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COVID-19 in Florida: A Breakdown of Disparities in the Black Population June & July 2020

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FLORIDA STATE UNIVERSITY

**COVID-19
IN FLORIDA: A
BREAKDOWN OF
DISPARITIES IN THE
BLACK POPULATION
BY COUNTY FOR
JUNE & JULY 2020**

**Cameron C. Beatty, James E. Wright II,
Dongfang Gaozhao, Erica R. Wiborg,
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**Funded by: Florida State University's
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**A Research Brief
August 2020**

WHERE WE ARE NOW

INTRODUCTION

COVID-19 has been the center of a global pandemic, statewide shutdowns, quarantines, and social distancing in the U.S. since mid-March of 2020. In addition, COVID-19 has created a new normal for the lives of many in both the U.S. and internationally. This new normal consists of requirements of wearing facial masks, social distancing, and fever requirements in public and private spaces. As the State of Florida reopened May 18th, hospital rates and testing centers reported significant increases in positive COVID-19 rates by early June. Research displays Florida as becoming one of the critical states categorized as the “New Epicenter” (Feuer, 2020) as well as in surpassing records across the nation in positive COVID-19 infected rates in July 2020 (Maxouris & Yan, 2020).

From early June through mid-July, Florida ranks the highest in its number of COVID-19 cases in a single day than any other state across the U.S. (Maxouris & Yan, 2020). Moreover, hospitals reaching their maximum capacities in many South and Central Florida counties caused heightened pressures for health care employees (Chavez & Holcombe, 2020). Currently, the State of Florida remains open and functioning in Phase 2 of its reopening process. If proper precaution procedures are not issued, Florida’s COVID-19 rates could remain spiraling. This brief will examine the impacts COVID-19 has had on FL residents across counties, racial and ethnic demographics, and the FL school population. We ran a multiple linear regression to determine our tested correlations.

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LITERATURE REVIEW

From a public health perspective, racism in the United States affects the health of Communities of Color (Jee-Lyn Garcia & Sharif, 2015). More specifically, Black people as a group compared to white people have an overall shorter life expectancy, higher rates of obesity, hypertension, kidney disease, diabetes, and cardiovascular disease (Jee-Lyn Garcia & Sharif, 2015; Krishnan, Ogunwole, & Cooper, 2020; Morgan & Reid, 2020; Yancy, 2020). However, without a historical analysis of health disparities for minoritized groups, including racially minoritized populations, these rates can be explained on an individual level, rather than the outcome of structural racism (Krishnan et al., 2020).

The 1918 influenza and the 2009 H1N1 pandemic are two historical epidemic diseases that can provide insight for our current COVID-19 reality in the United States (Bibbins-Domingo, 2020; Krishnan et al., 2020; Lin et al., 2014; Morgan & Reid, 2020). Krishnan and colleagues (2020) detailed the historical connections of the 1918 influenza, including minimal documentation of racial or ethnic background. Of the studies conducted, they found the Black population had lower influenza numbers, but higher case fatalities.

White public figures manipulated these studies to perpetuate a Black immunity myth, resulting in a lack of governmental response and health care for Black Americans (Krishnan et al., 2020). Research including racial and ethnic demographic data was also limited during the 2009 H1N1 pandemic, which is problematic considering individuals who hold minoritized racial or ethnic identities have a higher risk of exposure because of their overrepresentation in low-wage, essential work roles, including healthcare (Bibbins-Domingo, 2020). Although the Centers for Disease Control and Prevention (CDC) attempted to develop pandemic influenza interventions for racially minoritized communities (Hutchins et al., 2009), their plans for control and mitigation of the 2017 influenza omitted strategies to limit or eliminate racial disparities (Morgan & Reid, 2020). Distrust in the health care system, as a result of the governmental inadequacy or delayed action in addressing disparate health outcomes, is maintained during the COVID-19 pandemic as many scholars in the medical, health promotion, and public health field call for addressing the disproportionate rate of infections and death amongst African American or Black individuals in the United States (Laurencin & McClinton, 2020; McLaren, 2020; Samuels-Staple, 2020; Smith & Judd, 2020; Yancy, 2020).

