

HEALTHY GEORGIA

Spring 2022 • Issue 1

Our State of Public Health



AUGUSTA UNIVERSITY
Institute of Public
and Preventive Health

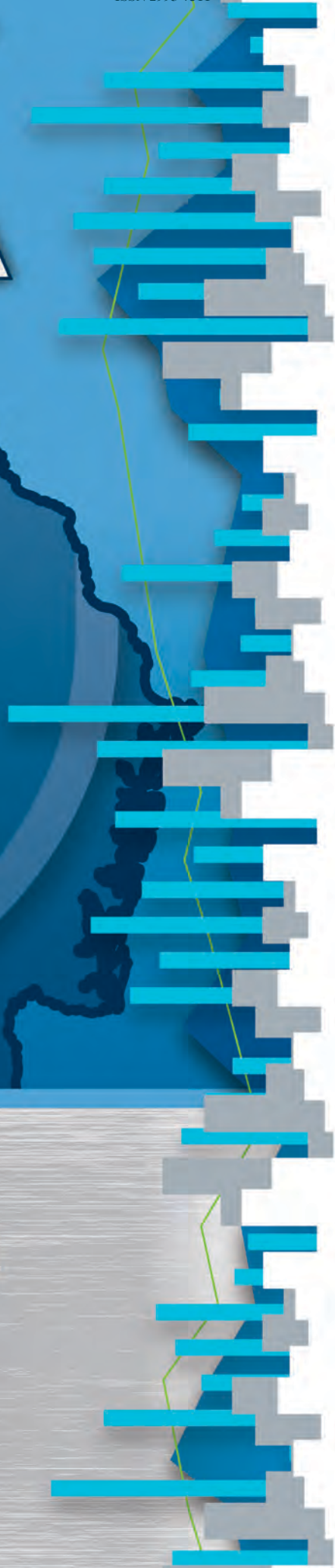




Table of Contents

3	Letter from the director
4	Executive summary
8	Chronic conditions
8	High cholesterol
10	Hypertension
12	Obesity
14	Noncommunicable diseases
14	Arthritis
16	Asthma
18	Cancer
20	Cardiovascular diseases (CVD)
22	Chronic obstructive pulmonary disease (COPD)
24	Diabetes
26	Behavioral health
26	Alcohol - heavy drinking
28	Depressive disorder
30	Tobacco - smoking
32	Communicable diseases
32	HIV risk behaviors
34	Prevention
34	Physical activity
36	Breast cancer screening
38	Colorectal cancer screening
40	Vaccination - flu
42	Child health
42	Asthma
44	Nutrition
46	Obesity
48	Technical appendix



LETTER FROM THE DIRECTOR

J. Aaron Johnson, PhD

Institute of Public and Preventive Health (IPPH)

Dear Public Health Stakeholder,

I am addressing this letter in this manner because, regardless of who you are, we are all stakeholders in public health. The decisions you make and the actions that you take have an impact on your health and, potentially, the health of your family, friends, neighbors, and others throughout our state.

We appreciate your interest in our inaugural edition of Healthy Georgia: Our State of Public Health. Though we are releasing this report in conjunction with the 2022 Georgia Public Health Association Annual Meeting and Conference, it is our intention to release future editions of the report in January of each year. Future reports will be designed to provide the Georgia legislature with up-to-date information on major health topics at the start of the legislative session as our state representatives begin to consider legislation that directly affects public health in Georgia.

This initial report is limited in scope and relies exclusively on 2020 data (the most recent available) from the Behavioral Risk Factor Surveillance System (BRFSS), a self-report survey conducted annually by the Centers for Disease Control and Prevention. Future reports will expand to include additional topics and utilize additional data sources, as available.

Our hope is to provide a single consolidated resource with the latest available data on the state of public health in Georgia for use by legislators, public health professionals, and other key stakeholders. The report will highlight differences, both positive and negative, between Georgia, its neighboring states in the Southeast region, and the United States as a whole. It will also highlight disparities within our state based on race/ethnicity, income, and place of residence (rural/urban).

We want this report to be utilized by stakeholders working in the public health field as well as those that participate in decision-making that impacts the field. For that reason, we invite your feedback on how we could make this report more useful. Please take a few minutes to respond to the survey using the QR code on the back cover of this report. You may also provide feedback by emailing suggestions to us at IPPH@augusta.edu.

Sincerely,

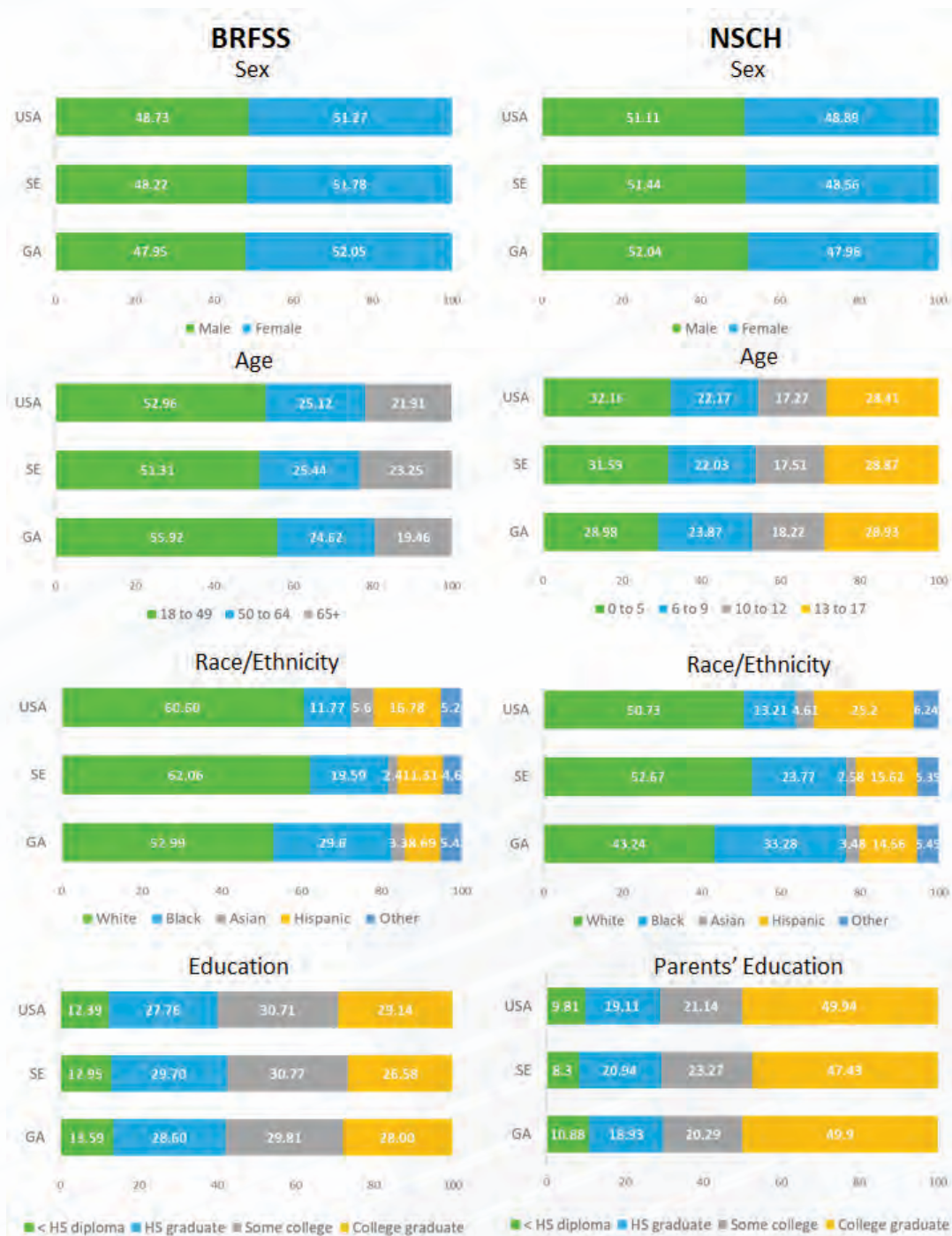
A handwritten signature in black ink, appearing to read "J. Aaron Johnson". The signature is fluid and cursive, extending across the width of the text area.

J. Aaron Johnson, PhD
Director, Institute of Public and Preventive Health
Professor, Department of Psychological Sciences
Augusta University

EXECUTIVE SUMMARY

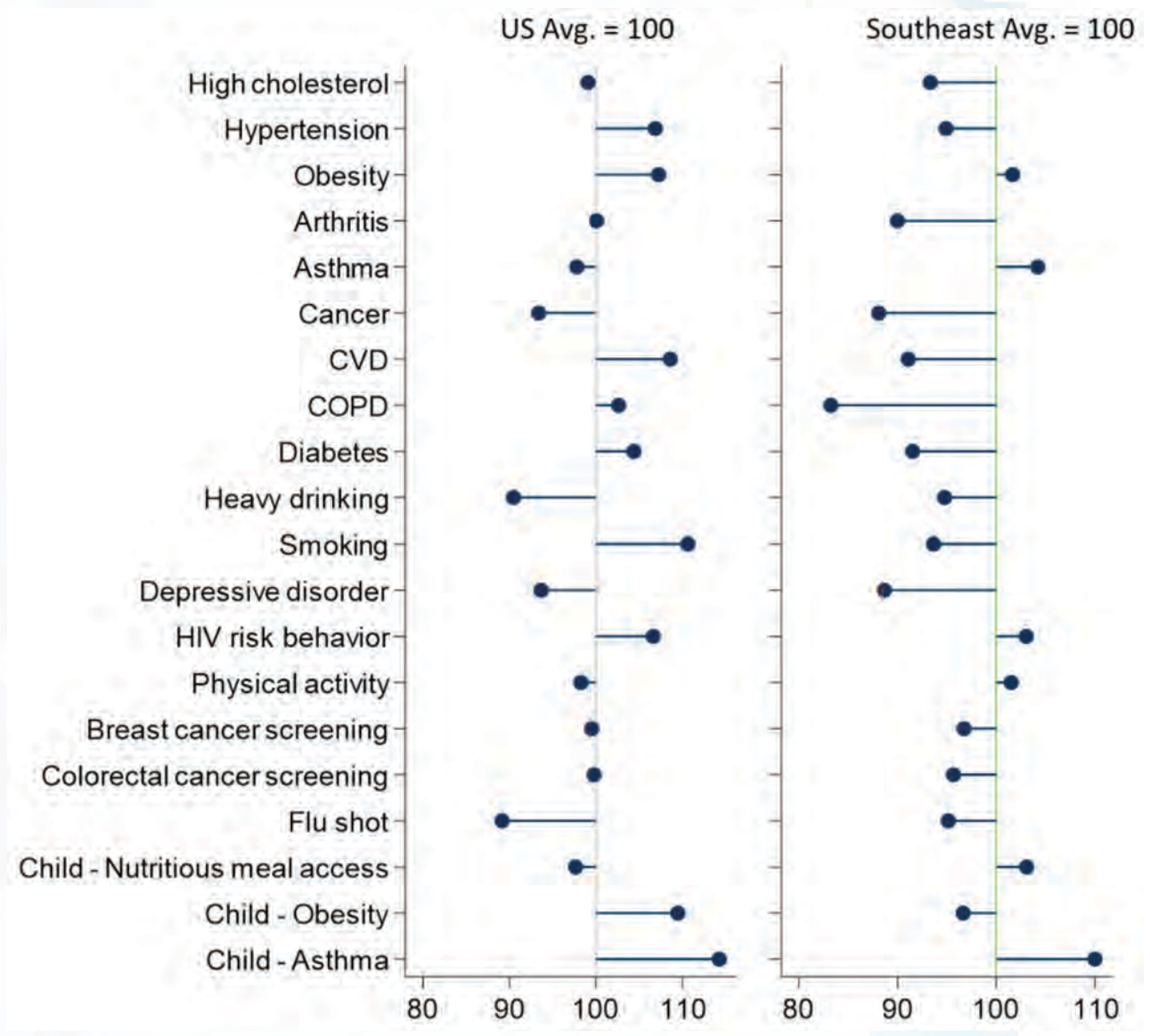
In this report, we compared the prevalence rates of several chronic conditions, and behavioral and preventive health issues among Georgians with respective national (U.S.) and regional (Southeast) averages. We used nationally representative data from the 2020 Behavioral Risk Factor Surveillance System (BRFSS) and the last five waves (2016 to 2020) of the National Survey of Children’s Health (NSCH) to assess the prevalence rates across the following domains: sex, race/ethnicity, income, and residence (urban/rural). We further reported the prevalence rates by age group and educational attainment. Figure 1 presents the sociodemographic characteristics of the respondents from the two surveys.

Figure 1. Sociodemographic characteristics of the study sample



The prevalence rates of chronic conditions, noncommunicable diseases, and other health topics, including behavioral health and preventive measures, among Georgians compared to the national and regional averages are presented in Figure 2. Among chronic conditions, the prevalence of high cholesterol among Georgians is comparable to the national average, but lower than the regional average. Prevalence rates of hypertension and obesity, however, are significantly higher among Georgian adults than the national average, though lower than (for hypertension) and comparable to (for obesity) the regional average. Other than asthma, the prevalence rates of noncommunicable diseases among Georgians are lower than respective regional averages. Georgians, however, have higher cardiovascular diseases (CVD) prevalence compared to the national average.

Figure 2. Comparison of prevalence rates in Georgia with national (U.S.) and Southeast regional averages

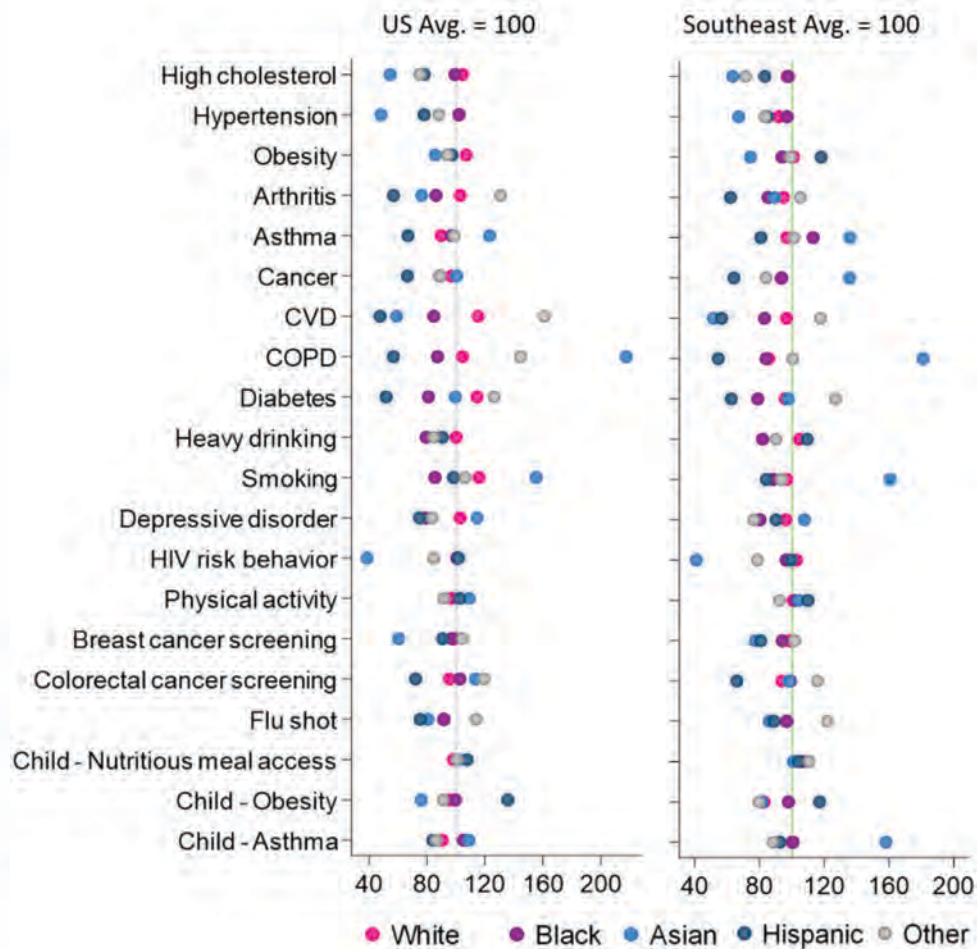


Note: The prevalence rates for Georgia are expressed as percentages of the national and regional averages, respectively.

EXECUTIVE SUMMARY (continued)

Among behavioral health issues, prevalence of heavy drinking among Georgians is lower than the national and regional averages. Prevalence of current smoking, though lower than the regional average, is higher than the national average. Georgians also report lower prevalence of depressive disorder than the national and regional averages. Among preventive behaviors, the influenza vaccination (flu shot) rate in Georgia is significantly lower than both national and regional averages. Among child health issues, Georgia children have a higher prevalence of asthma than the national and regional averages. Obesity among Georgia children, though lower than the regional average, is significantly higher than the national average.

Figure 3. Comparison of prevalence rates in Georgia by race/ethnicity with respective national (U.S.) and Southeast regional averages



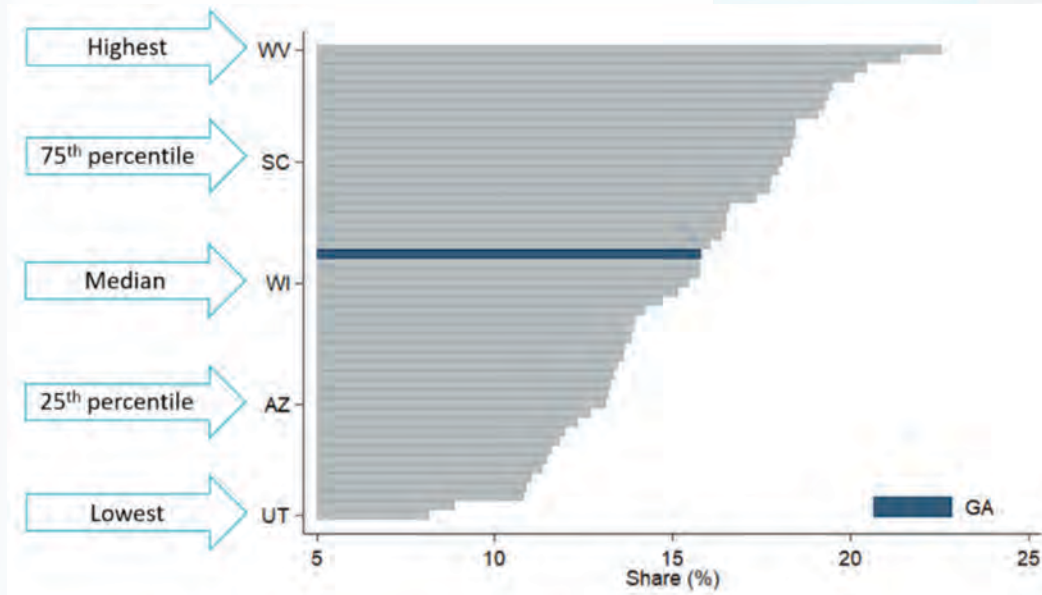
Note: The prevalence rates for Georgia are expressed as percentages of the national and regional averages for respective race/ethnicity.

Comparisons of prevalence rates by race/ethnicity categories are presented in Figure 3. Georgians of Asian descent have a significantly lower prevalence of high cholesterol, hypertension, and obesity than non-Georgians of Asian descent at both the national and regional levels. Conversely, prevalence rates of asthma, COPD, and current smoking among Georgians of Asian descent are significantly higher than their non-Georgians of Asian descent counterparts. Prevalence rates of noncommunicable diseases among Hispanic Georgians are lower than non-Georgian Hispanic adults at both the national and regional levels. Prevalence of childhood obesity among Hispanic children in Georgia, in contrast, is significantly higher than their non-Georgian counterparts.

Guide to reading charts:

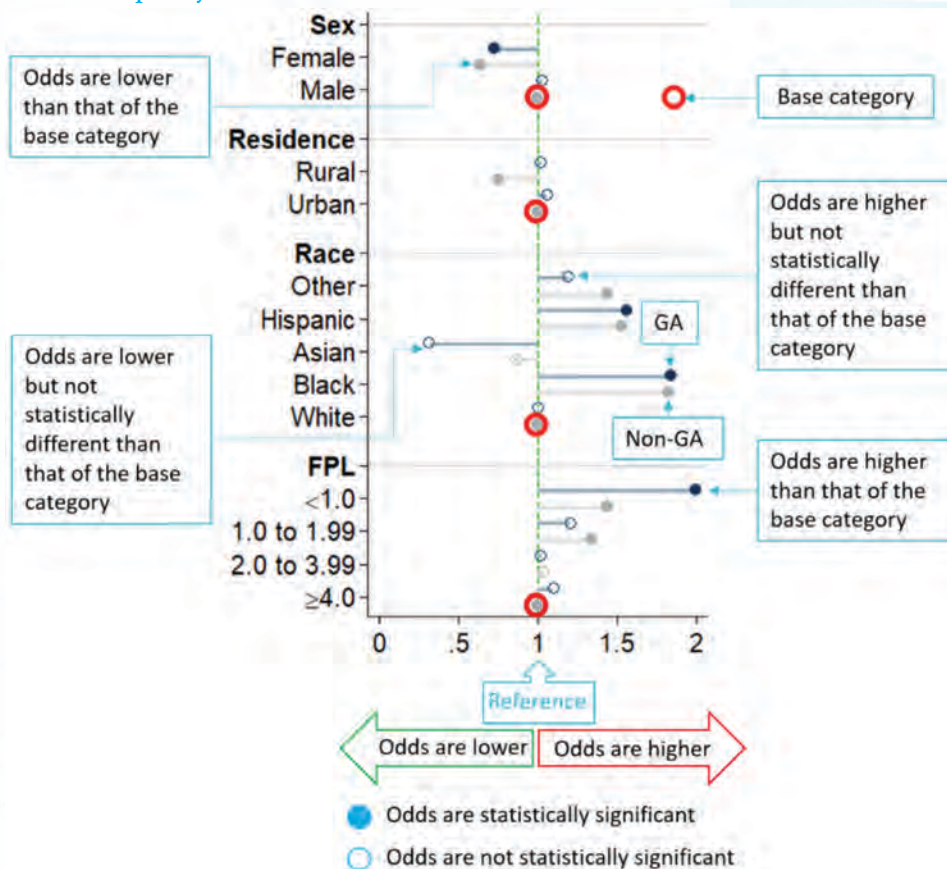
Figures 4 and 5 provide guidance on how to read the distribution and disparity charts in the report. How Georgia ranks among the 50 states and the District of Columbia is shown in a distribution chart as follows:

Figure 4. How to read the distribution chart



The chart presents prevalence rates by state, and indicates states with the lowest, highest, median (50th percentile), 25th and 75th percentiles of prevalence. Figure 5 presents guidance for reading the charts reporting disparities in prevalence rates, as follows:

Figure 5. How to read the disparity chart

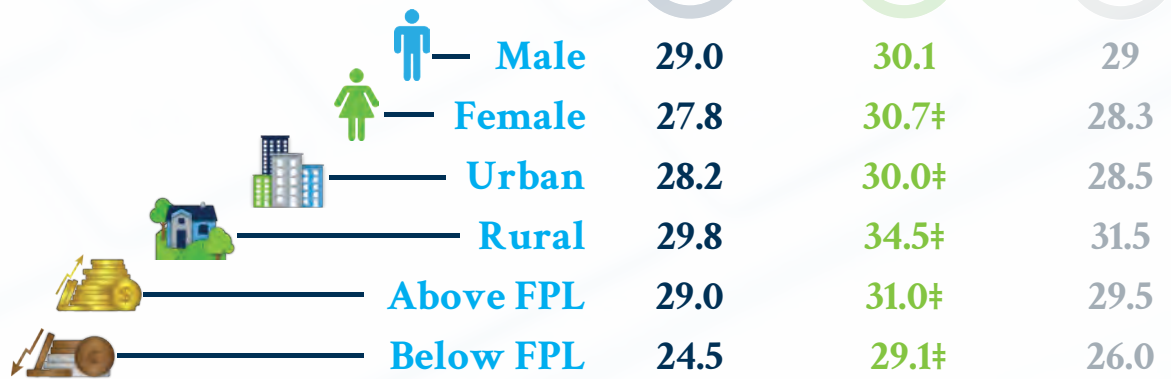
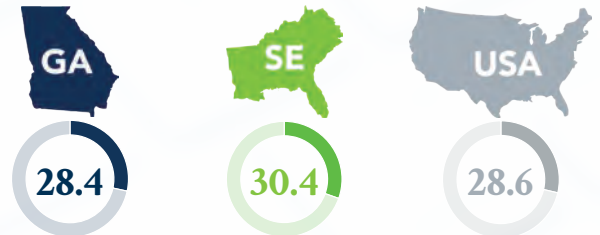


High Cholesterol

Adults ever told to have high blood cholesterol.

Highlights

- Prevalence of high cholesterol in Georgia is comparable to the rest of the U.S., but is significantly lower than other states in the Southeast.
- Cholesterol rates in Georgia have declined slightly over the past five years, dropping over 1% during that period.

