



## **CCADMW Webinar: COVID-19 and the Social Determinants of Health Disparities in Older Adults**

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SmartState Endowed Chair, South Carolina State University



Hollings Cancer Center

An NCI-Designated Cancer Center

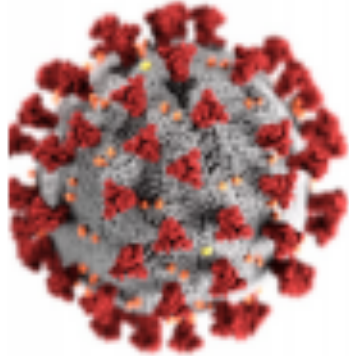
# Definition of Health Disparities

"Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States." National Institutes of Health

# Definition of Healthcare Disparities

**Healthcare disparities** refer to differences in access to or availability of facilities and services. **Health status disparities** refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically **defined** population groups.

# What Is COVID-19?



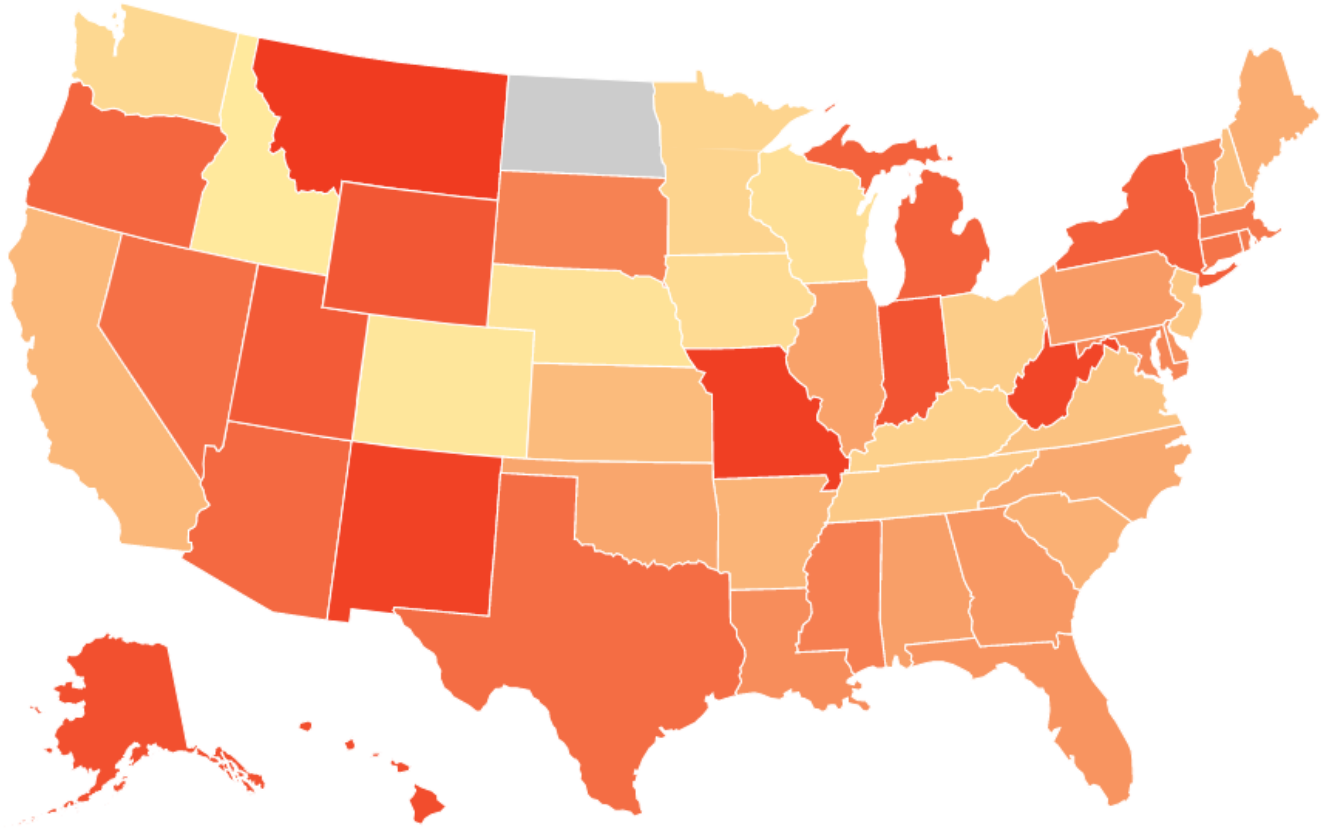
## Know about COVID-19

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- Coronavirus (COVID-19) is an illness caused by a virus that can spread from person to person.
- The virus that causes COVID-19 is a new coronavirus that has spread throughout the world.
- COVID-19 symptoms can range from mild (or no symptoms) to severe illness.



# Racial Disparities in COVID-19 Cases, As of November 22, 2020

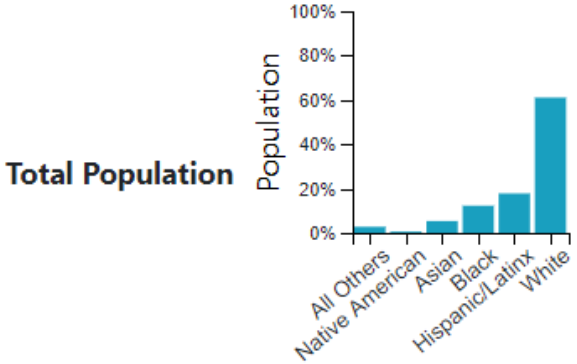


The redder the state, the greater the COVID-19 racial disparity. Source: <https://belonging.berkeley.edu/covid-19-race>

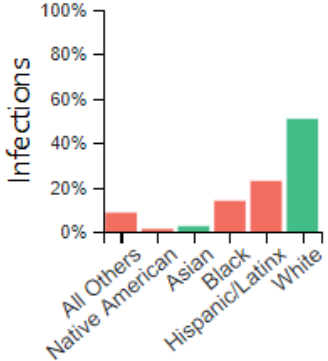
- Predominantly Black U.S. communities carry the burden of the country's COVID-19 cases and deaths.

Source: <https://www.esri.com/arcgis-blog/products/arcgis-living-atlas/health/new-data-collection-available-covid-19-health-racial-and-economic-equity/>

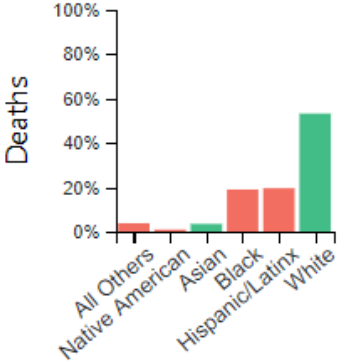
# US Data As of November 22, 2020



**COVID-19 Infections** by race



**Deaths** from COVID-19 by race



# COVID by Race/Ethnicity

Rate ratios compared to White, Non-Hispanic Persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
CASES <sup>1</sup>	2.8x higher	1.1x higher	2.6x higher	2.8x higher
HOSPITALIZATION <sup>2</sup>	5.3x higher	1.3x higher	4.7x higher	4.6x higher
DEATH <sup>3</sup>	1.4x higher	No Increase	2.1x higher	1.1x higher

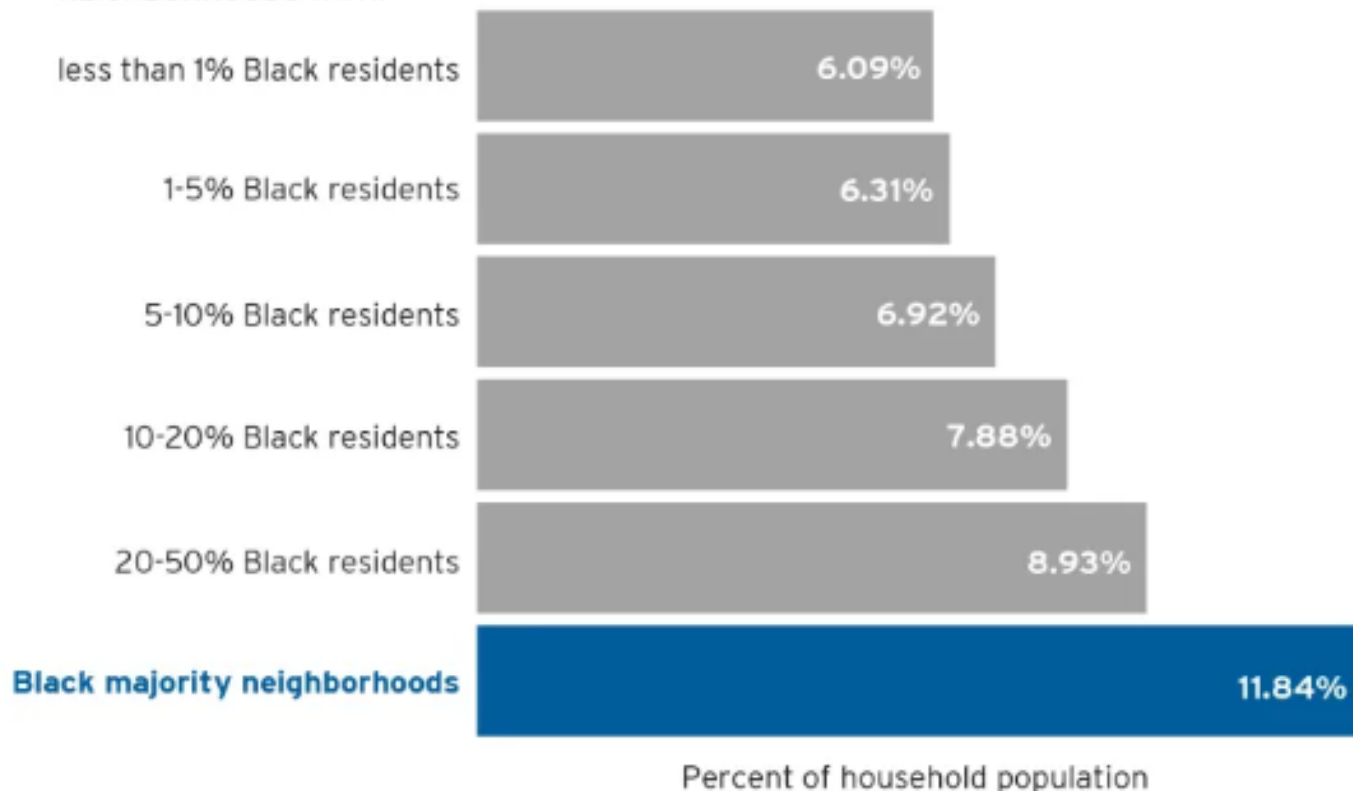
Race and ethnicity are risk markers for other underlying conditions that impact health — including socioeconomic status, access to health care, and increased exposure to the virus due to occupation (e.g., frontline, essential, and critical infrastructure workers).

[cdc.gov/coronavirus](https://cdc.gov/coronavirus) — as of 10/30/20

## Black majority neighborhoods have higher rates of multigenerational family cohabitation

Percent of household population that are extended family by neighborhood type

NEIGHBORHOODS WITH:



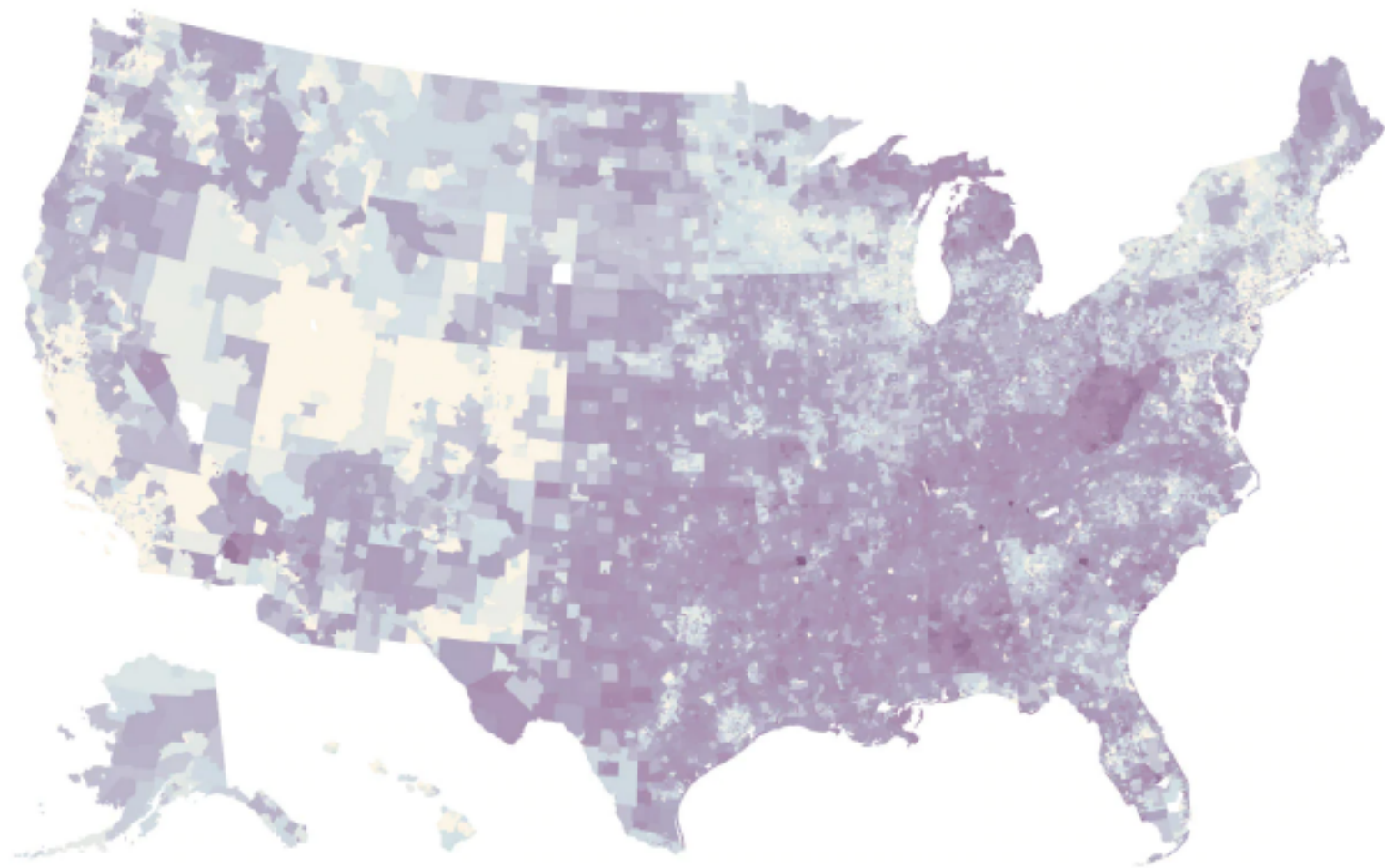
Source: Brookings analysis of 2014-2018 ACS 5-year estimate