LITERATURE REVIEW

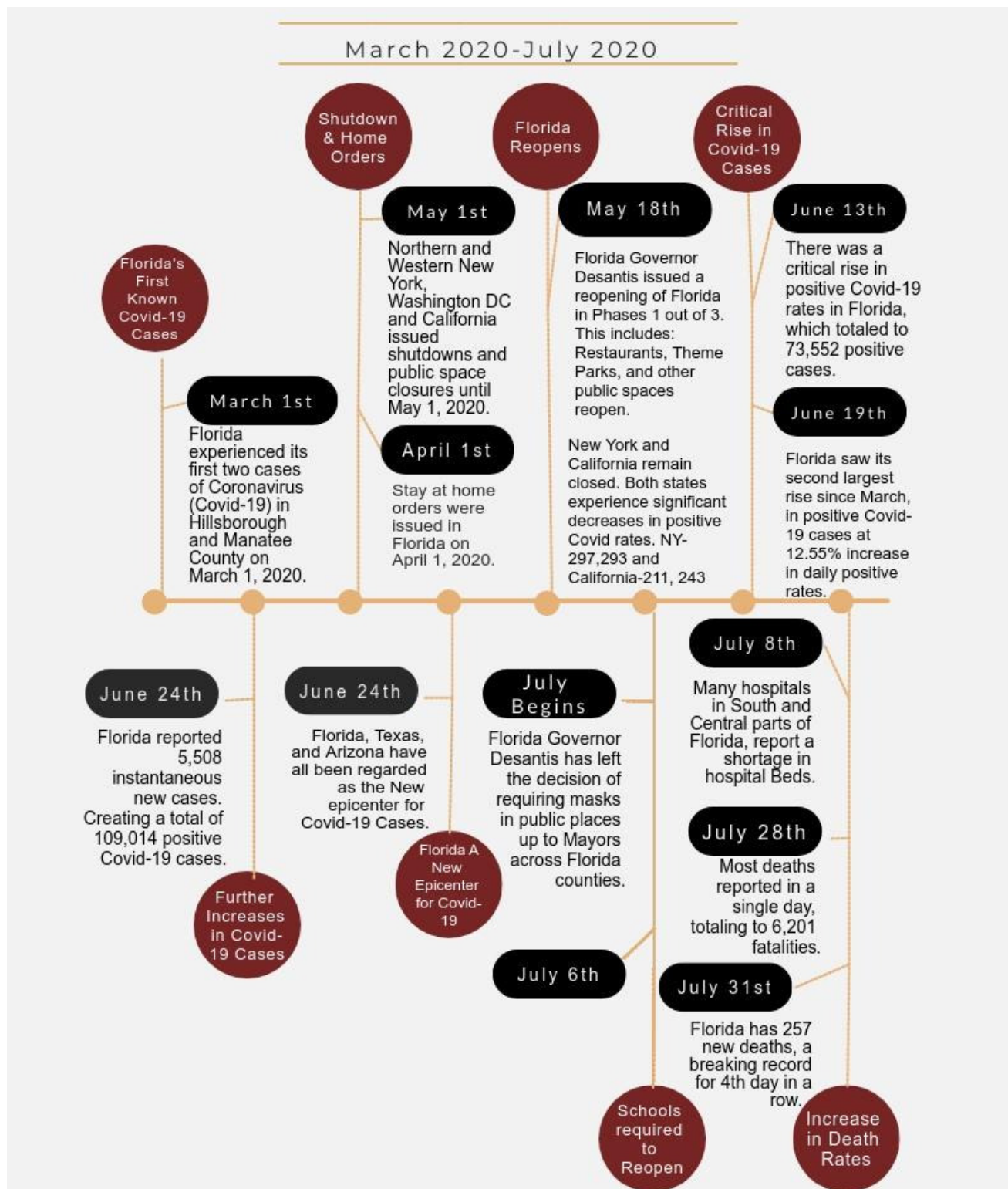
CONTINUED

Yancy (2020) referred to a Washington Post article on April 7 which cited Black Americans are contracting the coronavirus at higher rates and are more likely to die from it because of various social determinants. Laurencin and McClinton (2020) conducted one of the first COVID-19 studies analyzing racial and ethnic backgrounds and found a higher rate of infection and death in the Black population in Connecticut in comparison to their population percentage. Through our review, most states were not reporting demographic data or were reporting numbers for the entire state, rather than county-level data. In Florida, Samuels-Staple with the Florida Health Justice Project, released an initial report in May on the racial disparities of COVID-19.

