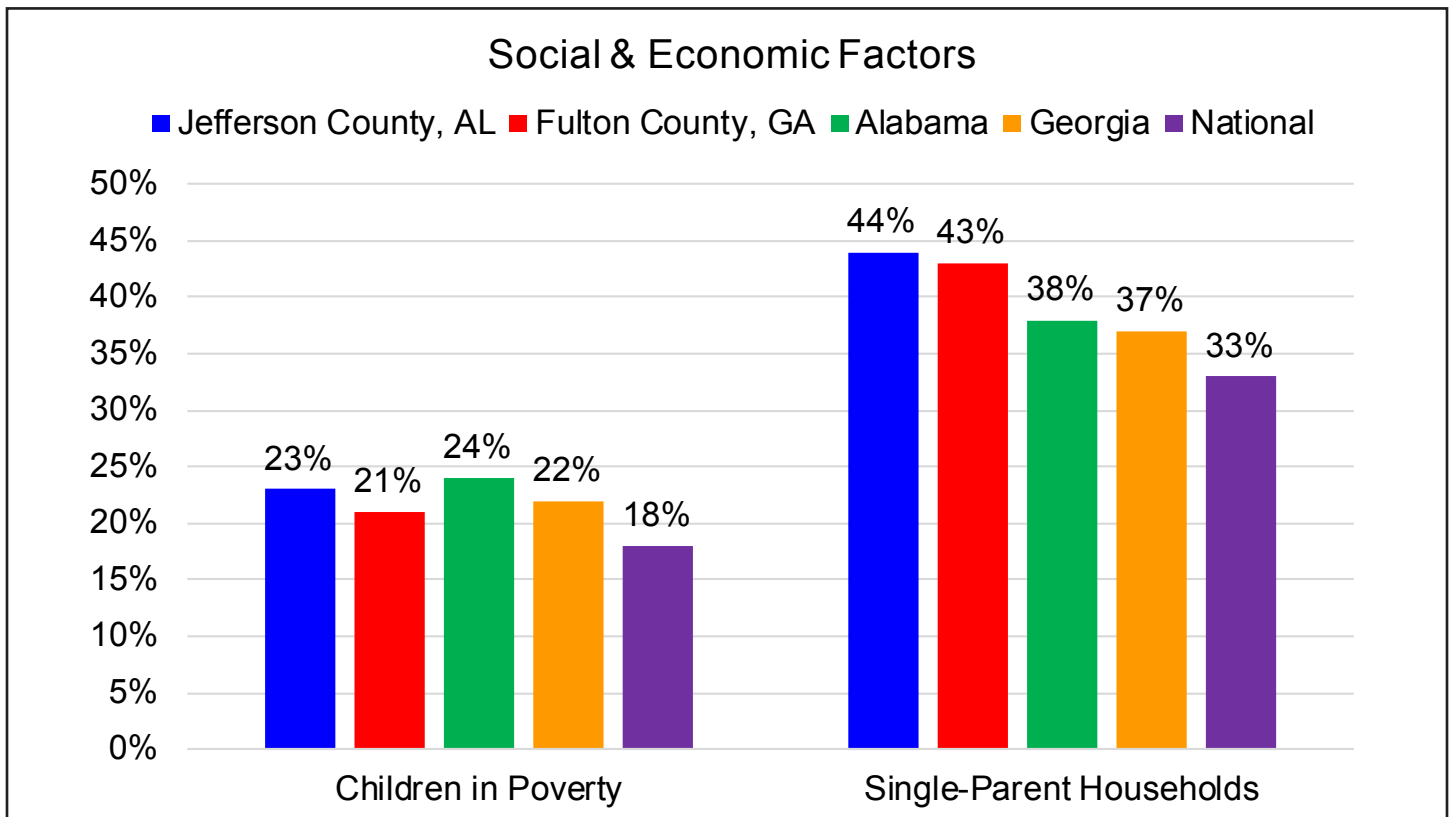


• 2019 County Health Rankings •

Graph 11. Social & Economic Factors



Graph 12. Social & Economic Factors



• 2019 County Health Rankings •

Secondary data available on Jefferson County and all counties in the nation are available at countyhealthrankings.org. This annually updated site establishes a benchmark using Health Outcomes and Health Factors. The County Health Rankings are a key component of the Mobilizing Action Toward Community Health (MATCH) project. MATCH is the collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The rankings identify the multiple Health Factors that determine a county's health status. Each county receives a summary rank for its Health Outcomes and Health Factors - the four different types of Health Factors include: health behaviors, clinical care, social and economic factors, and the physical environment.

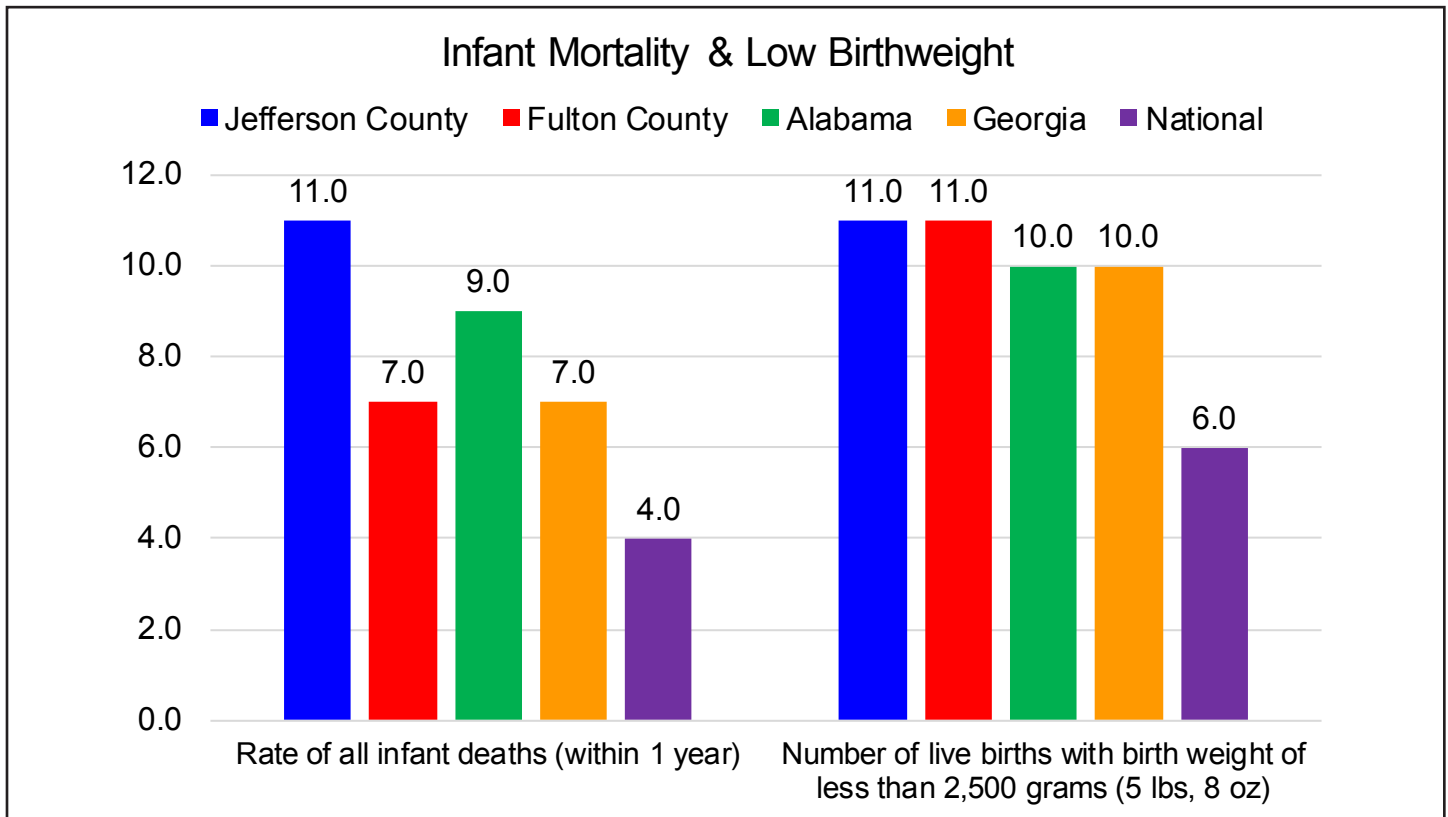
Table 2. 2019 County Health Rankings

County Health Rankings Health Outcomes and Factors					
	Jefferson County	Fulton County	Alabama	Georgia	National Average
Mortality					
Premature Death (Lives Lost / 100,000)	11,000	6,800	9,900	7,700	8,500
Health Behaviors					
Adult Smoking	18%	15%	22%	18%	18%
Adult Obesity	33%	25%	35%	30%	32%
Physical Inactivity	28%	19%	28%	24%	26%
Excessive Drinking	16%	18%	14%	15%	17%
Alcohol-Impaired Driving Deaths	16%	20%	29%	22%	29%
Sexually Transmitted Infection (Chlamydia / 100,000)	700.1	820.5	543.6	614.6	383.5
Low Birthweight	11%	11%	10%	10%	8%
Teen Birth Rate (15 - 19 Yr Olds / 100,000)	32	24	33	33	32
Clinical Care					
Uninsured	10%	13%	11%	15%	11%
Primary Care Physicians	920:1	930:1	1,530:1	1,520:1	1,830:1
Preventable Hospital Stays (Per 100,000 Medicare Enrollees)	4,236	4,423	5,496	4,851	4,828
Mammography Screening	47%	38%	42%	40%	40%
Social & Economic Factors					
High School Graduation	89%	87%	89%	81%	88%
Unemployment	4.2%	4.8%	4.4%	4.7%	4.6%
Children in Poverty	23%	21%	24%	22%	22%
Children in Single - Parent Households	44%	43%	38%	37%	32%
Violent Crime Rate / 100,000	873	763	480	388	252
Physical Environment					
Air Pollution - Particulate Matter / Cubic Meter	13.4	12.0	11.0	10.9	9.0
Food Environment Level [0 (worst) - 10 (best) - Food Desert]	6.2	6.8	5.8	6.0	7.5
% Adequate Access to Exercise Opportunities	80%	95%	62%	76%	63%