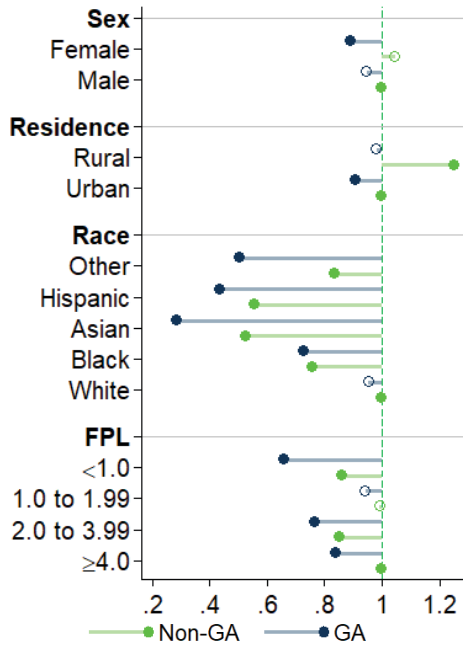


Category	Demographic	GA (%)	SE (%)	USA (%)
Race/ Ethnicity	White	32.5	33.4	31.1
	Black	26.9	27.5	27.1
	Asian	12.6	19.8†	23.1†
	Hispanic	18.0	22.0	23.0†
	Other	20.3	28.4†	27.1†
Age	18 to 49	14.6	15.1	14.4
	50 to 64	41.7	42.9	40.6
	65+	50.2	51.1	49.9
Education	Less than HS diploma	29.9	36.0†	32.1
	HS graduate	25.9	30.0†	27.5
	Some college	30.0	29.1	28.2
	College graduate	28.5	29.5	28.8
Household Income	< 100% FPL	24.5	29.1†	26.0
	≥ 100 to < 200% FPL	31.7	32.7	30.8
	≥ 200 to < 400% FPL	27.4	29.2	27.3
	≥ 400% FPL	29.3	32.5†	31.7

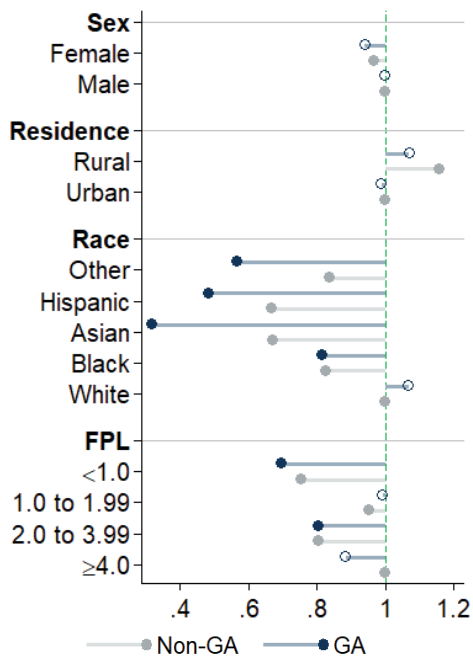
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

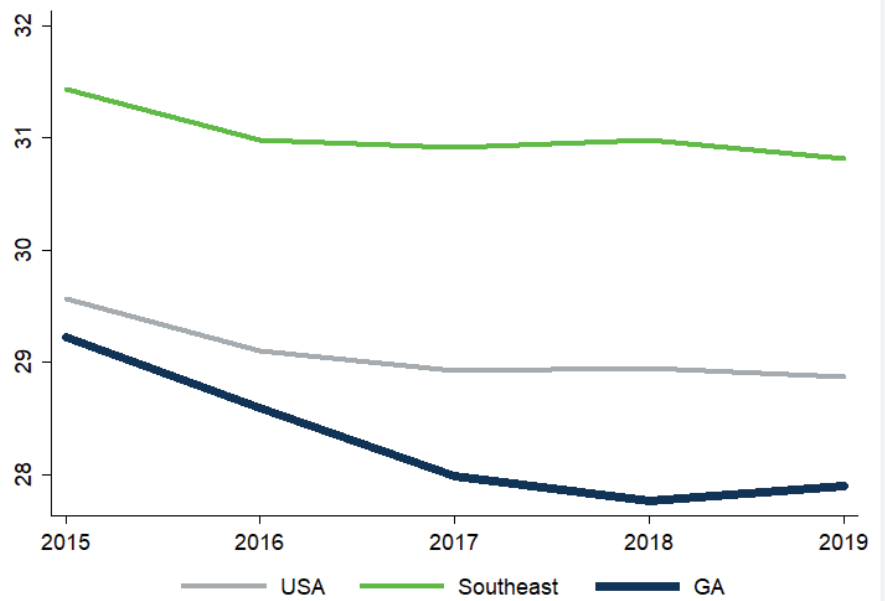
Southeast Disparities



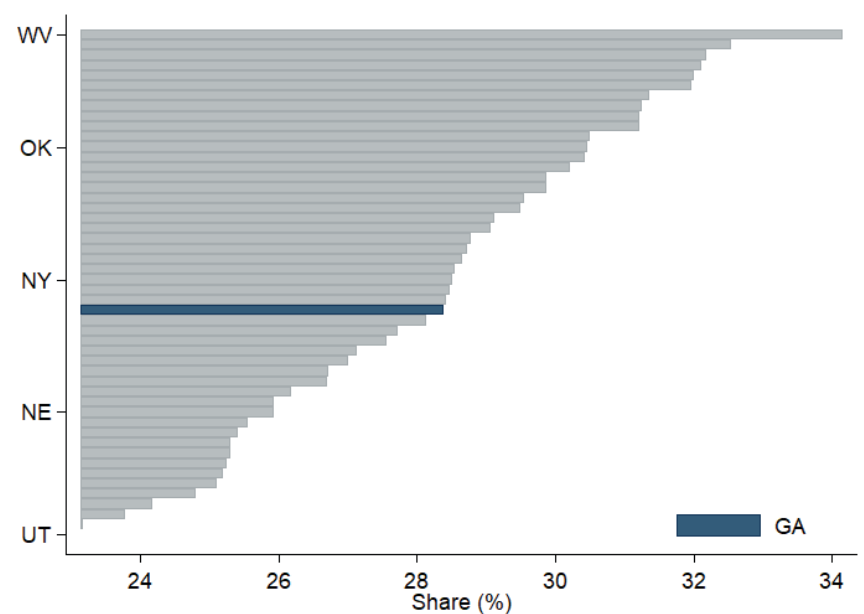
U.S. Disparities



Trend



Distribution by State



Key Findings

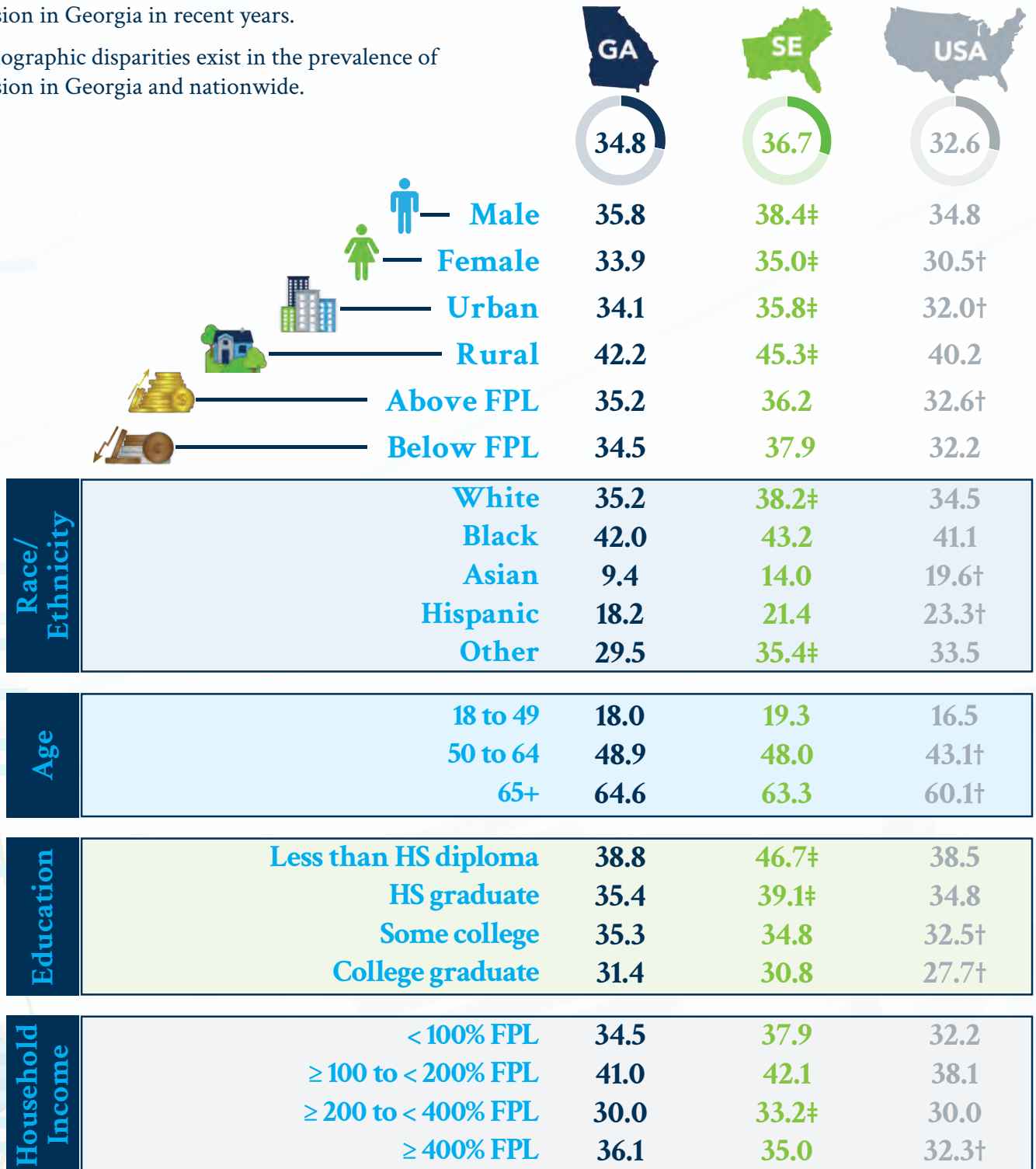
- Cholesterol rates differ significantly by race/ethnicity with the lowest rates among Asian adults, followed by Hispanic, Black, and White adults. This pattern is consistent in Georgia, the Southeast, and the U.S.
- Cholesterol rates among Asian and Hispanic adults in Georgia are significantly lower than the respective U.S. averages.
- While high cholesterol rates increase as people age, rates are comparable across rural and urban settings and relatively consistent across education levels.
- Lower income individuals (those below the federal poverty level) and individuals with lower educational attainment in Georgia have lower rates of high cholesterol than their counterparts in Southeastern states.

Hypertension

Adults ever told to have high blood pressure.

Highlights

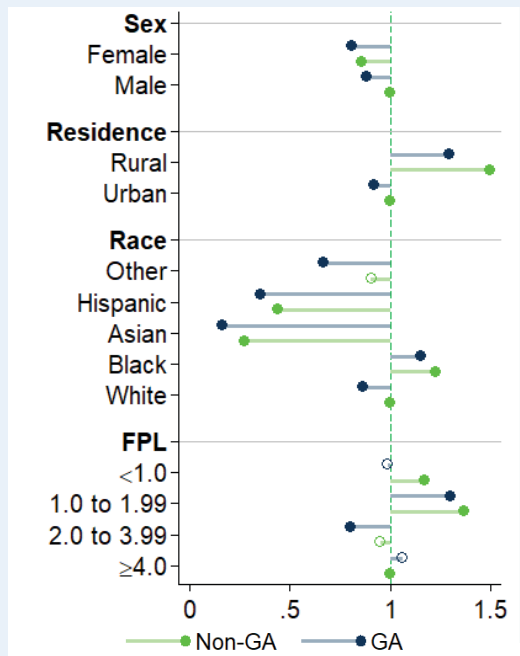
- Prevalence of hypertension in Georgia is higher than the national prevalence, but lower than the prevalence for the Southeast.
- There has been a downward trend in the prevalence of hypertension in Georgia in recent years.
- Sociodemographic disparities exist in the prevalence of hypertension in Georgia and nationwide.



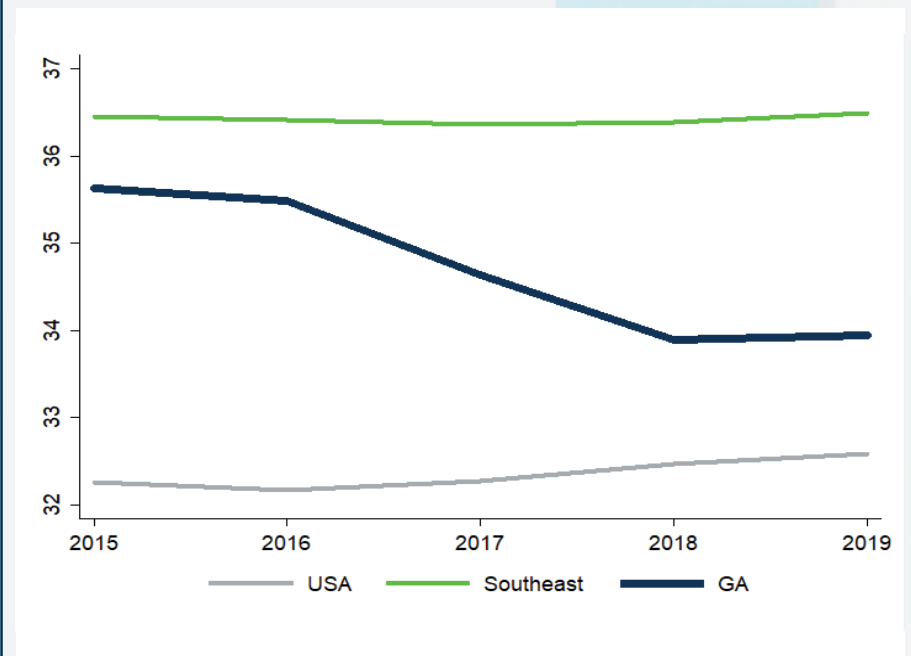
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

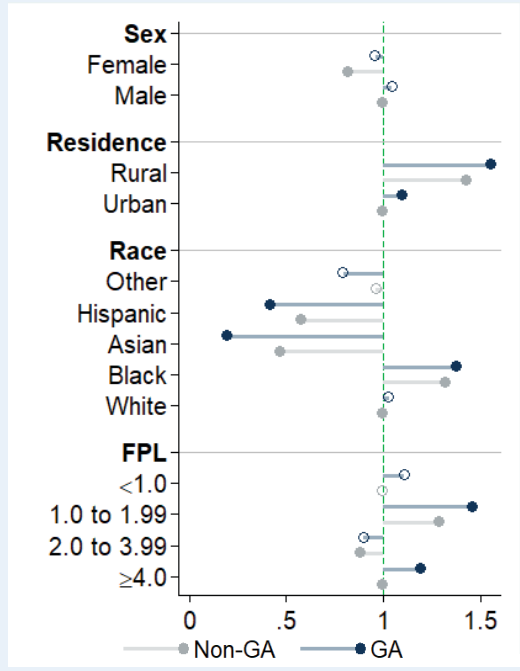
Southeast Disparities



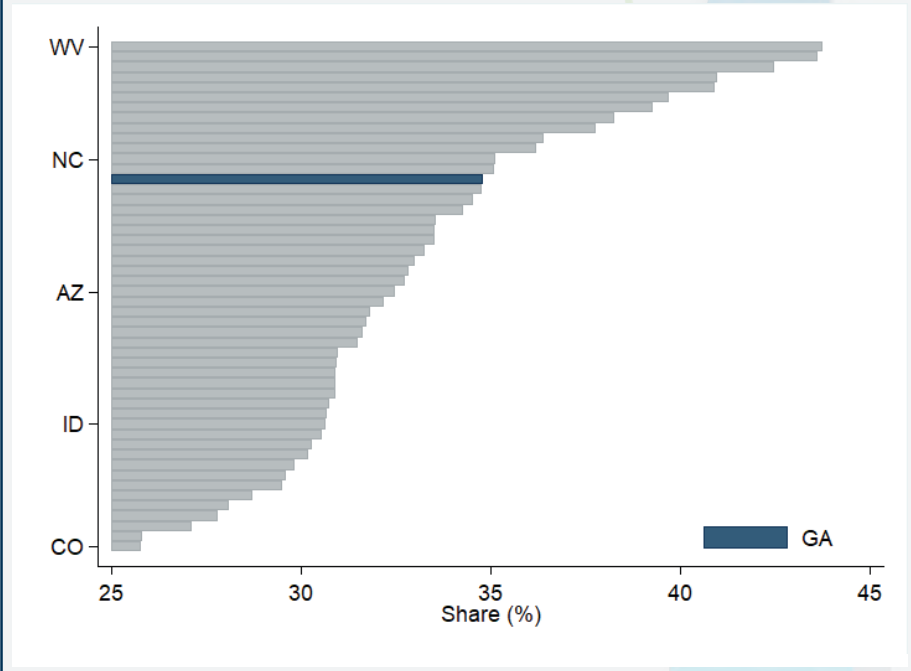
Trend



U.S. Disparities



Distribution by State



Key Findings

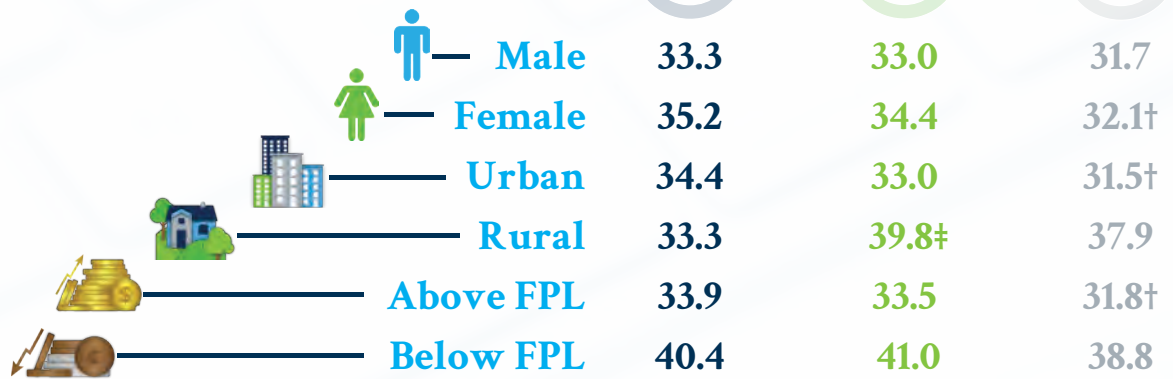
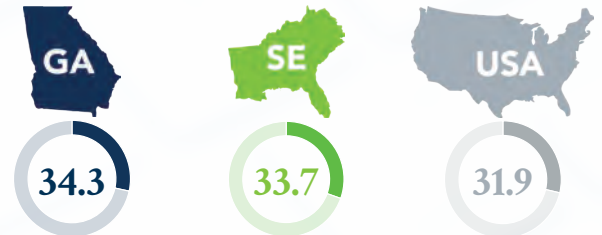
- The prevalence of hypertension in Georgia lies in the 70th percentile when compared with other states in the U.S.
- Hypertension prevalence among Asian and Hispanic adults in Georgia are lower than the respective U.S. averages.
- Rural dwellers in Georgia have a disproportionately higher prevalence of hypertension compared to urban dwellers.
- Hypertension prevalence in the urban areas of Georgia is lower than the national and regional averages.

Obesity

Body Mass Index (BMI) $\geq 30.0 \text{ kg/m}^2$.

Highlights

- Obesity rates have been increasing in every state in the U.S. for more than three decades. Despite significant efforts to address the obesity epidemic, the trend lines indicate that obesity rates continue to rise in Georgia, the Southeast region, and throughout the U.S.
- Georgians rank within the top 50th percentile for obesity prevalence amongst all states in U.S.
- Obesity trend in Georgia is on the rise.

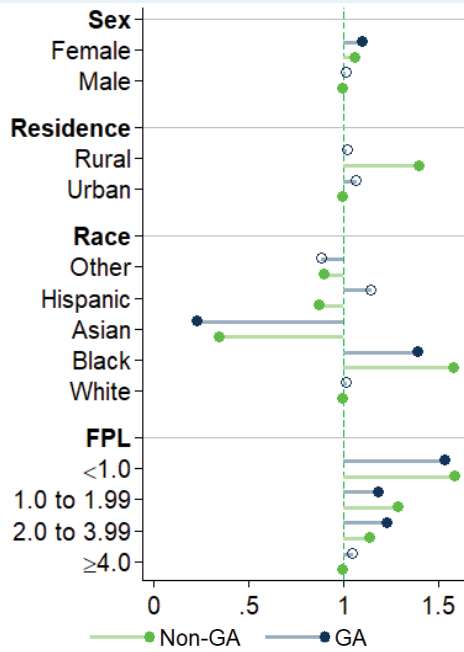


		GA (%)	SE (%)	USA (%)
Race/ Ethnicity	White	32.8	32.5	30.7†
	Black	40.0	42.6	41.6
	Asian	10.1	13.6	11.8
	Hispanic	35.5	30.1	36.6
	Other	29.9	30.1	31.8
	Age	18 to 49	32.8	32.7
50 to 64		38.8	38.8	36.8
65+		32.6	30.4‡	29.3†
Education	Less than HS diploma	40.6	37.8	38.8
	HS graduate	35.1	35.3	34.0
	Some college	36.8	35.4	34.1
	College graduate	27.7	28.1	25.0†
Household Income	< 100% FPL	40.4	41.0	38.8
	≥ 100 to < 200% FPL	34.2	35.9	35.2
	≥ 200 to < 400% FPL	35.1	33.6	31.8†
	≥ 400% FPL	31.6	30.7	28.9

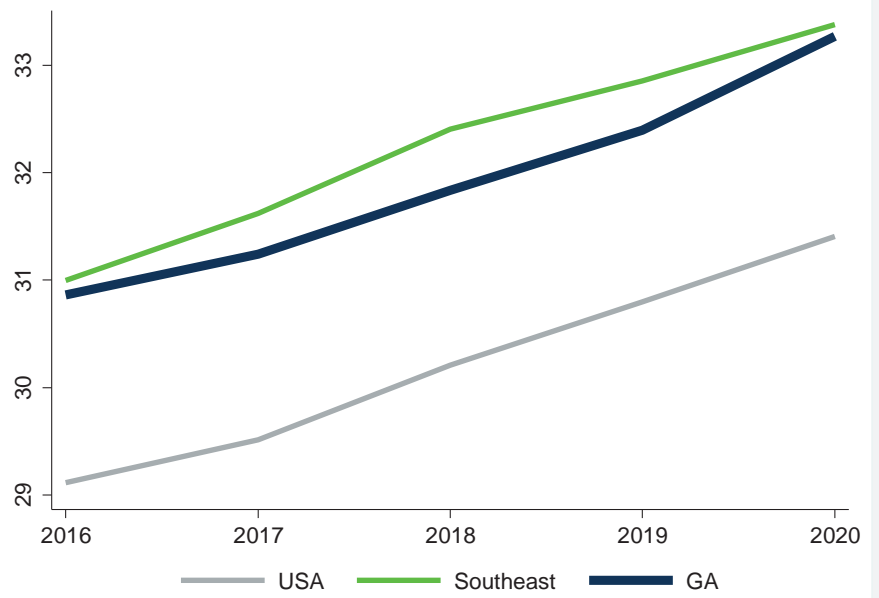
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

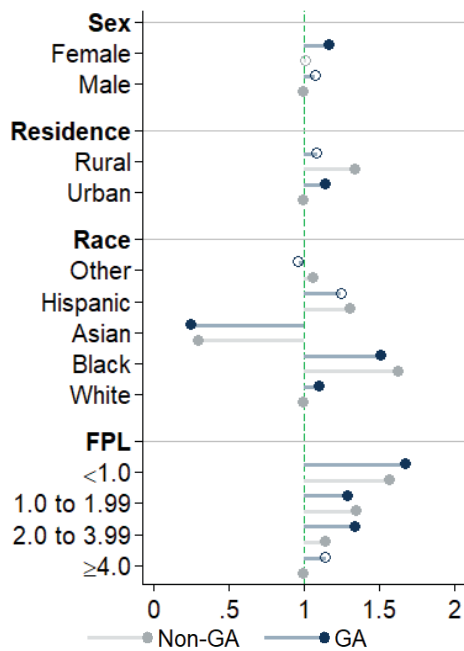
Southeast Disparities



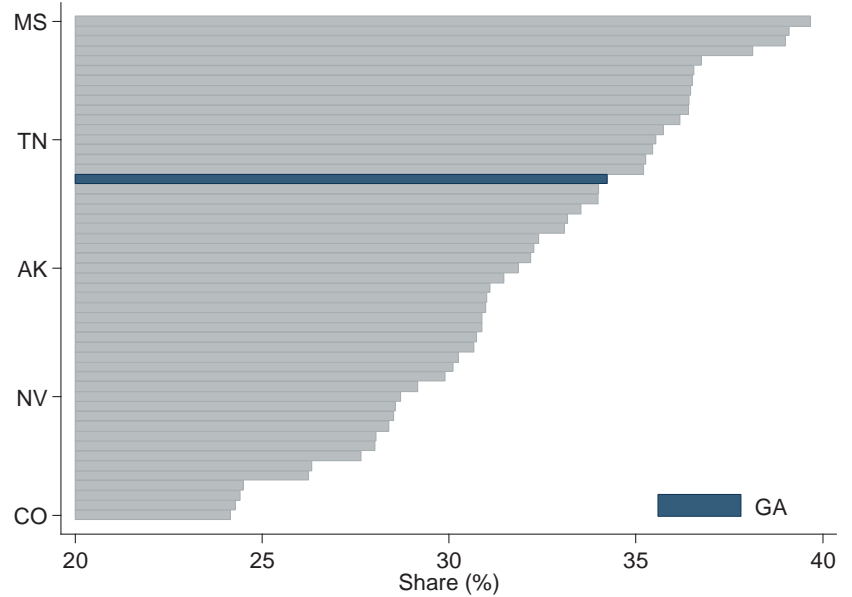
Trend



U.S. Disparities



Distribution by State



Key Findings

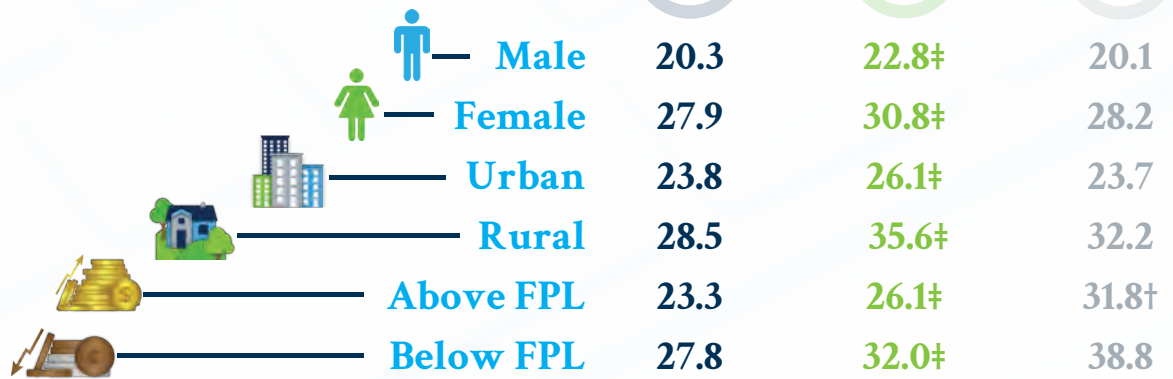
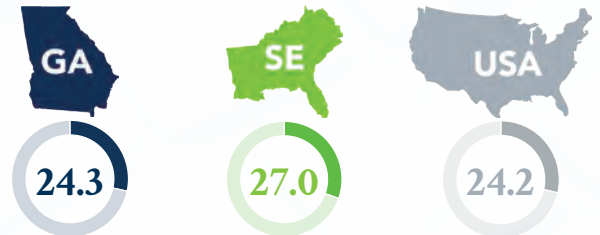
- Obesity prevalence among rural Georgians is significantly lower than the national and regional averages.
- Female Georgians have a greater likelihood of being obese compared to the national average.
- Obesity prevalence among elderly Georgians is significantly higher than the national and regional averages.

Arthritis

Adults ever told to have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Highlights

- Approximately 1 in 5 men and 1 in 4 women in Georgia report having some form of arthritis, with rates holding relatively steady over the past five years.
- Arthritis rates in Georgia are comparable to the U.S. and significantly lower than rates in the Southeast.
- Education is strongly associated with arthritis. In Georgia, arthritis rates are significantly lower among individuals with higher educational attainment compared to those with lower level of educational attainment.