The report states that testing occurs in Florida counties with higher-income residents, resulting in disparities among rural counties. In addition, Black residents had higher rates of hospitalization and death from COVID-19 compared to all other races in Broward and Miami-Dade (Samuels-Staple, 2020). Further, Florida has a higher rate of uninsured individuals in the state compared to the national average and has not expanded Medicaid, complicating healthcare access (Samuels-Staple, 2020). Unfortunately, in Florida, we have already witnessed outcomes of underestimating the pandemic's effects but can now focus on mitigation strategies to limit new waves of the disease (Krishnan et al., 2020). In the reactionary stage of a pandemic, sociohistorical considerations must be included in local, state, and federal interventions for vaccination, treatment access, communication, funding, and further reparations to address systemic health-vulnerabilities (Morgan & Reid, 2020).



FLORIDA'S COVID-19 TIMELINE



OUR CURRENT STATE

COUNTY DATA

We collected COVID-19 data from [Florida Department of Health Dashboard](#) to understand COVID-19 across the 67 counties in Florida on June 15 and July 20, 2020; including the number of tests, positive residents, hospitalization, deaths, and demographic information of those positive cases. In addition, we gathered counties demographic and socioeconomic data (e.g., percentage of racial backgrounds and medium household incomes) from the [U.S. Census Bureau 2018 ACS 5-Year Data Profile](#). As we can see from **Figure 1 and Figure 2**, Black residents in 48 counties in Florida were disproportionately affected by COVID-19 to a greater extent in June. In July there were 39. Each county is listed below through a gold column representing the percentages of positive Black residents out of total positive residents. The garnet line represents the county percentages of Black residents. Columns over the garnet line show the disproportionality of Black residents and COVID-19 cases.