• Health Indicators Data •

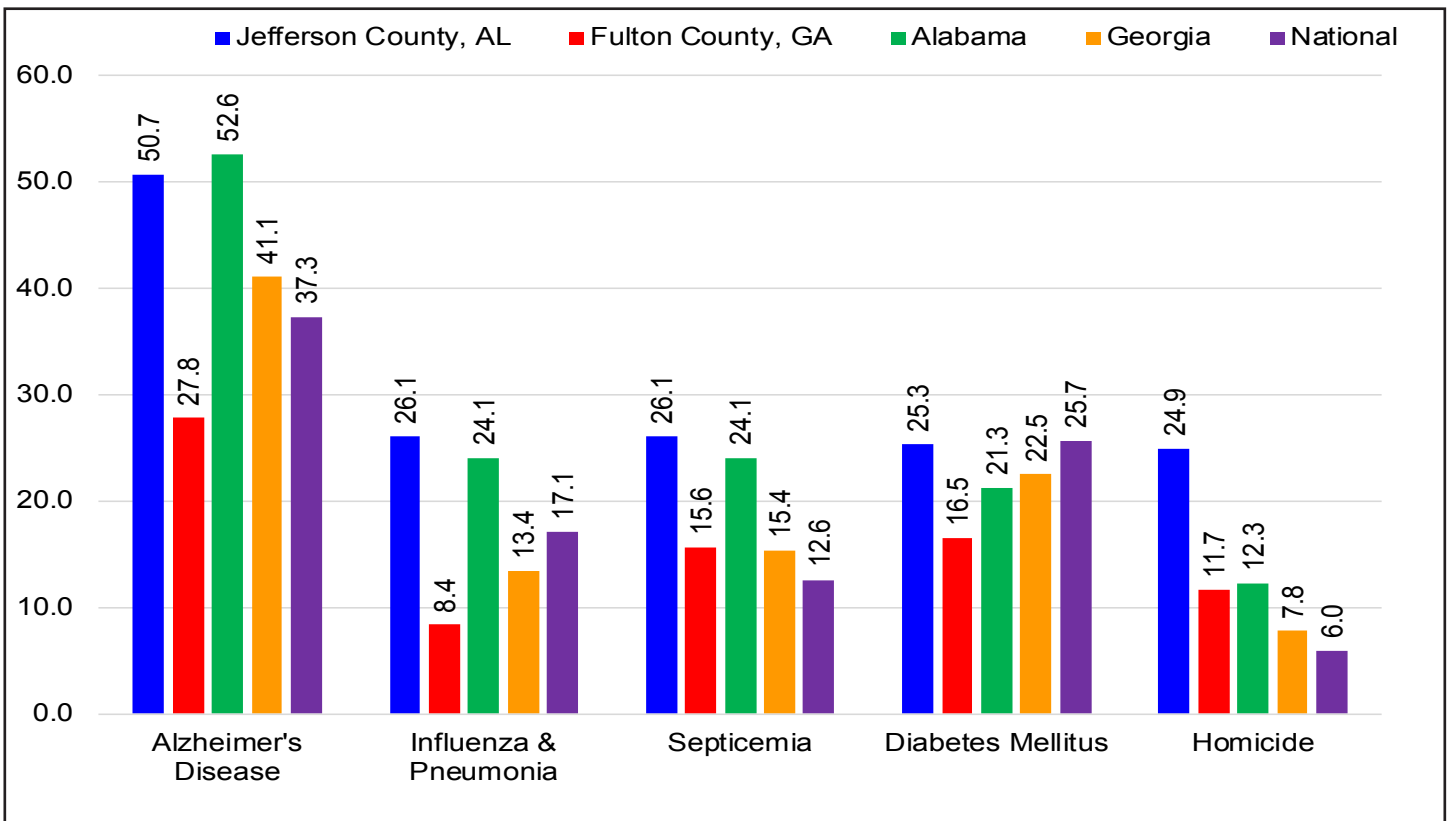
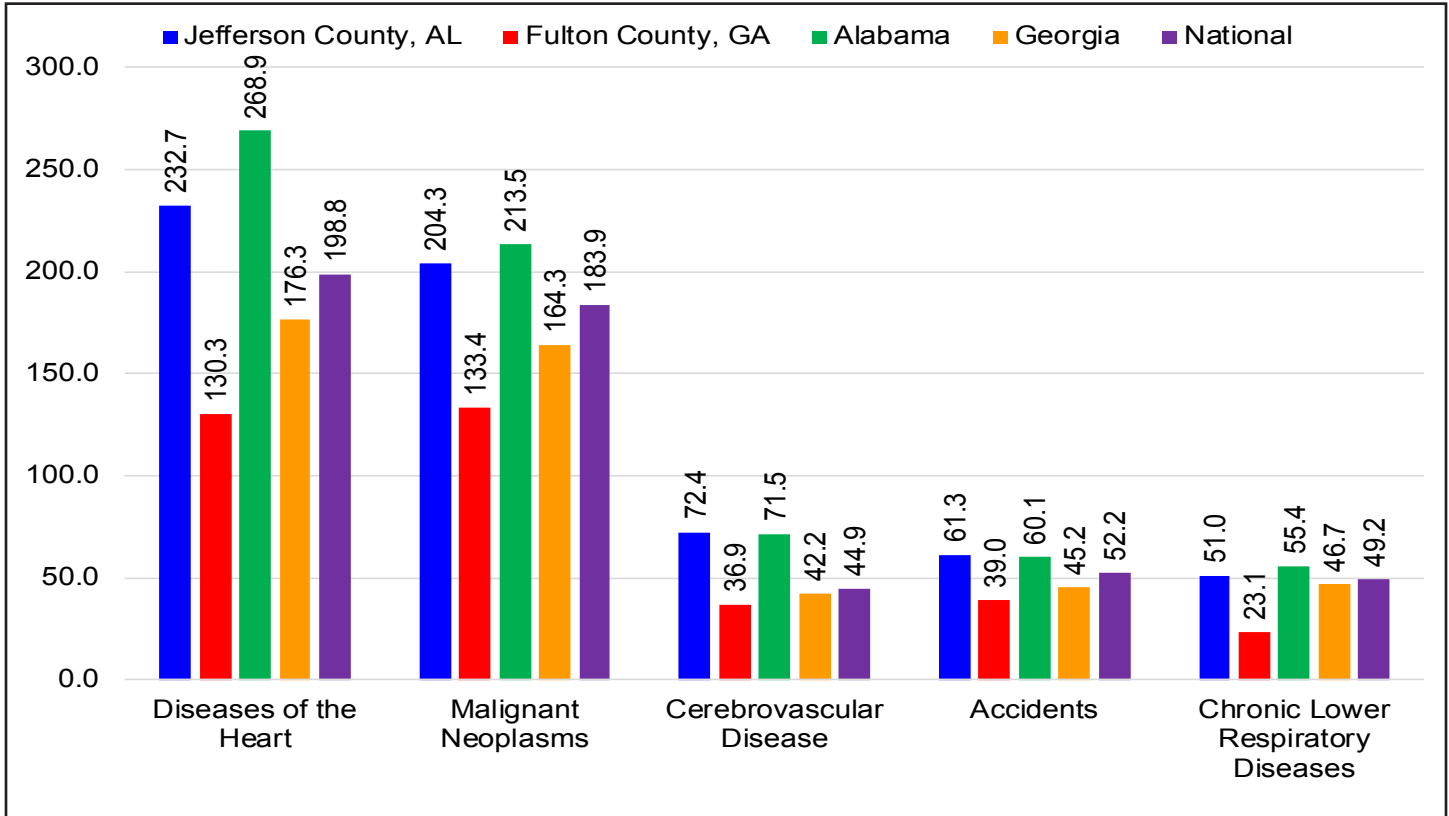
Community Health Status Indicators (CHSI) provide data on over 200 key health indicators for each of the 3,141 U.S. counties. The data are provided to assist community leaders and public health professionals as they identify, compare, and address the most pressing issues for their community.