**B** Metropolitan Policy Program  
at BROOKINGS



## High-risk health conditions above national rates

◀ Less risk  More risk ▶



# South Carolina: FAST FACTS

COMMUNITY OUTREACH AND ENGAGEMENT

## Population (SC / US)

2019 Population 5,148,714 / 328,239,523

## Gender (SC / US)

Male 48.5% / 49.2%

Female 51.5% / 50.8%

## Rural (SC / US)

33.7% / 19.3%

75% of SC counties include rural areas  
(SC has 46 counties)

## Race (SC / US)

White 68.5% / 76.5%

Black 27.1% / 13.4%

Asian 1.8% / 5.9%

Am.Ind./Al.Nat. 0.5% / 1.3%

Other 1.9% / 2.7%

*(Nat. Haw./Oth./Pac. Isl./Two or More Races)*

## Ethnicity (SC / US)

Hispanic/Latino 5.8% / 18.3%

## Education (SC / US)

High School or > 87.1% (US = 87.7%)

Bachelor's or > 27.4% (US = 31.5%)

## Income (SC / US)

Per Capita \$27,986 / \$32,621

Median HH \$51,015 / \$60,293

## SC

Median HH White \$54,000

Median HH Black \$31,000

Median HH Hispanic \$38,000

## Below Poverty Level (SC / US)

Individuals 15.3% / 11.8%

# Rural Coastal South Carolina Has Unique Needs and Opportunities



## Rural Residents

### Potential barriers to care:

- Transportation issues
- Distance to specialty care sites
- Access to cancer clinical trials

### Unique Sea Island population:

- Primarily descendants of enslaved Africans from Sierra Leone
- Genetically and culturally distinct due to previous geographic isolation and low rates of genetic admixture

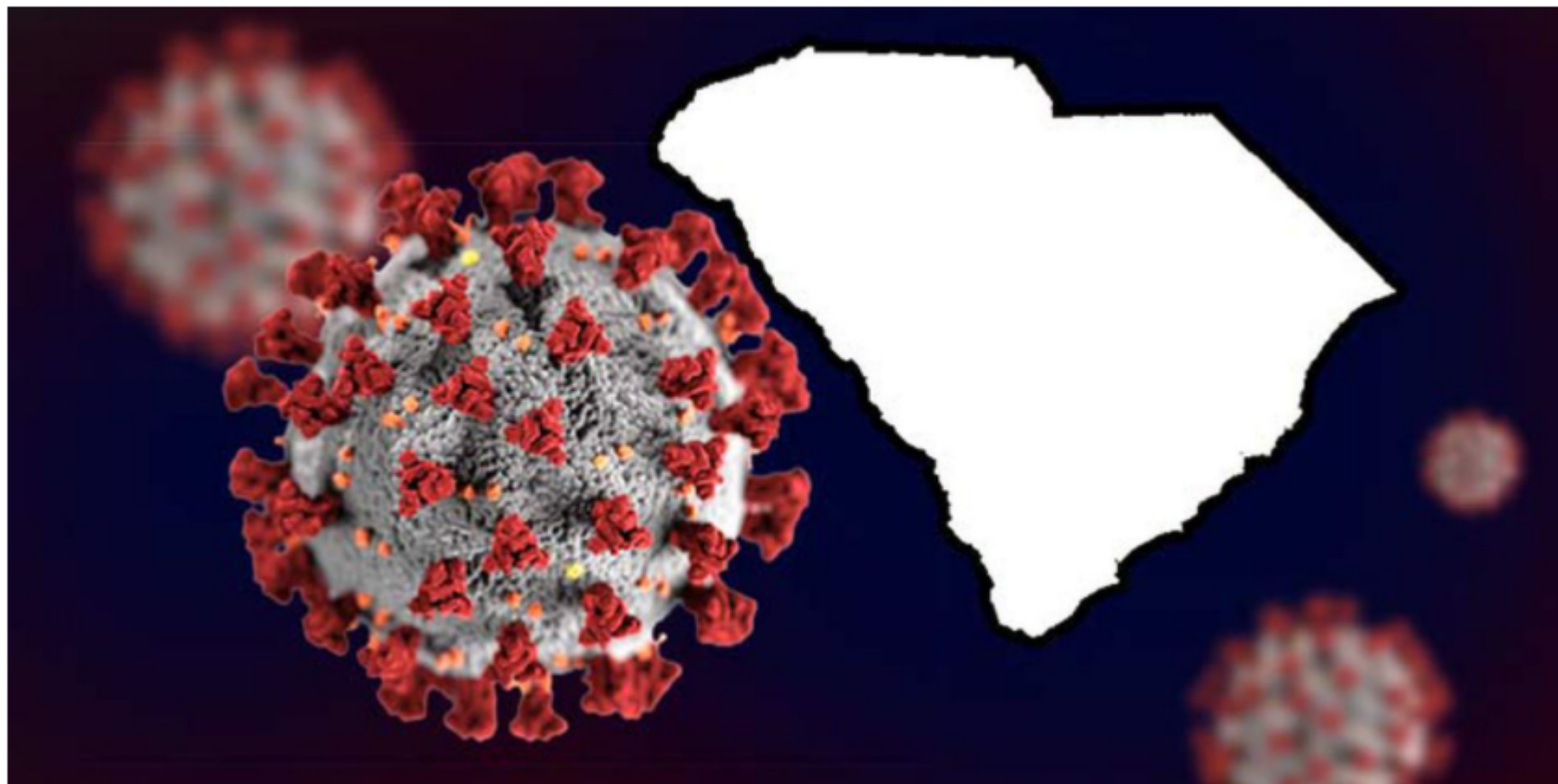
*Bea, Cunningham, Ford et al.. 2018, Frontiers in Oncology-Cancer Epidemiology and Prevention.*

*Ford et al. 2020, Advances in Cancer Research.*



January 6, 2021


## South Carolina reports more than 4,000 new COVID-19 cases, percent-positive above 30%



The South Carolina Department of Health and Environmental Control reported 4,037 new cases of COVID-19 Wednesday along with 101 new probable cases. (Source: AP)

## Reported Thursday, January 07, 2021 1:06 p.m.

Data as of Tuesday, January 05, 2021 11:59 p.m.

 New Confirmed Cases

**3,935**

Total Confirmed Cases


**310,246**

New Probable Cases

**69**

Total Probable Cases

**27,866**

 New Confirmed Deaths

**51**

Total Confirmed Deaths

**5,189**

New Probable Deaths

**29**

Total Probable Deaths

**472**

Individual Test Results

**11,500**

new individual test results reported  
statewide (not including antibody  
tests)

Percent Positive

**34.2%**

Total Tests

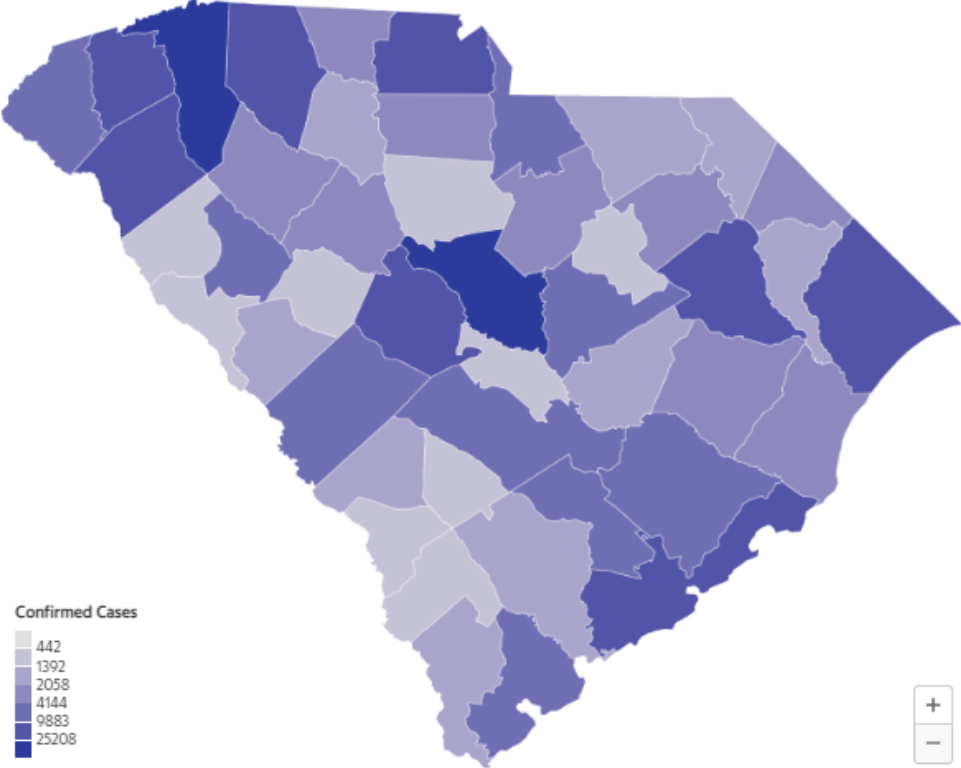
**3,895,919**



# COVID-19 Cases in South Carolina, by County, as of January 6, 2021

## SOUTH CAROLINA CASES OF COVID-19

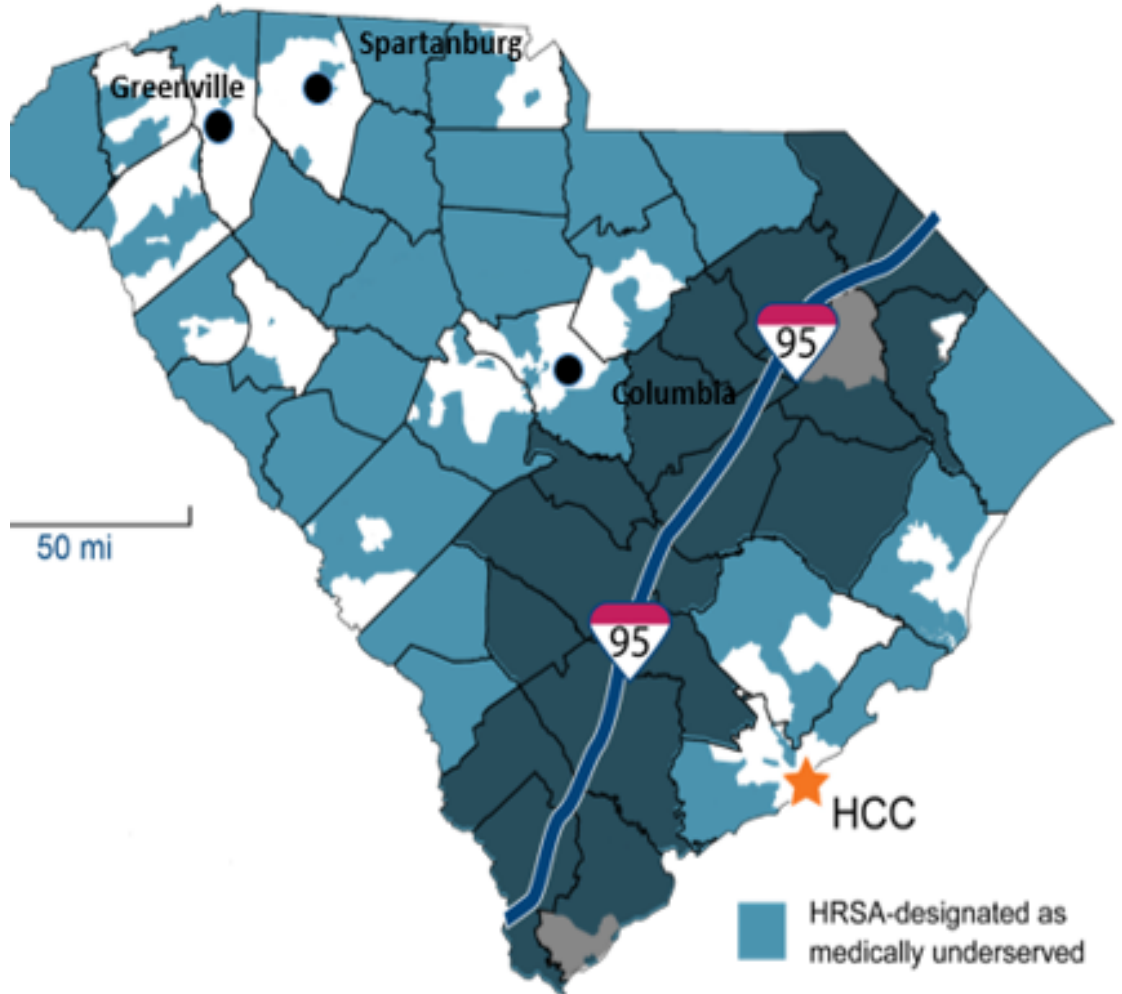
This map, created with data from the S.C. Department of Health and Environmental Control, displays the counties where COVID-19 has been reported and deaths confirmed.