Figure 1: June 15

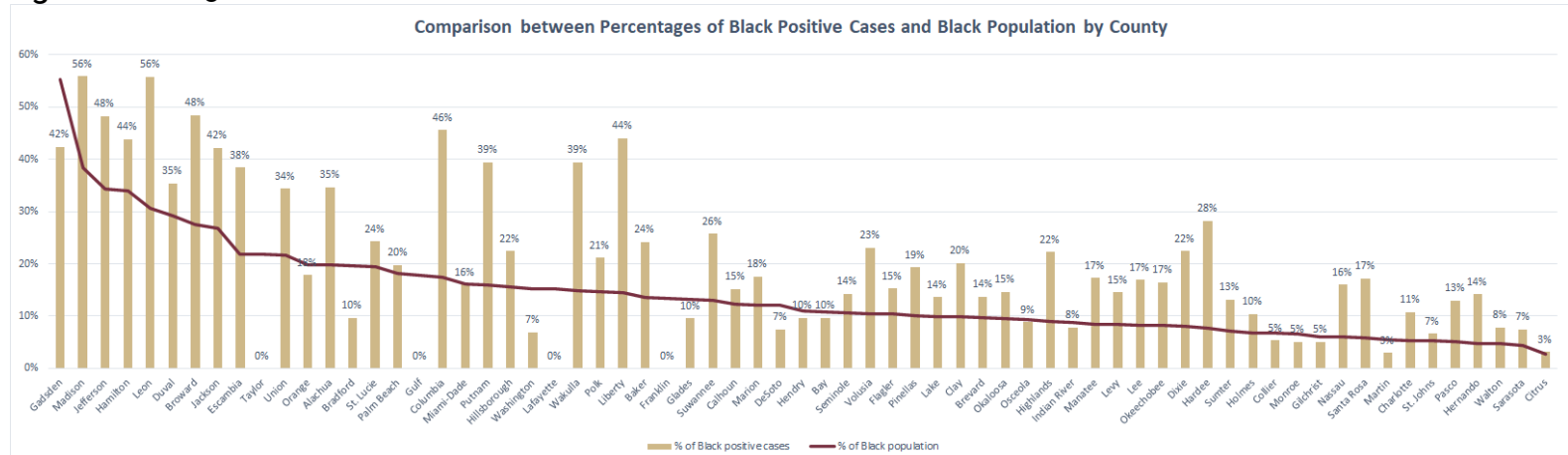
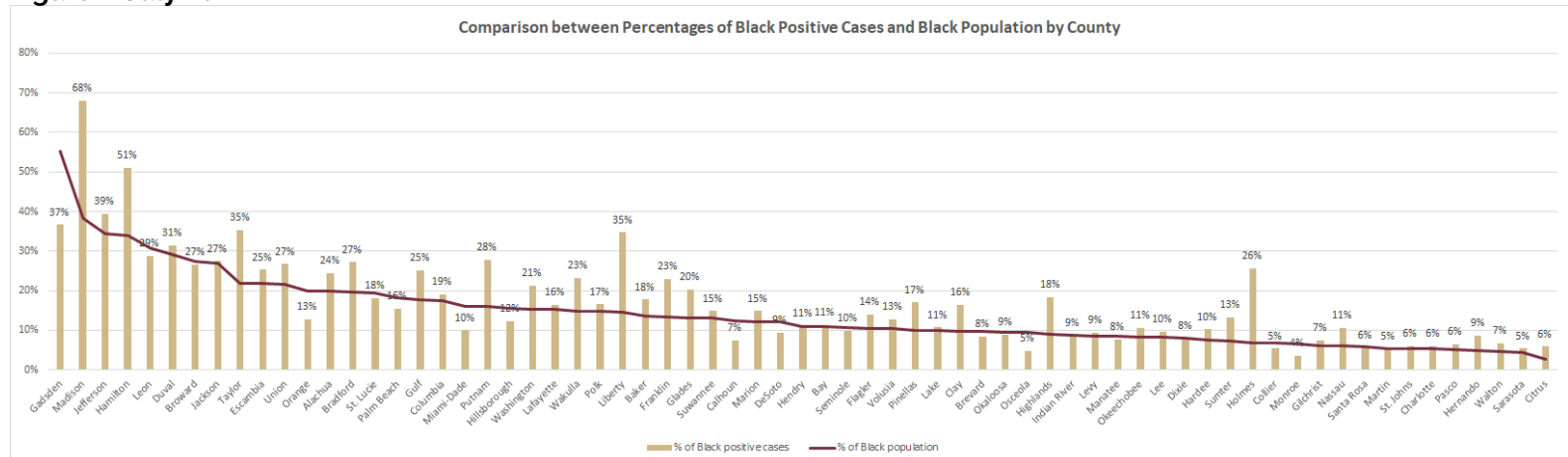


Figure 2: July 20



OUR CURRENT STATE

COUNTY DATA

As we can see from **Figures 3**, on June 15, 2020, among the top 10 counties in which Black residents were most disproportionately affected at the time, northern counties, including Liberty, Santa Rosa, Dixie, Nassau, Wakulla, Columbia, and Putnam, constituted 70% while the rest were in the State's central region. **Figure 4** shows by July 20, 2020, there was a shift to 5 of the top 10 counties in which Black residents were most disproportionately affected were located in central, 3 in northern, and 2 in southern Florida. Three counties consistently trended in the top 10 counties through the summer: Hardee (rural), Santa Rosa, and Nassau (rural).