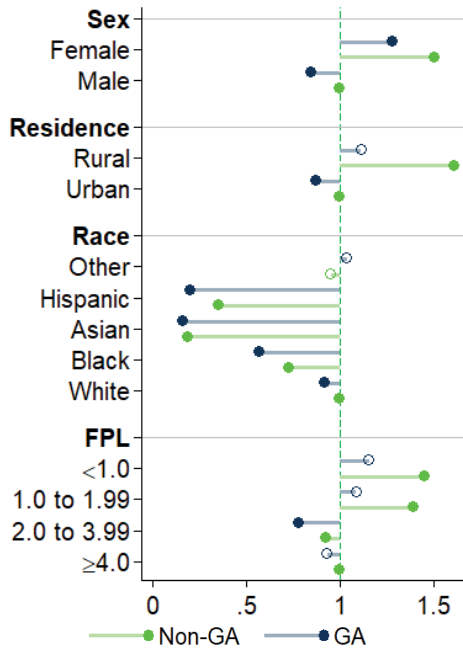


Category	Sub-category	GA (%)	SE (%)	USA (%)
Race/ Ethnicity	White	29.3	30.9†	28.4
	Black	20.4	24.0†	23.7†
	Asian	6.9	7.7	9.0
	Hispanic	8.3	13.4†	14.6†
	Other	31.9	30.4	24.4†
Age	18 to 49	8.7	10.6†	9.2
	50 to 64	36.6	37.3	33.2†
	65+	53.5	51.7	50.4†
Education	Less than HS diploma	30.7	35.3†	29.6
	HS graduate	26.6	27.4	25.0
	Some college	23.5	28.3†	26.1†
	College graduate	19.7	21.0	19.4
Household Income	< 100% FPL	27.8	32.0†	26.0
	≥ 100 to < 200% FPL	26.6	31.1†	28.4
	≥ 200 to < 400% FPL	20.7	23.3†	21.8
	≥ 400% FPL	23.7	24.9	23.0

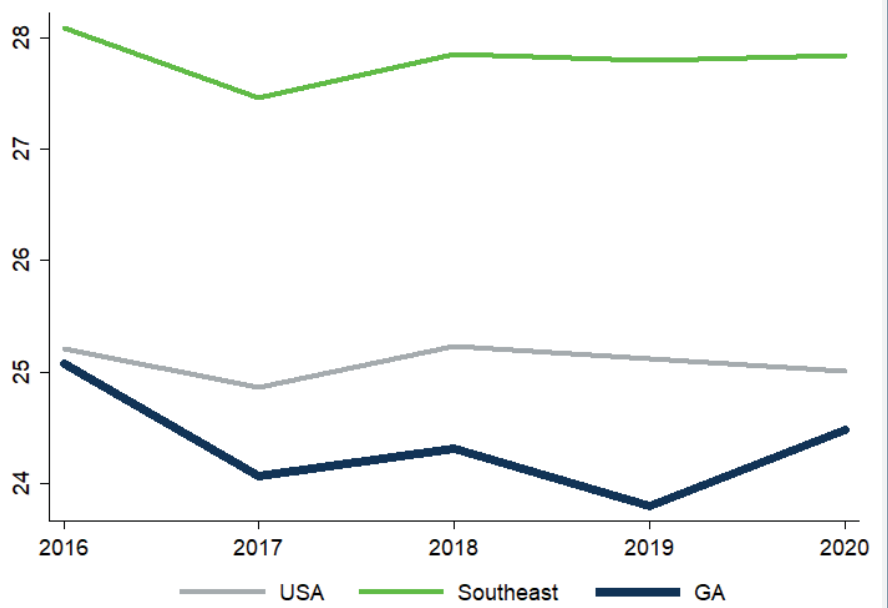
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

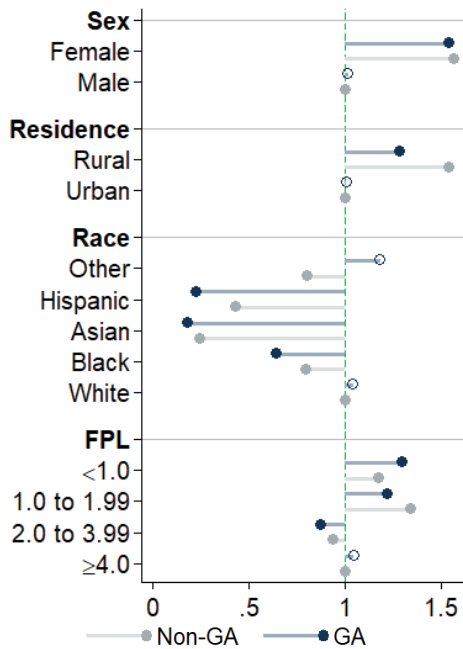
Southeast Disparities



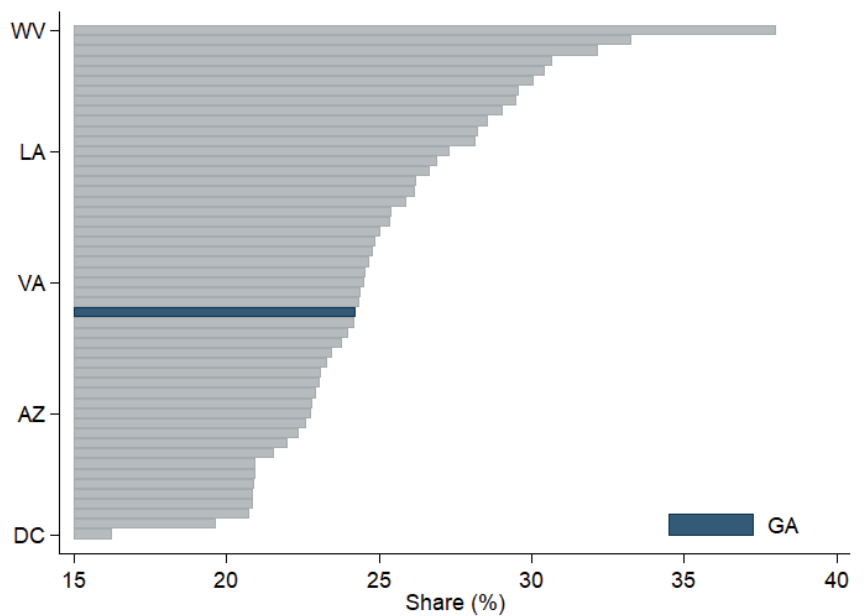
Trend



U.S. Disparities



Distribution by State



Key Findings

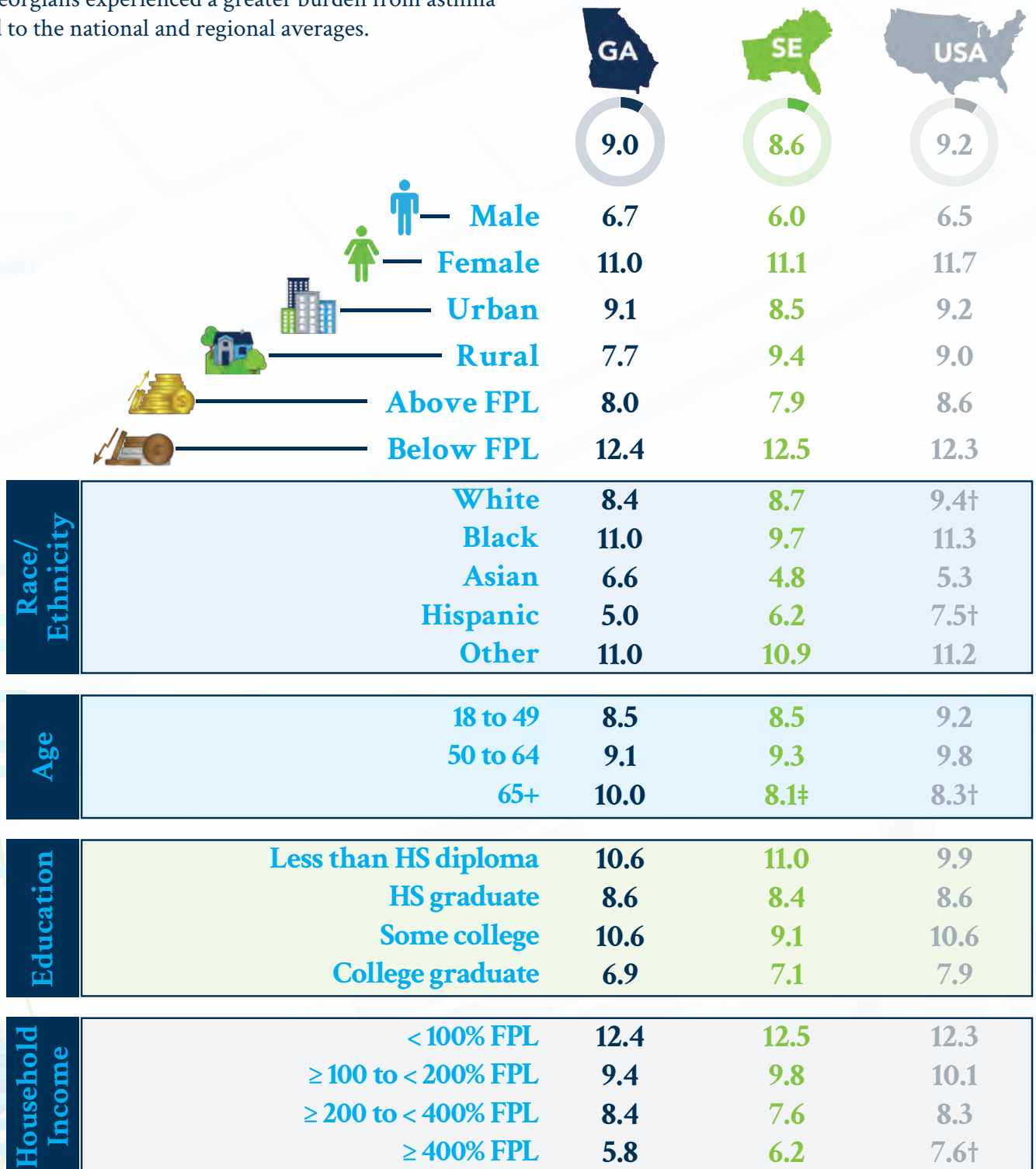
- Arthritis rates are higher among individuals residing in rural areas compared to those in urban areas.
- Arthritis rates are higher among individuals below the federal poverty level compared with those above the federal poverty level.
- There are significant differences in arthritis rates by race/ethnicity as the condition is more prevalent among White and Black adults compared to their Asian and Hispanic counterparts.

Asthma

Adults who have asthma at the time of the survey.

Highlights

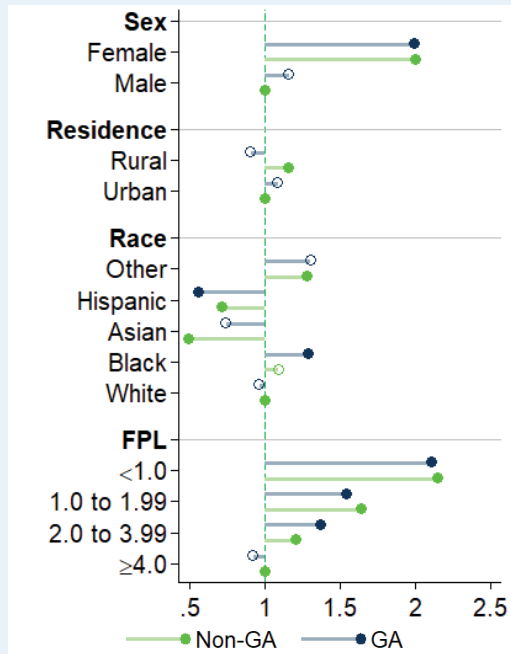
- Asthma is more prevalent among adults from lower socioeconomic backgrounds.
- Black Georgians are more likely to have asthma compared to their White and Hispanic counterparts.
- Elderly Georgians experienced a greater burden from asthma compared to the national and regional averages.



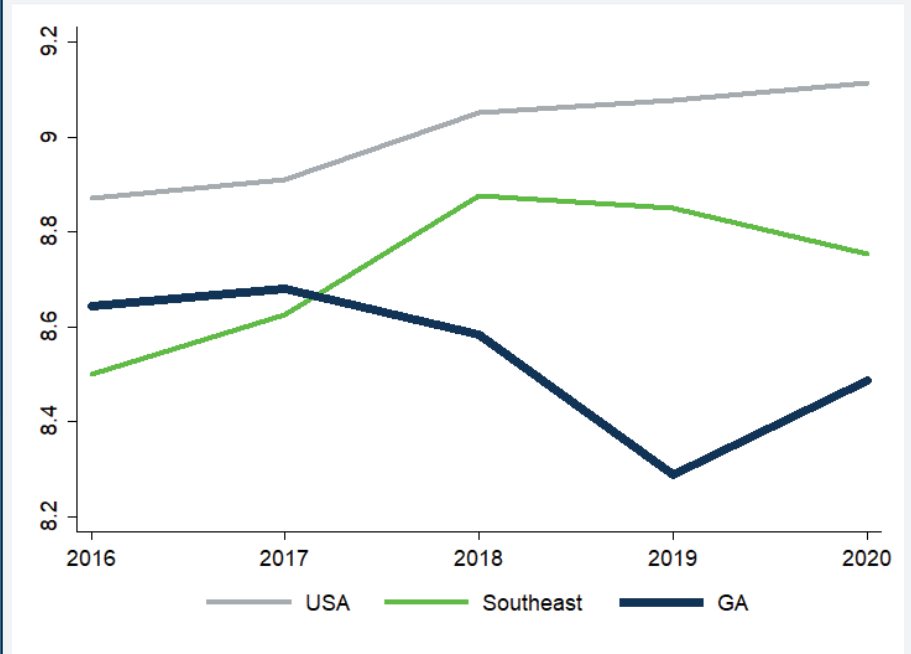
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

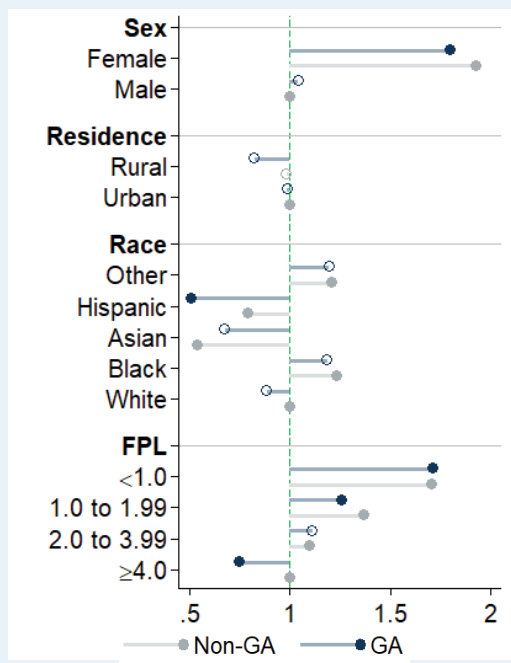
Southeast Disparities



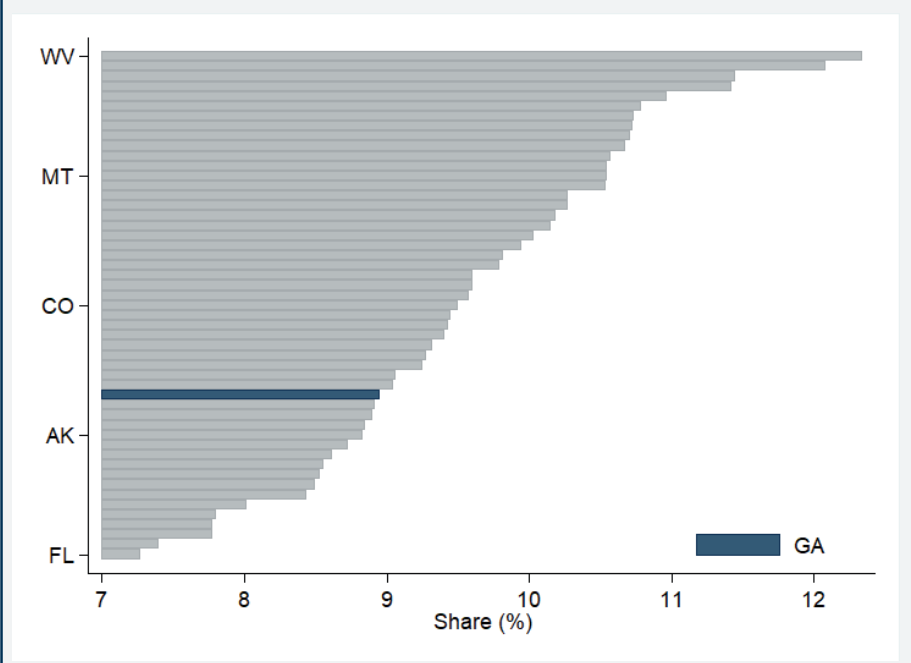
Trend



U.S. Disparities



Distribution by State



Key Findings

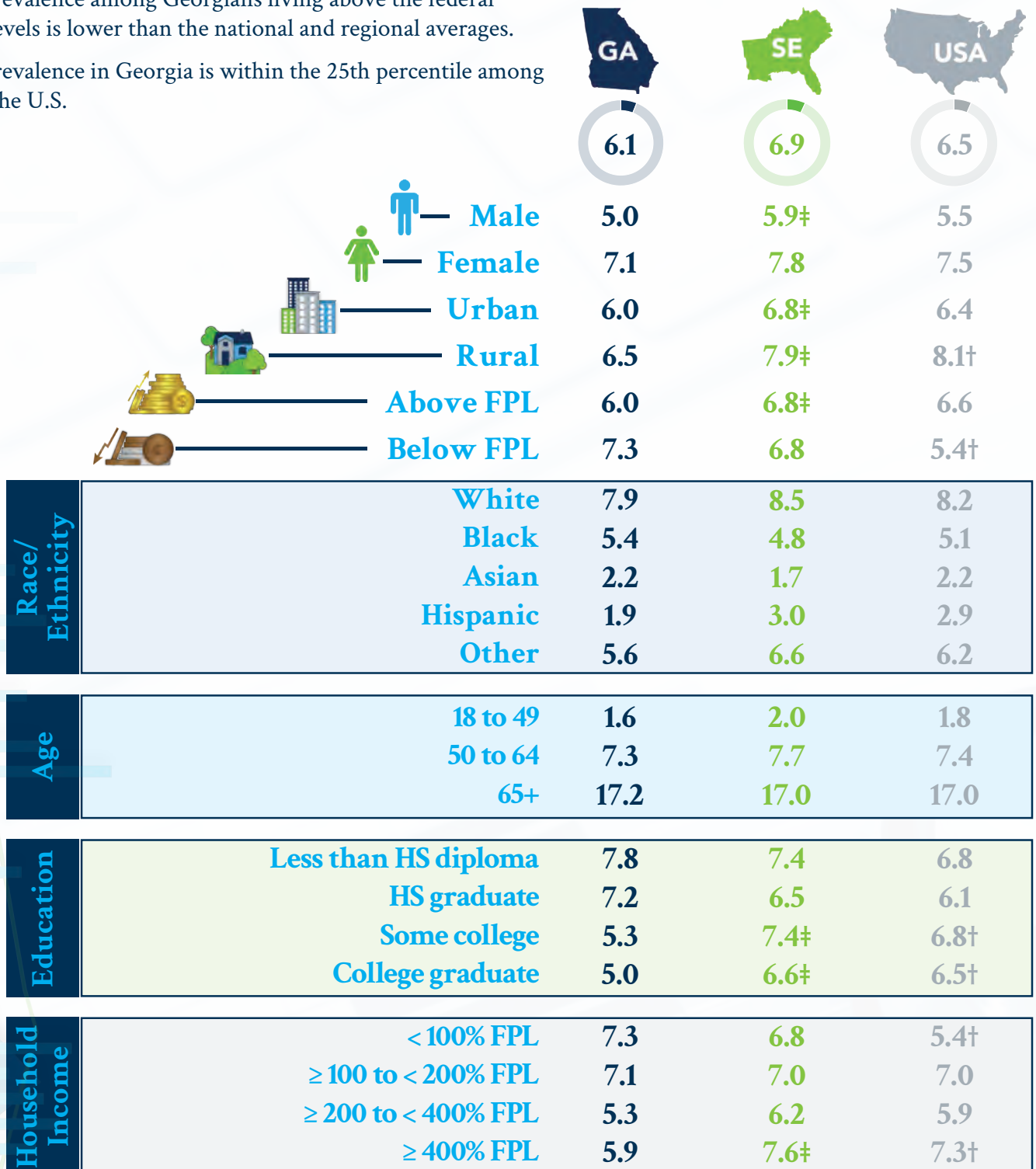
- The prevalence of asthma was almost twice among females compared to males.
- Compared to the U.S. and Southeast region, the prevalence of asthma in Georgia has decreased in recent years.
- Prevalences of asthma among White and Hispanic Georgians are significantly lower than respective national averages.

Cancer

Adults ever told to have cancer, except skin cancer.

Highlights

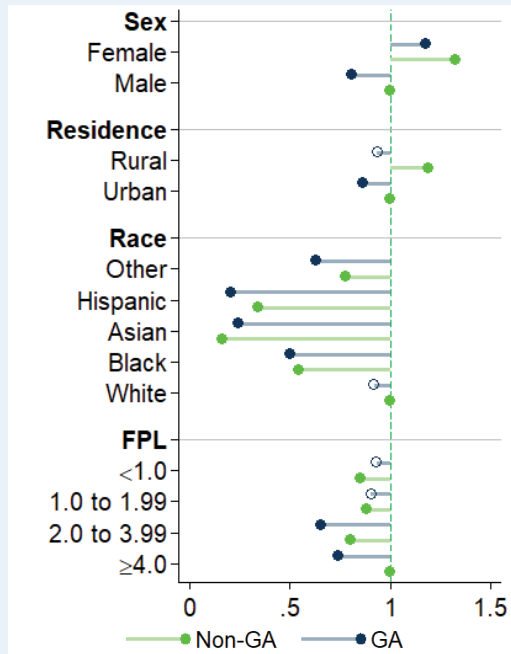
- The prevalence of cancer among Georgian males is lower than the regional average.
- Cancer prevalence among Georgians living below the federal poverty level is higher than the national average.
- Cancer prevalence among Georgians living above the federal poverty levels is lower than the national and regional averages.
- Cancer prevalence in Georgia is within the 25th percentile among states in the U.S.



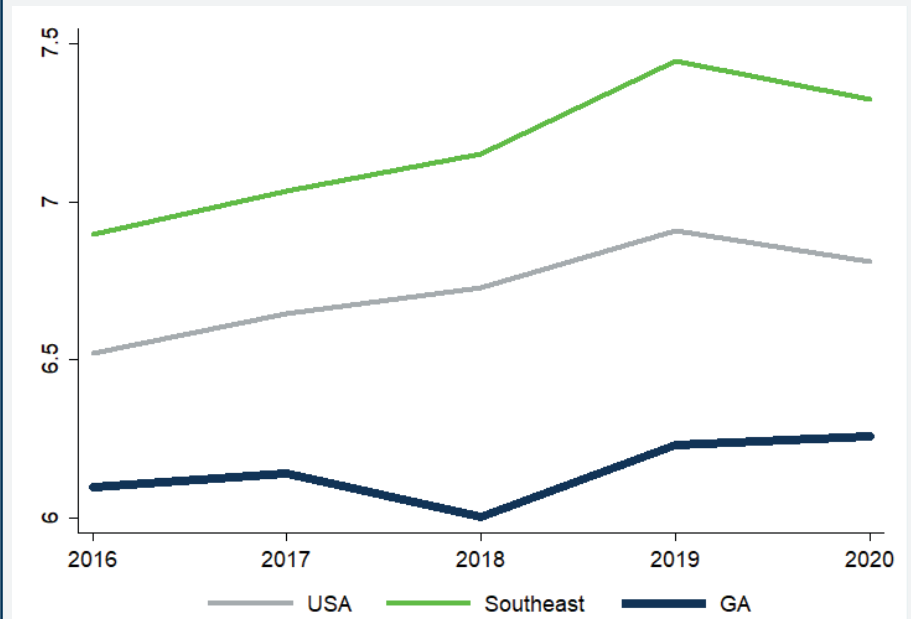
[†] US prevalence is statistically different from GA prevalence

[‡] SE prevalence is statistically different from GA prevalence

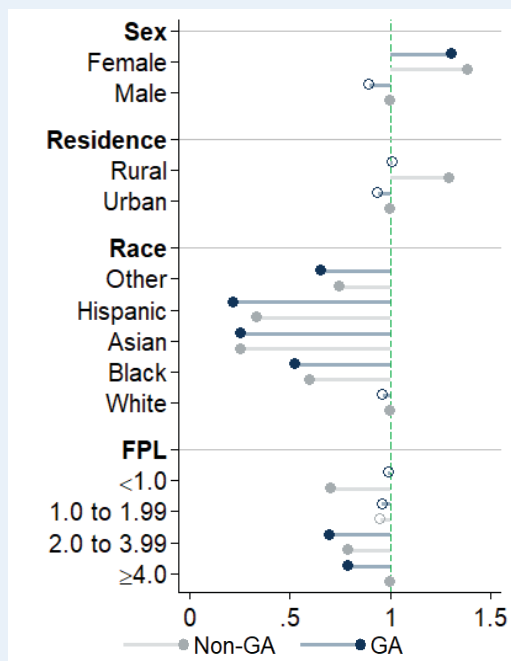
Southeast Disparities



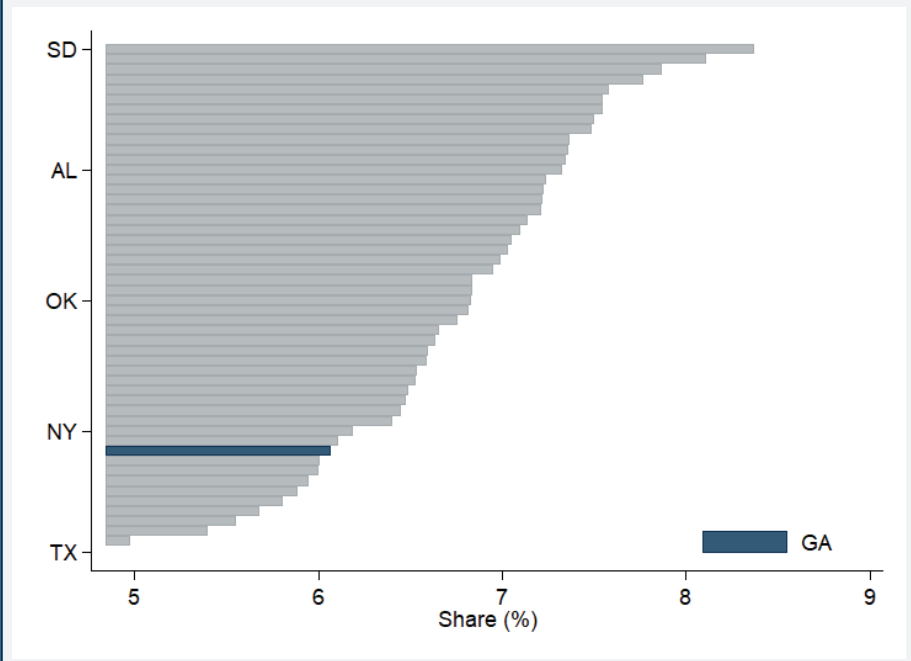
Trend



U.S. Disparities



Distribution by State



Key Findings

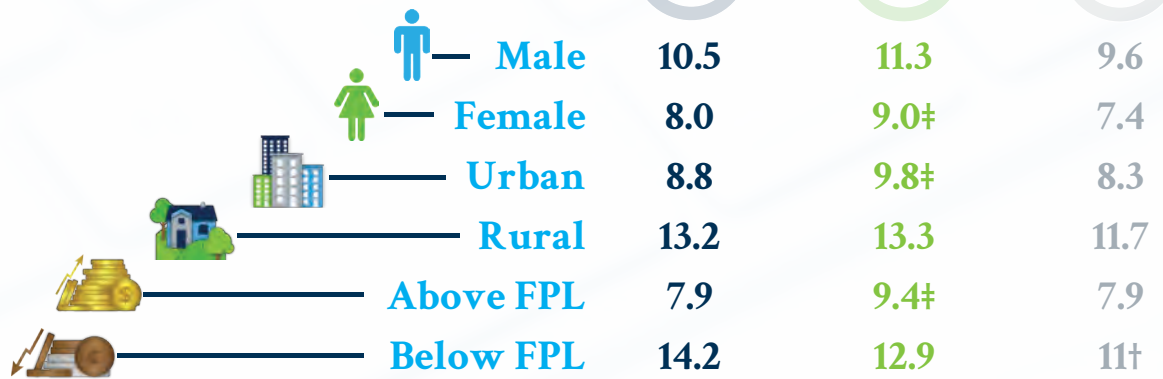
- Cancer prevalence among rural Georgians is significantly lower than the national and regional averages.
- Cancer prevalence among racial/ethnic groups in Georgia is comparable to respective national and regional averages.
- Cancer prevalence across age groups in Georgia is comparable to the national and regional averages.

Cardiovascular Diseases

Adults ever told to have coronary heart disease, myocardial infarction, or stroke.

Highlights

- Cardiovascular diseases prevalence among Black and Hispanic Georgians is significantly lower than the national and regional averages.
- Cardiovascular diseases prevalence among Black and Hispanic Georgians is significantly lower than the national and regional average.
- Georgians living below the federal poverty level threshold have a higher likelihood of having cardiovascular diseases than their non-Georgian counterparts.