Graph 13. Infant Mortality and Low Birth Weight 2018 (healthdata.gov)



• Health Indicators Data •

Graph 14. Deaths per 100,000 Population CHSI



*Diseases of the Heart: Ischemic Heart Disease, Acute Myocardial Infarction, Artherosclerotic CVD, Hypertensive Heart Disease

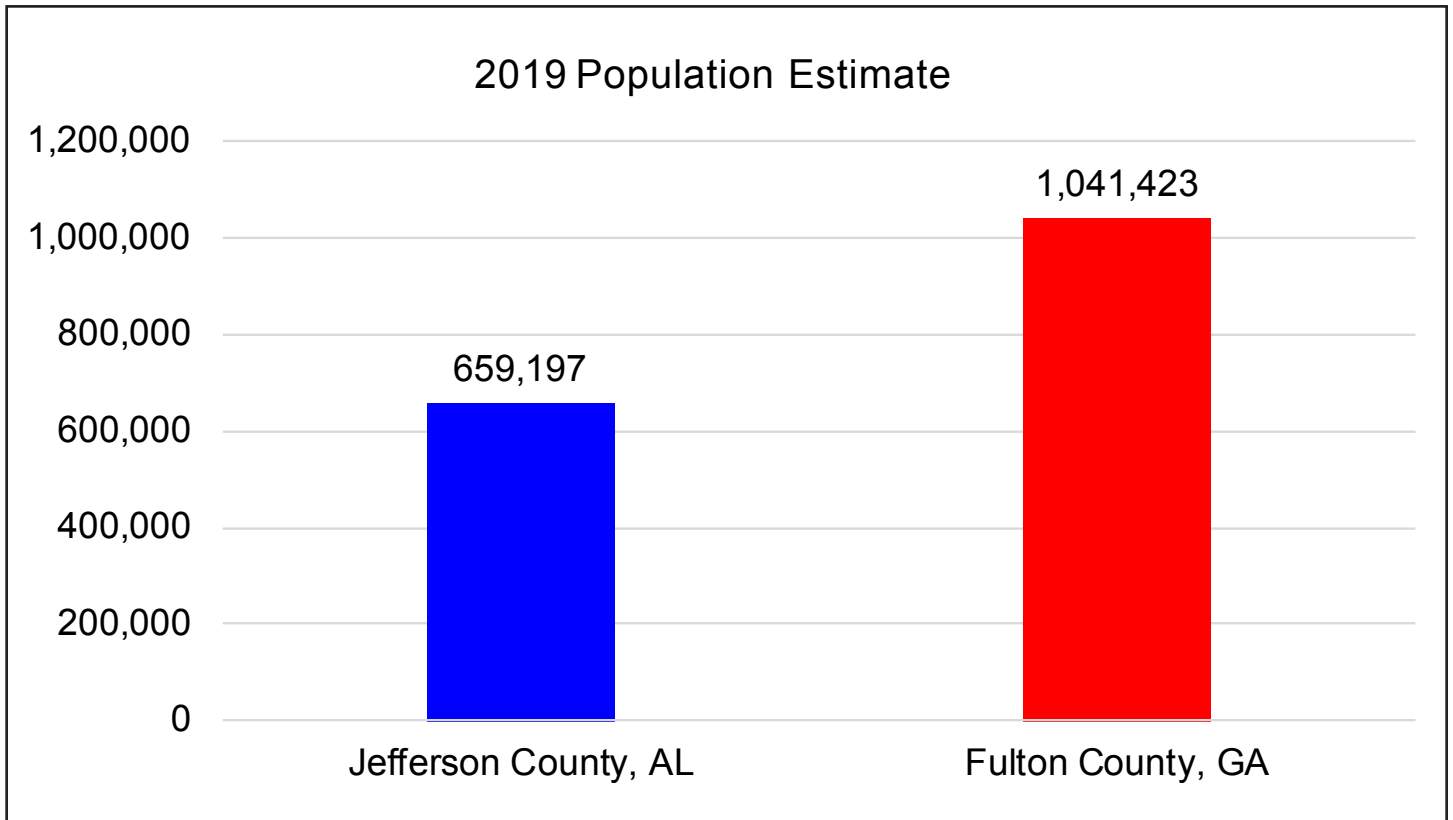
*Malignant Neoplasms: Cancer of the Trachea, Bronchus & Lung; Cancer of the Colon, Rectum & Anus; Cancer of the Lymphoid, Hematopoietic & Related Tissue

*Cardiovascular Diseases: Stroke

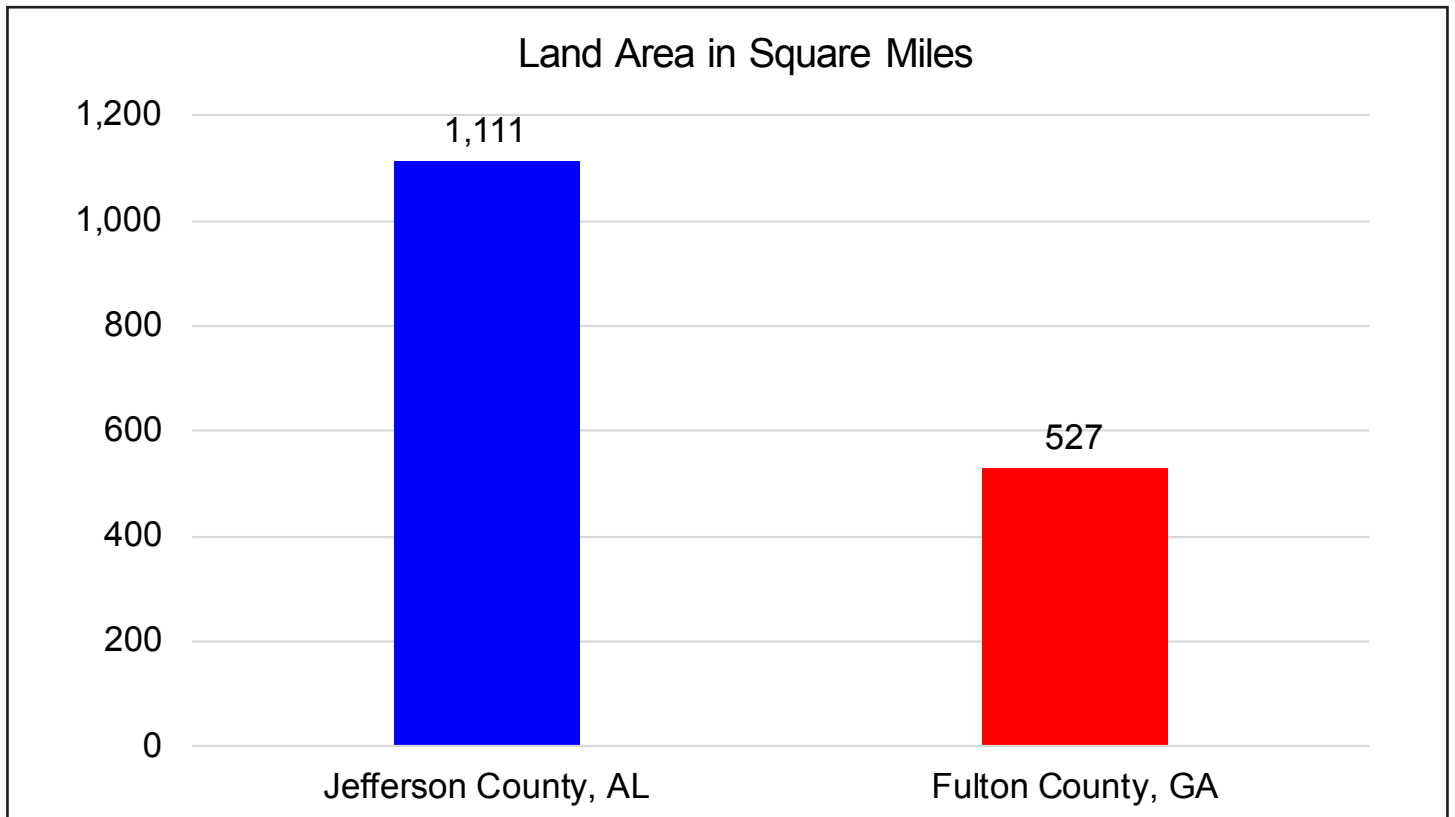
*Accidents: Poisoning & Exposure to Noxious Substances, Non-transport Accidents, Motor-vehicle Accidents