Figure 3: June 15

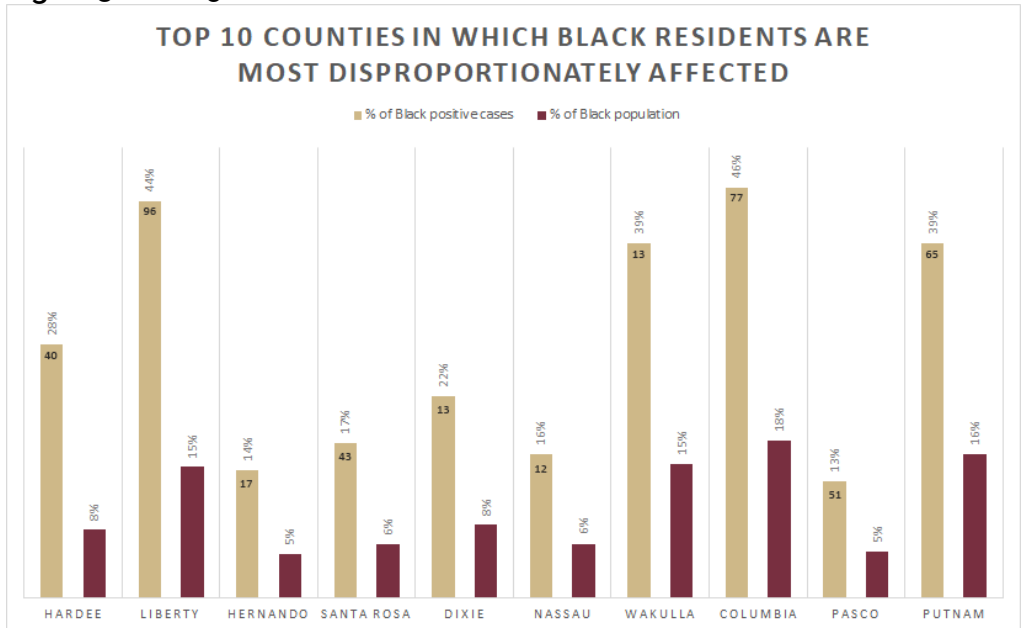
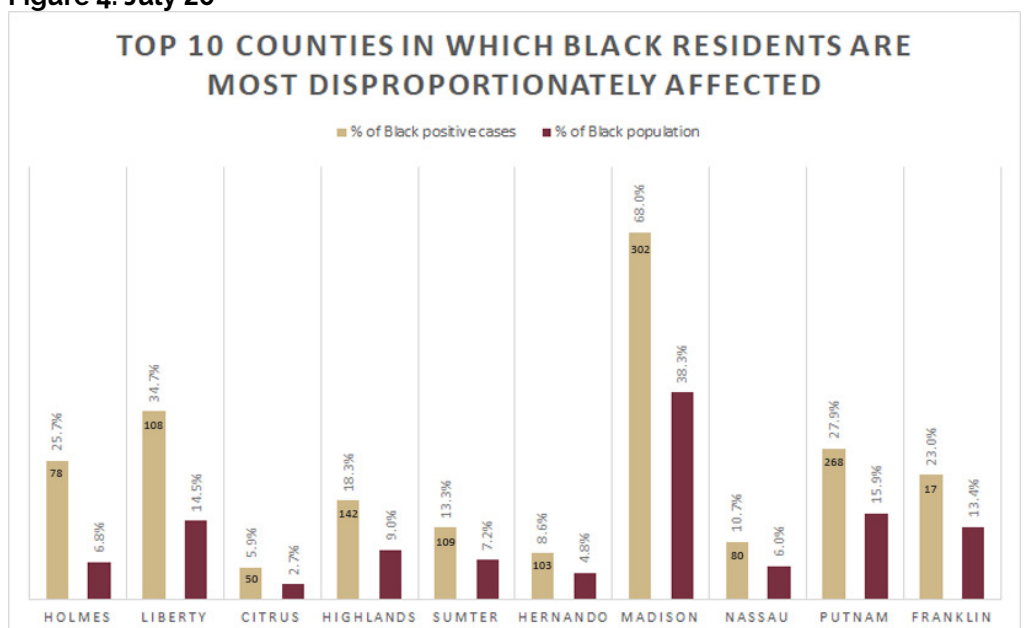