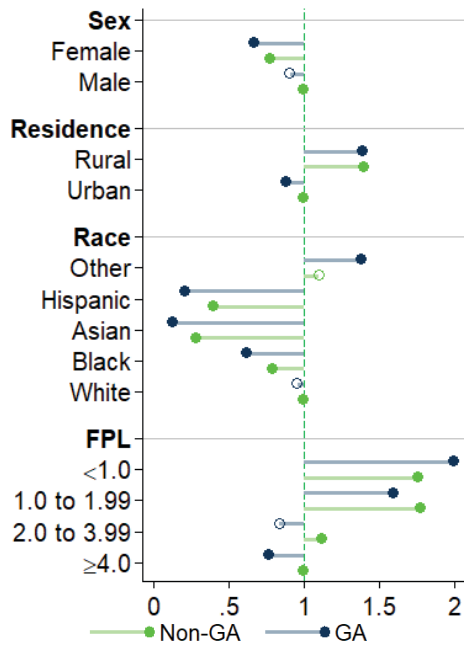


		GA	SE	USA
Race/ Ethnicity	White	11.1	11.5	9.6
	Black	7.5	9.0†	8.8
	Asian	1.7	3.3	2.9
	Hispanic	2.7	4.7†	5.6
	Other	15.2	12.9	9.4
Age	18 to 49	3.4	3	2.5†
	50 to 64	10.8	12.3†	10.1
	65+	23.9	23.5	21.2†
Education	Less than HS diploma	13.7	16	12.9
	HS graduate	11.0	10.8	9.3†
	Some college	8.8	9.6	8.6
	College graduate	5.7	7.0†	5.7
Household Income	< 100% FPL	14.2	12.9	11.0†
	≥ 100 to < 200% FPL	11.7	12.7	10.9
	≥ 200 to < 400% FPL	6.5	8.3†	7.1
	≥ 400% FPL	6.0	7.5†	6.5

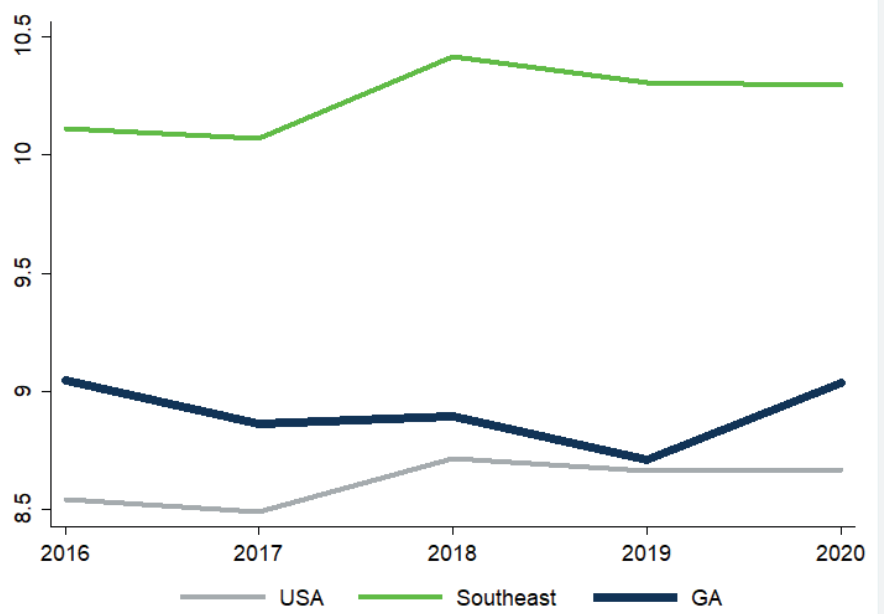
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

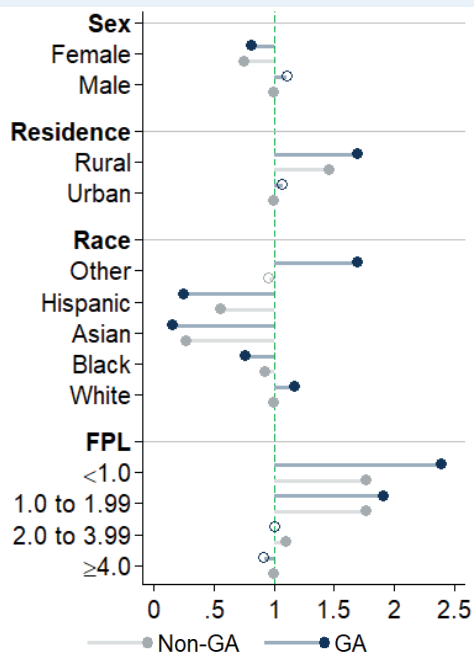
Southeast Disparities



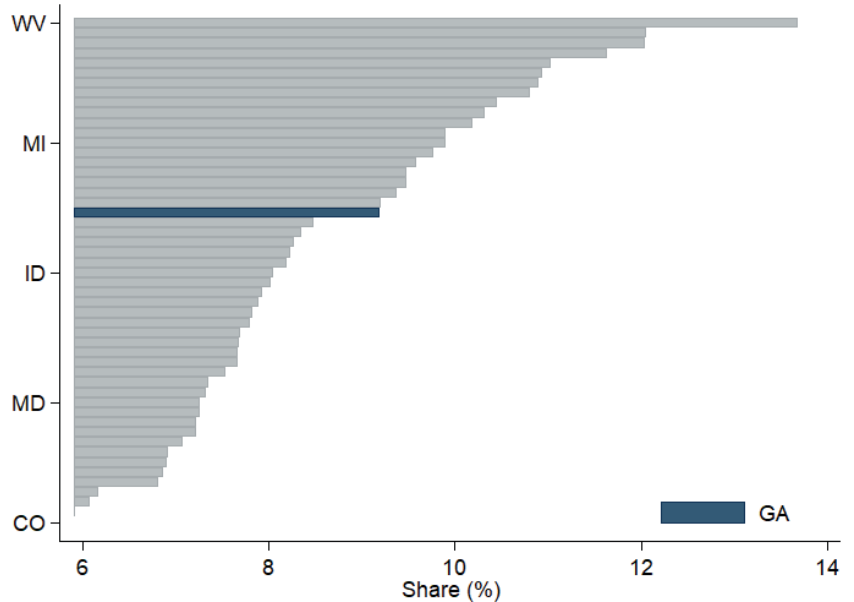
Trend



U.S. Disparities



Distribution by State



Key Findings

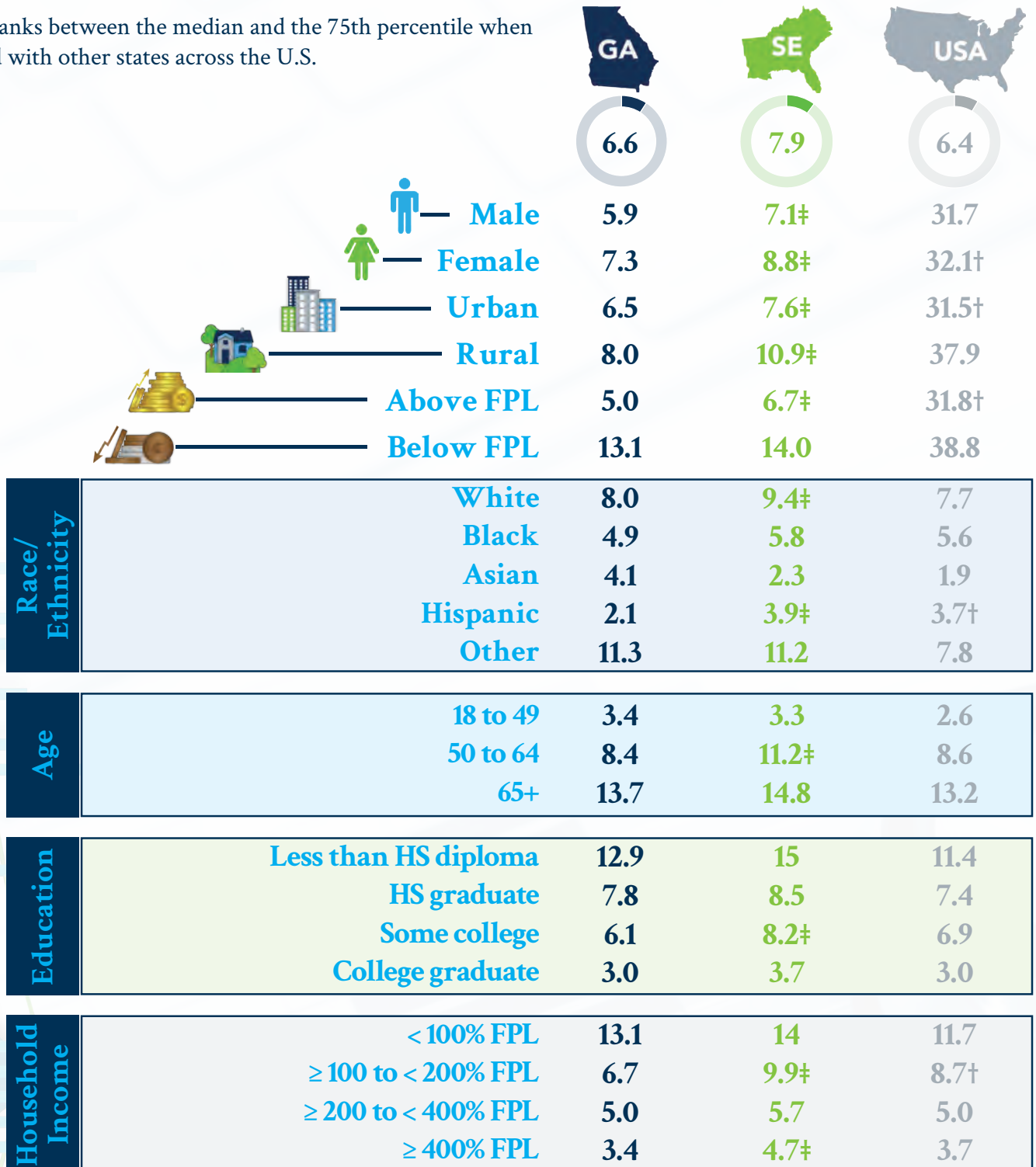
- Georgians living in rural areas were more likely to have cardiovascular diseases compared to Georgians living in urban areas.
- White Georgians were more likely to have cardiovascular diseases than their Black, Asian, and Hispanic counterparts.
- Georgians with lower educational attainment have a higher prevalence of cardiovascular diseases than the regional average.
- College-educated Georgians have a lower cardiovascular diseases prevalence than the regional average.

COPD

Adults ever told to have any type of chronic obstructive pulmonary disease.

Highlights

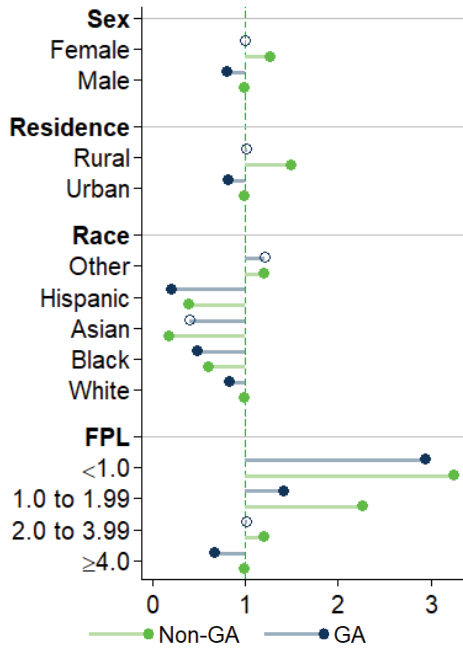
- Georgians have a lower prevalence of COPD than the regional average.
- The prevalence of COPD among Georgians living below the federal poverty level is comparable to the national and regional averages.
- Georgia ranks between the median and the 75th percentile when compared with other states across the U.S.



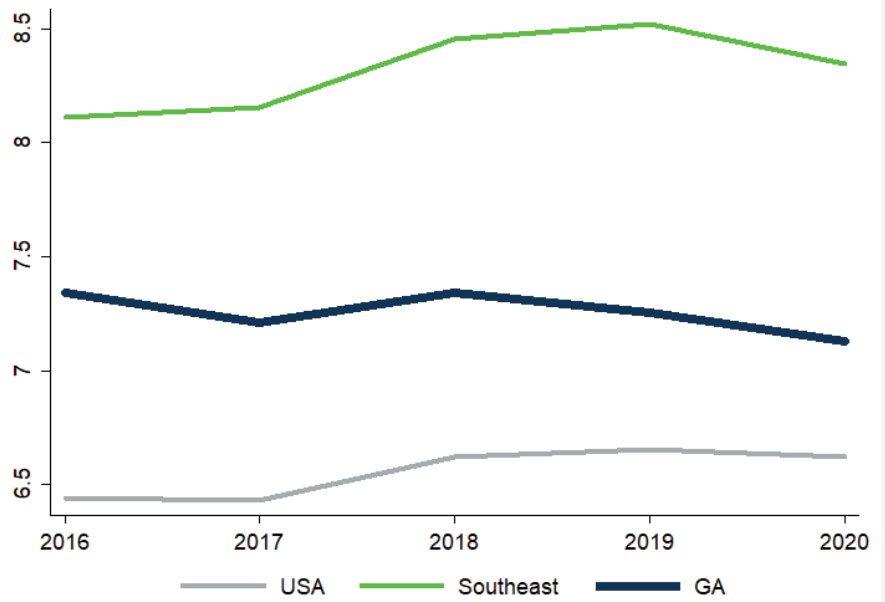
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

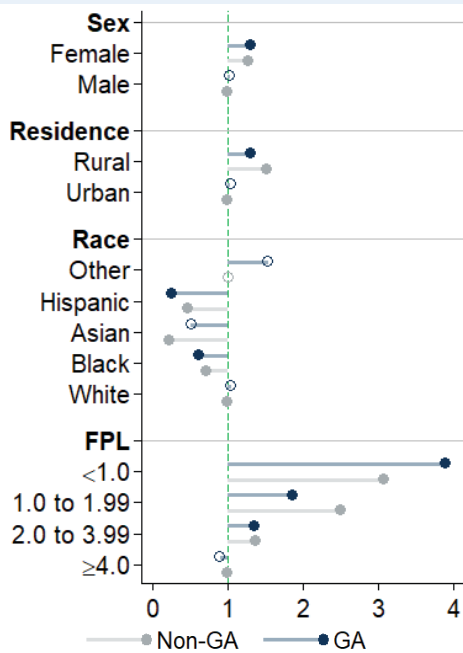
Southeast Disparities



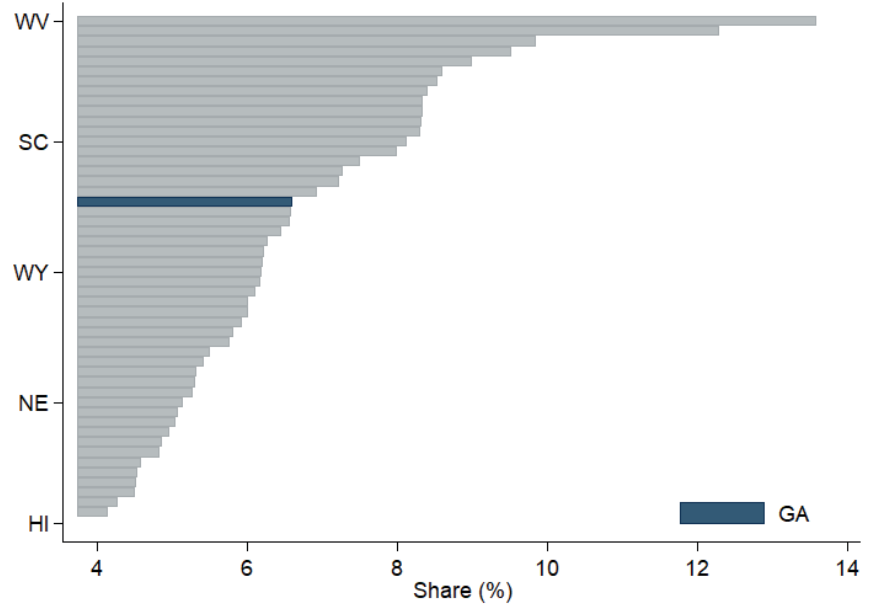
Trend



U.S. Disparities



Distribution by State



Key Findings

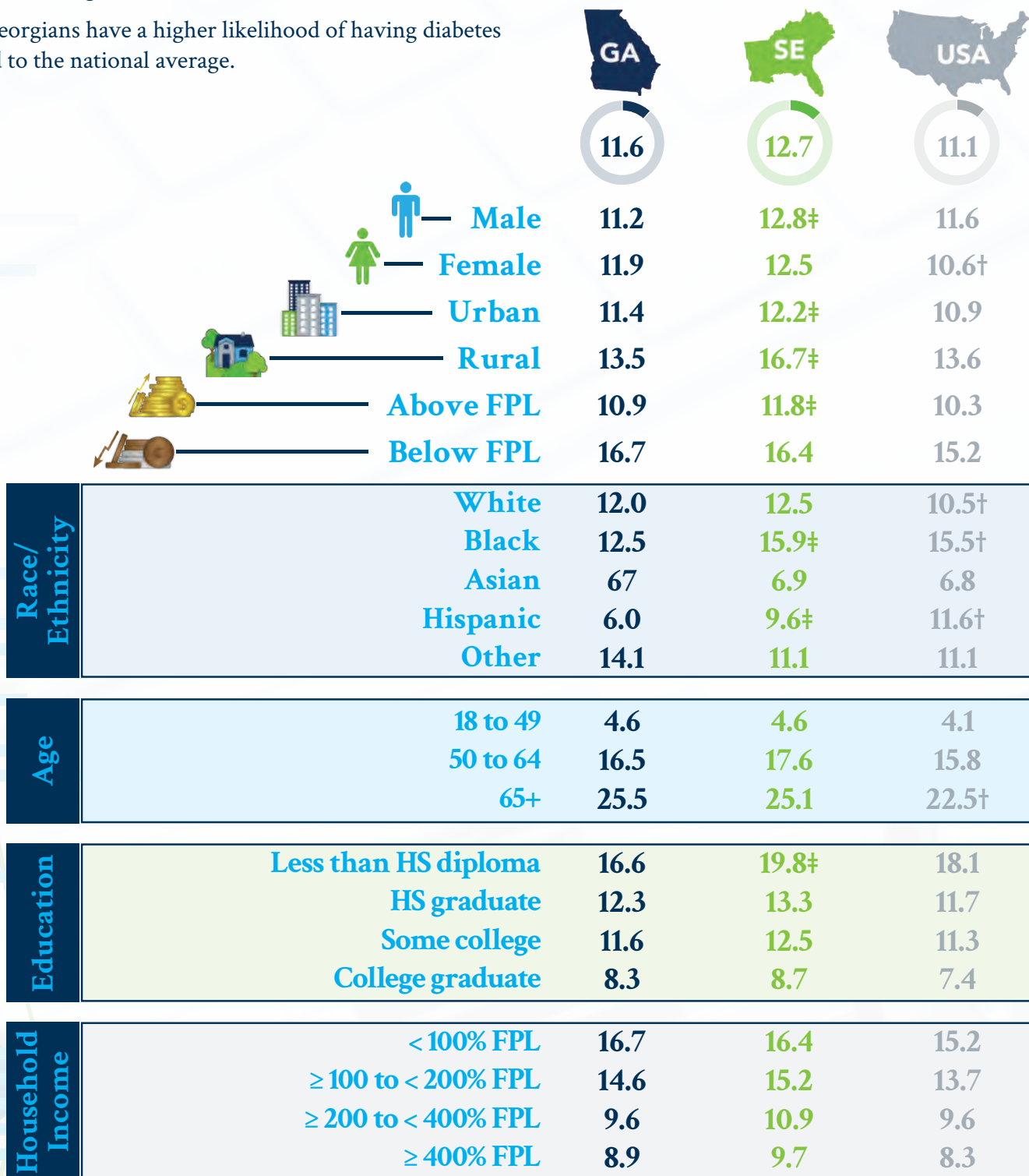
- White Georgians were more likely to have COPD than their Black, Asian, and Hispanic counterparts.
- White Georgians, however, have a lower prevalence of COPD than their regional counterparts.
- Hispanic Georgians have a lower prevalence of COPD than the national and regional averages.
- While prevalence of COPD among Georgians living under the federal poverty level is comparable to the regional average, Georgians above the federal poverty level had lower prevalence than the regional average.

Diabetes

Adults ever told to have diabetes.

Highlights

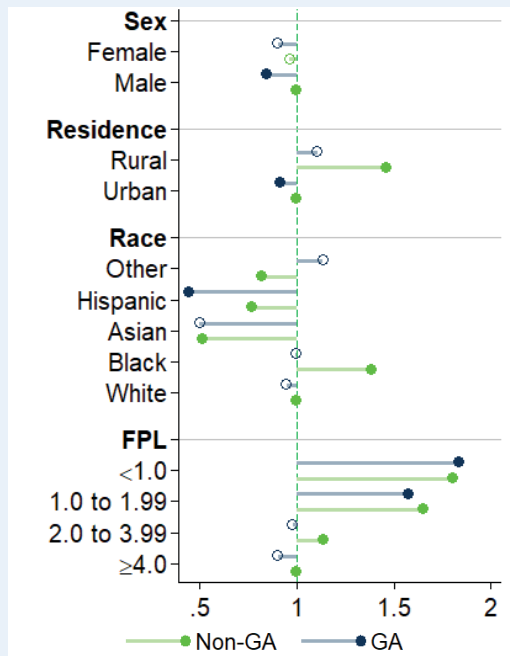
- White Georgians have a higher likelihood of having diabetes than the national average.
- The prevalence of diabetes among Black and Hispanic Georgians is significantly lower than respective national and regional averages.
- Elderly Georgians have a higher likelihood of having diabetes compared to the national average.



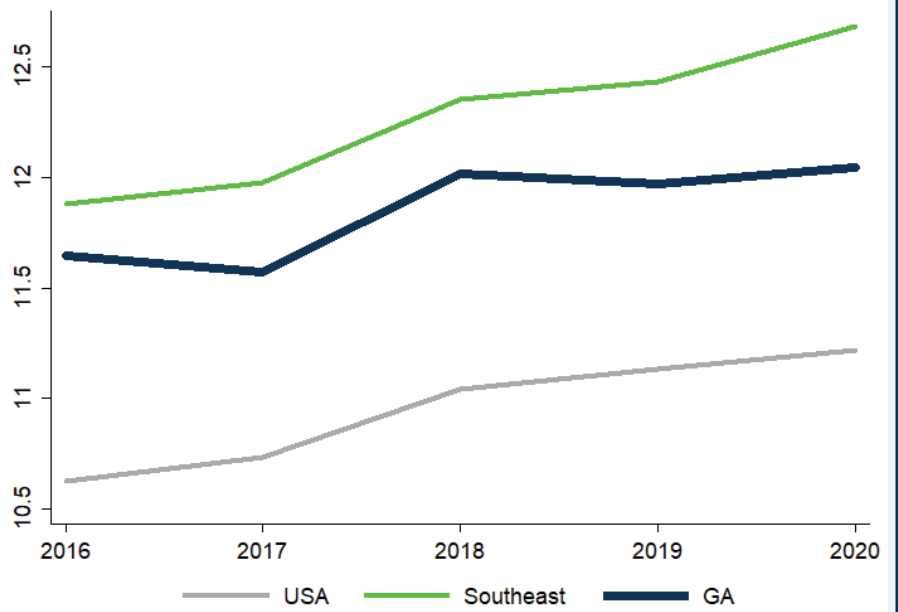
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

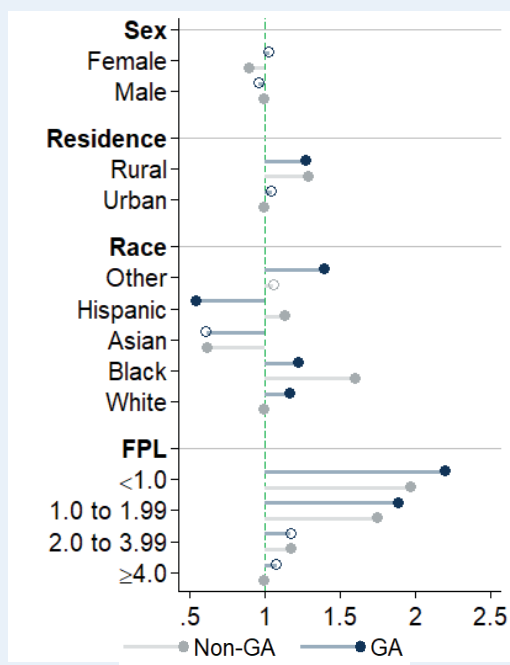
Southeast Disparities



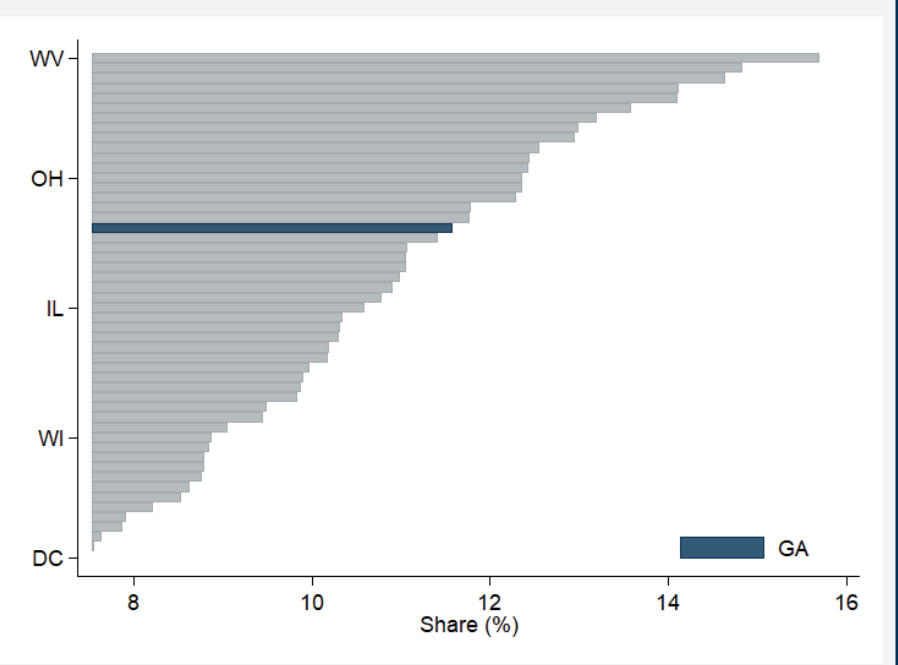
Trend



U.S. Disparities



Distribution by State



Key Findings

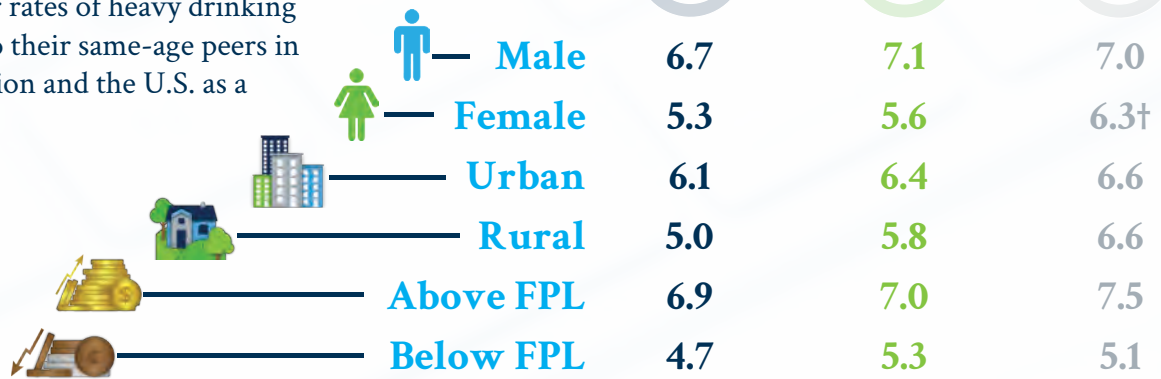
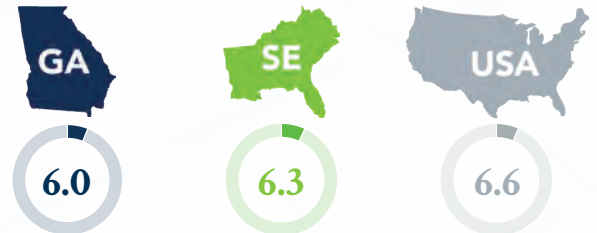
- Diabetes is more prevalent among low-income adults than high-income adults.
- Diabetes prevalence was higher among adults with lower educational attainment compared with their college-educated counterparts.
- While prevalence of diabetes among Georgian males is comparable to the national average, Georgian females have a higher likelihood of having diabetes than the national average.
- Diabetes was more prevalent among low-income Georgia residents compared to their higher income counterparts. This pattern is comparable to the national and regional averages.

Alcohol – Heavy Drinking

Adults consuming > 14 drinks/week (men) or > 7 drinks/week (women).

Highlights

- The percentage of people in Georgia who exceed the weekly recommended alcohol use limits (heavy drinking) is similar to both the Southeast Region and the U.S. as a whole.
- While men, on average, report higher rates of heavy drinking than women, women in Georgia report significantly lower rates than the national average.
- Rates of heavy drinking tend to decline as people age. Among 18-to-49-year-olds, who typically have the highest levels of alcohol use and alcohol-related problems, Georgia residents report significantly lower rates of heavy drinking when compared to their same-age peers in the Southeast Region and the U.S. as a whole.