• Census Data •

Graph 15. U.S. Census – 2019 Population Estimate

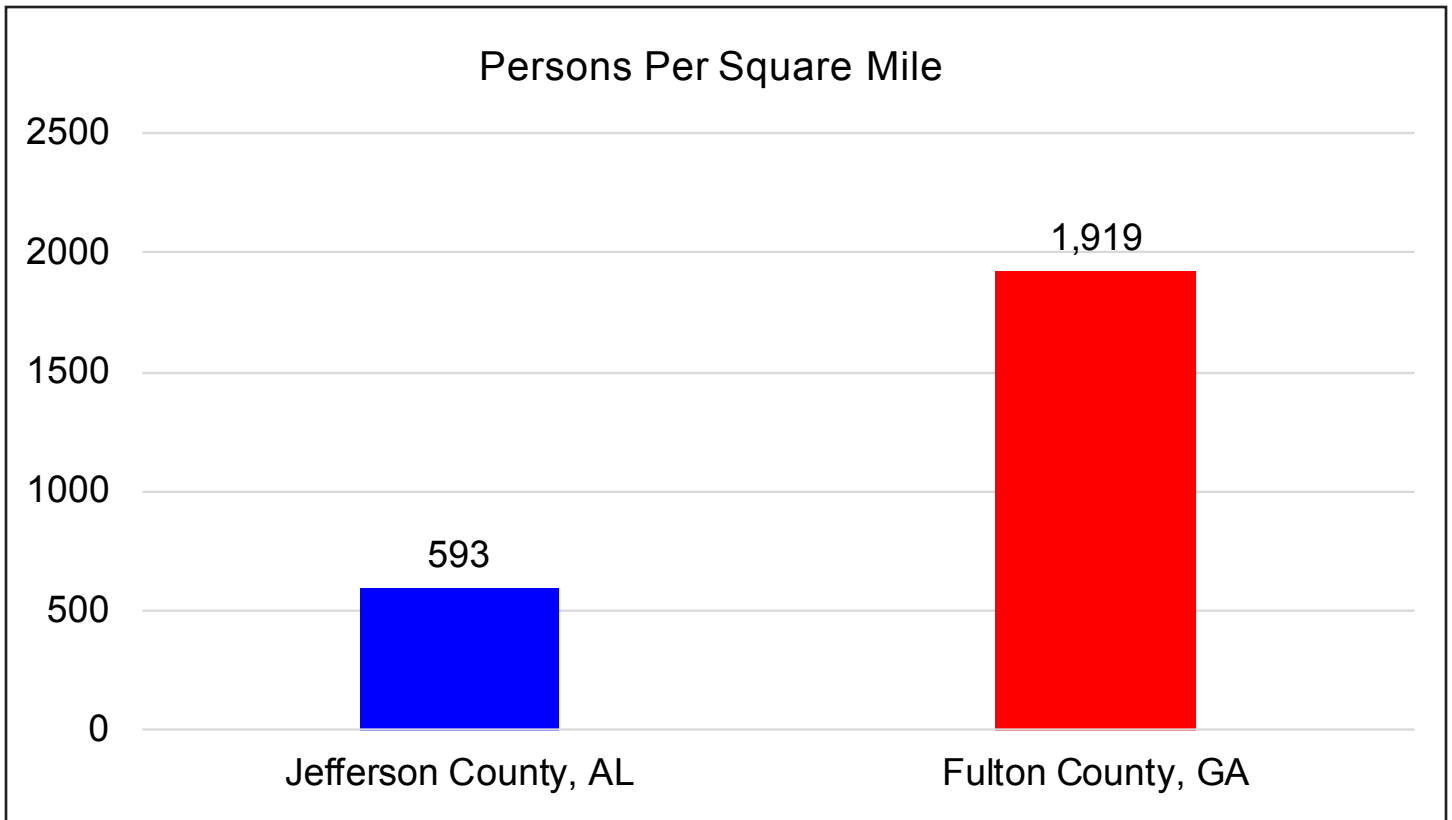


Graph 16. U.S. Census – Land Area

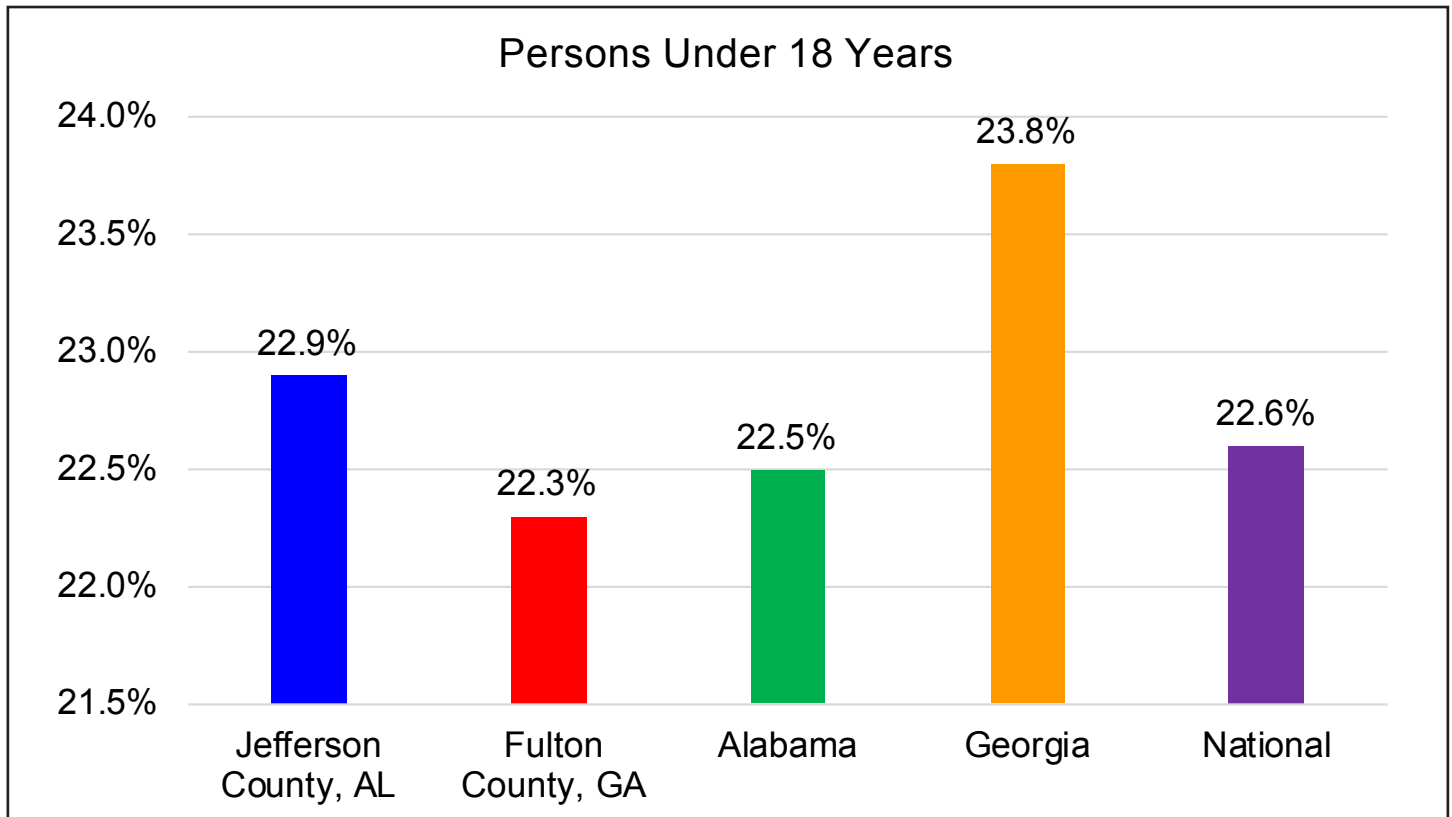


• Census Data •

Graph 17. U.S. Census – Persons per Square Mile

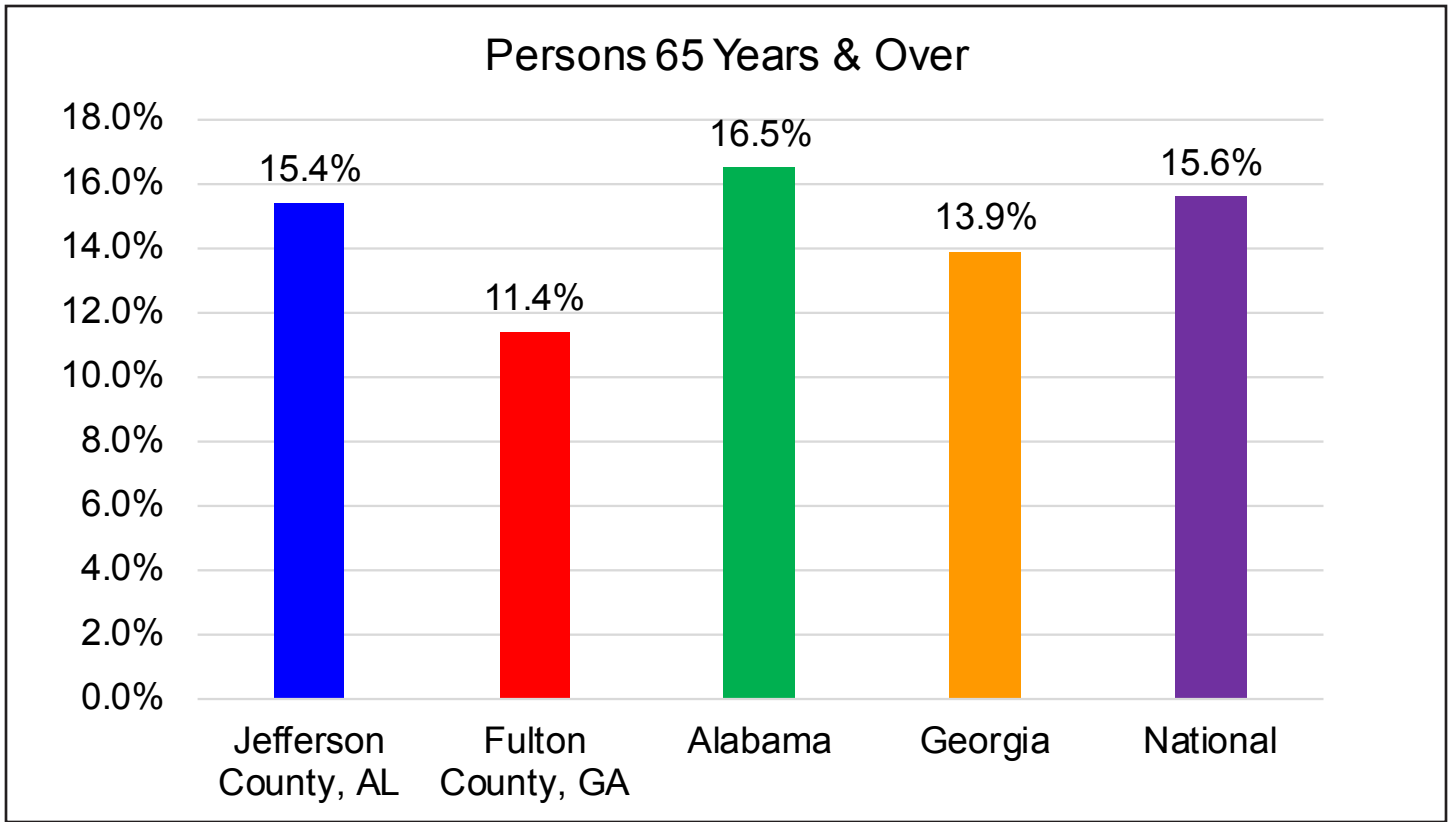


Graph 18. U.S. Census – Persons Under 18 Years

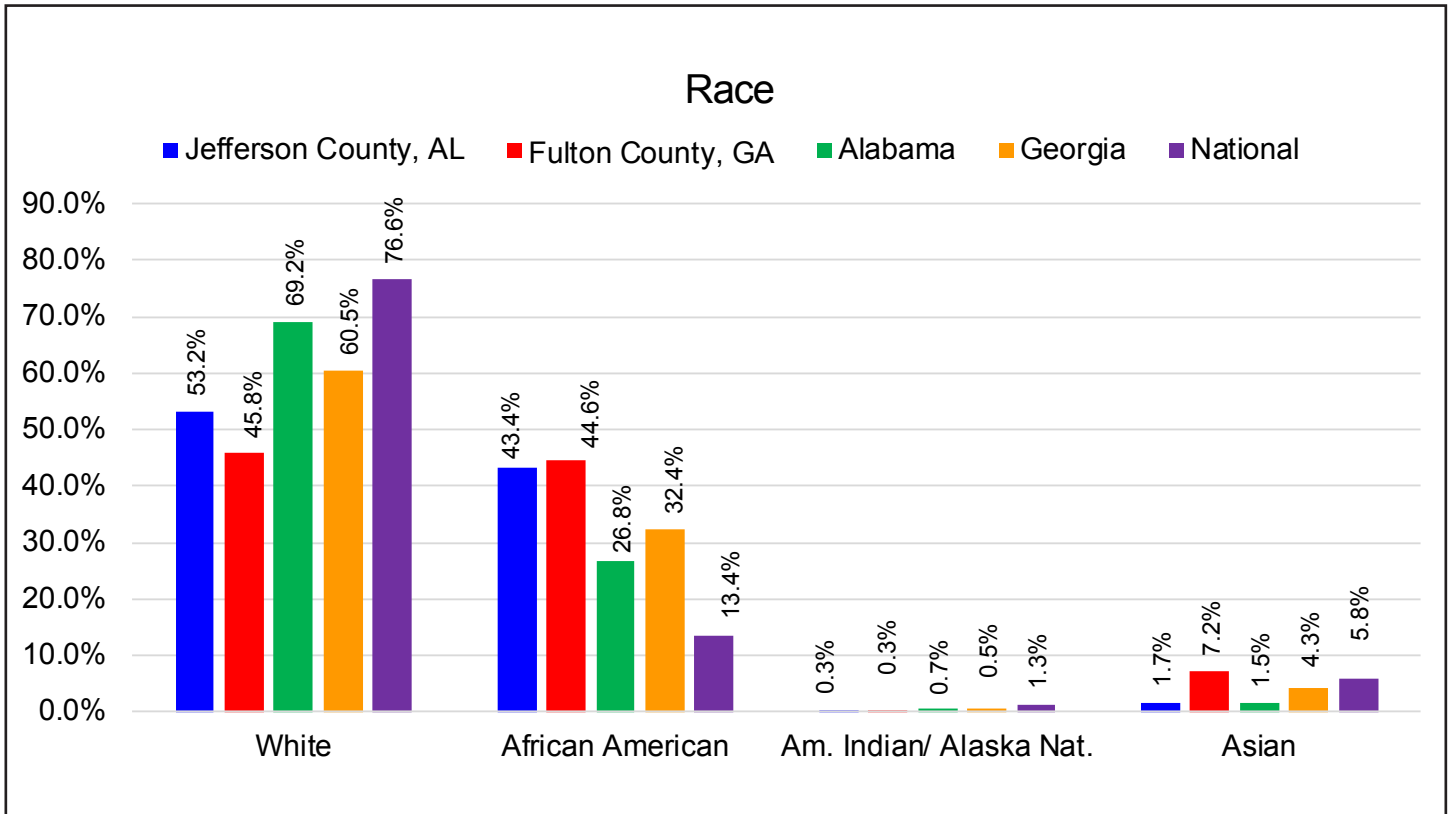


• Census Data •

Graph 19. U.S. Census – Persons 65 Years & Over

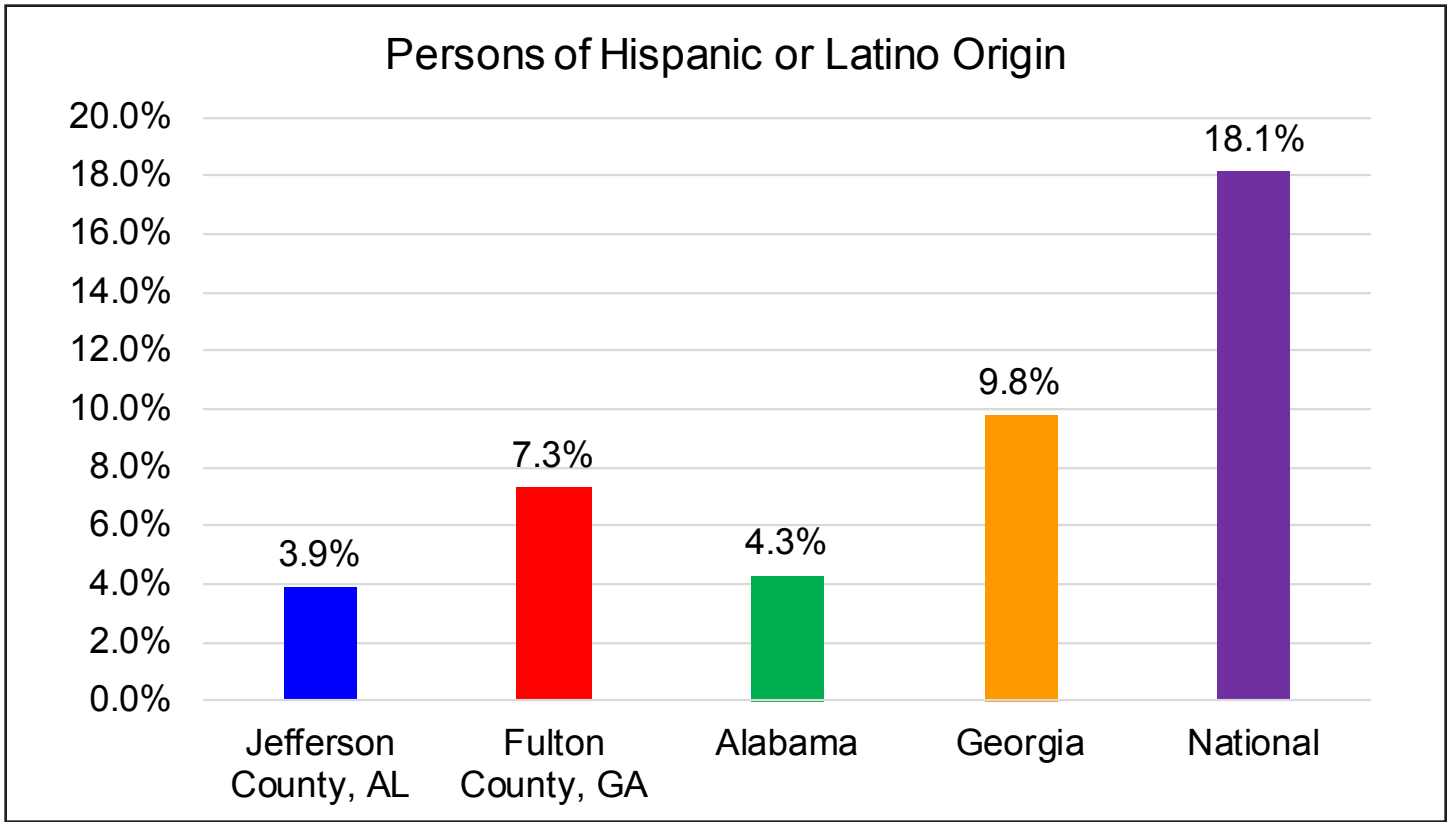


Graph 20. U.S. Census – Race

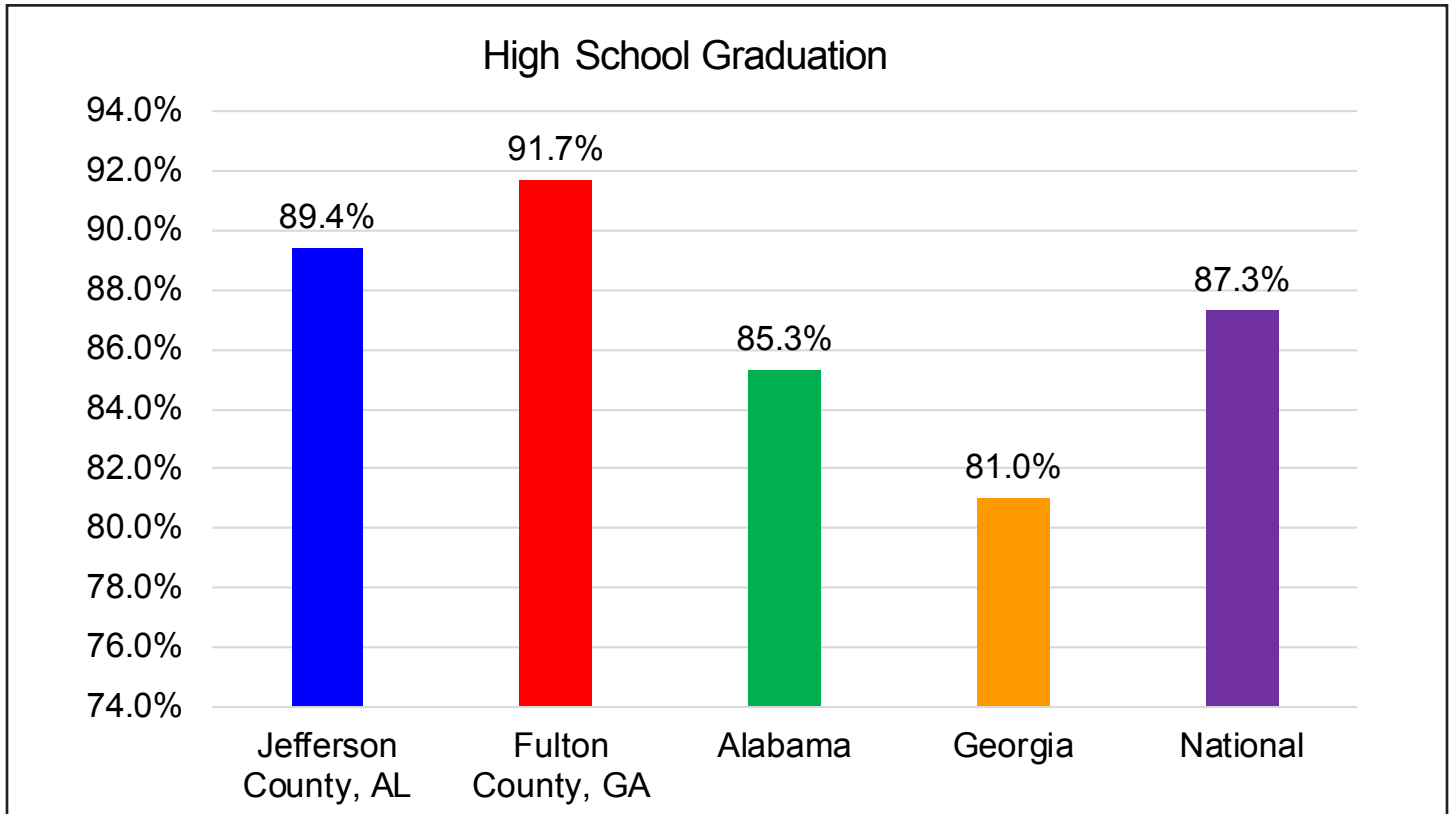


• Census Data •

Graph 21. U.S. Census – Ethnicity

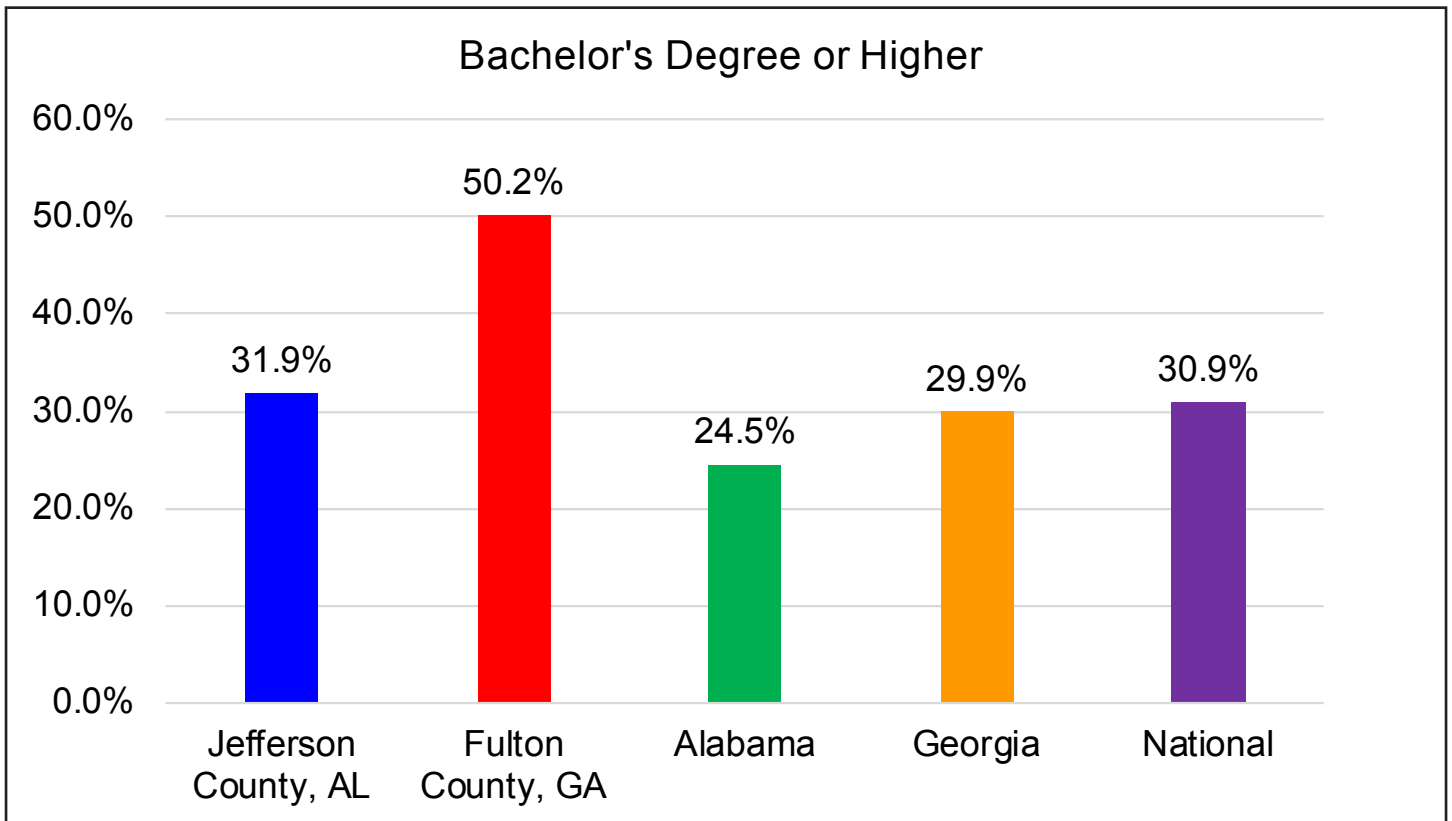


Graph 22. U.S. Census – High School Graduation

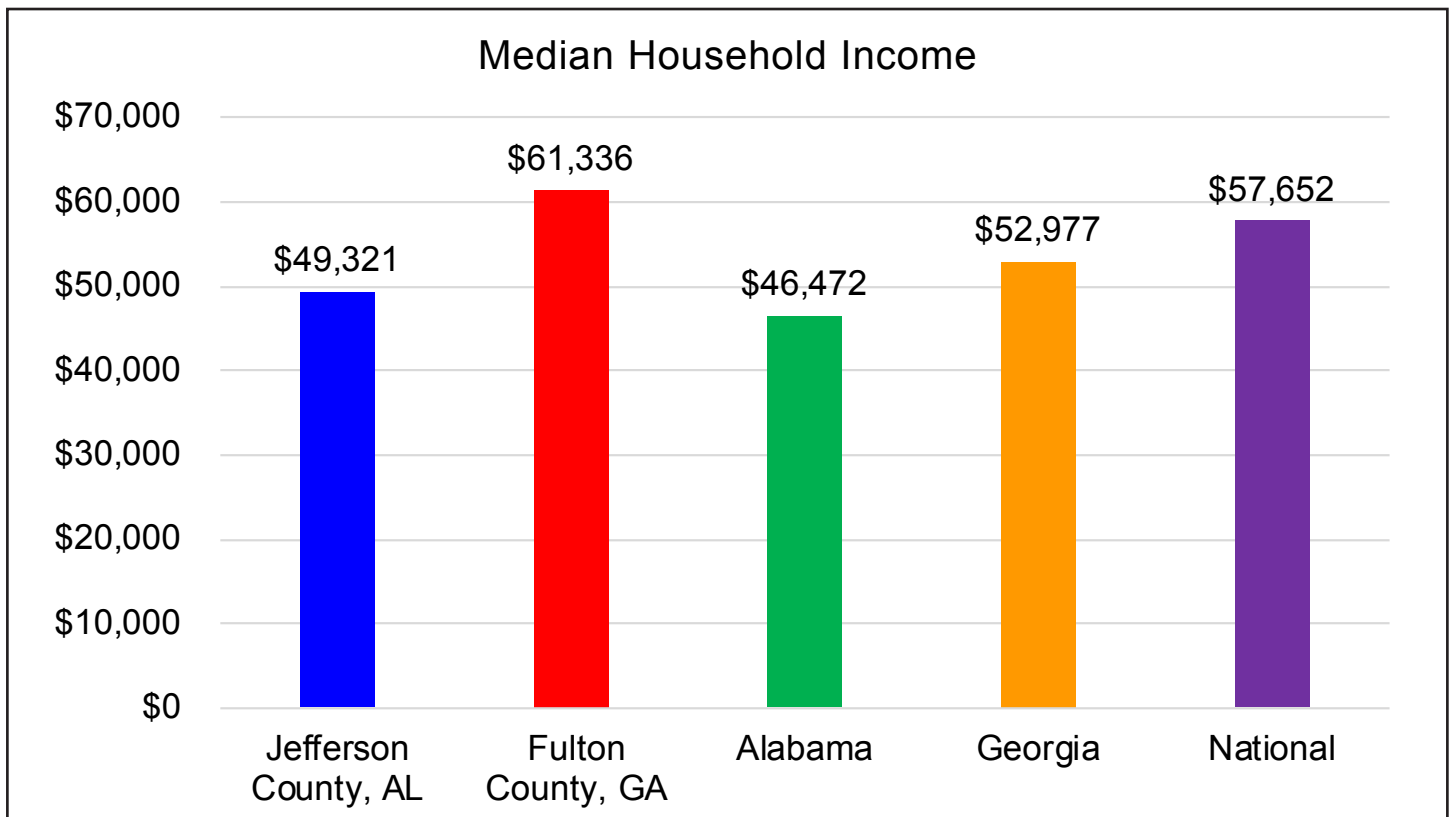


• Census Data •

Graph 23. U.S. Census – Bachelor's Degree or Higher

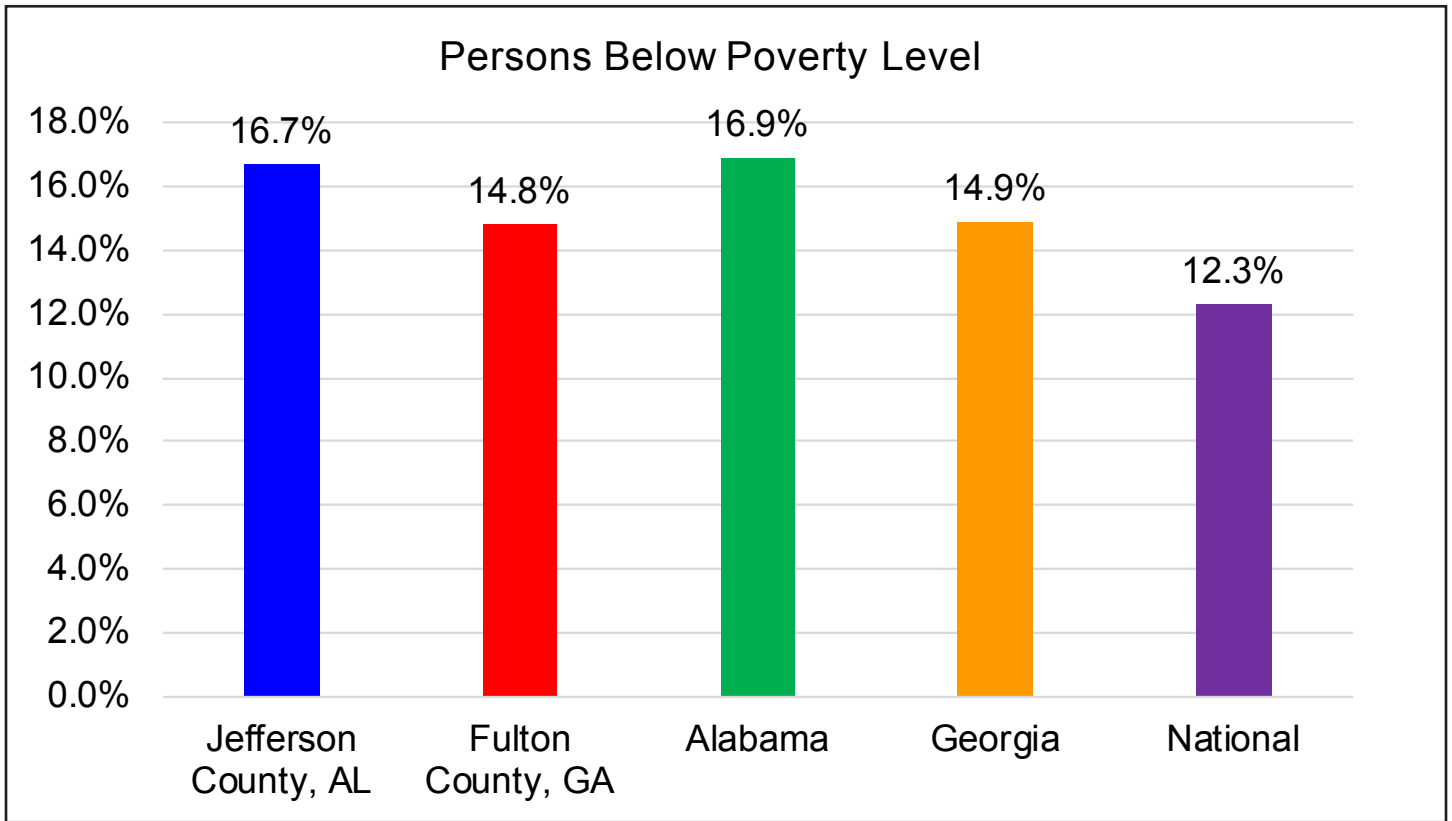


Graph 24. U.S. Census – Median Household Income



• Census Data •

Graph 25. U.S. Census – Persons Below Poverty Level



• Surveys/Interviews •

In order to formulate a comprehensive list of the greatest health needs within the UAB Callahan Eye Hospital & Clinics community, survey and interview questions were developed as previously described. Using the guidance provided in IRS notice 2011-52 