Figure 4: July 20



OUR CURRENT STATE

COUNTY DATA

Figure 5: June 15

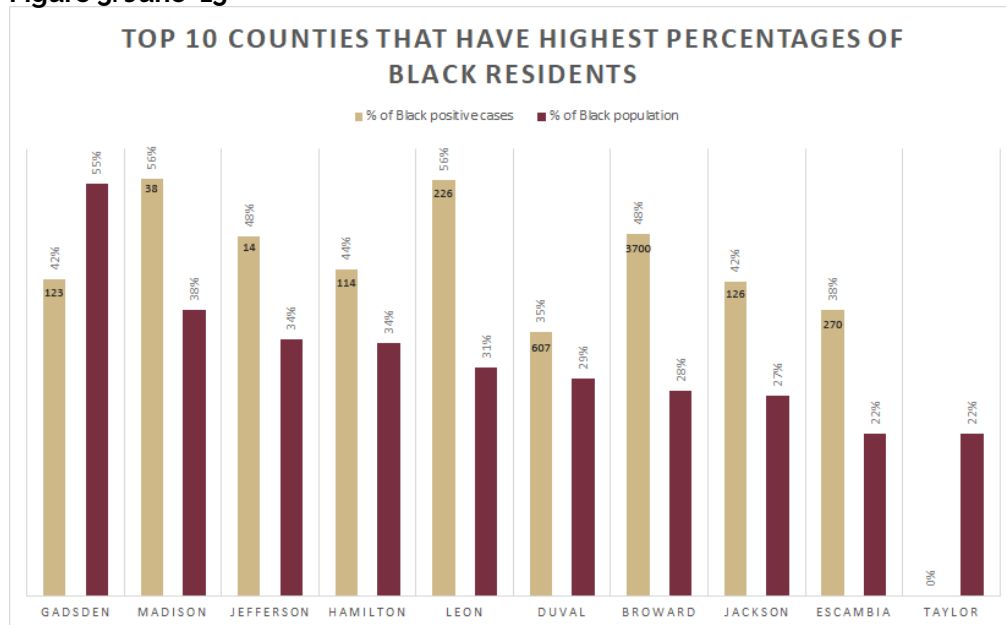
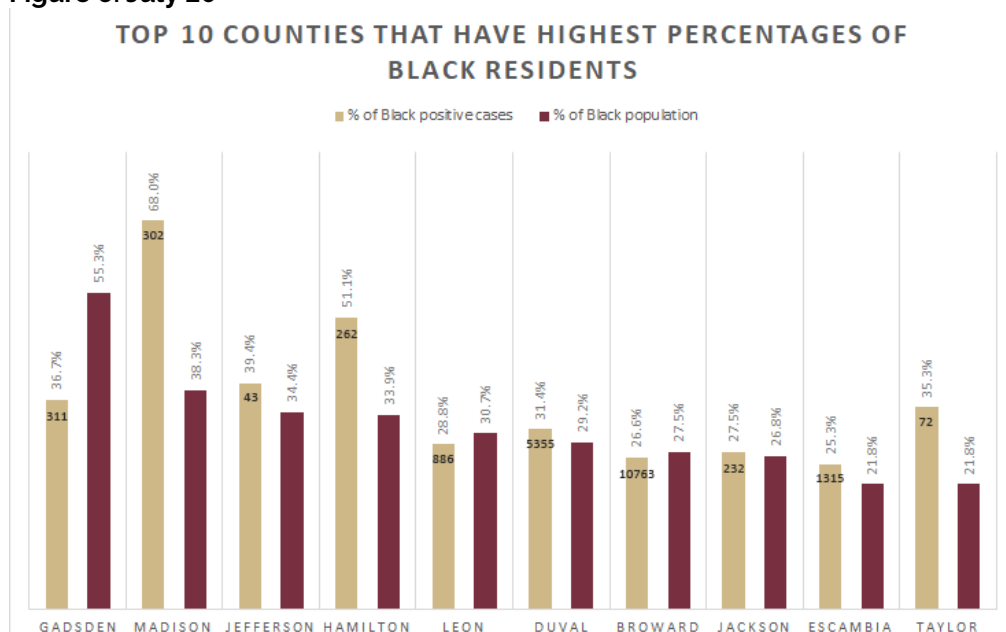


Figure 6: July 20



Figures 5 and 6 highlights that on June 15, 2020, 9 out of 10 counties with the highest percentages of Black residents are located in northern Florida, except for Broward County (located in southern Florida).