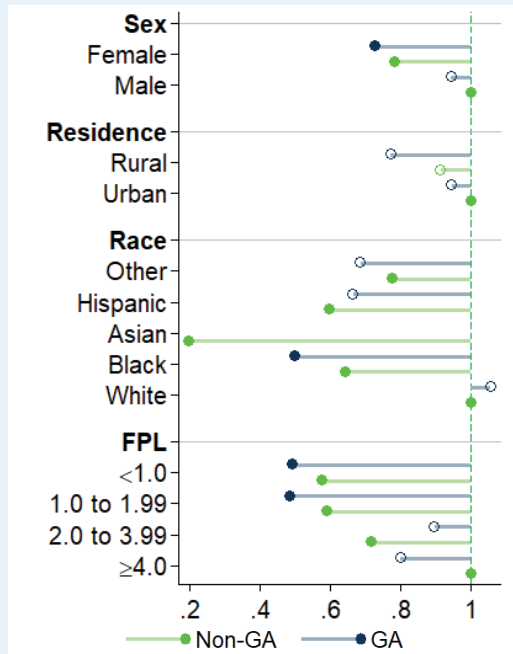


		GA (%)	SE (%)	USA (%)
Race/ Ethnicity	White	7.7	7.3	7.7
	Black	3.8	4.6	4.8
	Asian	0.0	1.3†	2.4†
	Hispanic	5.0	4.6	5.5
	Other	5.1	5.7	6.1
Age	18 to 49	6.0	7.3†	7.5†
	50 to 64	7.6	6.7	6.8
	65+	3.8	3.8	4.4
Education	Less than HS diploma	5.0	5.7	5.7
	HS graduate	5.8	6.6	6.6
	Some college	6.7	6.1	6.9
	College graduate	6.1	6.6	6.7
Household Income	< 100% FPL	4.7	5.3	5.1
	≥ 100 to < 200% FPL	4.6	5.5	5.9
	≥ 200 to < 400% FPL	8.2	6.9	7.6
	≥ 400% FPL	7.4	8.9	8.8

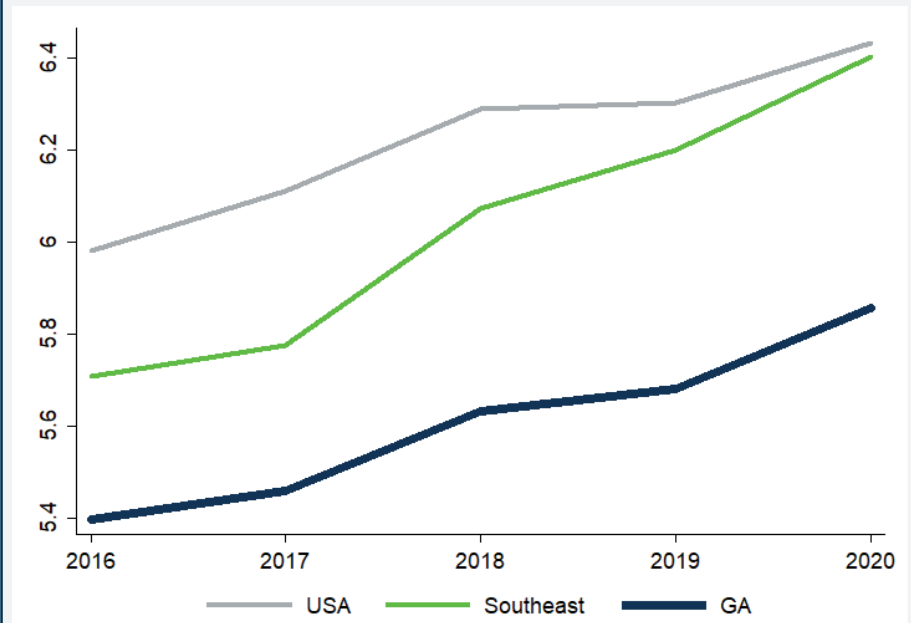
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

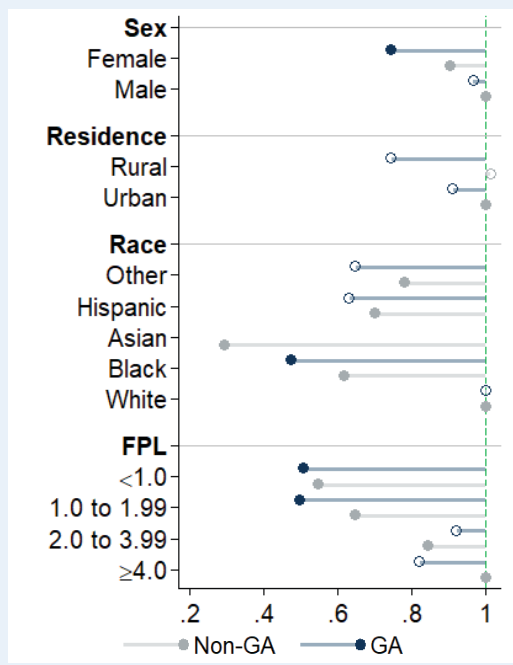
Southeast Disparities



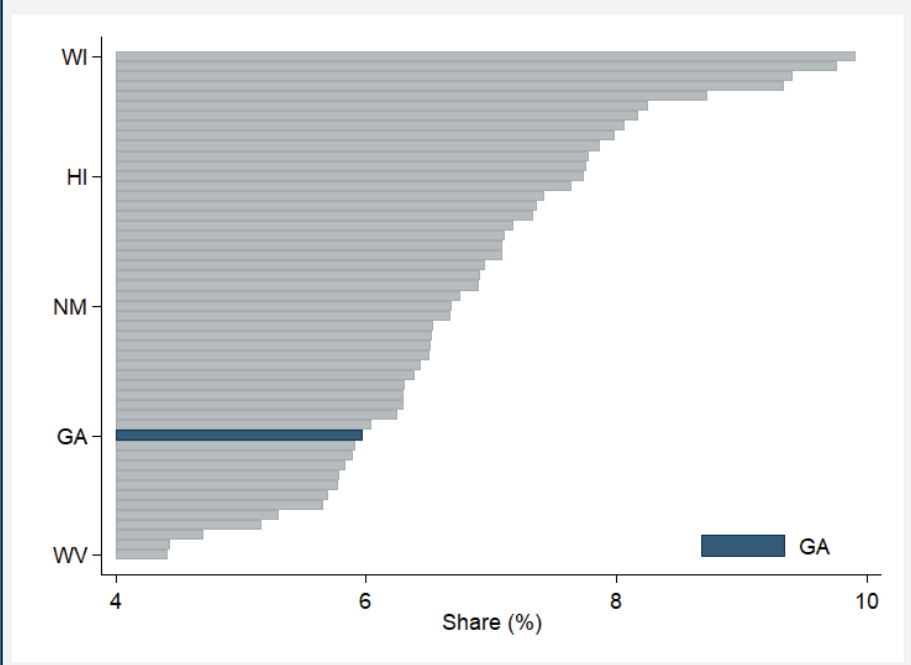
Trend



U.S. Disparities



Distribution by State



Key Findings

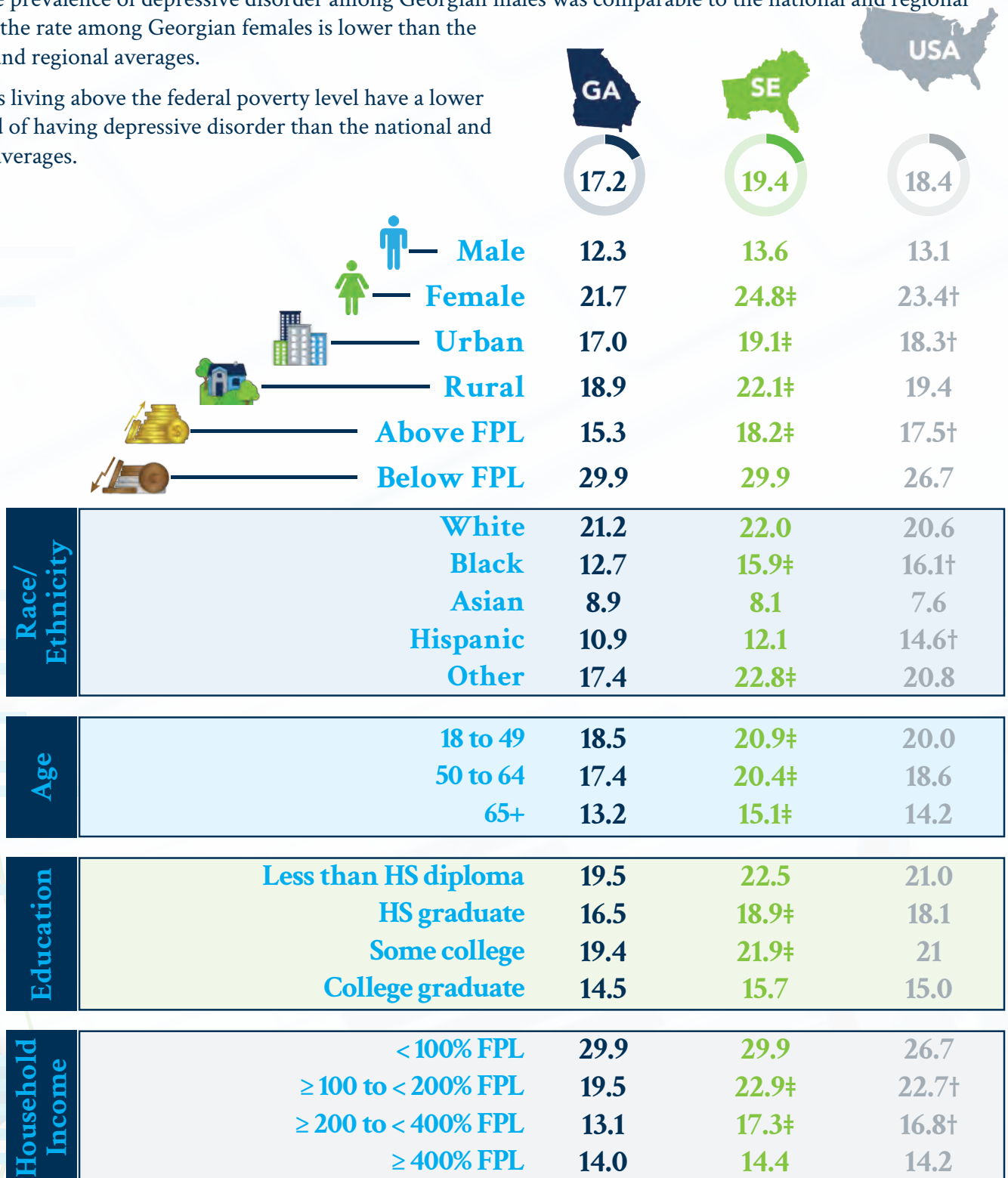
- When compared to other states, Georgia has one of the lower rates of heavy drinking, ranking in the 25th percentile.
- Heavy alcohol consumption among Georgian adults by educational attainment and household income is comparable to respective national and regional averages.
- The trend in heavy alcohol consumption is on the rise in recent years.

Depressive Disorder

Adults ever told to have a depressive disorder.

Highlights

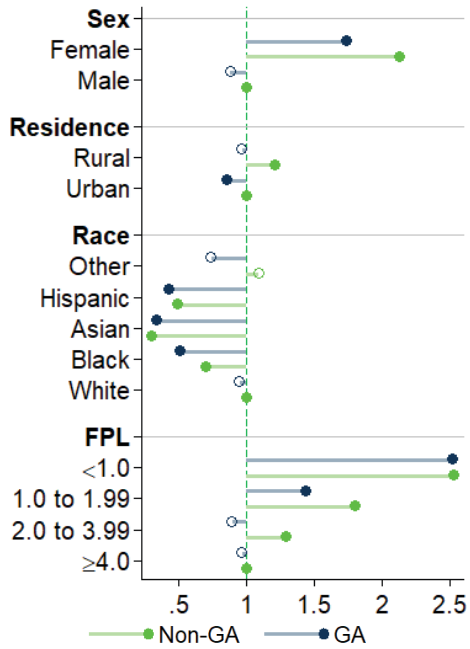
- Self-reported rates of depressive disorder in Georgia are relatively lower than the national and regional averages.
- While the prevalence of depressive disorder among Georgian males was comparable to the national and regional averages, the rate among Georgian females is lower than the national and regional averages.
- Georgians living above the federal poverty level have a lower likelihood of having depressive disorder than the national and regional averages.



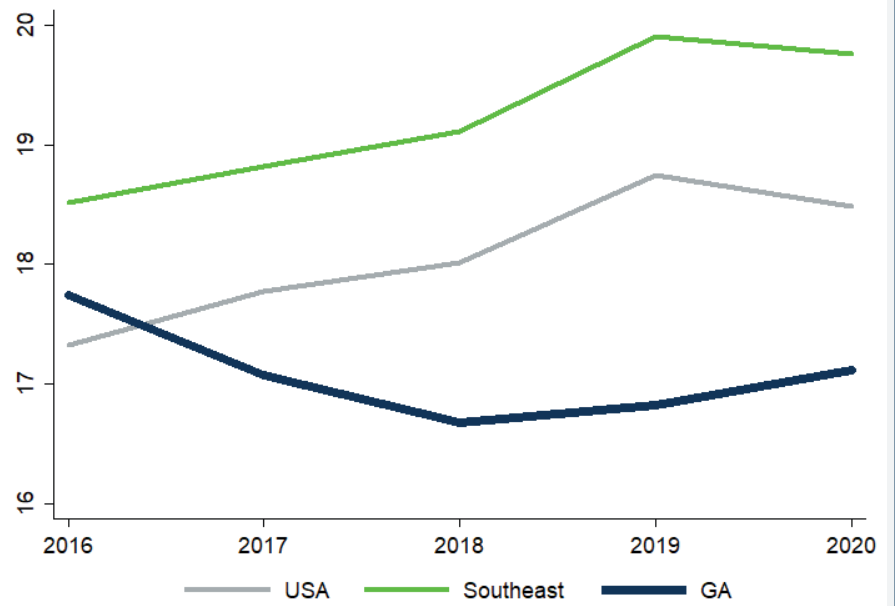
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

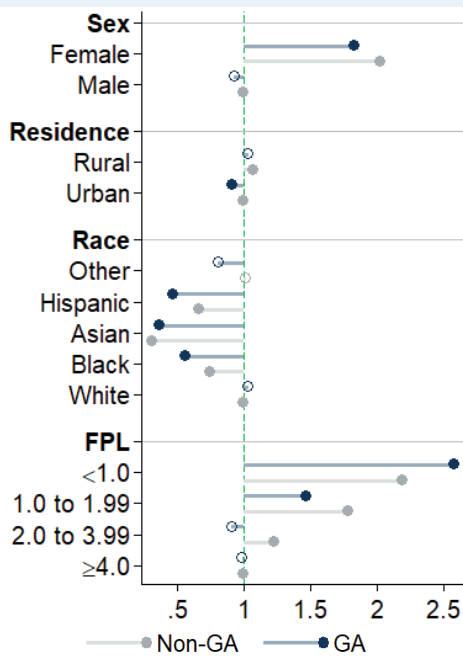
Southeast Disparities



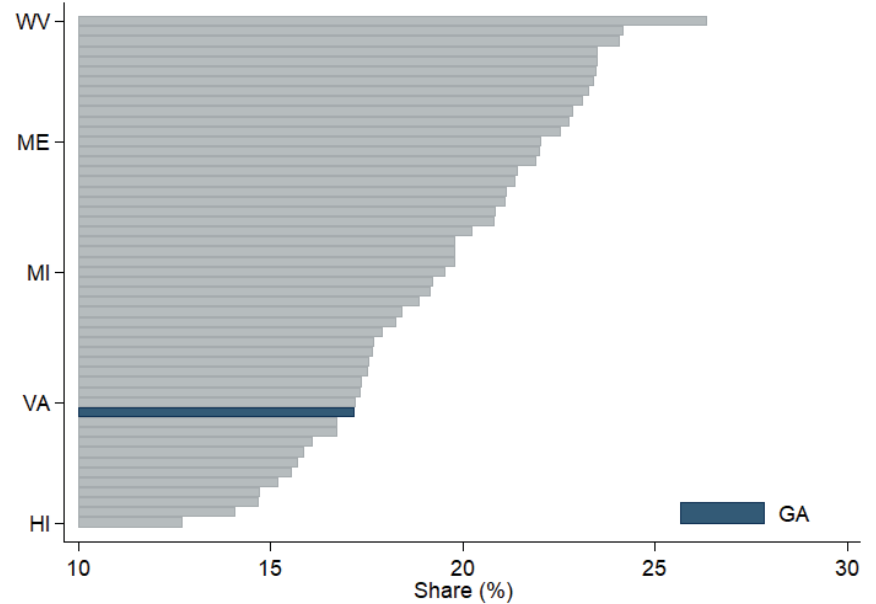
Trend



U.S. Disparities



Distribution by State



Key Findings

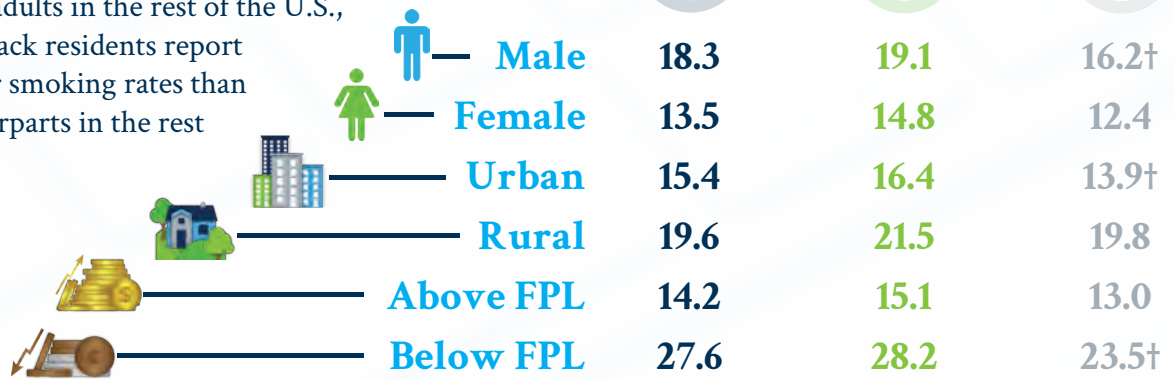
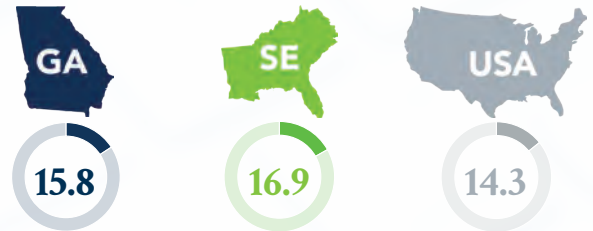
- Self-reported depressive disorder among Black Georgians is lower than the national and regional averages.
- Self-reported depressive disorder among Hispanic Georgians is lower than the national average.
- Prevalence of depressive disorder among Georgians is comparable to the national average, but lower than the regional average across all age groups.

Tobacco – Smoking

Adults who currently smoke.

Highlights

- Smoking rates have been declining for nearly 3 decades with the past 5 years showing rates continuing to drop in Georgia and across the U.S.
- Education and income are strongly associated with smoking in high-income individuals, and those with a college degree or higher are 3-4 times less likely to report smoking than individuals below the federal poverty level and those with less than a high school diploma.
- Georgia’s White residents report significantly higher smoking rates than White adults in the rest of the U.S., while Georgia’s Black residents report significantly lower smoking rates than their Black counterparts in the rest of the U.S.

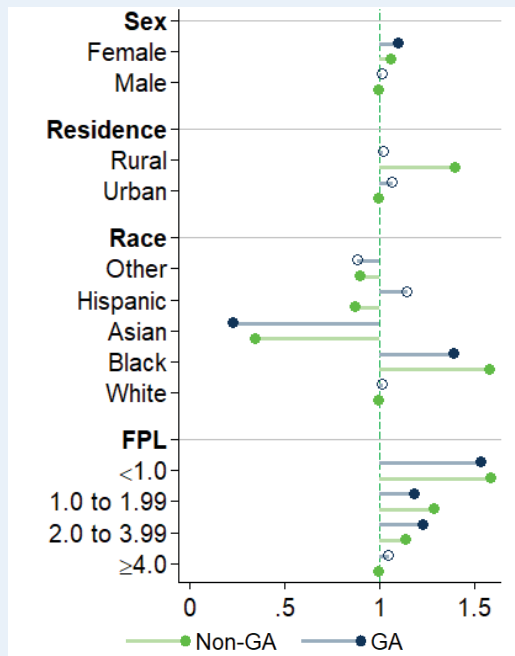


Category	Sub-category	GA (%)	SE (%)	USA (%)
Race/ Ethnicity	White	17.3	17.9	14.9†
	Black	14.2	16.0	17.0†
	Asian	11.4	7.1	7.3
	Hispanic	10.9	13.0	11.1
	Other	19.7	21.1	18.6
Age	18 to 49	16.8	18.2	15.2
	50 to 64	18.5	20.4	17.0
	65+	9.4	10.2	8.9
Education	Less than HS diploma	28.7	29.7	24.5†
	HS graduate	20.9	21.4	18.9
	Some college	14.6	16.4	14.4
	College graduate	5.9	6.4	5.6
Household Income	< 100% FPL	27.6	28.2	23.5†
	≥ 100 to < 200% FPL	19.9	22.4	20.0
	≥ 200 to < 400% FPL	14.2	13.4	11.9†
	≥ 400% FPL	8.4	9.8	8.7

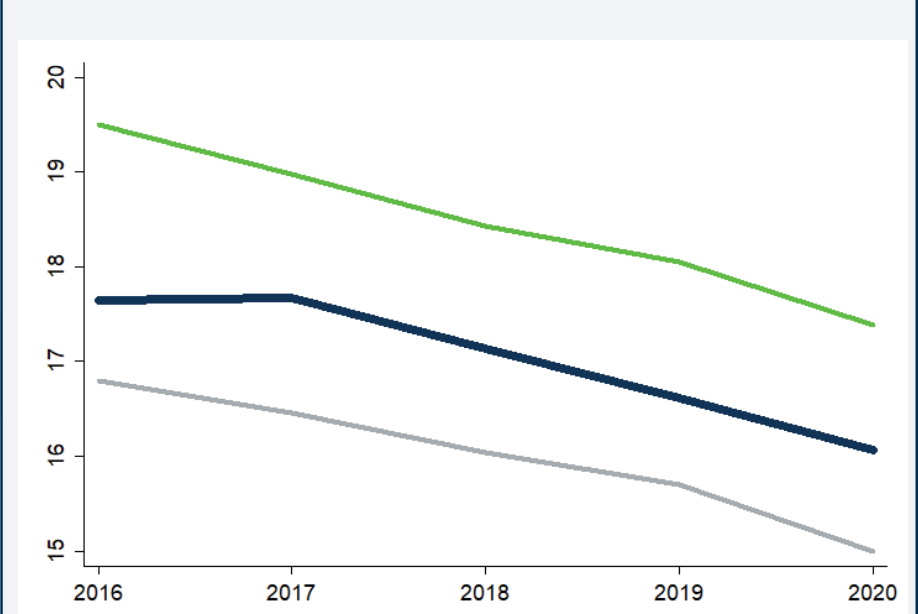
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

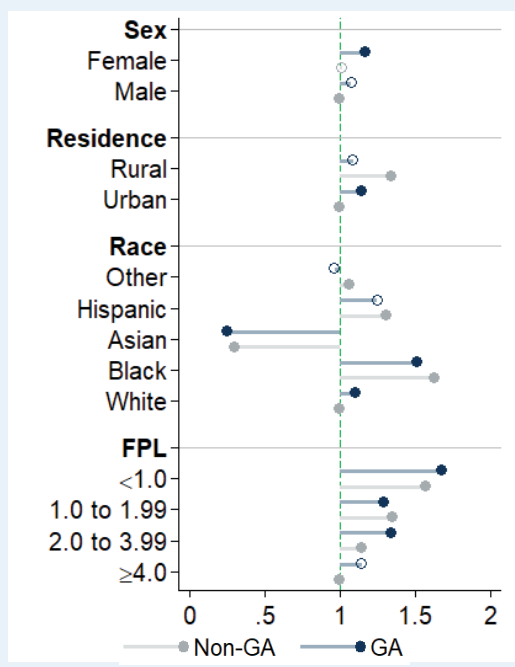
Southeast Disparities



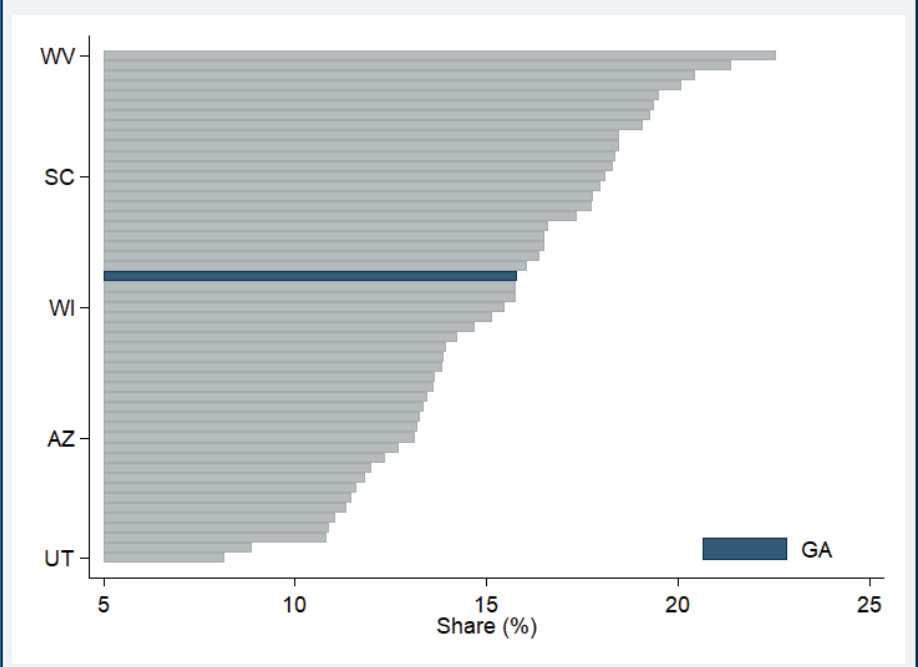
Trend



U.S. Disparities



Distribution by State



Key Findings

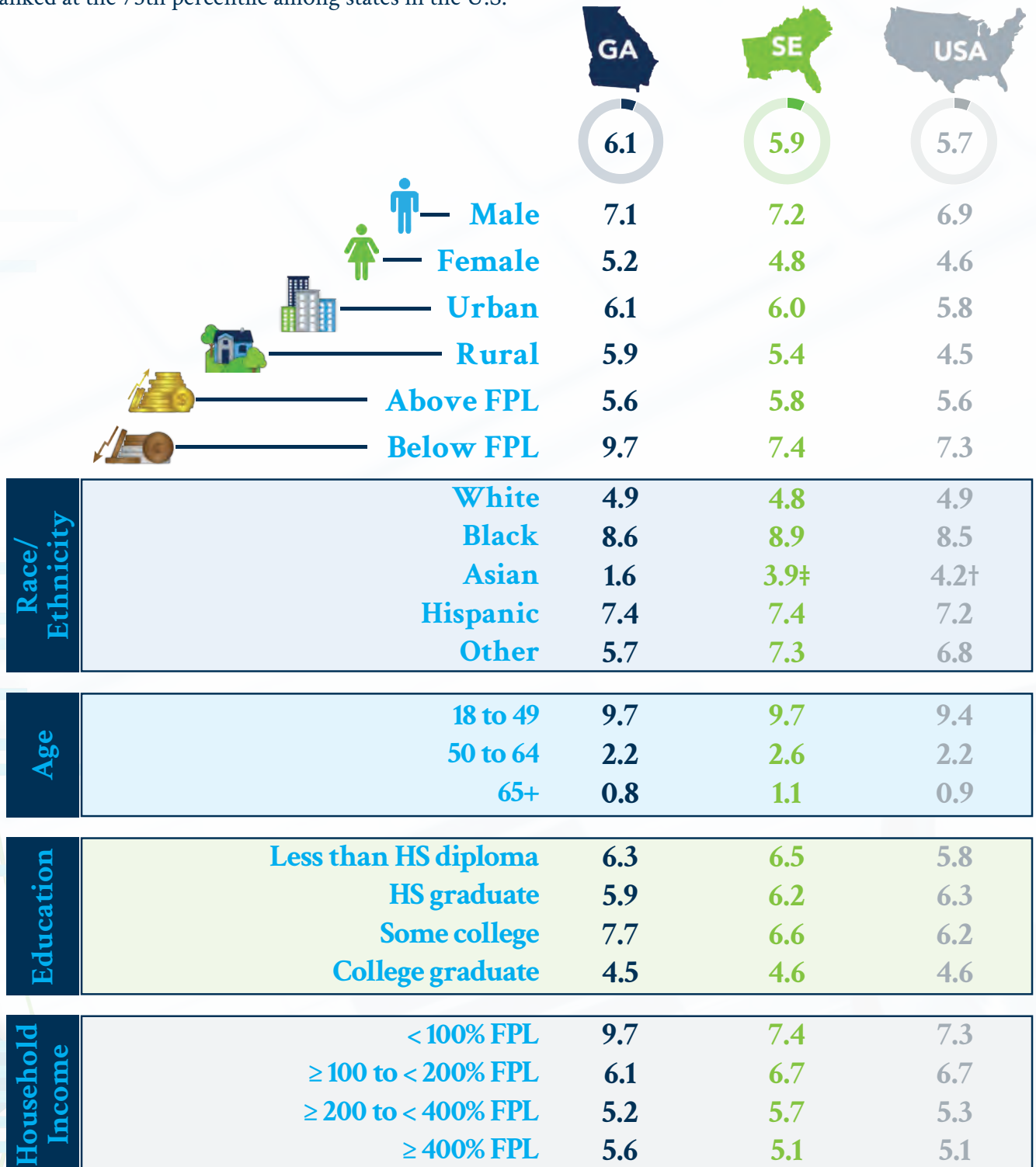
- While males in Georgia and across the U.S. report higher smoking rates than females, smoking rates for males in Georgia are significantly higher than males in the U.S. as a whole. Female smoking rates in Georgia are comparable to those in the rest of the U.S.
- Across the U.S., significantly higher smoking rates are found in rural areas compared to urban areas. In Georgia, urban residents report significantly higher rates of smoking when compared to other urban areas in the U.S., while rural smoking rates in Georgia and the rest of the U.S. are comparable.
- Compared to other states, smoking rates in Georgia are near the 50th percentile.