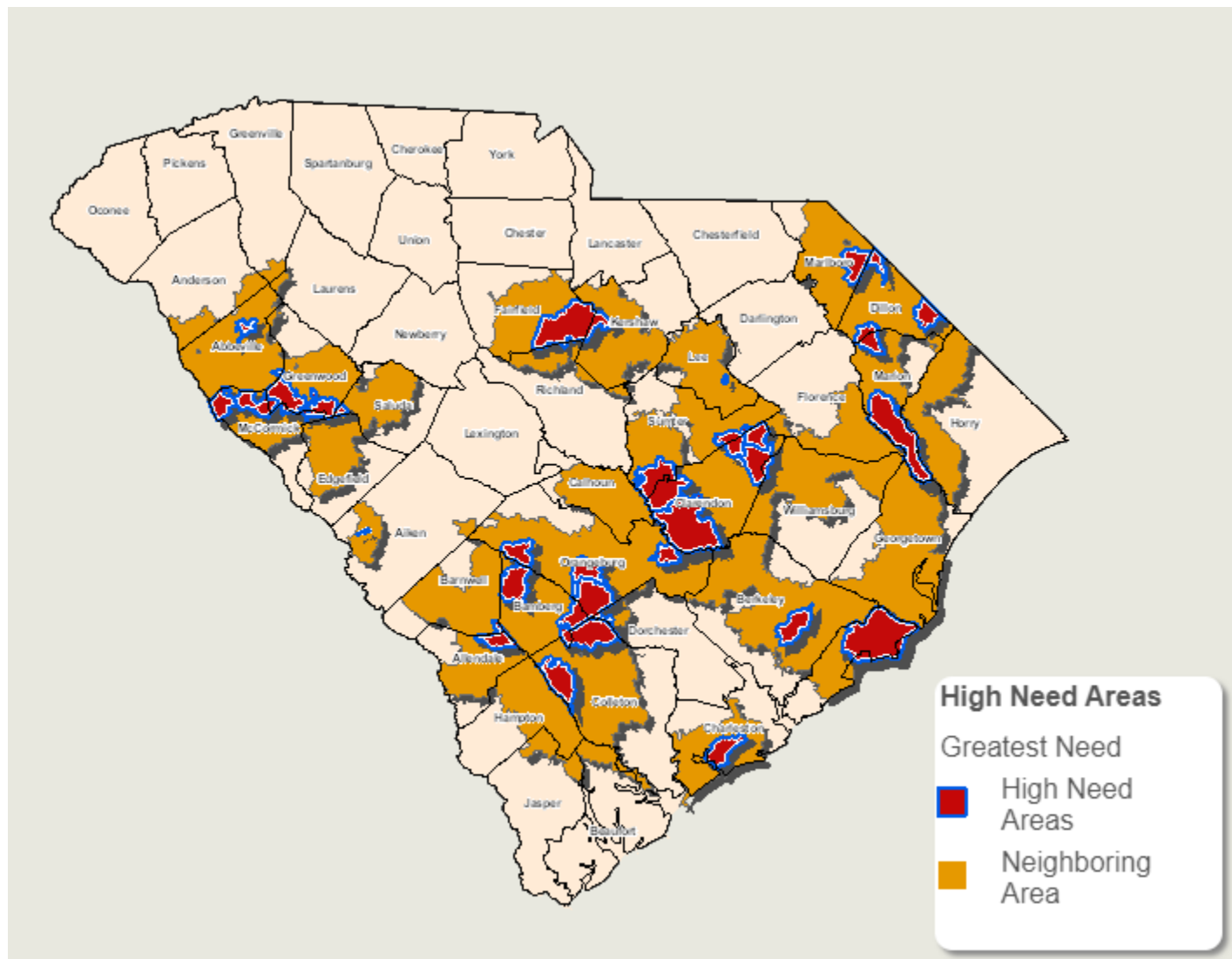


Tap a county to see the number of confirmed cases and deceased residents.  
Map: Ben Connors and Emily Bohatch • Source: S.C. Department of Health and Environmental Control • [Get the data](#)

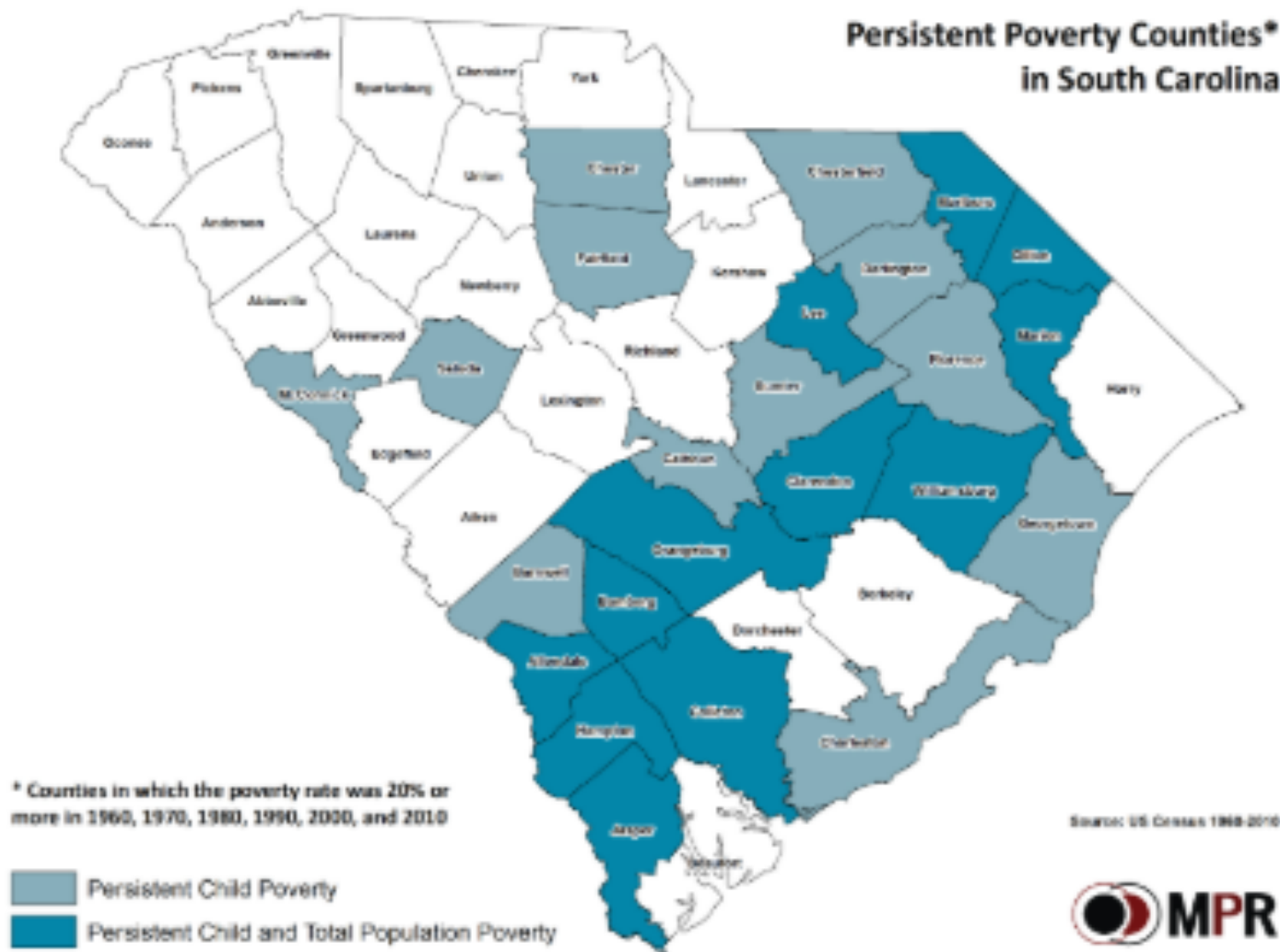
Source: <https://www.thestate.com/news/coronavirus/article248306475.html>

I-95 “Corridor of Economic Disadvantage”

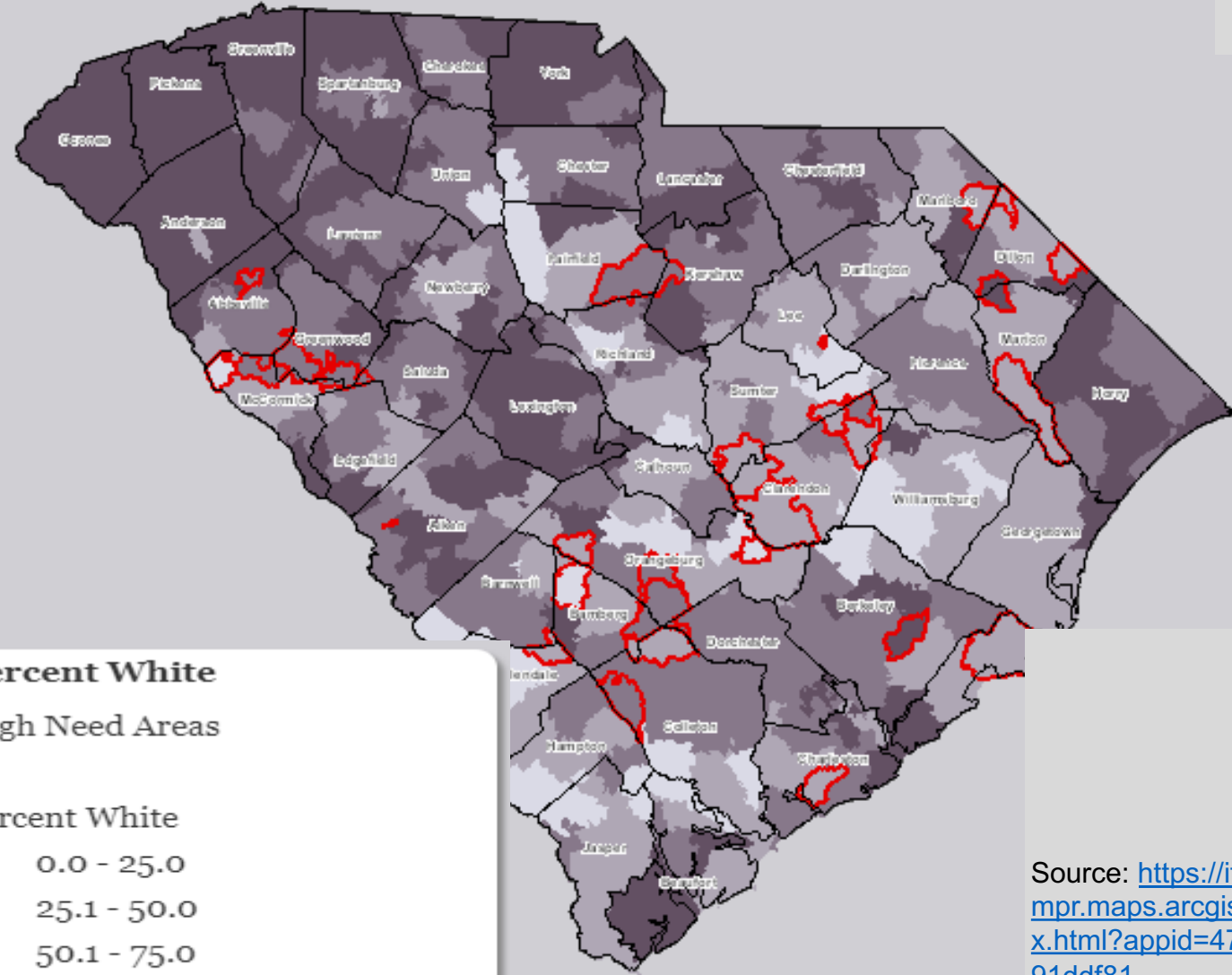




## Persistent Poverty Counties\* in South Carolina



# Percent White



## Percent White

### High Need Areas



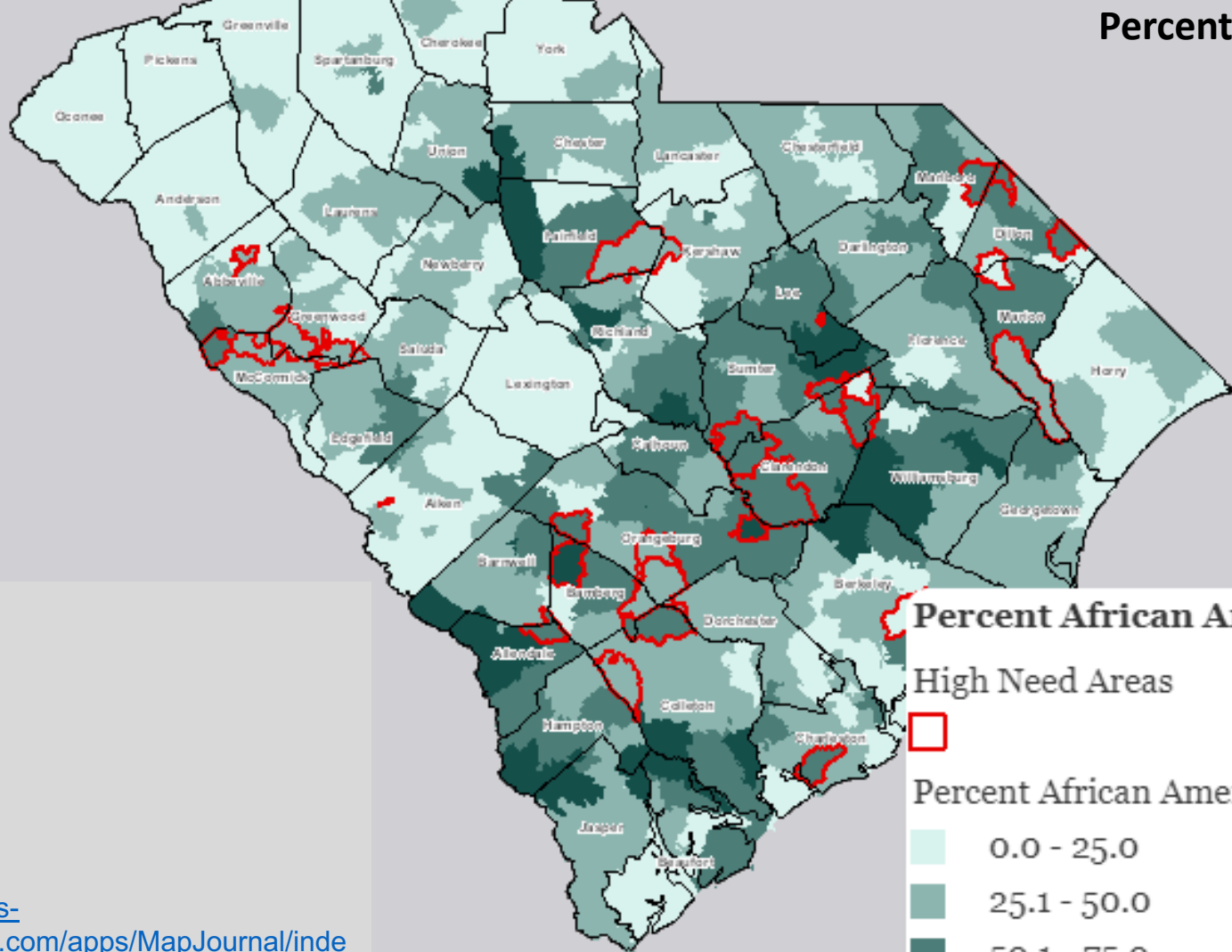
### Percent White

- 0.0 - 25.0
- 25.1 - 50.0
- 50.1 - 75.0
- 75.1 - 100.0

Source: <https://ifs-mpr.maps.arcgis.com/apps/MapJournal/index.html?appid=47c9824a5b9e41219bc3f542191ddf81>