on Community Health Needs Assessments for tax-exempt hospitals, the CHNA team identified key informants. The list of key informants included health experts at the state and community levels and local civic leaders. These key informants were queried using a variety of techniques including electronic survey, and telephone and in-person interviews. Below is a list of the survey questions and the most common responses:

WHICH ARE MOST PRESSING HEALTH CONCERNS IN YOUR COMMUNITY? (INTERVIEWS/SURVEY)

- Diabetes
- Obesity
- Education
- Age Related Diseases
- Hypertension
- Lack of Insurance Coverage
- Access to Health Services
- Substance Abuse
- Social Determinants
- Cancer

WHICH ARE THE PROBLEMS/CONCERNS IN YOUR COMMUNITY? (SURVEY)

- Access to Healthcare
- Drug Use
- Obesity
- Homelessness
- Poor Diet
- Tobacco Use
- Lack of Exercise
- Alcohol Abuse
- Literacy
- Increase in Elderly Population

MOST COMMON CAUSE OF DEATH IN YOUR COMMUNITY? (SURVEY)

- Heart Disease & Stroke
- Cancer
- Diabetes

MAIN REASON PEOPLE DON'T SEEK HEALTHCARE IN YOUR COMMUNITY? (INTERVIEWS/SURVEY)

- Lack of Insurance
- Cost
- Fear
- Lack of Geographic Access
- Transportation

WHAT IS THE HOSPITAL'S ROLE IN ADDRESSING NEEDS? (INTERVIEWS/SURVEY)

- Community Education