HIV Risk Behaviors

Adults who engaged in HIV risk behaviors in the past year.

Highlights

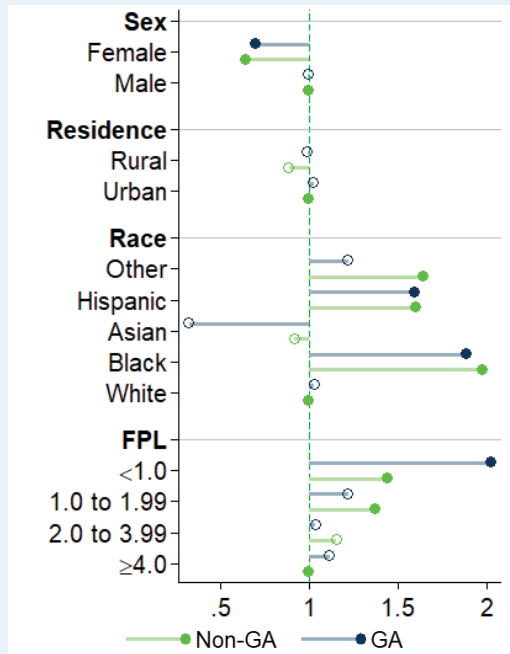
- Males in Georgia are more likely to have HIV risk exposure than females.
- HIV risk exposure is significantly higher among low-income Georgians than their high-income counterparts.
- Georgia ranked at the 75th percentile among states in the U.S.



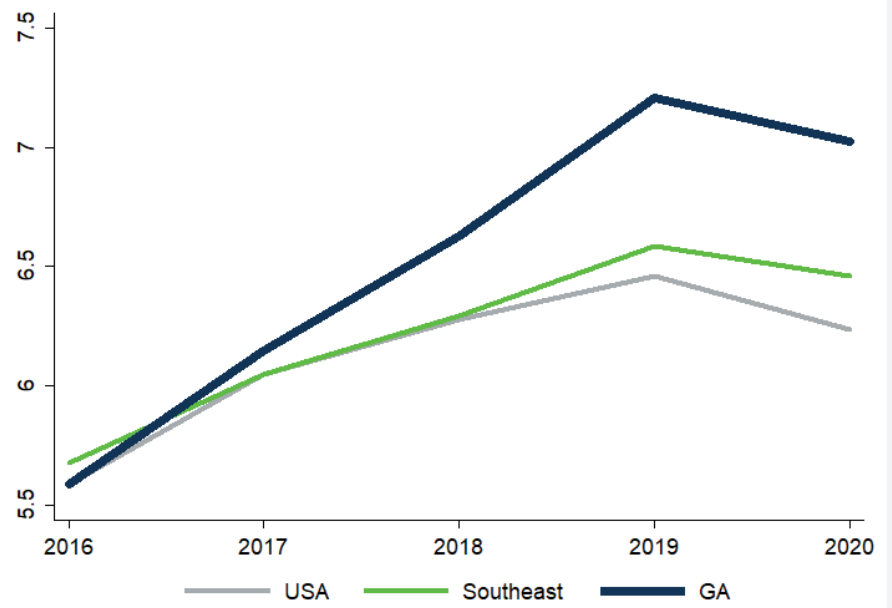
[†] US prevalence is statistically different from GA prevalence

[‡] SE prevalence is statistically different from GA prevalence

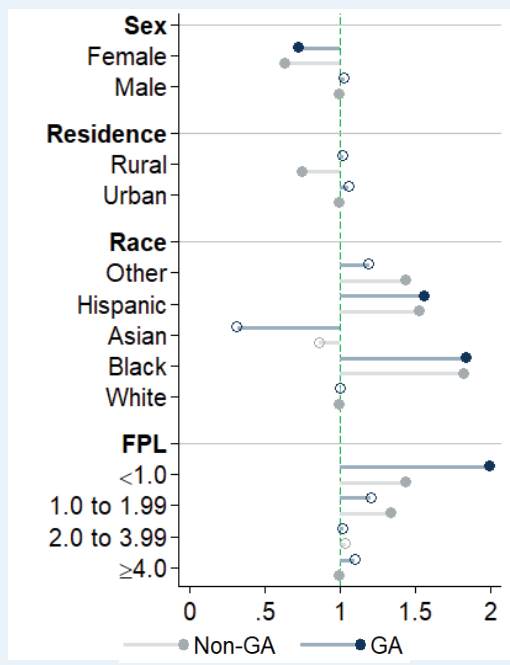
Southeast Disparities



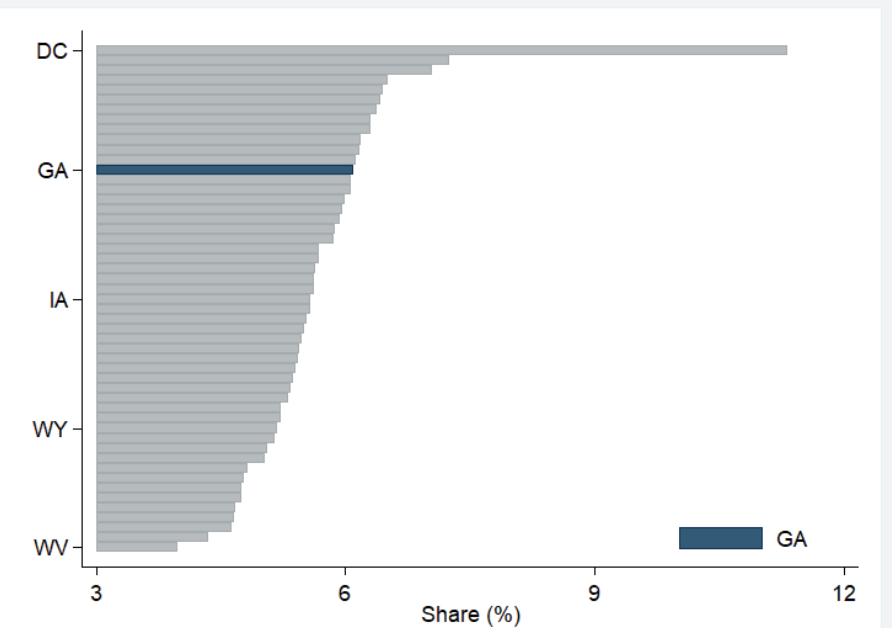
Trend



U.S. Disparities



Distribution by State



Key Findings

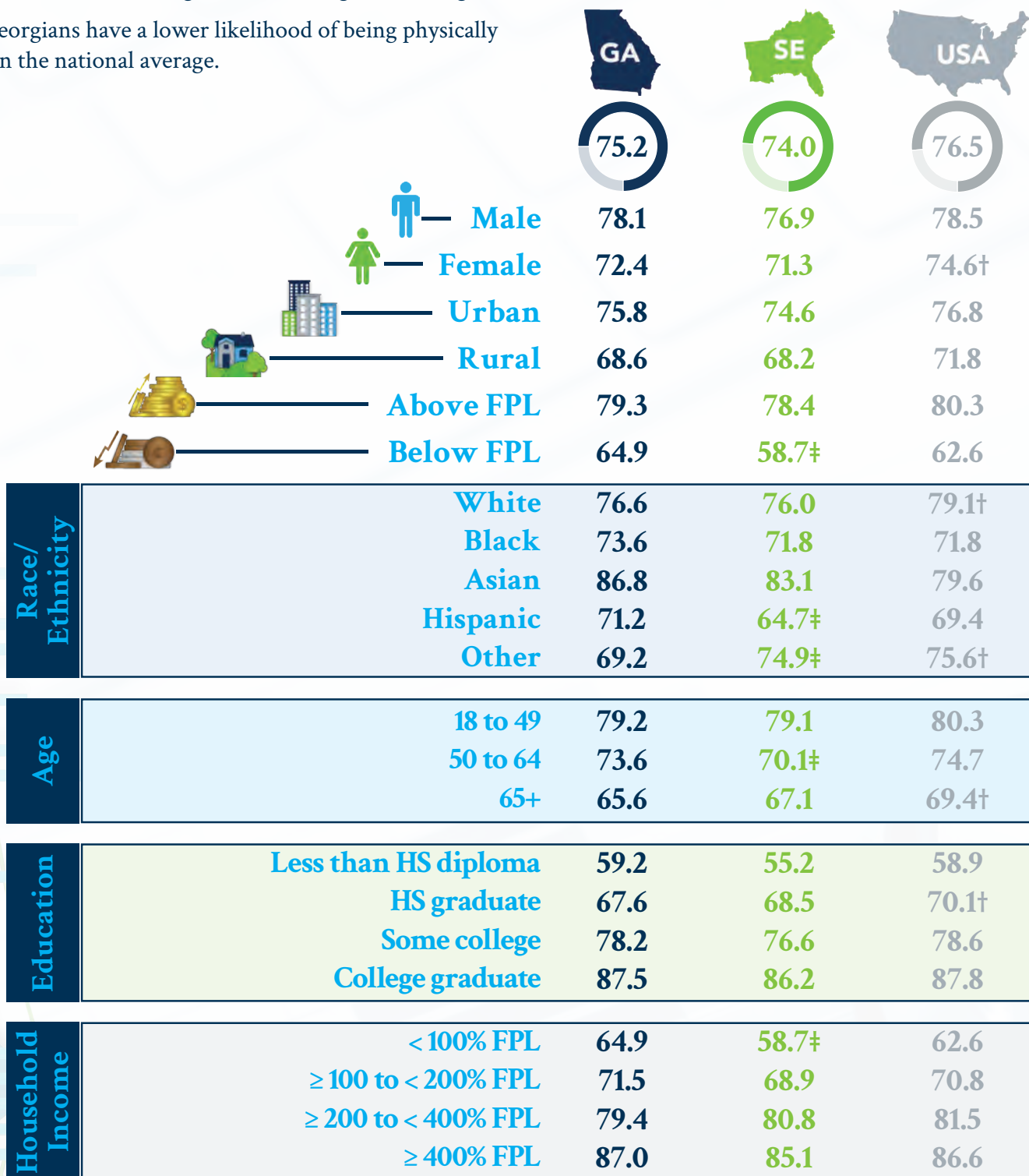
- Black Georgians have a significantly higher HIV risk exposure than their White counterparts.
- HIV risk exposure among Georgians is comparable to the national and regional averages across all age groups.
- The trend in HIV risk exposure in Georgia is on the rise.

Physical Activity

Adults who participated in physical activities/exercises in past 30 days.

Highlights

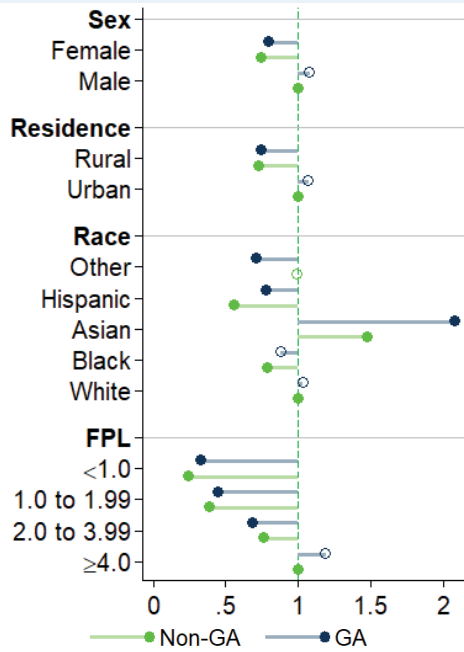
- Georgian females have a lower likelihood of being physically active than the national average.
- Low-income Georgians are less likely to be physically active compared to their high-income counterparts, however, the likelihood is higher than the regional average.
- Elderly Georgians have a lower likelihood of being physically active than the national average.



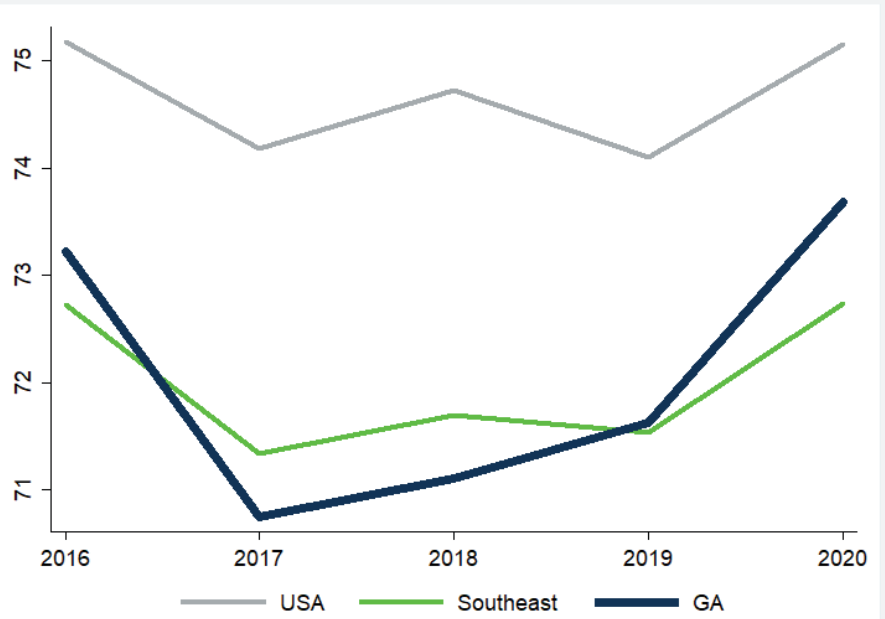
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

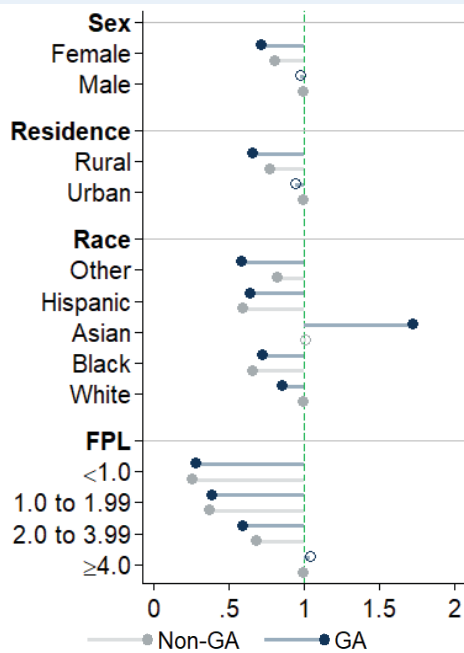
Southeast Disparities



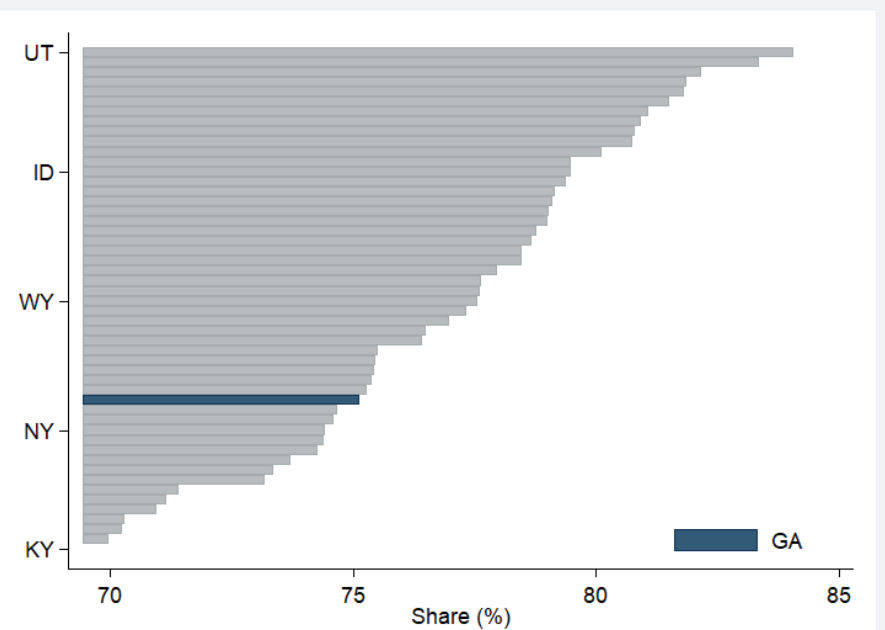
Trend



U.S. Disparities



Distribution by State



Key Findings

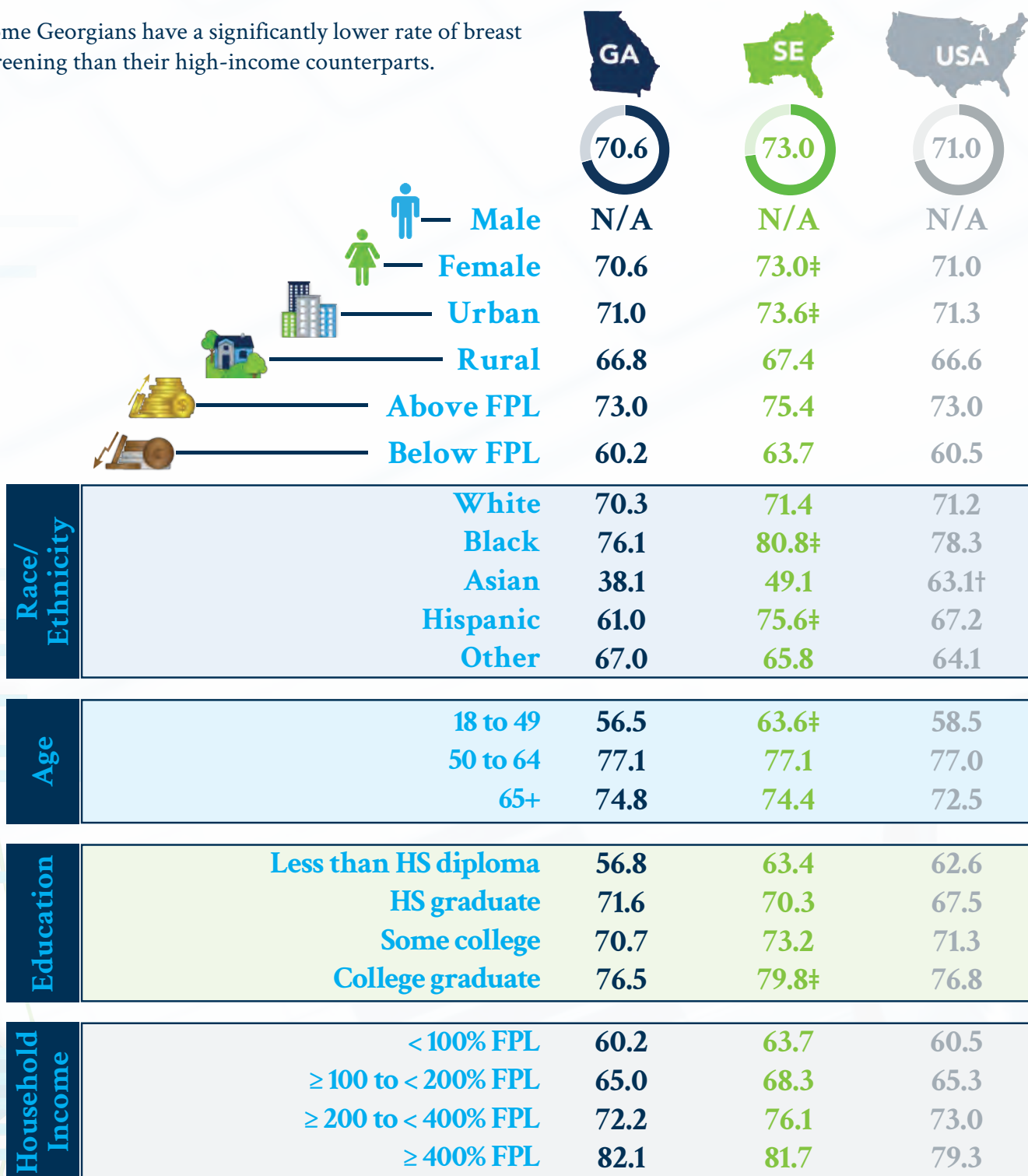
- Georgia ranked near the 25th percentile among the U.S. states.
- Hispanic Georgians have a higher likelihood of being physically active than their Southeastern counterparts.
- Compared to the national average, White Georgians are less likely to be physically active.
- Rural adults in Georgia are less likely to be physically active than their urban counterparts.

Breast Cancer Screening

Women aged 40+ who had a mammogram within the past 2 years.

Highlights

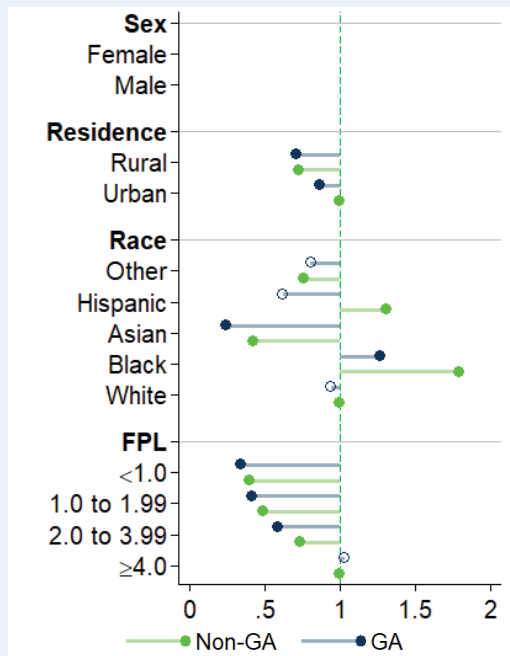
- Overall, the average rate of breast cancer screening has declined in recent years.
- Breast cancer screening rates in Georgia are comparable to the national average, but lower than the regional average.
- Low-income Georgians have a significantly lower rate of breast cancer screening than their high-income counterparts.