# Percent Black



## Percent African American

High Need Areas

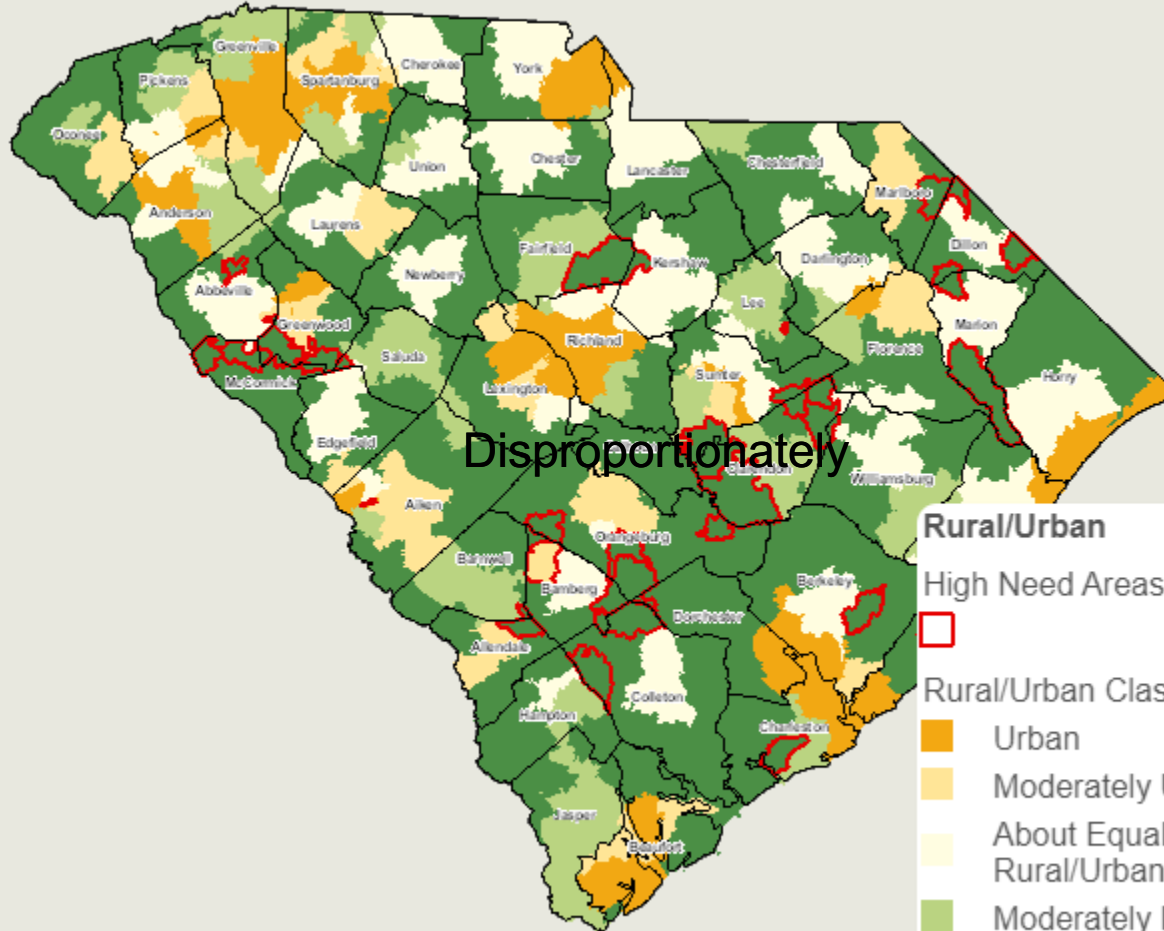


## Percent African American

- 0.0 - 25.0
- 25.1 - 50.0
- 50.1 - 75.0
- 75.1 - 100.0


Source: <https://ifs-mpr.maps.arcgis.com/apps/MapJournal/index.html?appid=47c9824a5b9e41219bc3f542191ddf81>

# Percent Rural








Disproportionately

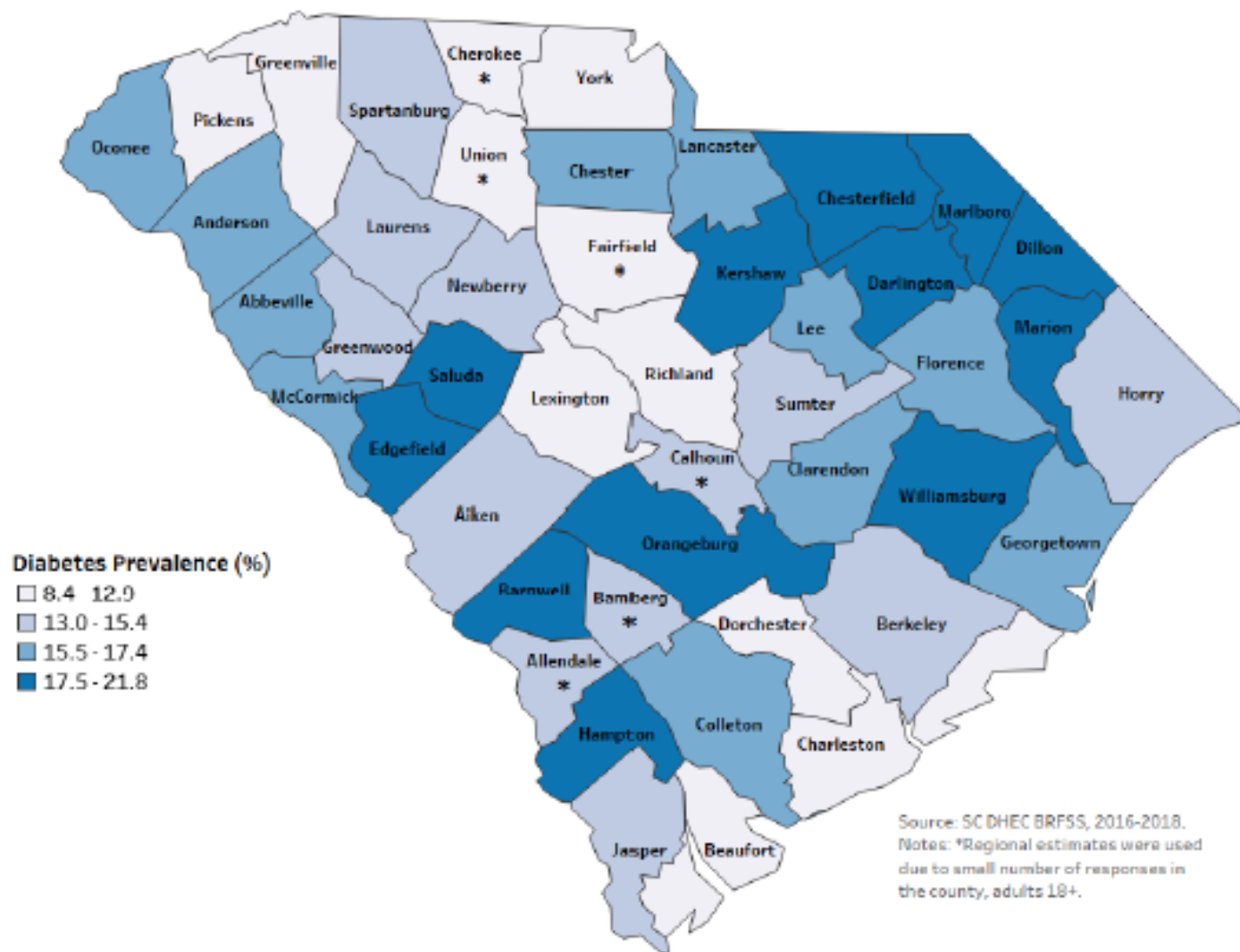
**Rural/Urban**  
High Need Areas

 High Need Areas

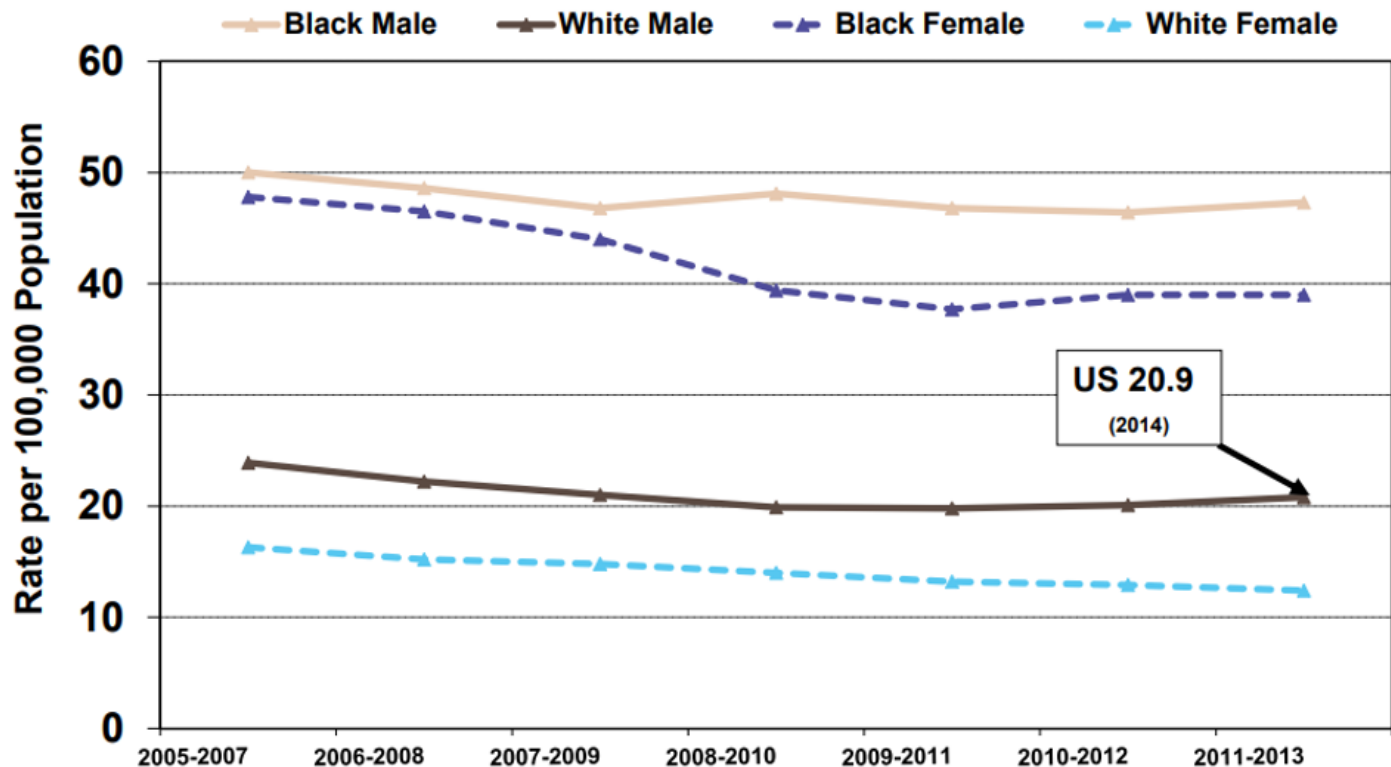
**Rural/Urban Classification**

-  Urban
-  Moderately Urban
-  About Equal Rural/Urban
-  Moderately Rural
-  Rural

## Diabetes Prevalence Among Adults, 2016-2018



# South Carolina Health Disparities: Mean Age-adjusted Diabetes Death Rates\*

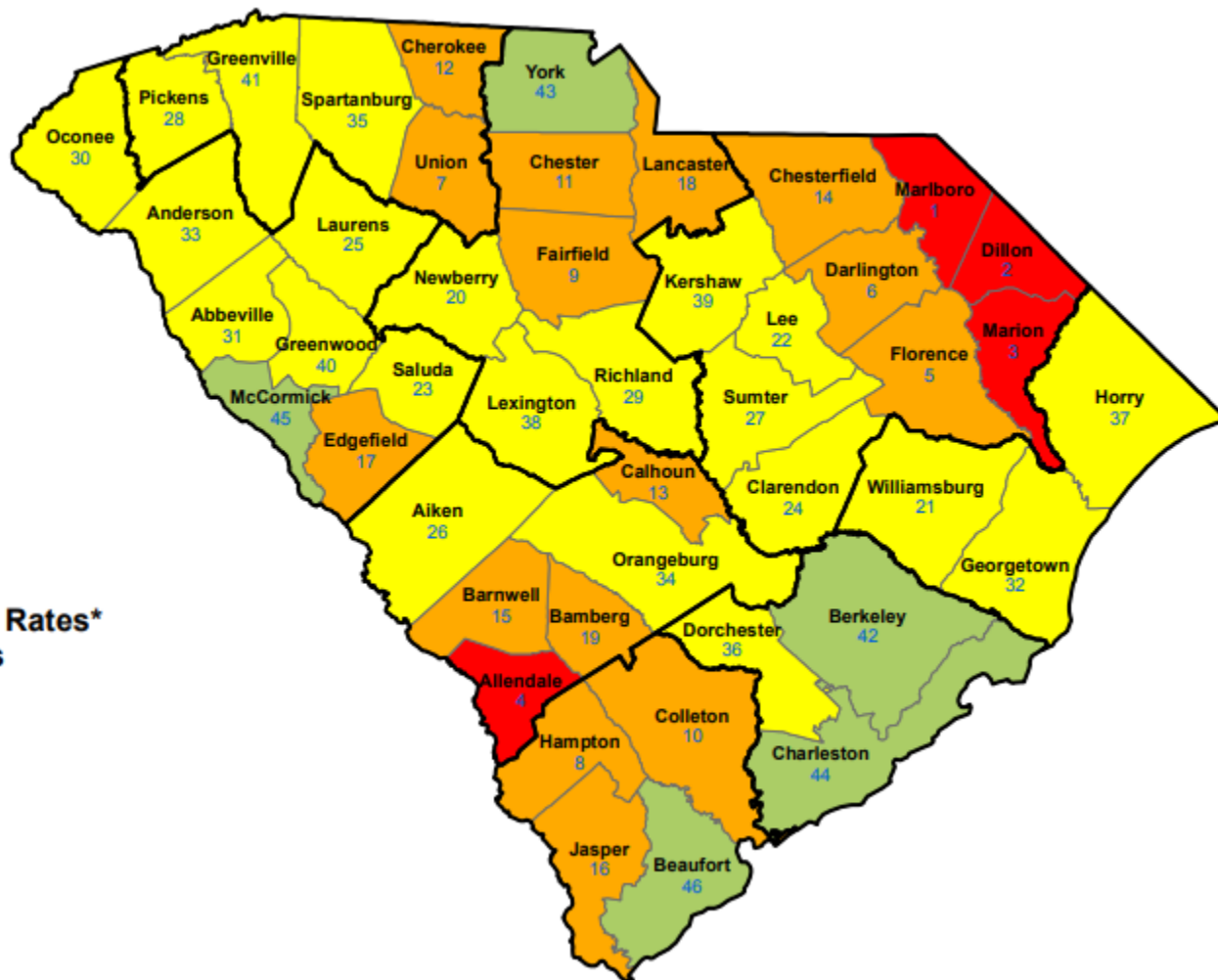


\*Age Adjustment Uses 2000 Standard Population  
Source: SC DHEC Vital Statistics, US CDC WONDER

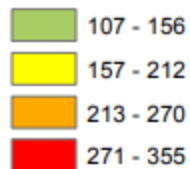
Generated by Division of Chronic Disease Epidemiology,  
December 2015