- Better Communication Between Hospitals and Outpatient Clinics
- Streamline Services
- Access
- Making Community Aware of Their Strengths

• Summary of Findings •

The CHNA Coalition Committee, consisting of representatives from hospital leadership, completed a private ballot to determine their top five issues of the community. The ballot prompted each committee member to rank order a list of community concerns. The results demonstrated the committee members' healthcare priorities, as well as the voting frequency of each item on the ballot. A Borda-Type methodology was used to tabulate the results. The top three issues considered to be of greatest need in the community are as follows:

1. Diabetes Education

2. Access

3. Free/Subsidized Healthcare for the Uninsured

Identifying the needs of the community provides UAB Callahan Eye Hospital & Clinics the opportunity and the knowledge to better align existing programs and to design future efforts to best meet the needs of their community. UAB Callahan Eye Hospital & Clinics are part of a health system committed to providing a continuum of health services of the highest quality.



UAB CALLAHAN EYE HOSPITAL AND CLINICS

2019 Community Health Needs Assessment – Implementation Strategy -

Hospital and Clinics Summary

Callahan Eye Foundation Hospital was established in 1963 and still remains dedicated to preserving and restoring sight to the people of Alabama and the Southeast. In 1997, the hospital became part of the UAB Health System and changed its name to the UAB Callahan Eye Hospital. As Alabama's only eye hospital, Callahan Eye Hospital & Clinics (CEHC) is devoted to providing quality medical and surgical eye care to its patients. It is equipped with nine outstanding ophthalmology operating rooms and provides a full spectrum of specialized eye care. CEHC offers general ophthalmology, glaucoma, retina/vitreous, cornea, ocular plastics, pediatric ophthalmology, and neurological ophthalmology care. CEHC also maintains an ophthalmology residency program and participates in vision research. It is the region's only Level I Ocular Trauma Center with a 24-hour, 7 day a week emergency room dedicated solely to the eye. Located in the Medical District of downtown Birmingham, CEHC's primary business consists of outpatient ophthalmology and ambulatory surgery. While it is one of the busiest ophthalmology surgery centers in the country, all of CEHC's surgeons and staff are committed to providing excellent quality eye care for each of their patients.