Figure 6 shows that by July 20, 2020, Madison, Hamilton, Leon, Duval, Jackson, and Escambia, all had a decrease in Black positive cases since the month of June. Broward county was consistently disproportionate from June to July, while Taylor county reported 0 Black positive cases in June and then spiked up to 13% by July (72 cases). Jefferson county also saw a spike from 48% (14 cases) in June to 68% (43 cases) in July of Black positive cases. Gadsden county decreased from 42% to 10% of Black positive cases compared to the total percentage of cases, but the total number of Black positive cases increased from 123 to 311 total cases.

SUMMARY & IMPLICATIONS

- This data highlights positive cases, but positive cases lead to hospitalizations which in turn lead to deaths.
- Similarly to what was found in the county by county data for this report, the [Florida Health Justice Project](#) found that Florida's Black population in many counties are experiencing disproportionately high rates of cases, hospitalizations, severe complications, and deaths associated with COVID-19. In the two counties with the highest number of confirmed cases in June 2020 (Broward and Miami-Dade), Blacks were hospitalized and died at higher rates compared to all other races; mirroring reports of racial disparities from other states.
- This report highlights the Florida Department of Health data also reveals disparities in testing, particularly among rural counties, and those with lower median incomes, but the testing that was completed in June and July 2020 had disproportionate positive Black COVID-19 cases.
- Five rural counties (Columbia, Dixie, Liberty, Putnam, and Wakulla) shifted from the top 10 most disproportionate Black positive cases from June to July, but their overall cases still increased as the number of positive cases increased across the state.
- Rural counties are disproportionately impacted, even with a low lower number of total cases, these inequities have implications for health and social policy at the state and local county levels.



POLICY & RESEARCH RECOMMENDATIONS

- Florida must address long-standing systemic and institutional racism. The state can do so over the long-term by investing in Black communities that have been historically and economically disenfranchised, specifically Black rural communities in northern and central Florida (Samuels-Staple, 2020).
- As the COVID-19 pandemic continues, Florida must develop a culturally relevant health services campaign and invest in a state healthcare system that serves Black communities in order to effectively address statewide inequities.
- The Florida Department of Health must complete a racial bias and disparities audit to consider how healthcare decisions are clouded by racism and bias. Doing so is essential to effectively addressing the injustices of healthcare disparities and creating a state that is more resilient to future health crises.
- Rural counties need a pandemic plan that is centralized at the state level that centers how Black residents are consistently disproportionately represented in health inequities across the state and nation.
- Appendix B shows the OLS results and the statistical significance of counties with the highest racially minoritized student population with positive COVID-19 cases, hospitalizations, and deaths. For future research, data from these counties needs further analysis when considering school district recommendations for not only handling the pandemic, but addressing county racial inequities and how those inequities disproportionately affect Black students.