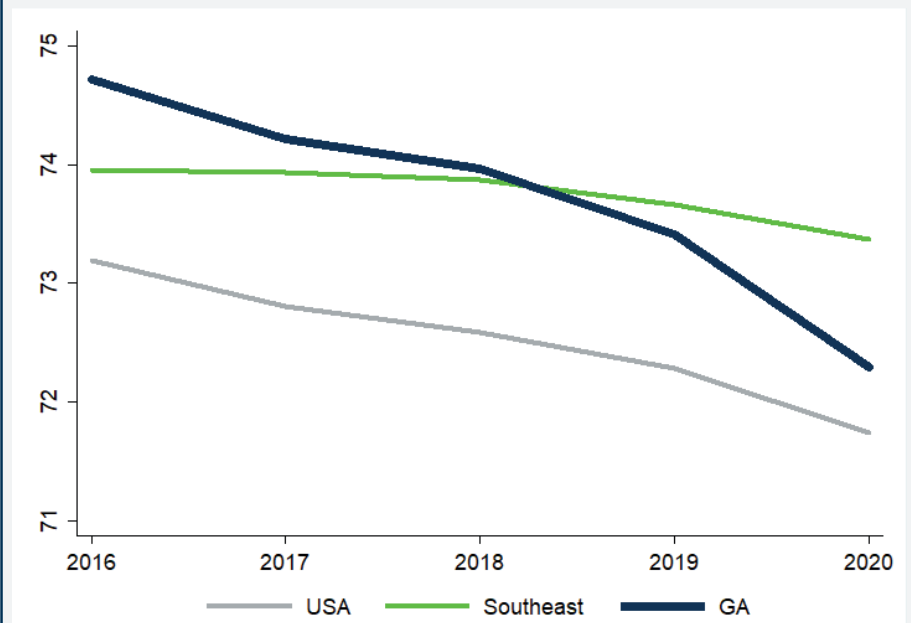
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

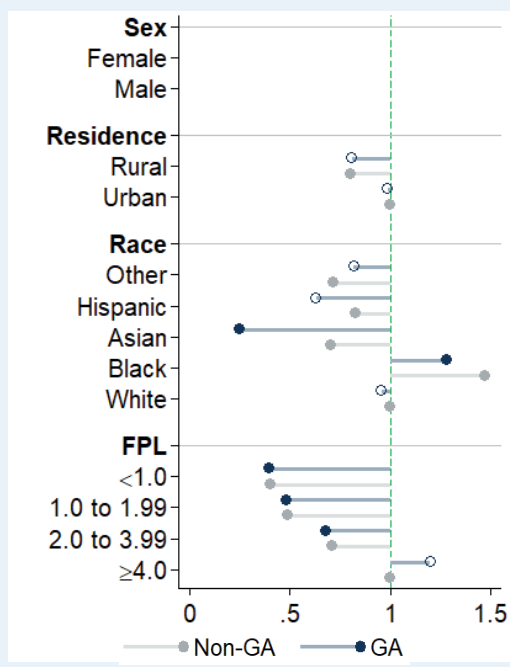
Southeast Disparities



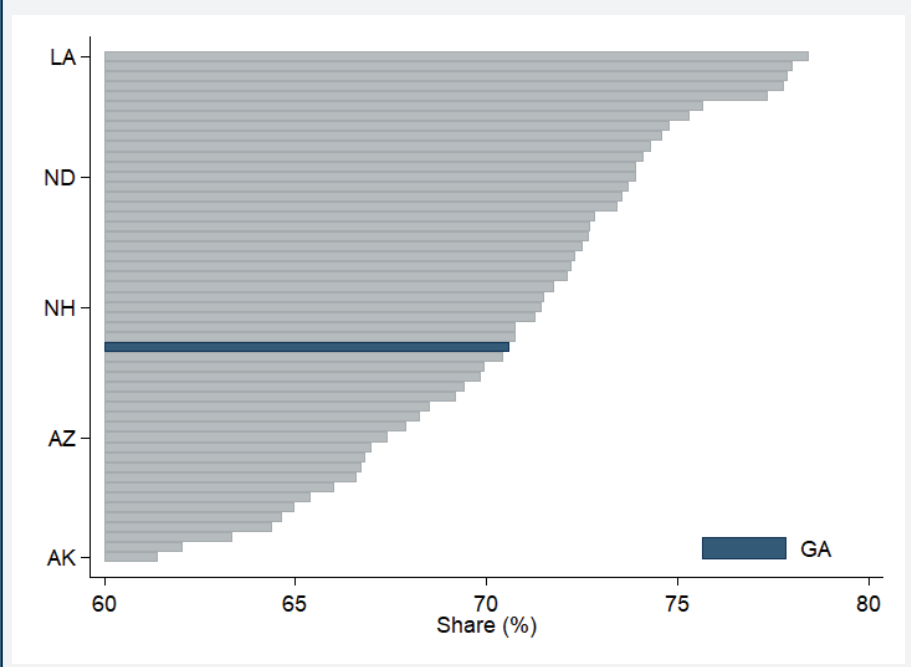
Trend



U.S. Disparities



Distribution by State



Key Findings

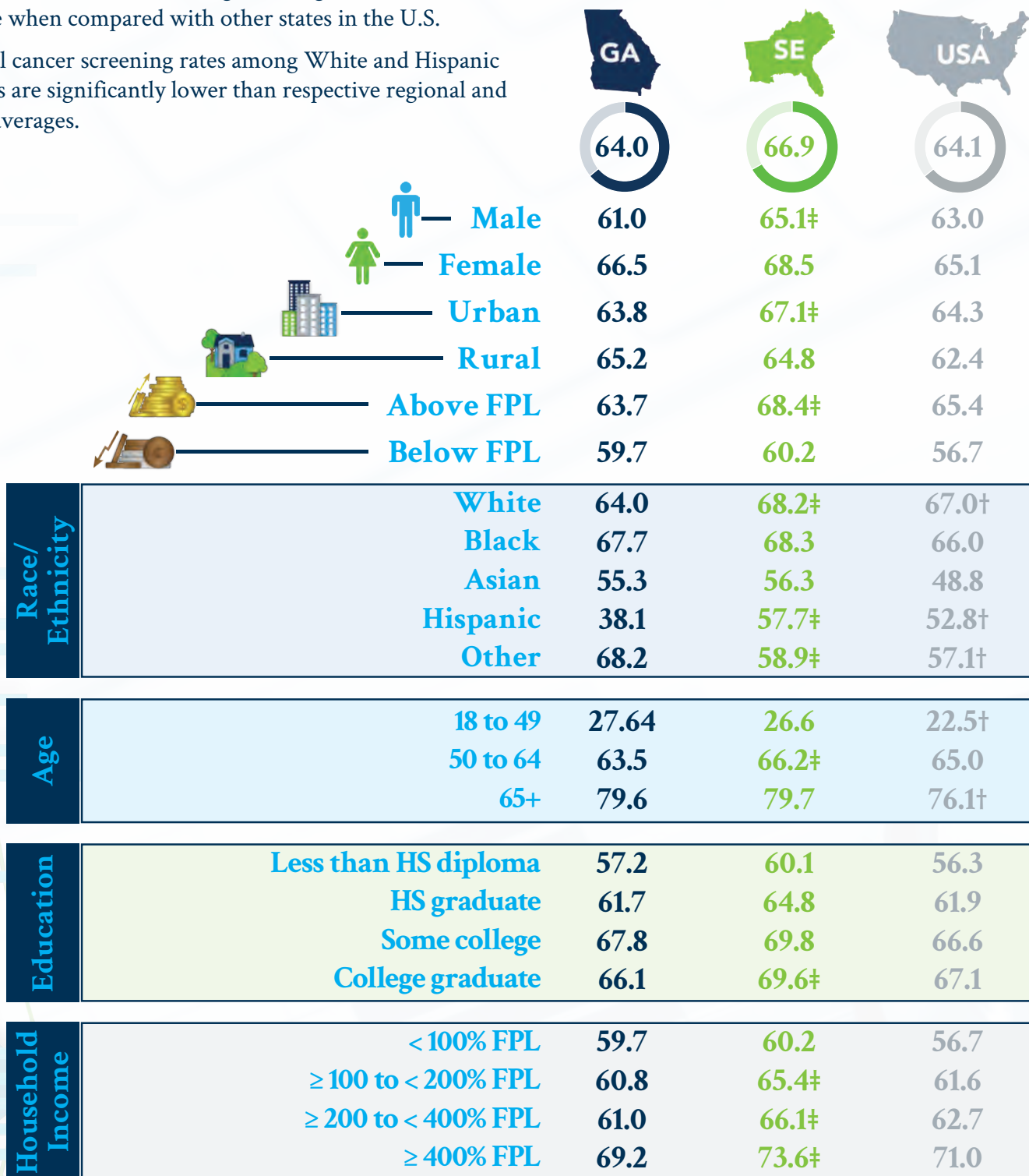
- Black and Hispanic Georgians are less likely to receive breast cancer screening compared to their counterparts in the Southeast Region.
- Higher rates of breast cancer screening are seen in the urban areas of Southeast compared to urban areas of Georgia.
- The rate of screening among younger (< 50 years) Georgians is comparable to the national average, but significantly lower than the regional average.

Colorectal Cancer Screening

Adults 45+ years with history of recent colon screening.

Highlights

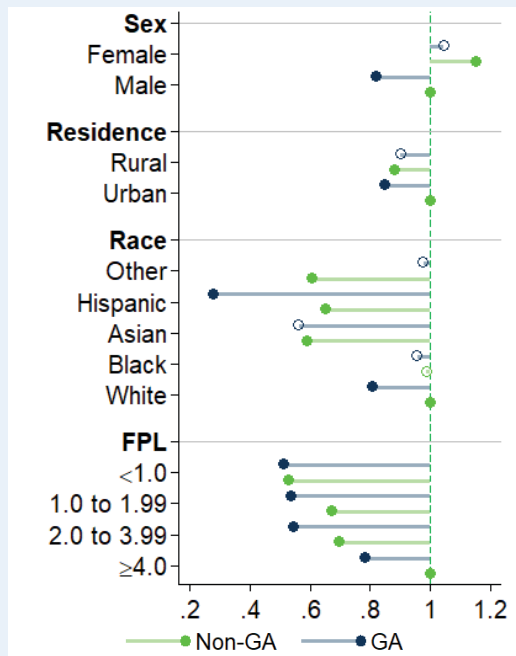
- Overall, the prevalence of colorectal cancer screening in Georgia is comparable to the national average, but lower than the regional average.
- The prevalence of CRC screening in Georgia lies in the 25th percentile when compared with other states in the U.S.
- Colorectal cancer screening rates among White and Hispanic Georgians are significantly lower than respective regional and national averages.



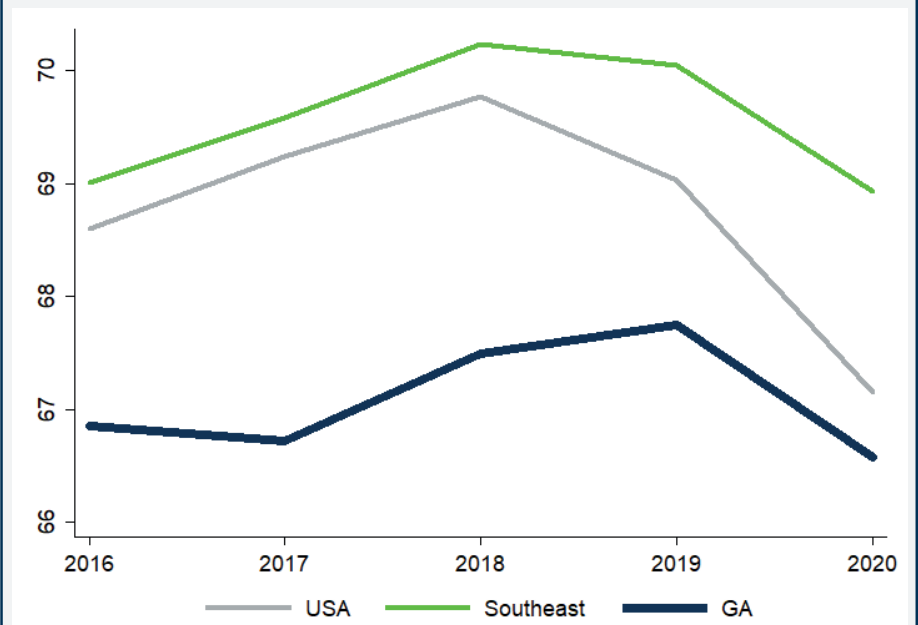
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

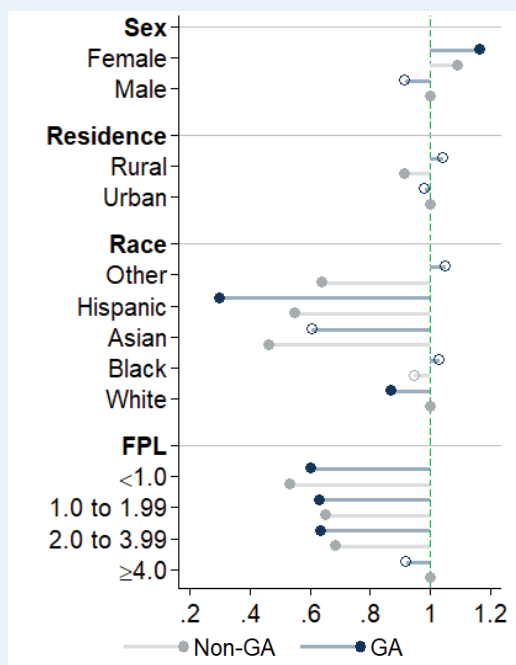
Southeast Disparities



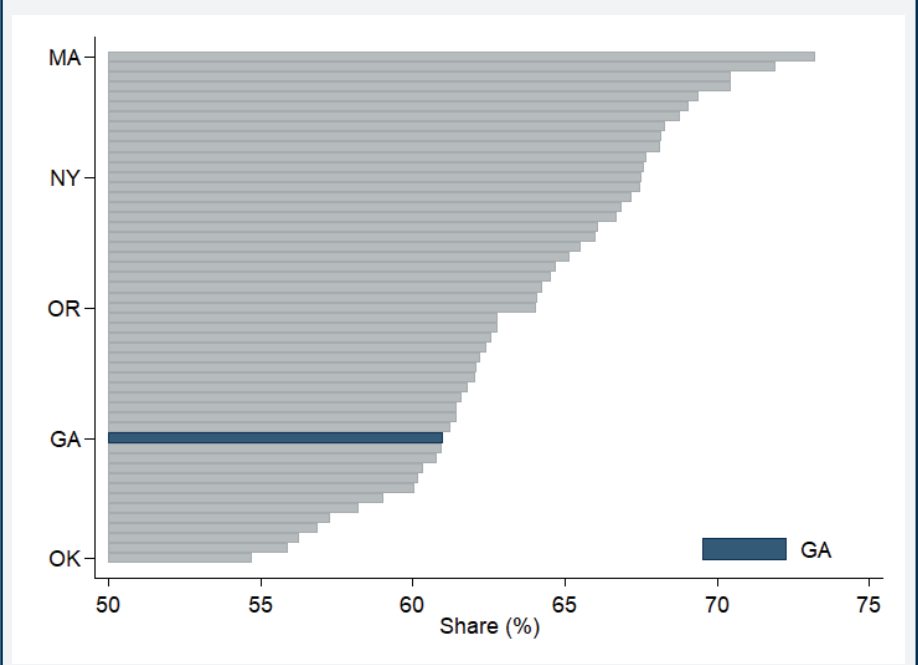
Trend



U.S. Disparities



Distribution by State



Key Findings

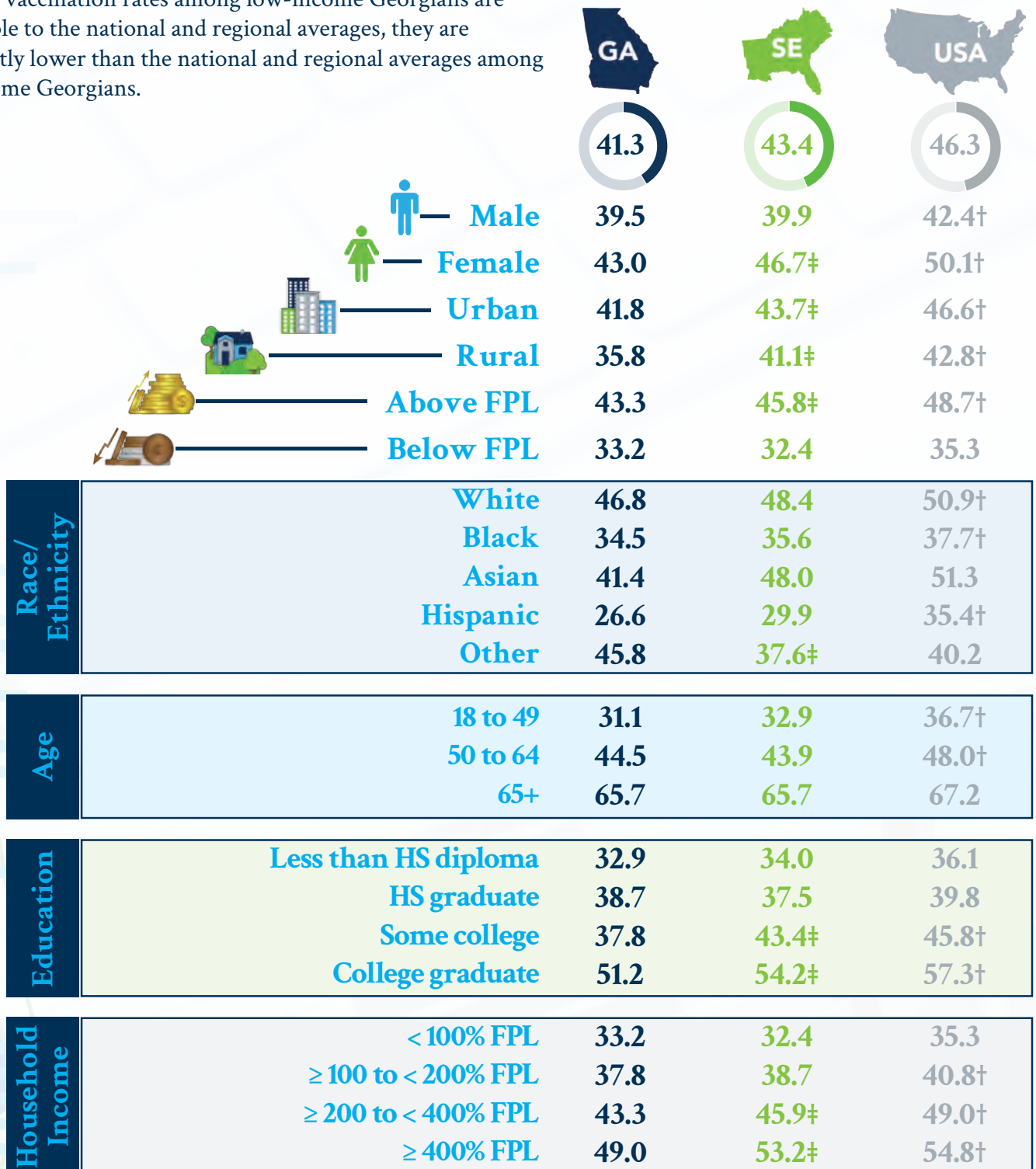
- The trend in colorectal screening in the past four years has not changed much.
- College graduate Georgians have a lower rate of colorectal cancer screening than the regional average.
- Elderly Georgians have a higher colorectal cancer screening rate than the national average.

Vaccination – Flu

Adults inoculated with flu vaccine in past 12 months.

Highlights

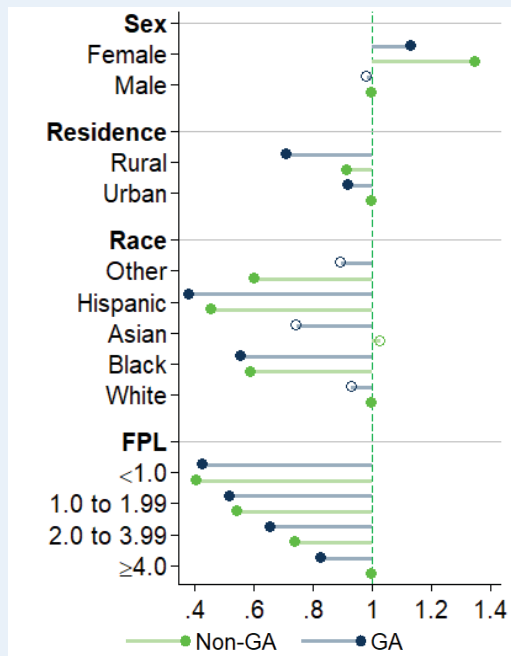
- Georgia has a significantly lower rate of flu vaccination compared to the national and regional averages.
- Georgia stands at the bottom quintile among states in the U.S.
- While flu vaccination rates among low-income Georgians are comparable to the national and regional averages, they are significantly lower than the national and regional averages among high-income Georgians.



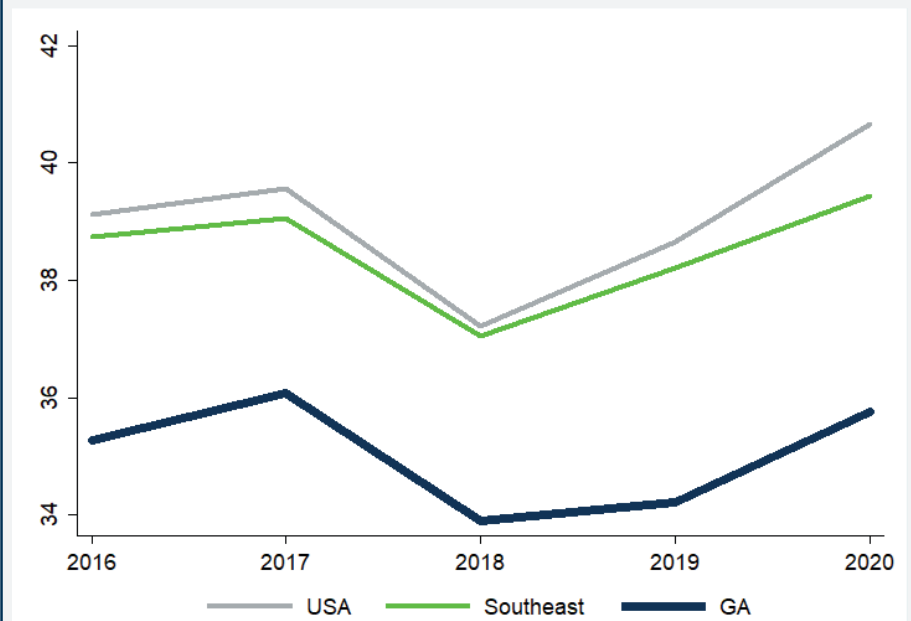
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

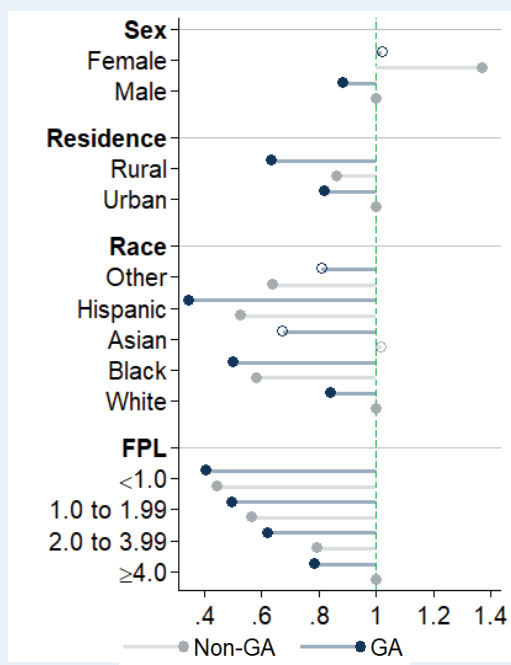
Southeast Disparities



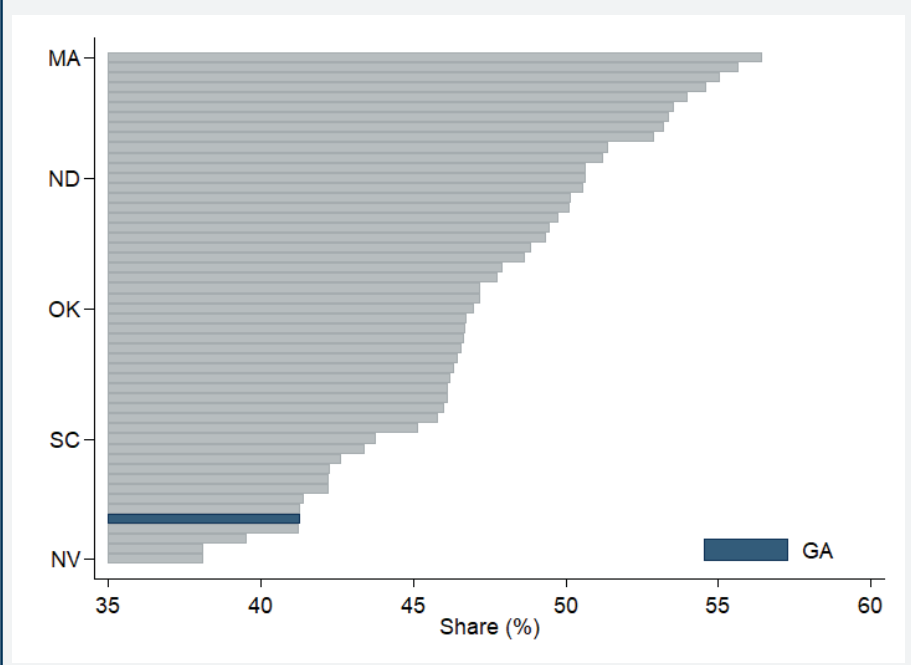
Trend



U.S. Disparities



Distribution by State



Key Findings

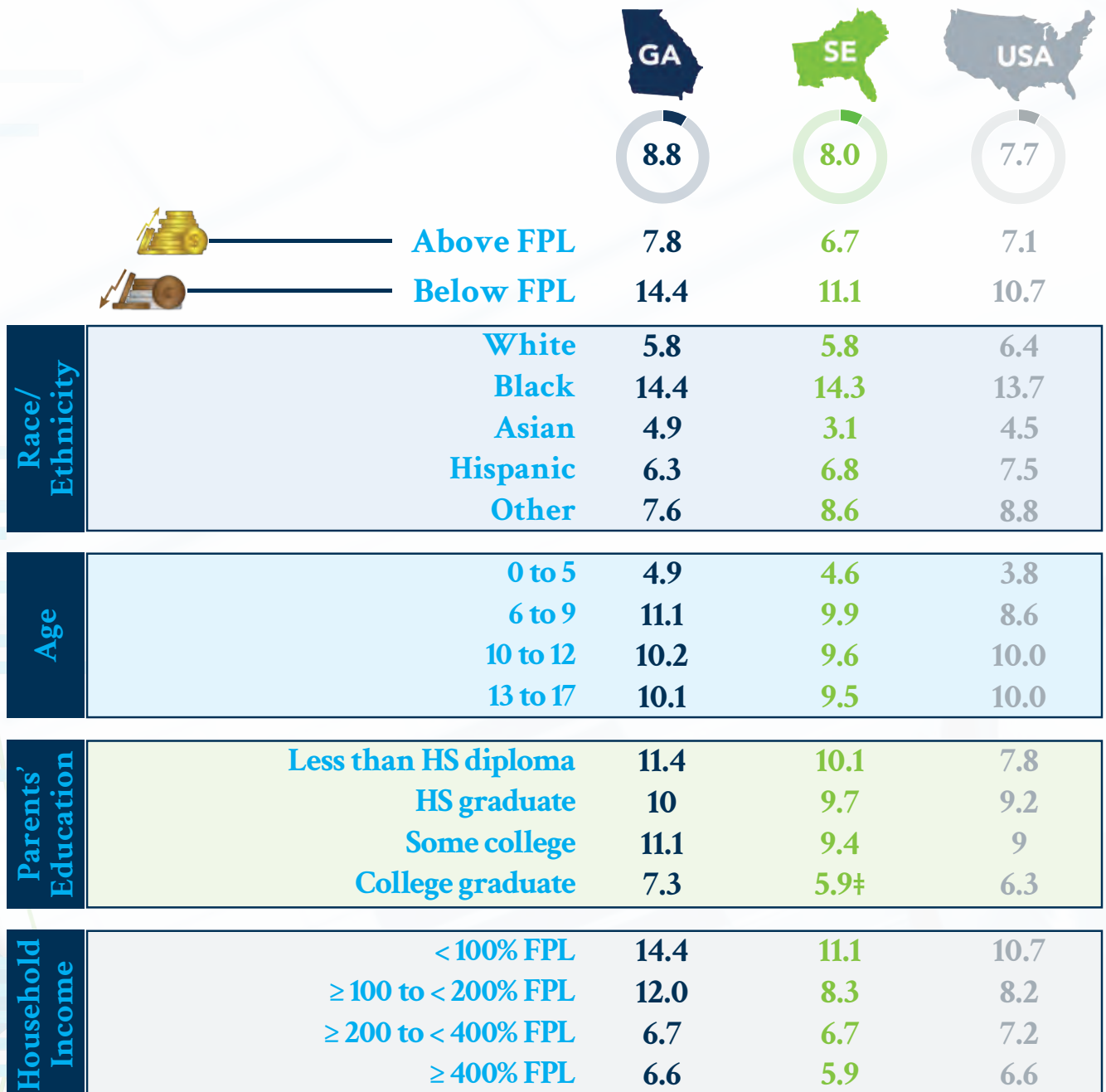
- Black and Hispanic Georgians are significantly less likely to receive a flu shot compared to their White counterparts.
- Flu vaccination rates among White, Black, and Hispanic Georgians are significantly lower than the respective national averages.
- Georgians with a college degree have a significantly lower rate of flu vaccination compared to the national and regional averages.

Child Health - Asthma

Children who have asthma at the time of the survey.

Highlights

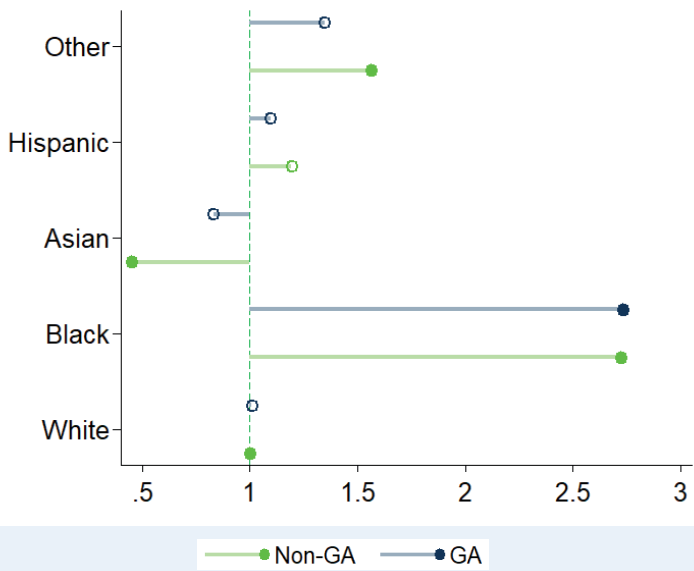
- Georgia ranks near the 75th percentile among states in the U.S.
- Asthma prevalence among Georgia children is comparable to national and regional averages across age groups and household income levels.
- Asthma prevalence among Georgia children of college-educated parents is comparable to the national average, but higher than the regional average.