Target Areas and Population

The UAB Callahan Eye Hospital & Clinics community is defined using the 104 zip codes derived from 75% of the hospital's inpatient and outpatient discharges from fiscal year 2018. The zip codes encompass 19 counties, all in the state of Alabama. For the purposes of this study, UAB's Callahan Eye Hospital community is defined as Central Alabama.

Population

Located in central Alabama, Jefferson County is a mix of urban, suburban, and rural environments. There are 67 communities within the county, 34 of which are incorporated municipalities. According to the U.S. Census Bureau, the most recent population estimate for Jefferson County is 659,197. The dominant language is English, with 5.9% speaking another language in the home.

Race/Ethnicity

The population of Jefferson County is 53.2% white, 43.4% black, and 3.1% other. The U.S. Census Bureau considers Hispanic/Latino heritage as an ethnicity and not a race. Of Jefferson County residents responding to the most recent census, 3.9% consider themselves to be of Hispanic/Latino origin. Persons of Hispanic/Latino origin may be of any race, and are included in the applicable race categories above. The Hispanic/Latino population of Jefferson County is 4.3%.

Education

Of Jefferson County's 659,197 residents, 22.9% are under 18 years old (Graph 18) and are served by 12 school systems. There are 11 city systems and one run by the Jefferson County Board of Education. This county system is Alabama's second largest school district with 57 schools, 4,500 teachers, and over 36,000 students. The system offers a multitude of academic, career technical and extracurricular opportunities for students. The Birmingham City School System serves students in the city of Birmingham with 43 schools, (18 elementary, 8 middle, 10 K-8 schools, and 7 high schools). Of the county's residents, 89.4% graduated from high school. Jefferson County offers many post-secondary education opportunities. Birmingham Southern, The University of Alabama at Birmingham, and Samford University provide the area with major colleges of medicine, dentistry, optometry, pharmacy, law, engineering, and nursing. Of the county's residents, 31.9% hold a Bachelor's degree or higher (Graph 23). Birmingham has been the home of The University of Alabama at Birmingham School of Medicine since 1947. Birmingham is also home to three of the state's five law schools.

Employment

Jefferson County is an economic catalyst for the state. Not only does it have many companies and organizations with a large employment base, but it is a hub for medical care. UAB has an extensive healthcare complex and is the second largest employer in the state. The per capita income of a Jefferson

County resident in 2017 was \$29,456 and median family income was \$49,321 (Graph 24). The percentage of residents living below the poverty level is 16.7% (Graph 25). As of February 2019, the unemployment rate for Jefferson County was 3.7% which is the same as the rate for the state of Alabama. UAB is the largest healthcare provider in the state, while Blue Cross Blue Shield of Alabama is the major health insurance carrier in the state with corporate headquarters in Birmingham. Major financial institutions include Regions, BBVA/Compass, and Wells Fargo. Honda Manufacturing of Alabama (4,500 employees) and Mercedes-Benz U.S. International, Inc. (3,600 employees) are the major manufacturing employers. Both are located in adjacent counties within driving distance of Birmingham.

How the Implementation Strategy Was Developed

The UAB Callahan Eye Hospital Implementation Plan was developed based on the findings of our CHNA conducted by Alabama Quality Assurance Foundation (attached).

The CHNA reviewed our target areas and population, key demographic data, health trends in the key markets, comparisons to a similar market, internal stakeholder surveys, and key informant interviews.

After all the data was compiled and reviewed, the UAB CHNA Oversight Committee reviewed the top ranking health priorities and approved the Top Three Health Needs. This Oversight Committee membership included leadership from UAB Callahan Eye Hospital, primary care physicians, UAB Health System strategic planning, UAB Health System marketing, UAB Hospital Wellness, and the Director of the UAB Health System Population Health Task Force.

Updates on the 2016 CHNA Action Plan

In 2016 the top three Health Needs identified were as follows:

1. Diabetes Education
2. Increased Transportation to Healthcare Appointments
3. Access

2016 Health Need Number One: Diabetes Education

We are working on many initiatives that will address access to care for our population. The main initiative and brief summary is listed below:

Working with other UAB departments, Department of Ophthalmology researchers and other supportive organizations as appropriate, we will continue to support ongoing educational activities directed toward diabetes initiatives.

In the years 2016 – 2019 Callahan Eye Hospital and Clinics furthered Diabetes Education in its community by:

- Distributing Diabetes Education pamphlets to our patients and supporting the research conducted by the Department of Ophthalmology regarding Diabetes.
- Partnering with primary care providers throughout the state to conduct dilated eye exams for diabetic patients.
- Creating an electronic medical record interface within the UAB Health System to streamline the results process of diabetic eye exams at Callahan Eye Hospital Clinics to the inbox of UAB Primary Care providers.

2016 Health Need Number Two: Increased Transportation to Healthcare

We are working on many initiatives that will address access to care for our population. The main initiative and brief summary is listed below:

Working through our supportive organization, Eyesight Foundation of Alabama, we are partners with Sight Savers of Alabama: Children's Eye care network and KidOne Transport to provide these services through these organizations.

In the years 2016 – 2019 Callahan Eye Hospital and Clinics furthered efforts to Increase Transportation to Health Care Appointments in its community by:

- Expanding our geographical presence by opening up three new clinics in rural and suburban communities, decreasing the transportation needs and costs for many of our patients.
- Continuing partnership with Sight Savers of Alabama: Children's Eye Care Network and KidOne Transport to provide transportation services through these organizations.

2016 Health Need Number Three: Access

We are working on many initiatives that will address access to care for our population. The main initiative and brief summary is listed below:

Continued support of eye care through our Lions Clinic and Emergency Department.

In the years 2016 – 2019 Callahan Eye Hospital and Clinics furthered Access to Healthcare in its community by:

- Expanding our geographical presence by opening three new satellite clinics in both urban and rural communities, making care more accessible.
- Hiring seven adult and two pediatric optometrists to expand access to our comprehensive eye care services. Many of these providers have a presence in the satellite locations increasing same day availability and access for urgent issues.
- Continuing eye care support through our Lions Clinic and 24/7 Emergency Department, giving patients access to the only Level One Ocular Trauma Center in the community at any hour of the day or night.

The 2019 Action Plan

The top three Health Needs that were identified in 2019 are as follows:

1. Diabetes Education
2. Access
3. Free/Subsidized Healthcare for the Uninsured

1. Diabetes Education

Callahan Eye Hospital and Clinics considers Diabetes Education to be of very high importance, especially regarding the education of the public and our patients on the connection between Diabetes and eye disease. A brief summary of our main initiatives is listed below:

1. We will continue to distribute educational materials to our patients and families.
2. We will continue our partnership with UAB Primary Care to provide dilated eye exams for diabetic patients
3. We will continue to include Diabetic Eye Exams as one of our MIPS Clinical Quality Measures.
4. We will continue working with other UAB departments, Department of Ophthalmology researchers, and other supportive organizations as appropriate.
5. We will continue to support ongoing educational activities directed toward diabetes initiatives

2. Access

Callahan Eye Hospital and Clinics strives to ensure that everyone in the State of Alabama might have equal access to Healthcare. In our field of Eye Care, we are taking the following steps to ensure this:

1. Continuing to expand our geographical presence by opening clinics in rural and suburban areas, making care more accessible to those communities.
2. Continued Department of Ophthalmology growth in both comprehensive and sub-specialty divisions of ophthalmology creating additional capacity
3. Through the continued support of eye care through our Lions Clinic and our 24/7 Emergency Department, giving patients around the clock access to our Level One Ocular Trauma Center.
4. Through our continued support and partnership with Sight Savers America, which provides free comprehensive health and vision screenings for underserved children in grades pre-K – 12 in Alabama school systems.

3. Free/Subsidized Healthcare for Uninsured

In 2018 alone, Callahan Eye Hospital and Clinics donated over \$7,000,000.00 in Eye Care Services to the underserved and uninsured, through our Hospital and Clinics. We intend to continue pursue providing Healthcare, in our field of Eye Care, through the following initiatives:

1. Continued donation of Eye Care Services to the underserved and uninsured through the Lions Clinic and pediatric locations of Callahan Eye Hospital and Clinics, as well as procedures and surgeries at Callahan Eye Hospital.
2. Partnering with community nonprofits with similar missions such as Sight Savers of America to provide free vision exams and discounted treatments.
3. Continuing to provide Eye Care Services to underserved residents of Jefferson County, through our support and partnership with Cooper Green Mercy Health Services

Next Steps

Our next steps will be to monitor the progress of each of these initiatives in order to gauge their effectiveness towards improving the health status of our community population and report the progress to the UAB CHNA Oversight Committee.

Needs Not Being Addressed

While the UAB CHNA Oversight Committee has focused on the top three health needs for the purpose of the CHNA, this does not mean that we are not addressing other needs mentioned in interviews, surveys, and data collection. At this time, all major health needs are being addressed in some way- but priority is given to the top three health needs identified.

Approval

This plan was presented to and approved by the UAB Callahan Eye Hospital Board on July 25th, 2019. This plan has also been approved by the UAB CHNA Oversight Committee.



Callahan Eye Hospital & Clinics
Community Health Needs Assessment
2019