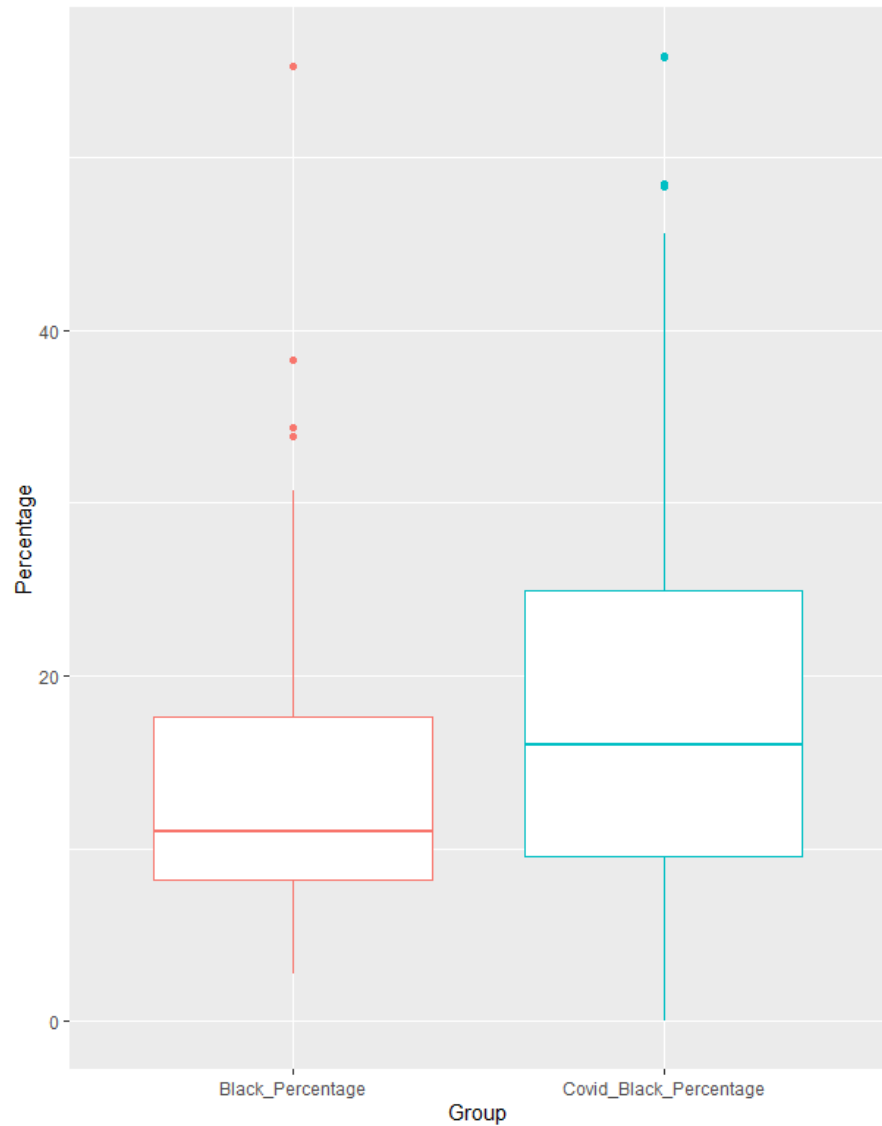


APPENDIX A

Paired t-test

We performed a paired t-test comparing the percentages of the Black population and of Black COVID-19 cases for each county. **Figure** is a box plot comparing the percentages of Black population and of Black positive cases for each county. The t test result suggests that Black residents are disproportionately affected by the virus – the percentages of Black positive cases is about 5.73% more than their shares of the county population. This result is significant at .001 level.

Figure 7: June 15
% of Black Population and % of Black COVID cases for Each County



APPENDIX B

OLS Model

We also built OLS models to analyze the relations of COVID-19 situation and counties' percentages of Black population, region, racially minoritized students, and median household incomes. The results are reported in **Table 1**

Table 1: OLS Results

	<i>Dependent variable:</i>			
	Covid Tests	Positive Residents	Hospitalization	Deaths
Black Percentage	Positive***	Positive	Positive	Positive
North Florida (compared to South Florida)	Negative	Negative***	Negative**	Negative***
Central Florida (compared to South Florida)	Negative**	Negative**	Negative***	Negative***
Racially Minoritized Students	Positive***	Positive***	Positive***	Positive***
Medium Household Incomes	Positive***	Positive	Positive	Positive
Constant	Negative*	Negative	Negative	Negative
Observations	67	67	67	67
R ²	0.597	0.577	0.593	0.579
Adjusted R ²	0.564	0.542	0.559	0.545
Residual Std. Error (df = 61)	21,547.060	1,773.481	297.862	74.219
F Statistic (df = 5; 61)	18.066***	16.644***	17.742***	16.786***

Note: *p<0.1; **p<0.05; ***p<0.01

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