# Age-Adjusted Average Mortality Rates and Ranks for Heart Disease Among All Races in SC, 2010



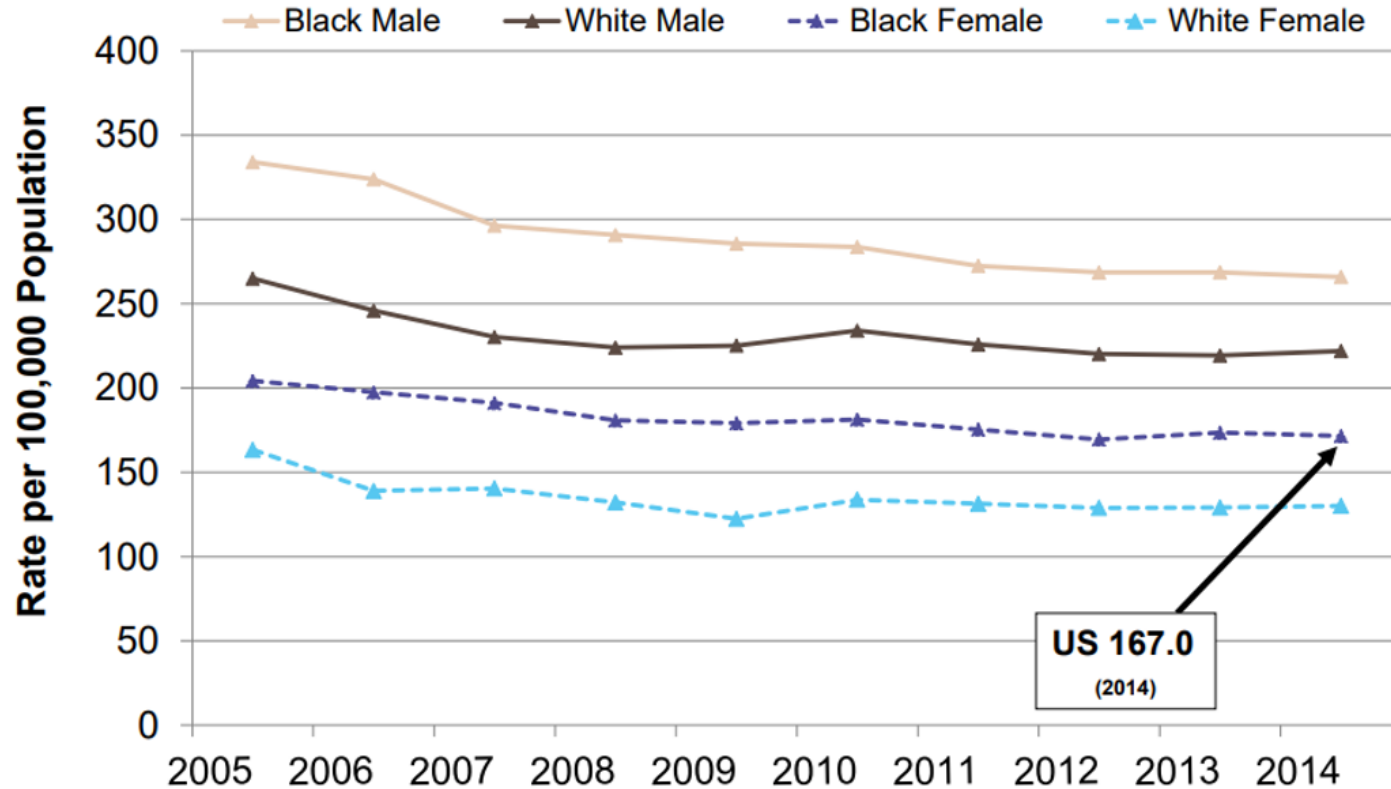
## Heart Disease Mortality Rates\* Among All Races



\*Rates are per 100,000 people, age adjusted mortality to year 2000 Population.



# South Carolina Health Disparities: Age-adjusted Heart Disease Death Rates\*

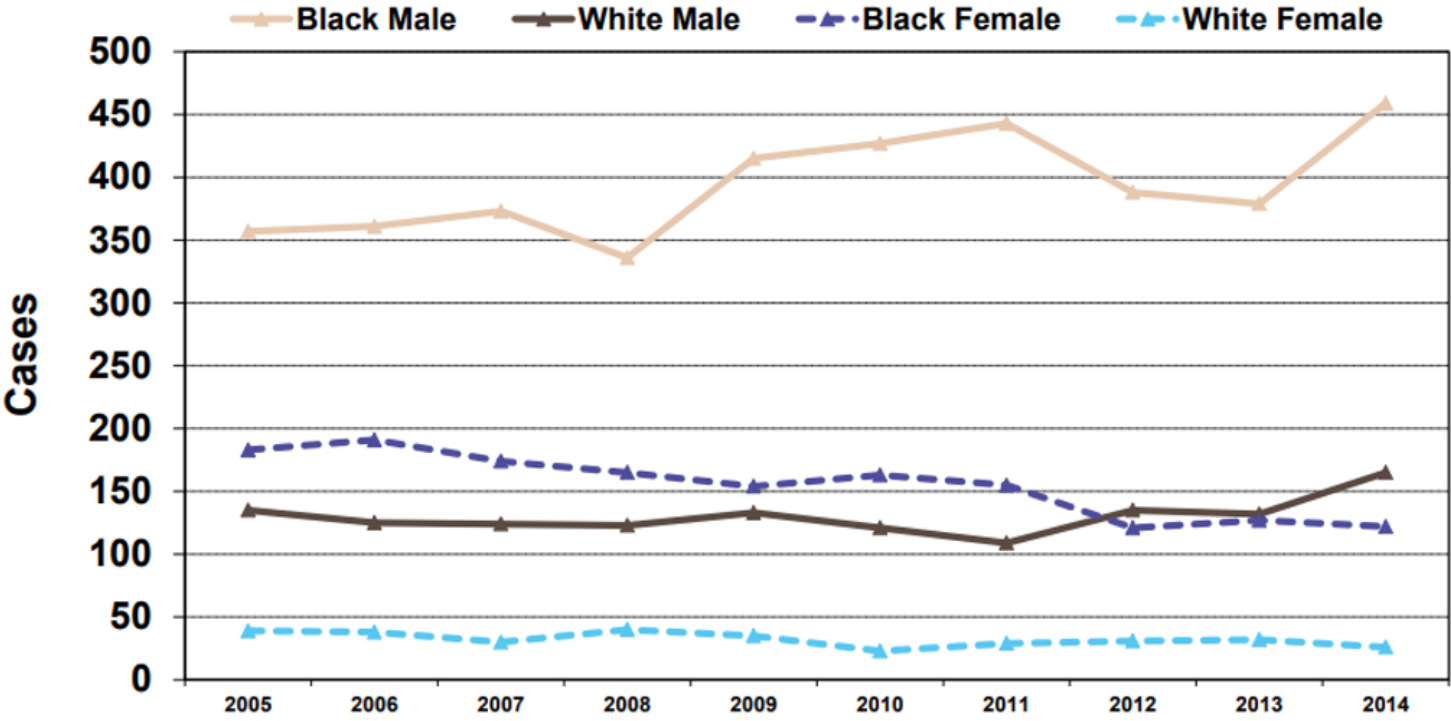


\*Age Adjustment Uses 2000 Standard Population  
Source: SC DHEC Vital Statistics, US CDC WONDER

Generated by Division of Chronic Disease Epidemiology,  
December 2015



# South Carolina Health Disparities: Reported Cases of HIV\*



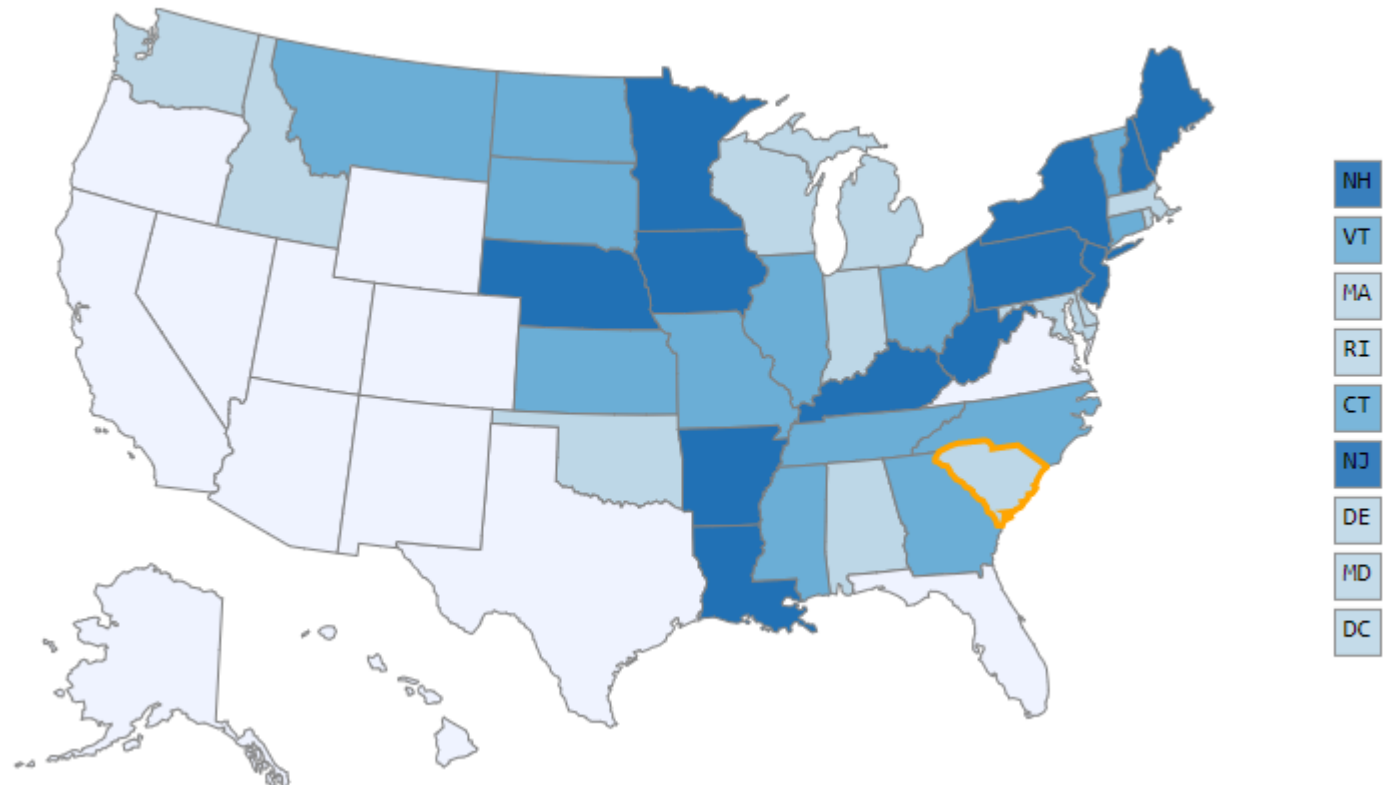
\*AIDS cases are included in counts of HIV cases.  
Source: SCDHEC HIV/AIDS Surveillance Data, Surveillance Report 2014

Generated by Division of Chronic Disease Epidemiology,  
December 2015



# Rate of New Cancers in the US, All Types of Cancer, All Ages, All Races/Ethnicities, Male and Female

Rate per 100,000 people



Source: <https://gis.cdc.gov/Cancer/USCS/DataViz.html>



**CANCER IN  
AFRICAN AMERICAN MEN  
IN SOUTH CAROLINA**



# A Message from Dr. Rick Toomey, SC Department of Health and Environmental Control

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I am pleased to introduce this important report, *Cancer in African American Men in South Carolina*. The need to formally address cancer incidence and deaths occurring in African American men became evident from the 20-Year Cancer Trend Report from DHEC's South Carolina Central Cancer Registry (SCCCR), released in October 2018. Key findings indicated that while cancer trends have declined over the past two decades for most cancer types in our state, the differences between African Americans and Caucasians persist, especially among men. Clearly, African American men bear a disproportionate share of the cancer burden.

Through a collaboration among the SCCCR, DHEC's Division of Cancer Prevention and Control, and the SC Cancer Alliance this report was developed to address the complex factors that contribute to the disparities revealed in the data. A multidisciplinary workgroup came together to provide their expertise to document information that will increase knowledge and understanding of these complexities in order to prevent some of these cancers, diagnose cases earlier, and improve the outcomes of patients who are suffering from cancer.

Thanks to our statewide partners, including our healthcare network of hospitals, labs, and physicians who are dedicated to providing their cancer cases to the SCCCR, and then utilize the information provided in reports such as this one to guide their activities that are put into action daily throughout South Carolina. Thanks also to our national partner, the Centers for Disease Control and Prevention for their funding, guidance,

and encouragement to utilize our rich data resources to collect, interpret, and disseminate meaningful information that will ultimately improve the population health of the citizens of South Carolina.

Our goal is health equity for all South Carolinians! Through our collaborative work, we can continue to increase awareness so that proper steps can be taken to reduce the burden that cancer places on African American men as well as other groups within our state.



Richard K. Toomey  
DHA, FACHE, Director

# A Message from Marvella Ford, Medical University of South Carolina

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Dear South Carolina Residents:

We are delighted to share this report with you! It highlights the cancer-related health of African American men in South Carolina. We chose to focus on this population for a number of reasons. First, the prostate cancer death rate is almost three times higher among African American men than among white men in our state. Second, few health reports focus specifically on African American men. Third, African American men play a very important and significant role in their families and communities, and too many are dying prematurely and unnecessarily.

South Carolina is making significant strides in combating cancer in our state. It is our desire for these benefits to reach African American men as well. The purpose of this report is to show areas where disparities still exist, and to make some recommendations to develop strategies to reduce, and eventually eliminate, these disparities.

We are pleased to present this collaborative report. The South Carolina Cancer Alliance worked with state, regional, and local academic, community, and governmental partners to develop the report.

We hope this report will serve as a living document for many years into the future, guiding the development and implementation of cancer prevention, control, treatment, and survivorship strategies focused specifically on African American men.



Marvella E. Ford, Ph.D.