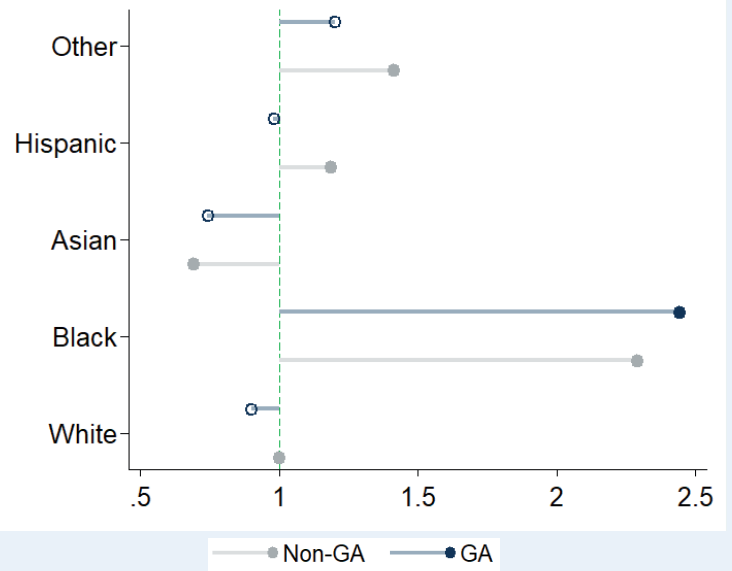
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

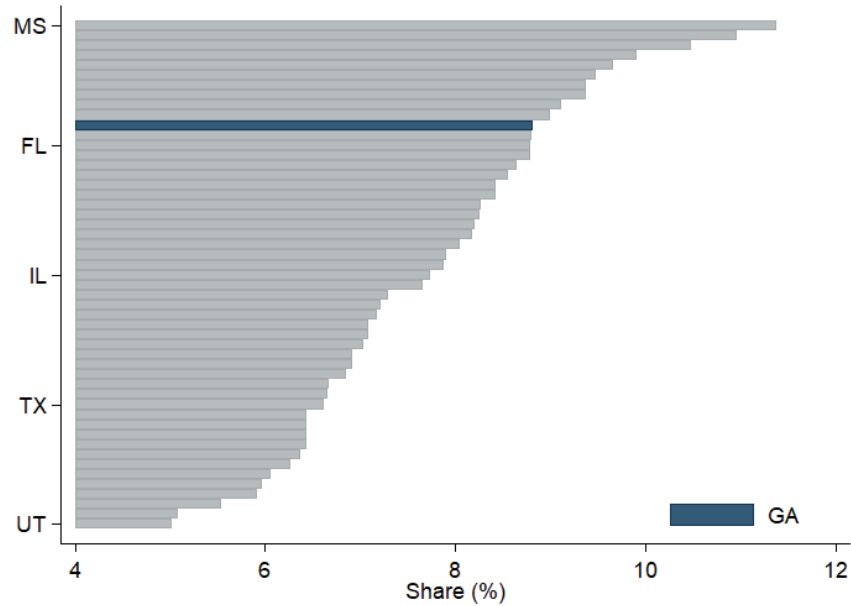
Southeast Disparities



U.S. Disparities



Distribution by State



Key Findings

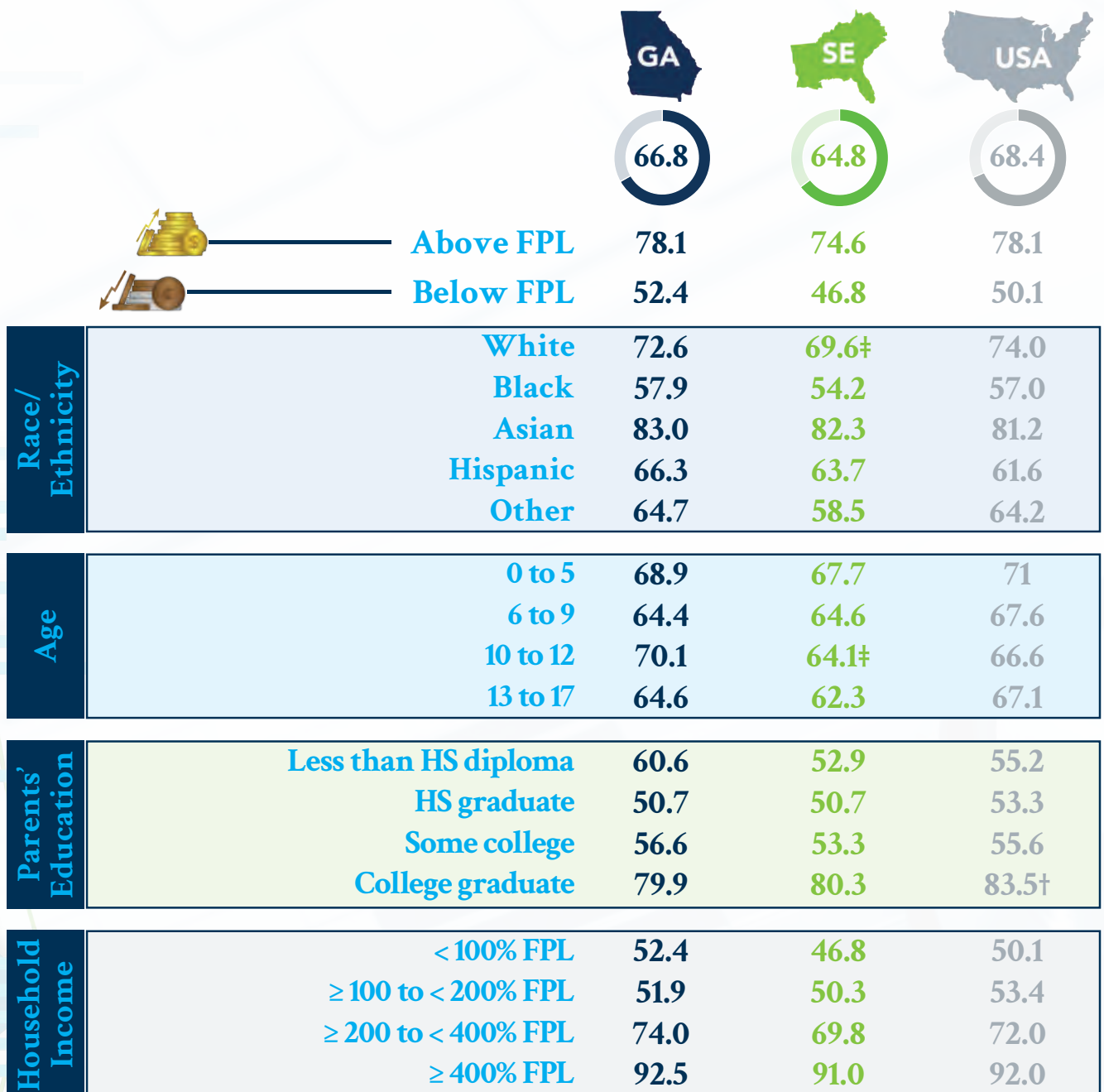
- Asthma prevalence is significantly higher among Black children compared to their White counterparts.
- Asthma prevalence among low-income Georgia children is significantly higher than their high-income counterparts.

Child Health - Nutrition

Children who have always accessed nutritious meals in past 12 months.

Highlights

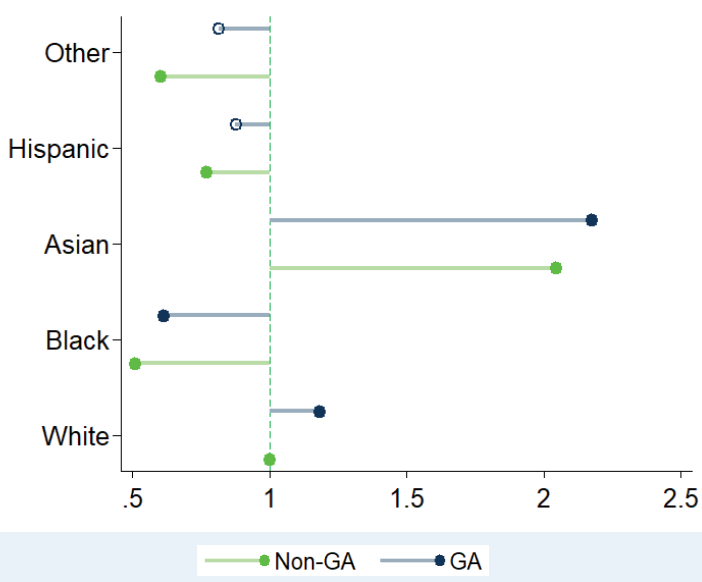
- Access to nutritious meals is significantly lower among low-income Georgia children than their high-income counterparts, and this pattern is similar at the national and regional levels.
- Compared to the national average, Georgia children of college-educated parents are less likely to have access to nutritious meals.



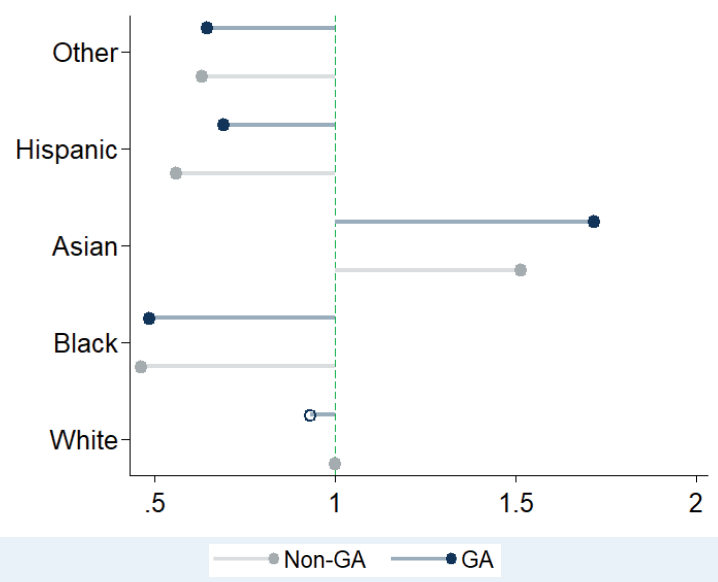
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

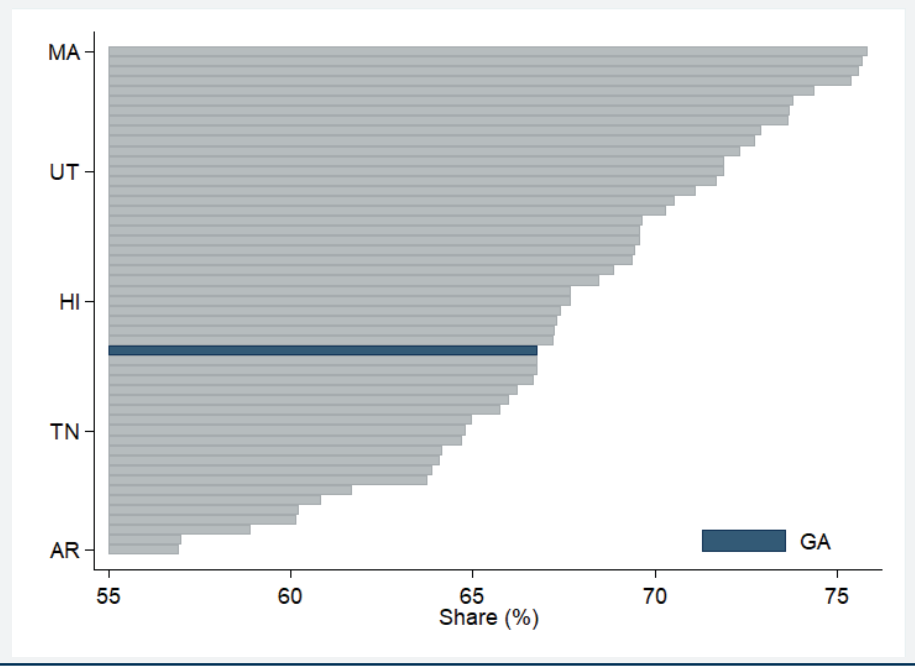
Southeast Disparities



U.S. Disparities



Distribution by State



Key Findings

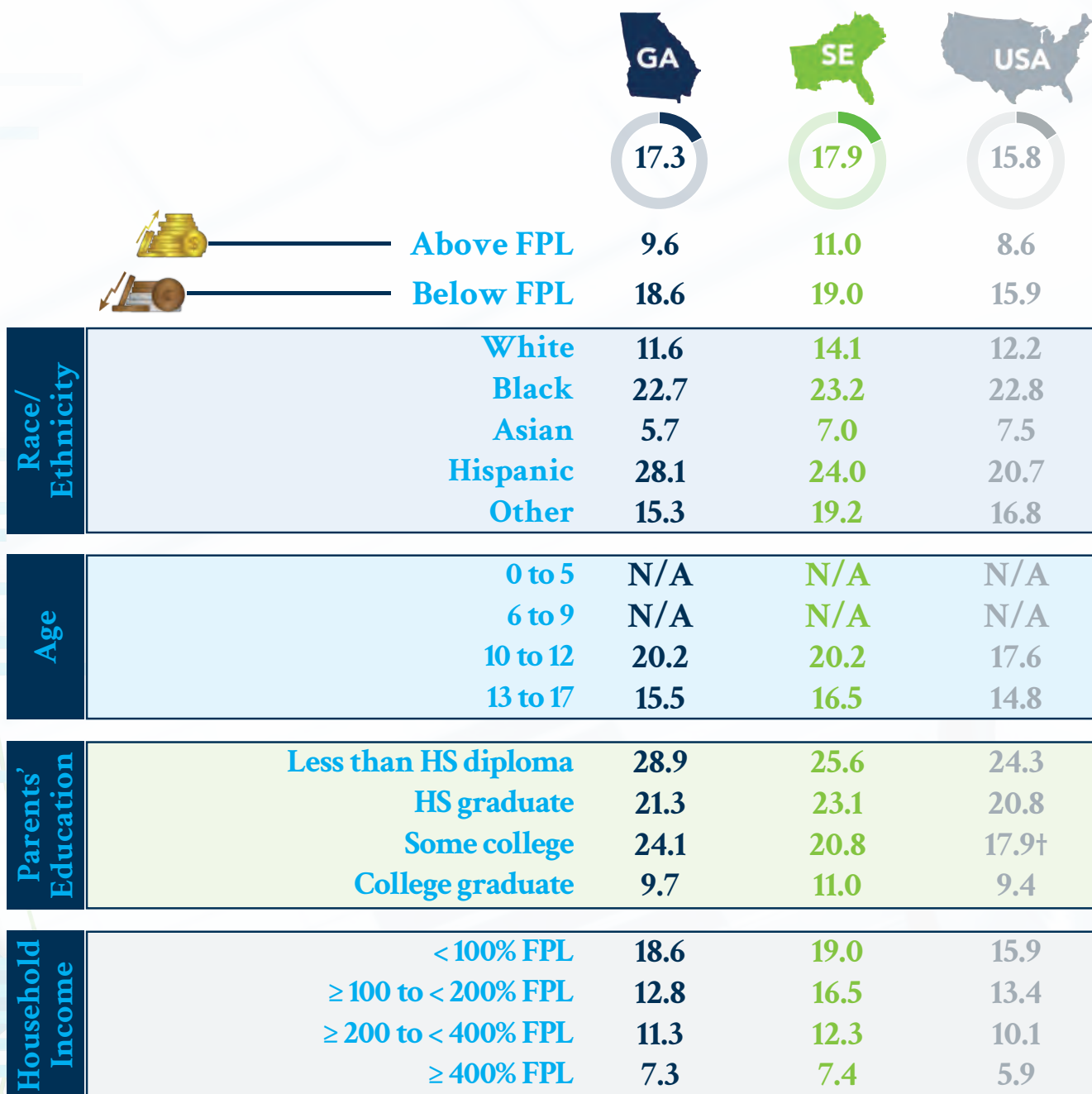
- Black Georgia children are less likely to have access to nutritious meals than White Georgia children.
- Asian children have the highest likelihood to always have access to nutritious meals.
- Children of parents with lower education attainment are less likely to have access to nutritious meals than children of college-educated parents.

Child Health - Obesity

BMI ≥ 95th percentile for children, aged 10 to 17 years.

Highlights

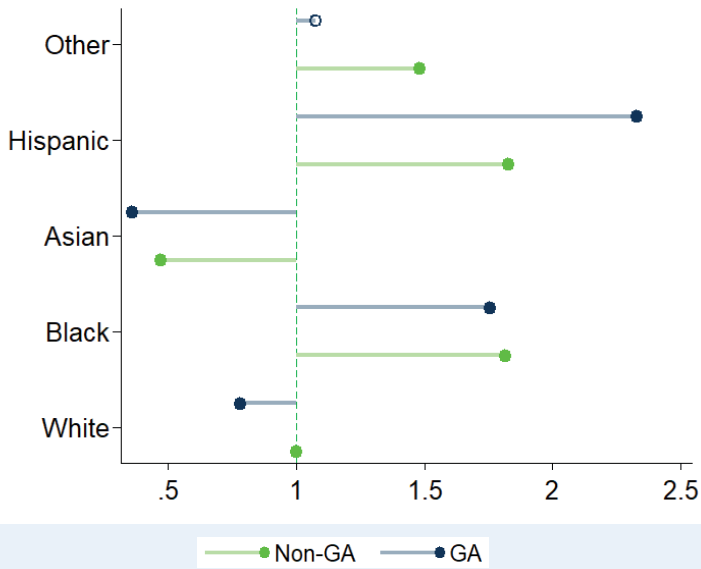
- Childhood obesity prevalence in Georgia is comparable to the national and regional averages.
- Obesity prevalence in Georgia is significantly higher among low-income children and this pattern is similar at the national and the regional levels.
- Black and Hispanic children in Georgia have a significantly higher likelihood of being obese than their White counterparts.



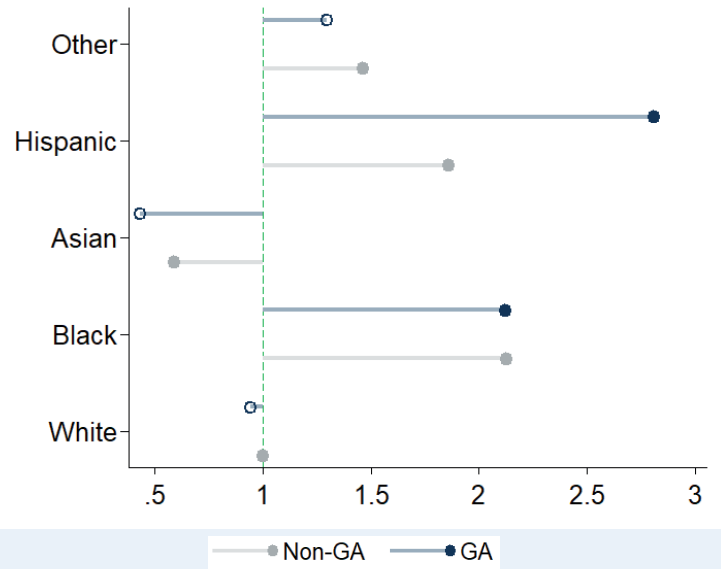
† US prevalence is statistically different from GA prevalence

‡ SE prevalence is statistically different from GA prevalence

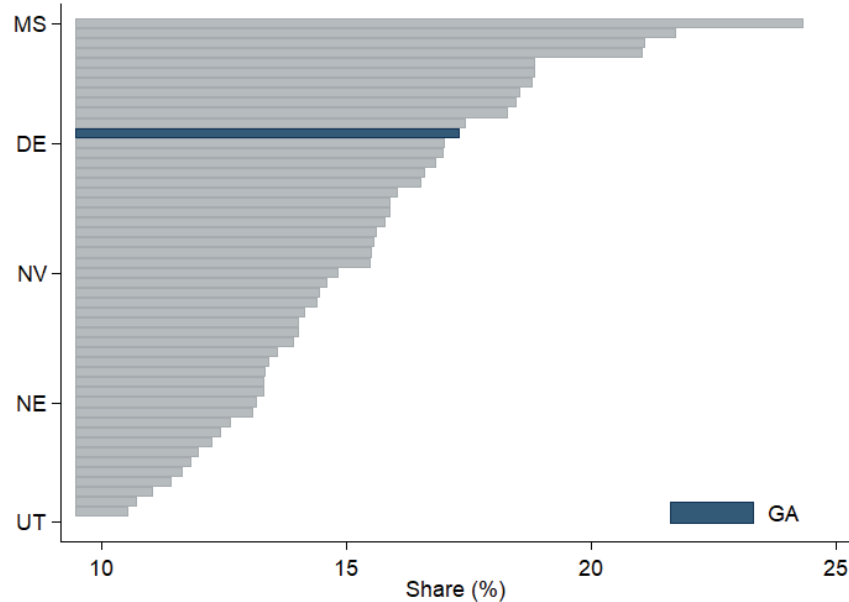
Southeast Disparities



U.S. Disparities



Distribution by State



Key Findings

- Obesity prevalence among White Georgia children is lower than the regional average.
- Prevalence of obesity in children decreases with parents' increased educational attainment and income.
- Obesity prevalence among Georgia children is comparable to the national and regional averages across parents' educational attainment and household income.

Technical Appendix

Sources of Data

Data for chronic conditions, noncommunicable diseases, behavioral health, communicable diseases, and preventive health, were obtained from the 2020 Behavioral Risk Factor Surveillance System (BRFSS)¹ for all topics except for hypertension and high cholesterol. Data for these two conditions are collected every other year, thus data from the 2019 BRFSS were used. Data for child health was obtained from the National Survey of Children's Health (NSCH)². Data was pooled from the 2016, 2017, 2018, 2019, and 2020 waves of the NSCH for analysis.

Sample size

Our sample size for respective topics are as follows:

	Topic	GA	Southeast	USA
1	High Cholesterol	7,272	86,470	405,293
2	Hypertension	7,321	87,152	408,263
3	Obesity	8,072	69,438	353,841
4	Arthritis	9,036	76,173	392,578
5	Asthma	9,054	76,348	393,477
6	Cancer	9,053	76,358	393,662
7	CVD	9,080	76,544	394,522
8	COPD	9,027	76,181	392,902
9	Diabetes	9,062	76,454	394,038
10	Alcohol - Heavy Drinking	8,222	70,963	364,460
11	Depressive Disorder	9,040	76,205	392,752
12	Tobacco - Smoking	8,431	72,695	373,875
13	HIV Risk Behaviors	7,935	41,068	357,220
14	Physically Active	9,068	76,458	394,153
15	Breast Cancer Screening	3,606	31,542	153,822
16	Colorectal Cancer Screening	5,746	50,801	252,756
17	Flu Vaccination	8,302	71,937	369,318
18	Child Health - Asthma	3,215	38,614	172,850
19	Child Health - Nutritious Meals	3,157	38,128	170,949
20	Child Health - Obesity	1,693	19,811	87,183

¹The BRFSS is a telephone survey that collects data across all 50 states as well as the District of Columbia and three U.S. territories. The data collection has been sponsored by the CDC National Center for Chronic Disease Prevention and Health Promotion; other CDC centers; and federal agencies, such as the Health Resources and Services Administration, Administration on Aging, Department of Veterans Affairs, and Substance Abuse and Mental Health Services Administration.

²The NSCH is administered in various formats across the nation and each of the 50 states plus the District of Columbia. The data collection is funded and directed by the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB).

Measures

Topic	Definition
-------	------------

Chronic Conditions

High Cholesterol	Ever told to have high blood cholesterol.
Hypertension	Ever told to have high blood pressure.
Obesity	Obesity is defined as Body Mass Index (BMI) ≥ 30.00 kg/m ² .

Noncommunicable Diseases

Arthritis	Ever told to have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.
Asthma	Have asthma at the time of the survey.
Cancer	Ever told to have any types of cancer other than skin cancer.
CVD	Ever told to have coronary heart disease, myocardial infarction, or stroke.
COPD	Ever told to have chronic obstructive pulmonary disease, emphysema, or chronic bronchitis.
Diabetes	Ever told to have diabetes.

Communicable Diseases

HIV Risk Behaviors	Have injected any drug other than those prescribed in the past year; or have been treated for a sexually transmitted disease in the past year; or have given or received money or drugs in exchange for sex in the past year.
--------------------	---

Behavioral Health

Alcohol - Heavy Drinking	Having more than 14 drinks per week for adult men, and more than 7 drinks per week for adult women.
Depressive disorder	Ever told to have a depressive disorder including depression, major depression, dysthymia, or minor depression.
Tobacco - Smoking	Smoked at least 100 cigarettes in entire life and smoke cigarettes every day or some days.

Preventive Behavior

Physically Active	Participated in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise during the past 30 days.
Breast Cancer Screening	Women aged 40+ had mammogram within past 2 years.
Colorectal Cancer Screening	Men and women aged 45+ had FOBT/FIT within 1 year, or s-DNA within 3 years, or sigmoidoscopy within 5 years, or sigmoidoscopy within 10 years and FOBT/FIT within 1 year, or colonoscopy within 10 years, or virtual colonoscopy within 5 years.
Flu Vaccination	Flu vaccine sprayed in nose or flu shot injected into arm during past 12 months.

Child Health

Childhood Asthma	Currently have asthma (told by doctor or other health care provider).
Childhood Nutrition	Always afford to eat good nutritious meals in past 12 months.
Childhood Obesity	Body mass index (BMI) ≥ 95 th percentile for children aged 10 to 17 years.

Technical Appendix (cont.)

Sociodemographic categories

Race/ethnicity: White, Black, and Asian refer to self-identified non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian respondents respectively. The “other” category includes American Indian, Native Hawaiian/Pacific Islander, multiracial, and other.

Residence: The BRFSS reports whether the respondent resides in an urban or a rural county. Urban refers to large central-, large fringe-, medium-, or small-metropolitan, and micropolitan counties. Rural refers to noncore counties. Rural/urban determination was not available in the NSCH data.

Household income: BRFSS reports household income in eight categories. The percentage of income in relation to the federal poverty level (FPL) is determined as follows: Suppose a respondent’s household income is reported as \$20,000 to \$24,999. The midpoint of this category, \$22,500, was considered as the imputed income level³. The family size was determined by adding the number of children and number of adults in the household. For a family size of four (for example, two children and two adults), the federal poverty level threshold in 2020 was \$26,200 (except for Alaska and Hawaii). The income to poverty level ratio for this household would be $(\$22,500/\$26,200) \times 100\%$ or 85.88%.

Prevalence estimation

Prevalence rates were estimated using complex survey weights of the BRFSS and NSCH. The differences across Georgia and rest of U.S. or rest of the Southeast region were assessed using survey-weight adjusted Wald tests. Level of significance was set at the 10% level. The Southeast region consists of the following 12 states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Prevalence trend

Three-year moving average estimates were used to produce trend graphs for their respective conditions. For example, the data point for 2016 in the trend graph is the average of prevalence rates in 2014, 2015, and 2016. Similarly, the data point for 2020 in the trend graph is the average of prevalence rates in 2018, 2019, and 2020. For hypertension and high cholesterol, for which data are available every other year, the prevalence rate for the missing year was imputed by taking the average of the preceding and succeeding years. For example, the prevalence rate of 2018 was imputed by averaging the prevalence rates of 2017 and 2019.

Disparities in prevalence

Disparities in prevalence rates were assessed across four domains: sex, residence, race/ethnicity, and income. For each domain, disparities were assessed separately at the national and regional level. Disparity is defined as differential odds in favor of certain conditions for a sociodemographic category compared to the odds of the respective base/reference category. Odds ratios were obtained by estimating logistic regression models. The reference category and other categories for each domain are as follows:

³Hest R. Four Methods for Calculating Income as a Percent of the Federal Poverty Guideline (FPG) in the Behavioral Risk Factor Surveillance System (BRFSS). State Health Access Data Assistance Center. 2019 May.

Domain	Reference category	Other categories
Sex	non-GA male	i) GA male, ii) non-GA female, iii) GA female
Residence	non-GA urban	i) GA urban, ii) non-GA rural, iii) GA rural
Race/Ethnicity	non-GA White	i) GA White, ii) non-GA Black, iii) GA Black, iv) non-GA Asian, v) GA Asian, vi) non-GA Hispanic, vii) GA Hispanic, viii) non-GA other, ix) GA other
Income	non-GA household income \geq 400% FPL	i) GA household income \geq 400% FPL, ii) non-GA household income \geq 200% to $<$ 400% FPL, iii) GA household income \geq 200% to $<$ 400% FPL, iv) non-GA household income \geq 100% to $<$ 200% FPL, v) GA household income \geq 100% to $<$ 200% FPL, vi) non-GA household income $<$ 100% FPL, vii) GA household income $<$ 100% FPL

Limitations

The conditions were self-reported in the BRFSS and NSCH. The 2020 waves of the surveys were conducted amid the COVID-19 pandemic, and hence, the estimates could differ from those in pre-pandemic years.

Share your feedback on this issue of...

HEALTHY GEORGIA

Our State of Public Health



Scan this code to share your thoughts.
Thank you!



AUGUSTA UNIVERSITY
Institute of Public
and Preventive Health

706-721-1104
ipph@augusta.edu
augusta.edu/institutes/ipph

 @AUGIPPH