**Professor, Department of Public Health Sciences**

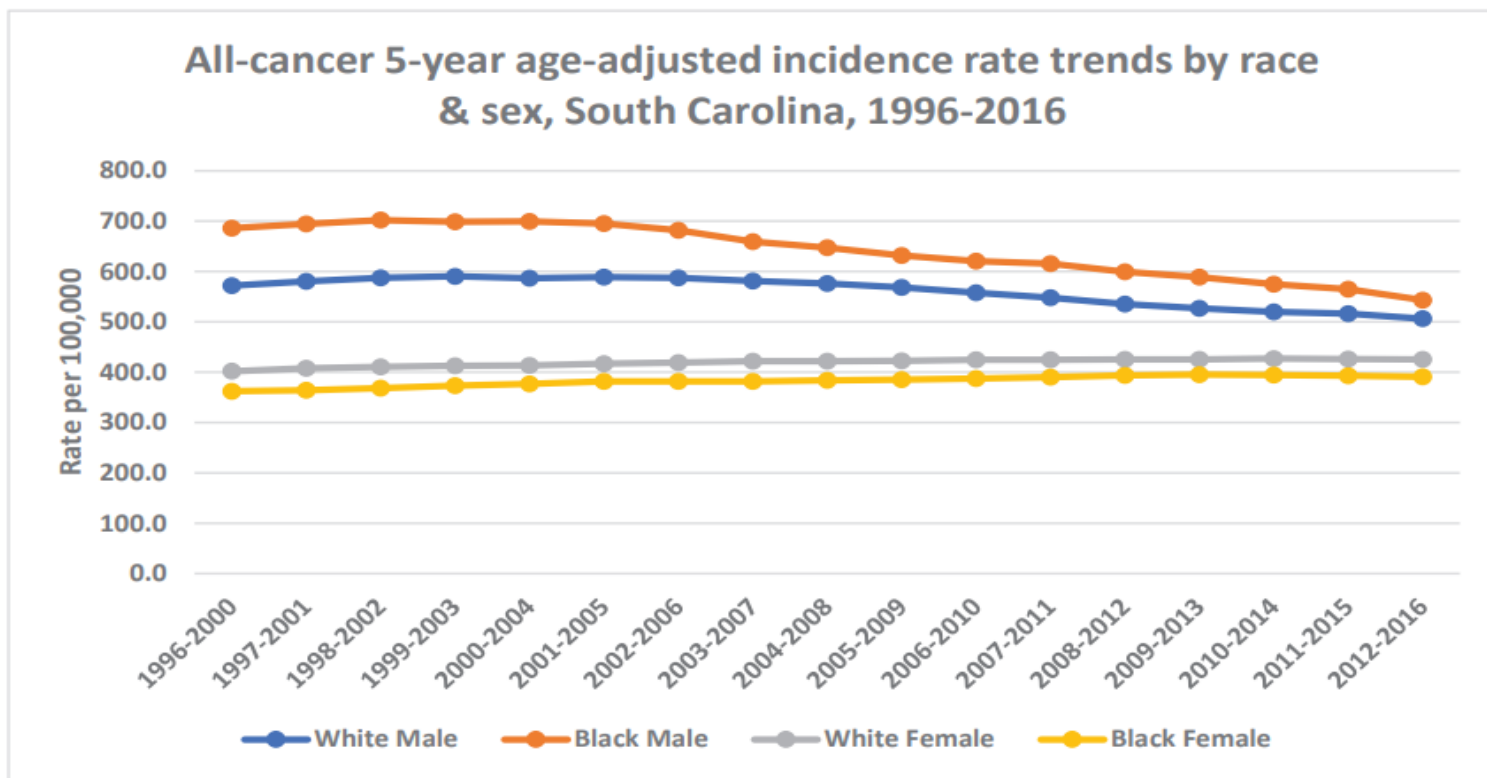
**Associate Director, Population Sciences and Cancer Disparities, Hollings Cancer Center**

**Director, Office of Community Outreach and Engagement, Hollings Cancer Center**

**Medical University of South Carolina Hollings Cancer Center**



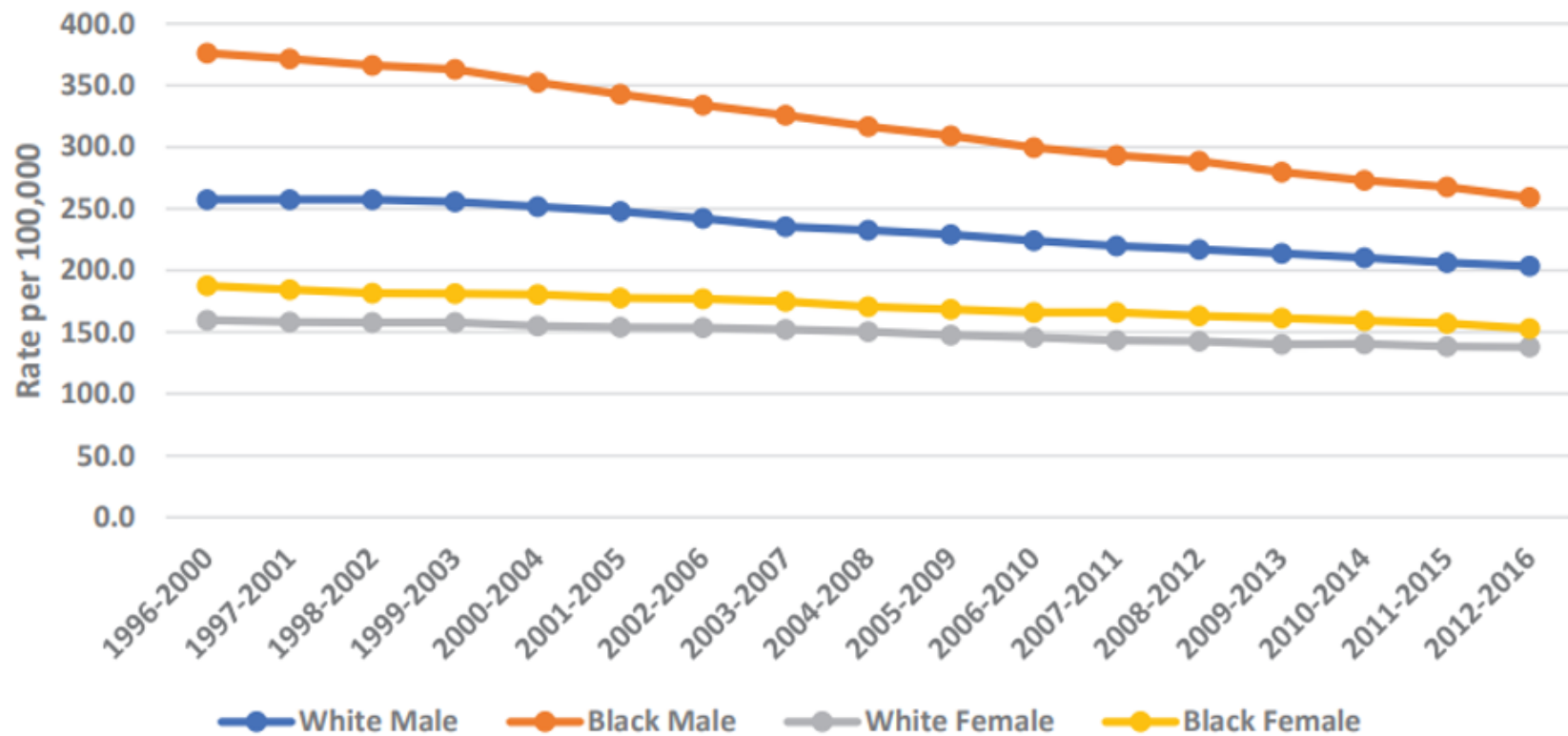
Figure 1: Incidence Rates of All Cancers by Race and Sex, 1996 to 2016 (Age-adjusted to the 2000 US Std Population)





# Mortality Rates of All Cancers by Race and Sex, 1996 to 2016 (Age-adjusted to the 2000 US Std Population)

## All-cancer 5-year age-adjusted mortality rate trends by race & sex, South Carolina, 1996-2016



# South Carolina COVID-19 Cases and Deaths for Blacks and Hispanics/Latinos

## Statewide Racial Breakdown of Cases and Deaths

### Black or African American

**27%** of population

A horizontal bar chart with a dark blue segment representing 27% of the total bar length.

**28%** of cases

A horizontal bar chart with a dark blue segment representing 28% of the total bar length.

**34%** of deaths

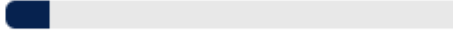
A horizontal bar chart with a dark blue segment representing 34% of the total bar length.

### Hispanic or Latino


**6%** of population

A horizontal bar chart with a dark blue segment representing 6% of the total bar length.

**10%** of cases

A horizontal bar chart with a dark blue segment representing 10% of the total bar length.

**4%** of deaths

A horizontal bar chart with a dark blue segment representing 4% of the total bar length.

Data Source: COVID Tracking Project Racial Data Tracker. Data shown is only for cases and deaths where racial data is reported.

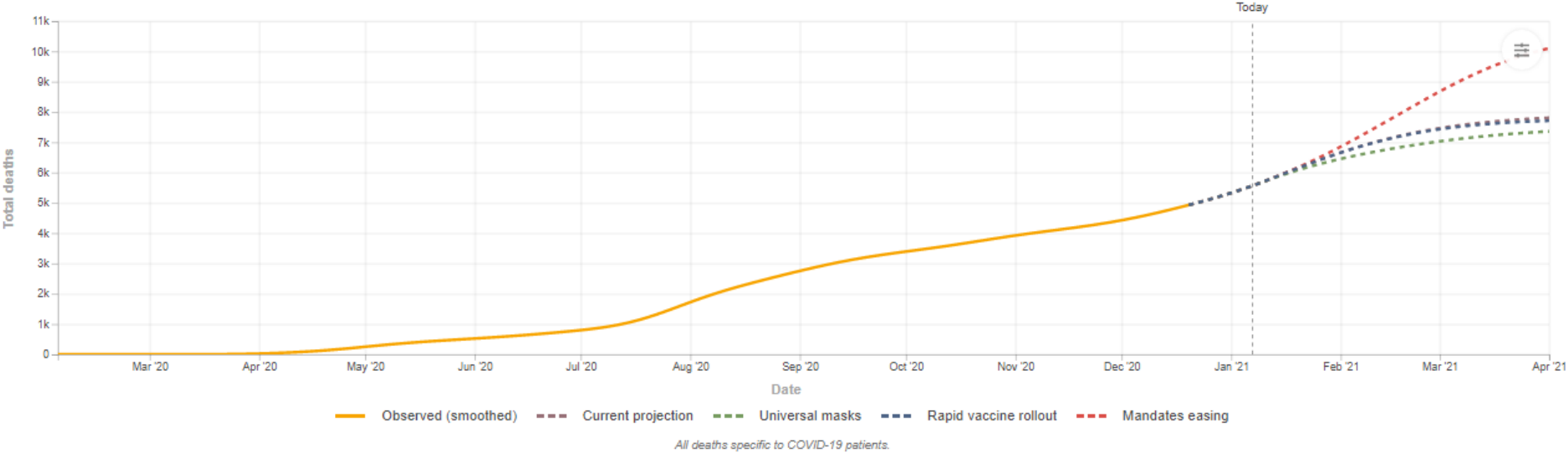
Source: <https://coronavirus.jhu.edu/region/us/south-carolina>

# SC Data as of January 6, 2021

7,808 COVID-19 deaths

based on Current projection scenario by April 1, 2021

Scenario

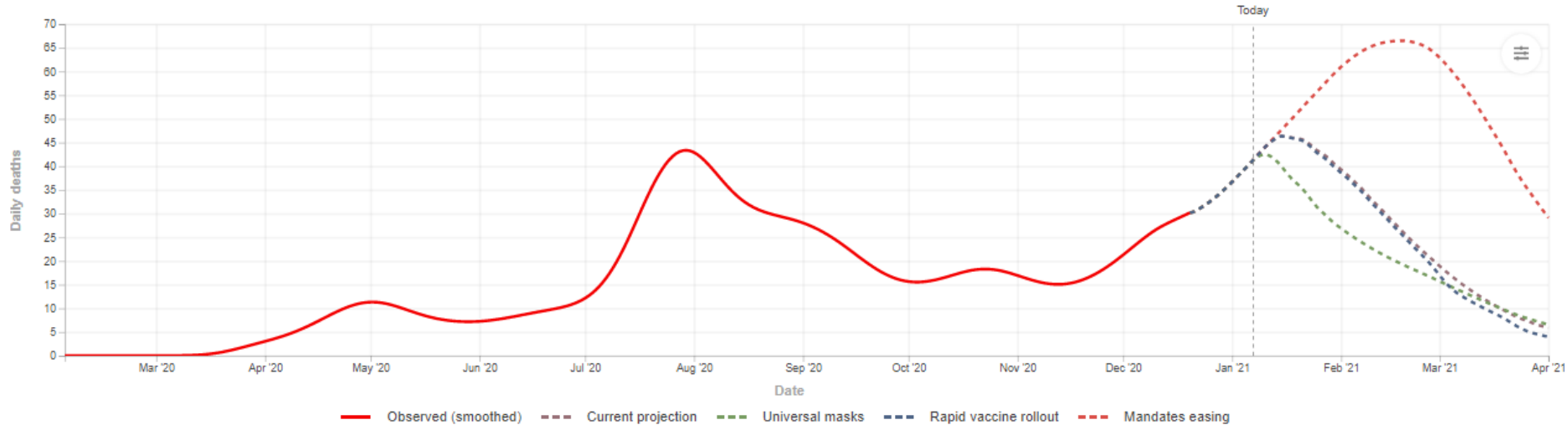


# SC Data as of October 29, 2020

## Daily deaths [↗](#)

[↗ Trend](#)[↗ Compare](#)[📍 Map](#)

Daily deaths is the best indicator of the progression of the pandemic, although there is generally a 17-21 day lag between infection and deaths.

Scenario Projection Masks Rapid rollout Easing 

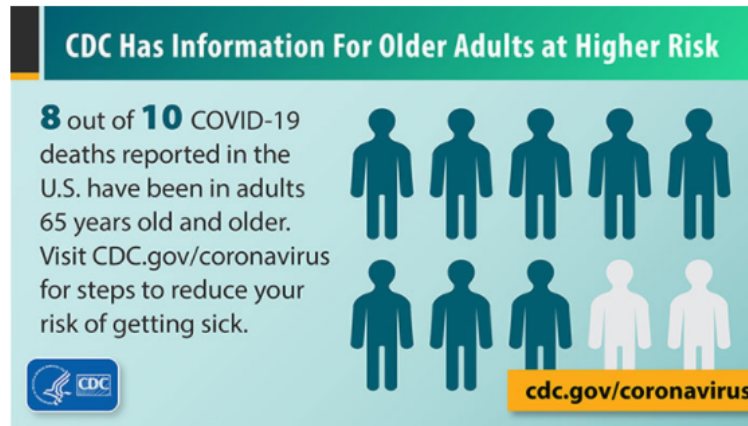
— Observed (smoothed)    - - - Current projection    - - - Universal masks    - - - Rapid vaccine rollout    - - - Mandates easing

All deaths specific to COVID-19 patients.

Source: <https://covid19.healthdata.org/united-states-of-america/south-carolina?view=total-deaths&tab=trend>

# Relationship Between Aging and COVID-19

- **Older adults are at greater risk of requiring hospitalization or dying** if they are diagnosed with COVID-19.
- Risk for severe illness with COVID-19 increases with age, with older adults at highest risk.
- For example, people in their 50s are at higher risk for severe illness than people in their 40s. Similarly, people in their 60s or 70s are, in general, at higher risk for severe illness than people in their 50s. The greatest risk for severe illness from COVID-19 is among those aged 85 or older.



# Relationship between Aging and COVID-19

Compared to younger adults, older adults are more likely to require hospitalization if they get COVID-19

	Hospitalization <sup>1</sup>	Death <sup>2</sup>
18-29 years	Comparison Group	Comparison Group
30-39 years	2x higher	4x higher
40-49 years	3x higher	10x higher
50-64 years	4x higher	30x higher
65-74 years	5x higher	90x higher
75-84 years	8x higher	220x higher
85+ years	13x higher	630x higher

Source: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>

# Relationship between Aging and COVID-19

## Certain Medical Conditions Can Increase Risk

- Other factors can also increase risk of severe illness, such as having [certain underlying medical conditions](#).



# Relationship between Aging and COVID-19

Many of the diseases that increase risk for COVID-19 occur more commonly among adults ages 50 years and older:

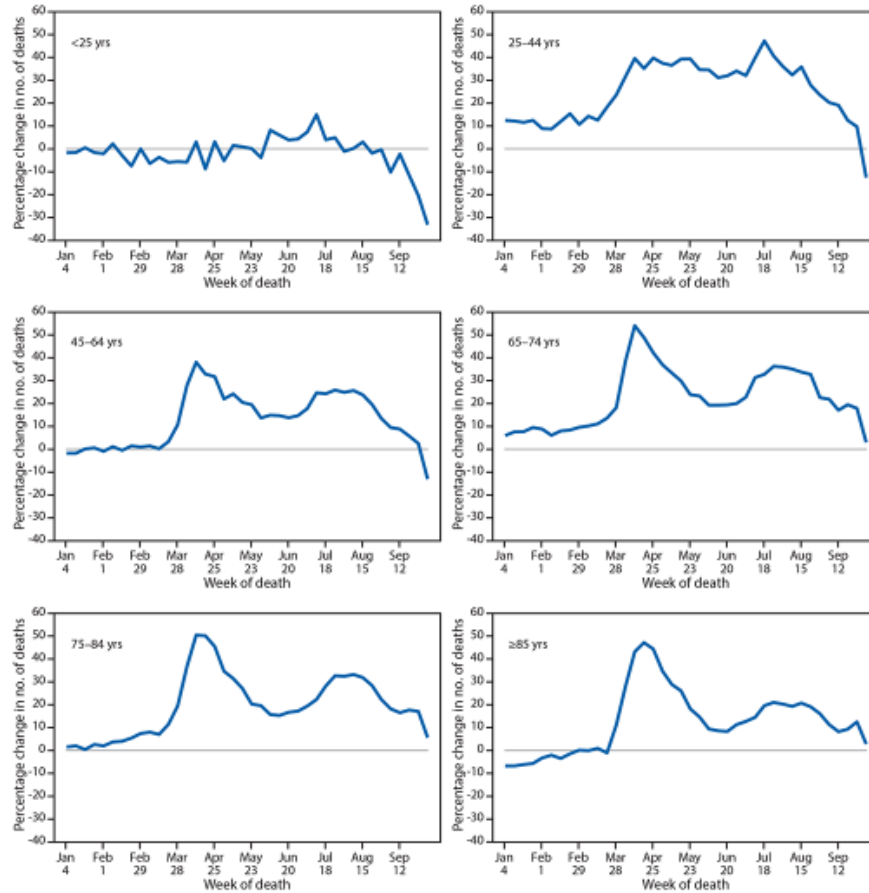
- Cancer
- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Heart conditions such as heart failure, coronary artery disease or cardiomyopathies
- Immunocompromised state (weakened immune system) from solid organ transplant
- Obesity (body mass index (BMI) of 30 kg/m<sup>2</sup> or higher but < 40 kg/m<sup>2</sup>)
- Severe obesity (BMI > = 40 kg/m<sup>2</sup>)
- Pregnancy
- Sickle cell disease
- Smoking
- Type 2 diabetes mellitus

# Relationship between Aging and COVID-19

Many of the diseases that **MIGHT** increase risk for COVID-19 occur more commonly among adults ages 50 years and older:

- Asthma (moderate-to-severe)
- Cerebrovascular disease (affects blood vessels and blood supply to the brain)
- Cystic fibrosis
- Hypertension or high blood pressure
- Immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV or use of corticosteroids, or use of other immune weakening medicines
- Neurologic conditions such as dementia
- Liver disease
- Overweight (BMI > 25 kg/m<sup>2</sup> but < 30 kg/m<sup>2</sup>)
- Pulmonary fibrosis (having damaged or scarred lung tissues - idiopathic pulmonary fibrosis mainly affects persons aged **50 years** or older.)
- Thalassemia (a type of blood disorder)
- Type 1 diabetes mellitus

# Percentage change in the weekly number of deaths in 2020 relative to average in the same weeks during 2015–2019, by age group — United States, 2015–2019 and 2020



Excess deaths are defined as the number of persons who have died from all causes, in excess of the expected number of deaths for a given place and time.

## Excess Deaths Associated with COVID-19, by Age and Race and Ethnicity — United States, January 26–October 3, 2020

Weekly / October 23, 2020 / 69(42):1522-1527

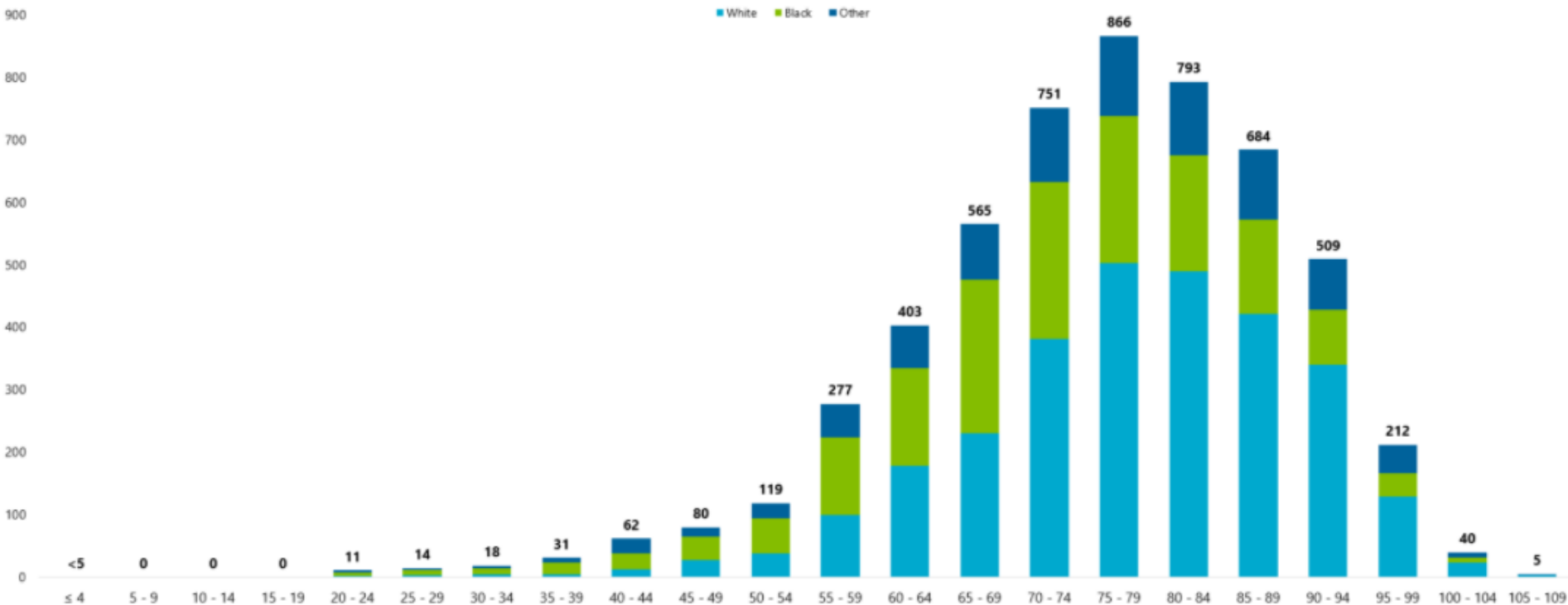
On October 20, 2020, this report was posted online as an MMWR Early Release.

Lauren M. Rossen, PhD<sup>1</sup>; Amy M. Branum, PhD<sup>1</sup>; Farida B. Ahmad, MPH<sup>1</sup>; Paul Sutton, PhD<sup>1</sup>; Robert N. Anderson, PhD<sup>1</sup> ([View author affiliations](#))

### Age of COVID-19 Reported Deaths, by Race (n=5,444)

As of 11:59 PM on 1/3/2021

White Black Other



Note: A value of 0 means that no death has occurred. Values between 1-4 are suppressed and displayed as (<5)

Reported Monday, January 04, 2021			
Data as of Saturday, January 02, 2021 11:59 p.m.			
<p>A delay in the reporting of an individual's death during this pandemic is often attributed to ensuring the death is accurately classified based on the most up-to-date federal guidance for determining a COVID-19-related death. Visit the COVID-19 Deaths in South Carolina chart on the SC Testing and Projections webpage for all deaths by date of occurrence.</p>			
Date of death	Confirmed or Probable	County	Age
1/1/2021	Confirmed	Aiken	Middle-Aged
1/1/2021	Confirmed	Barnwell	Young Adult
12/29/2020	Confirmed	Beaufort	Elderly
12/31/2020	Confirmed	Beaufort	Elderly
12/31/2020	Confirmed	Beaufort	Elderly
12/30/2020	Confirmed	Chesterfield	Elderly
12/31/2020	Probable	Georgetown	Elderly
12/29/2020	Confirmed	Greenville	Elderly
1/1/2021	Confirmed	Greenville	Elderly
1/1/2021	Confirmed	Lancaster	Elderly
1/1/2021	Confirmed	Lancaster	Elderly
1/1/2021	Confirmed	Lexington	Elderly
1/1/2021	Confirmed	Lexington	Elderly
1/1/2021	Confirmed	Lexington	Middle-Aged
12/30/2020	Confirmed	Orangeburg	Middle-Aged
12/30/2020	Confirmed	Spartanburg	Elderly
		<i>Elderly: 65 &amp; older</i>	
		<i>Middle-aged: 35-64</i>	
		<i>Young adult: 18-34</i>	
		<i>Pediatric: 17 &amp; younger</i>	

**What Are the Social Determinants of Health and How Do They Contribute to COVID-19 Disparities in Older Adults?**

# Definition of Social Determinants of Health

- [Healthy People 2020](#) defines **social determinants of health** as conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.
- Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as “place.”
- In addition to the more material attributes of “place,” the patterns of social engagement and sense of security and well-being are also affected by where people live.



# Social Determinants of Health

- Living in densely populated areas.
- Experiencing residential segregation. Racial **residential segregation** is linked with a variety of adverse health outcomes and underlying health conditions. These underlying conditions can also increase the likelihood of severe illness from COVID-19.
- Many members of racial and ethnic minorities live in neighborhoods that are **further from grocery stores and medical facilities**.
- **Multi-generational households**, which may be more common among some racial and ethnic minority families, may find it difficult to take precautions to protect older family members or isolate those who are sick.
- Racial and ethnic minority groups are **over-represented in jails, prisons, and detention centers**, which have specific risks due to congregate living, shared food service, and more.

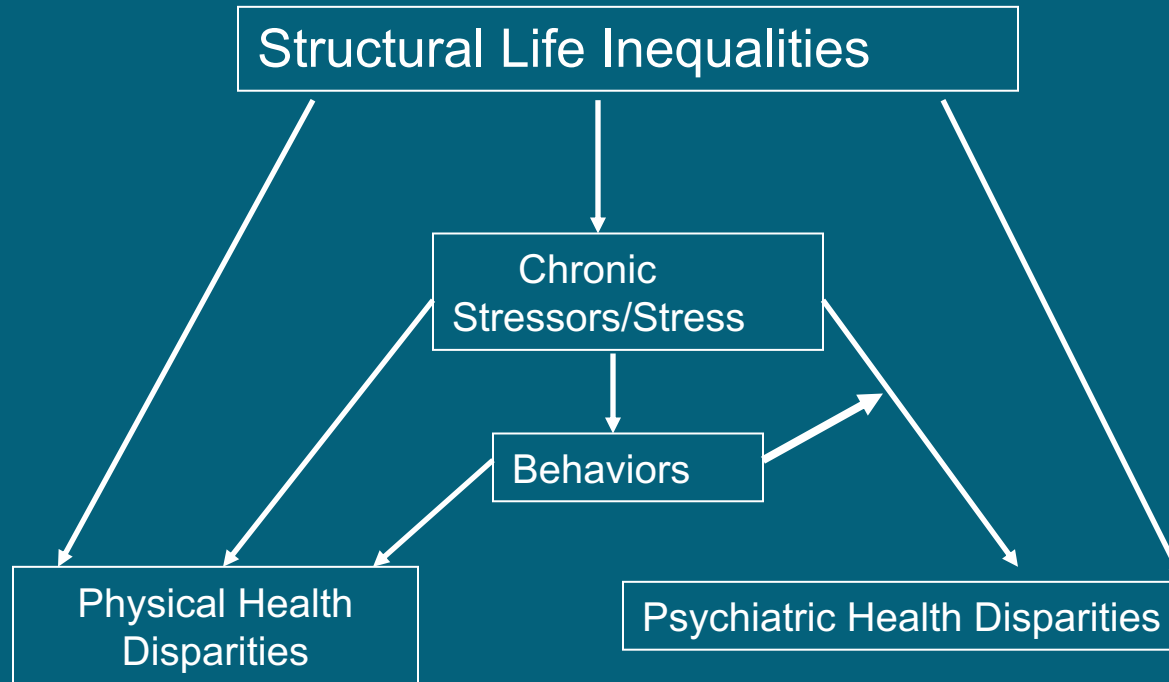
# A Simple Model of the Social Determinants of Health Disparities

- Phenotypic genetic expressions of race affect social interactions and health outcomes



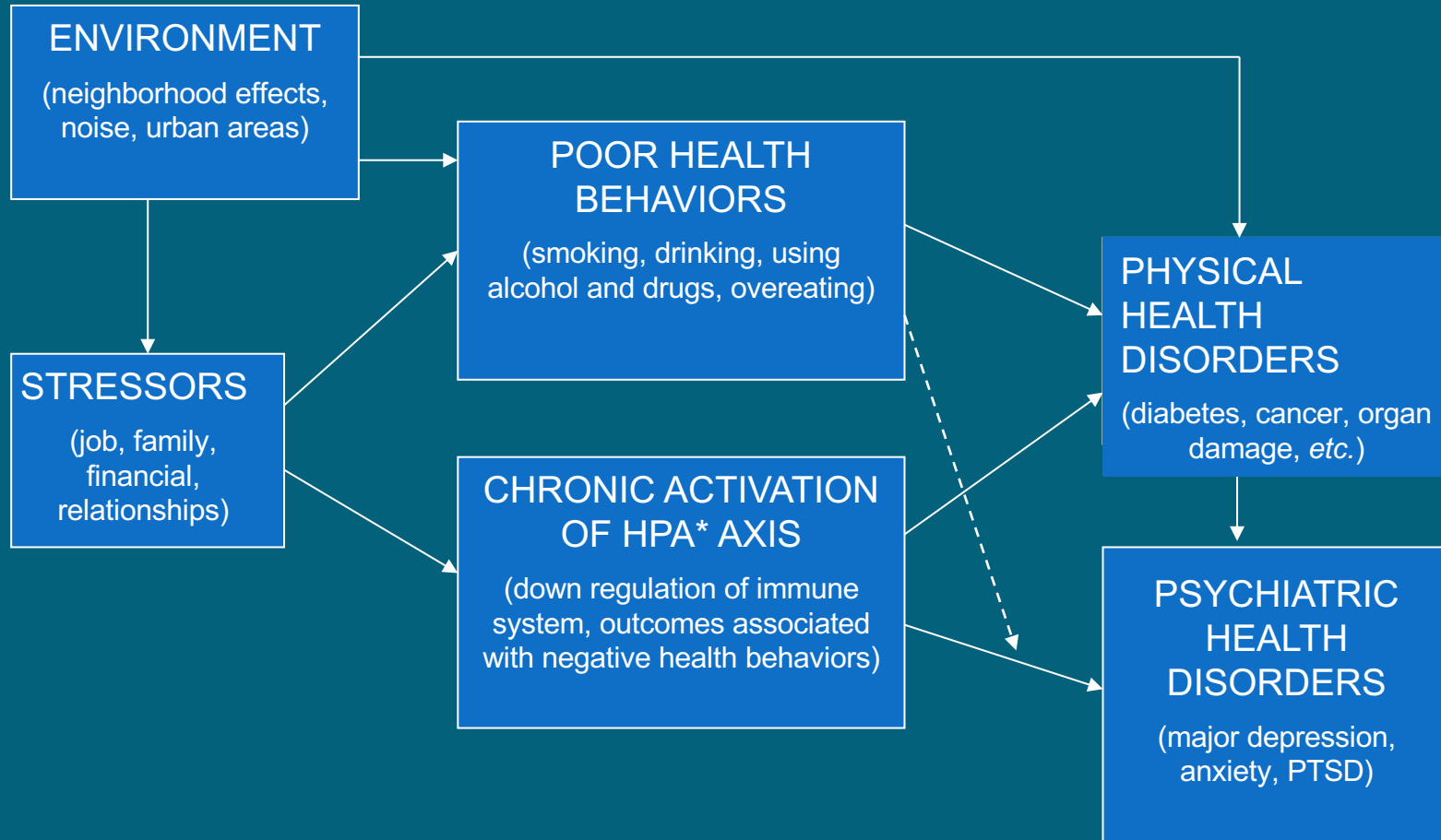
Whitfield, Ford, and Edwards. What Does Knowing about Genetics Contribute to Understanding the Health of Minority Elders? In Keith E. Whitfield and Tamara A. Baker (Eds.), Handbook of Minority Aging, New York, NY: Springer, 2014.

# Relationships among Structural Life Inequalities, Chronic Stress, Negative Behaviors, and Physical and Psychiatric Health Disparities



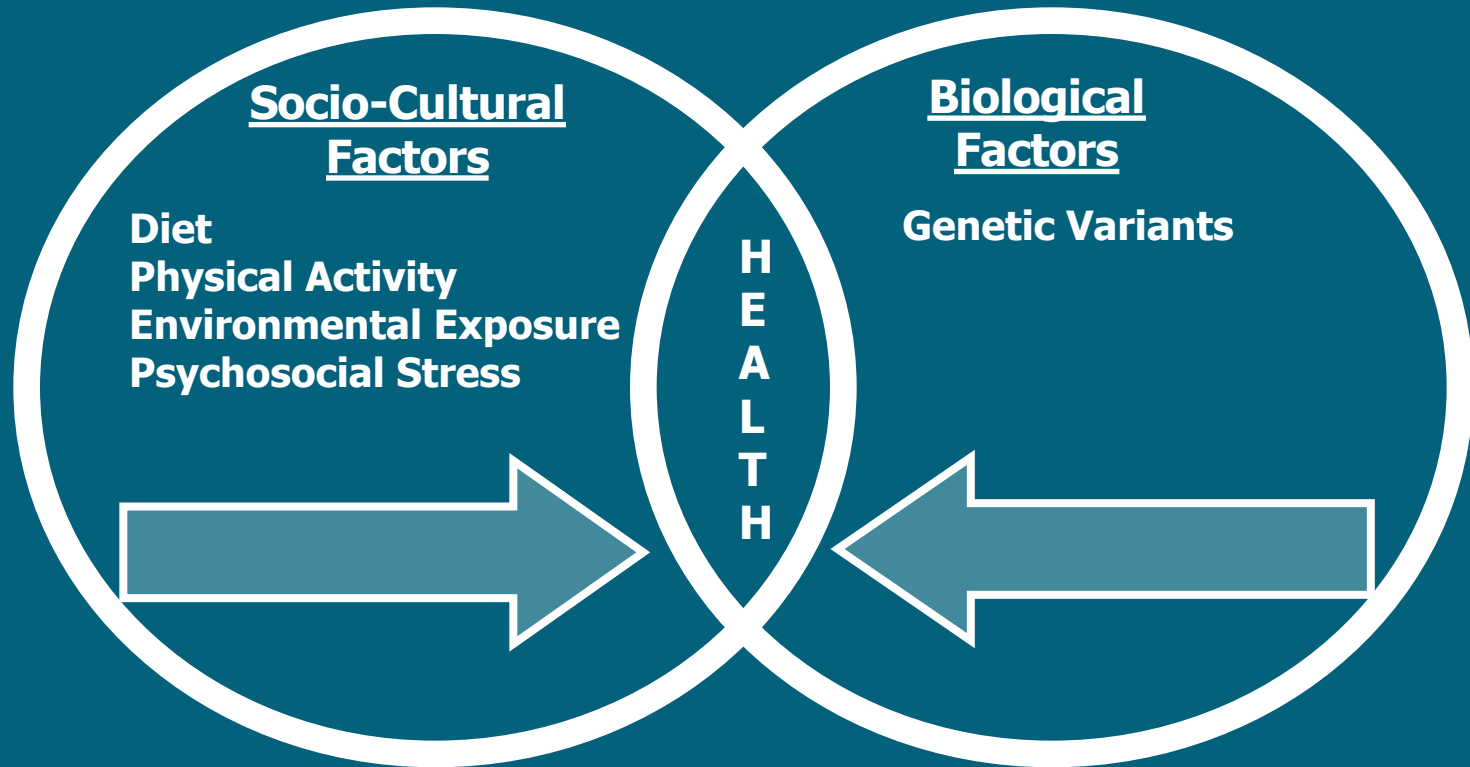
Whitfield, Ford, and Edwards. What Does Knowing about Genetics Contribute to Understanding the Health of Minority Elders? In Keith E. Whitfield and Tamara A. Baker (Eds.), Handbook of Minority Aging, New York, NY: Springer, 2014.

# Possible Interrelationships Among Environment, Stressors, Negative Health Behaviors and Physical and Mental Health Disorders



Whitfield, Ford, and Edwards. What Does Knowing about Genetics Contribute to Understanding the Health of Minority Elders? In Keith E. Whitfield and Tamara A. Baker (Eds.), *Handbook of Minority Aging*, New York, NY: Springer, 2014.

# Racial Differences in Health Outcomes as a Combination of Socio-Cultural and Genetic Factors



# COVID-19 VACCINE FLOW IN SC

This graphic shows the progression of the vaccine from the federal government to the state and the steps along the way from providers to vaccine recipients.<sup>1</sup>



Suppliers started shipping Dec. 13, 2020 (ships weekly)

PROVIDERS	VACCINE ARRIVAL
Acute Care Hospitals	Dec. 14, 2020
CVS/Walgreens (LTCF) <sup>3</sup>	Dec. 28, 2020
Non-Acute Care Hospitals	Jan. 4, 2021
Limited Pharmacies	Jan. 18, 2021
Limited Private Physicians	Jan. 11, 2021
Limited Urgent Care	Jan. 11, 2021
Limited DHEC Sites	Jan. 11, 2021

## PHASE 1 IN SC STARTS

Vaccine first received Dec. 14, 2020

### PHASE 1A (CURRENTLY ONGOING):

- Healthcare workers
- LTCF residents and staff
- Home health and hospice workers
- Dentists and dental hygienists/assistants
- Pharmacists

See more detailed listing of Phase 1a at [scdhec.gov/vaxfacts](https://scdhec.gov/vaxfacts)

### PHASE 1B (LATE WINTER 2021):<sup>2</sup>

- 75+ with or without underlying health conditions
- Frontline essential workers

See more detailed listing of Phase 1b at [scdhec.gov/vaxfacts](https://scdhec.gov/vaxfacts)

### PHASE 1C (EARLY SPRING 2021):<sup>2</sup>

- Essential workers continued
- 65–74 with or without underlying health conditions
- 16–64 with underlying health conditions

## PHASE 2

### PHASE 2 (LATE SPRING – FALL 2021):<sup>2</sup>

- All people who wish to be vaccinated
- Widespread availability



# **Wear a mask. Save lives.**

Wear a face cover

Wash your hands

Keep a safe distance

Source:

[https://www.google.com/search?rlz=1C1AJZK\\_enUS844US852&ei=DFn3X5DKEJCo5gK62aHIBw&q=how+to+prevent+covid+19&oq=how+to+prevent+covid+19&gs\\_lcp=CgZwc3ktYWIQAzIFCAAQyQMMyAggAMgIIADICCAAyAggAMgIIADICCAAyAggAMgIIADICCAA6BAgAEEc6CQgAEMkDEBYQHjoFCCEQoAFQ\\_RFYIzBguDJoAXACeACAAAd8BiAHeA5IBBTluMS4xmAEAoAEBqgEHZ3dzLXdpsgBA8ABAQ&scient=psy-ab&ved=0ahUKEwiQgl7Uv4ruAhUQIFkKHbpsCHkQ4dUDCA0&uact=5](https://www.google.com/search?rlz=1C1AJZK_enUS844US852&ei=DFn3X5DKEJCo5gK62aHIBw&q=how+to+prevent+covid+19&oq=how+to+prevent+covid+19&gs_lcp=CgZwc3ktYWIQAzIFCAAQyQMMyAggAMgIIADICCAAyAggAMgIIADICCAAyAggAMgIIADICCAA6BAgAEEc6CQgAEMkDEBYQHjoFCCEQoAFQ_RFYIzBguDJoAXACeACAAAd8BiAHeA5IBBTluMS4xmAEAoAEBqgEHZ3dzLXdpsgBA8ABAQ&scient=psy-ab&ved=0ahUKEwiQgl7Uv4ruAhUQIFkKHbpsCHkQ4dUDCA0&uact=5)





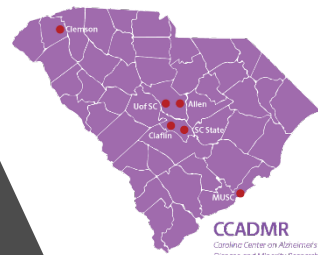
# Hollings Cancer Center

An NCI-Designated Cancer Center



## TODAY'S SPEAKER

Marvella Ford, PhD is a tenured Professor in the department of Public Health Sciences at the Medical University of South Carolina. She is also the Associate Director of Population Sciences and Cancer Disparities at the Hollings Cancer Center. She is the co-director of the South Carolina Cancer Disparities Research Center where they aim to create a future generation of cancer researchers.



Carolina Center on Alzheimer's Disease and Minority Research (CCADMR)

# CCADMR Request for Pilot Research Proposals

**Application Receipt Date: February 15, 2021**

**Award Period: Summer/Early Fall 2021—June 30, 2022**

For more information, please contact:

Lucy A. Ingram, PhD (UofSC) | [Lannang@sc.edu](mailto:Lannang@sc.edu) | 803 777-4389

Marvella E. Ford, PhD (MUSC) | [Fordmar@musc.edu](mailto:Fordmar@musc.edu) | 843 876-2433

Submit completed application to: Quentin McCollum, MPH | [mccolluq@email.sc.edu](mailto:mccolluq@email.sc.edu)

To find out more about the CCADMR, please visit our website:

[https://www.sc.edu/study/colleges\\_schools/socialwork/research/ccadmr/index.php](https://www.sc.edu/study/colleges_schools/socialwork/research/ccadmr/index.php)



**Arnold School  
Public Health**

# Thank you for participating!

*Please give us your feedback about the session by answering a brief survey.*

## To access the survey:

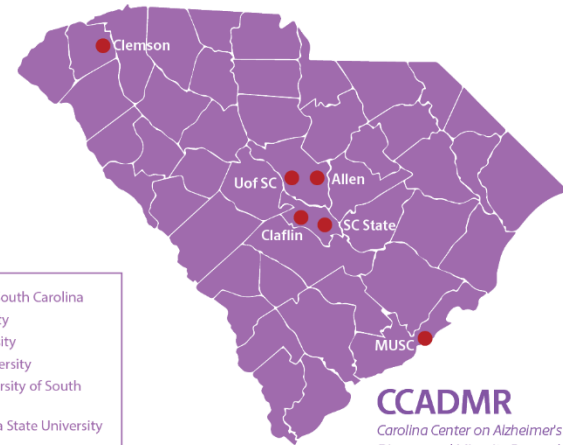
- Scan the QR code here *or*
- Complete the survey once you are emailed a link at the conclusion of the seminar

The QR code appears here or it can be accessed via the [Survey Link](#).



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# Thank you!

If you have any questions,  
please contact Quentin  
McCollum  
[mccolluq@email.sc.edu](mailto:mccolluq@email.sc.edu) or  
Brianna Ashford- Carroll,  
[ashfordb@email.sc.edu](mailto:ashfordb@email.sc.edu).

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