



# The COVID-19 Pandemic A Public Health Perspective

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# The Pandemic in SC... How It All Started

- **Dec. 31, 2019:** Pneumonia outbreak reported in Wuhan
- **Jan. 9, 2020:** Initial Health Alert sent by DHEC
- **Jan. 21, 2020:** 2019-nCoV Workgroup created in DADE and training provided to regional Epidemiology staff
- **Jan. 31, 2020:** Public Health Emergency Plan Committee meeting
- **Feb. 3, 2020:** DHEC began contacting returning travelers
- **Mar. 6, 2020:** First SC cases identified
- **Mar. 11, 2020:** First Gov. Executive Order (transportation)
- **Mar. 13, 2020:** First Gov. State of Emergency Order



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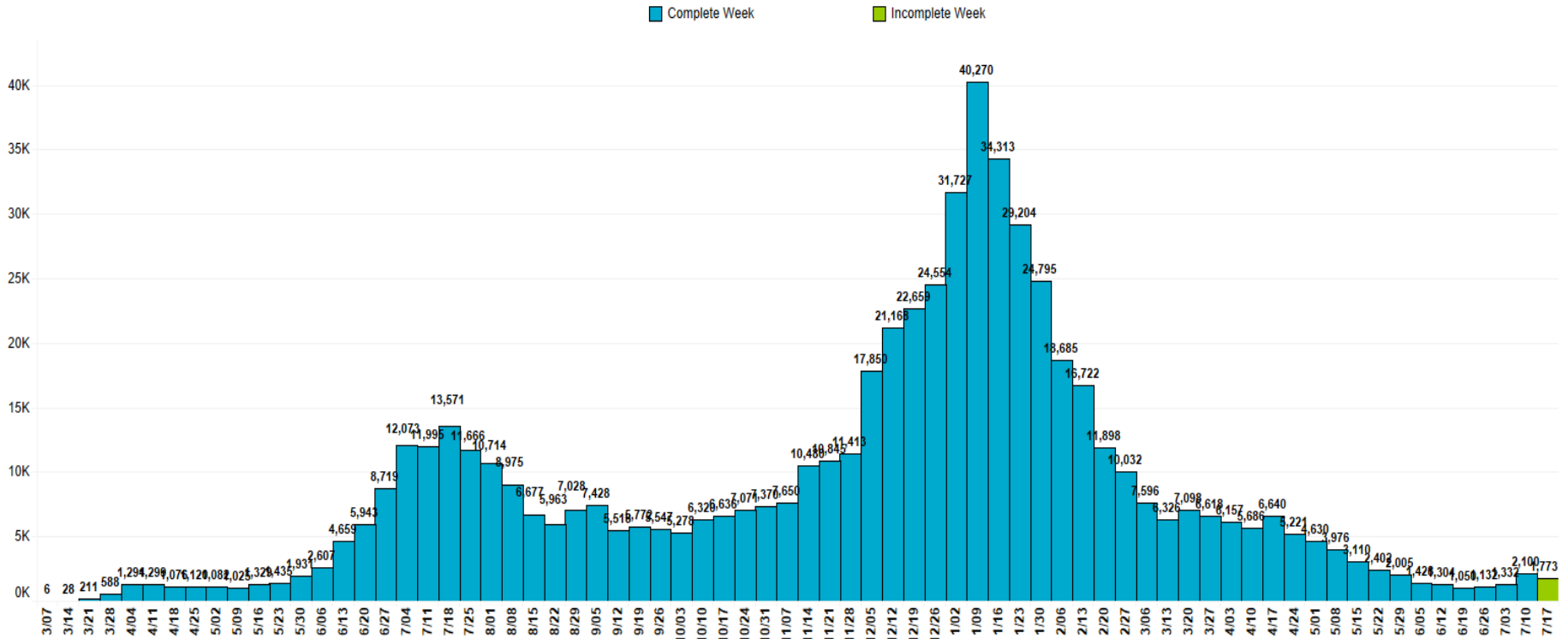
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# Situation Summary



# Cases...

## Reported Cases by MMWR, as of Week Ending 7/17 (601,803)

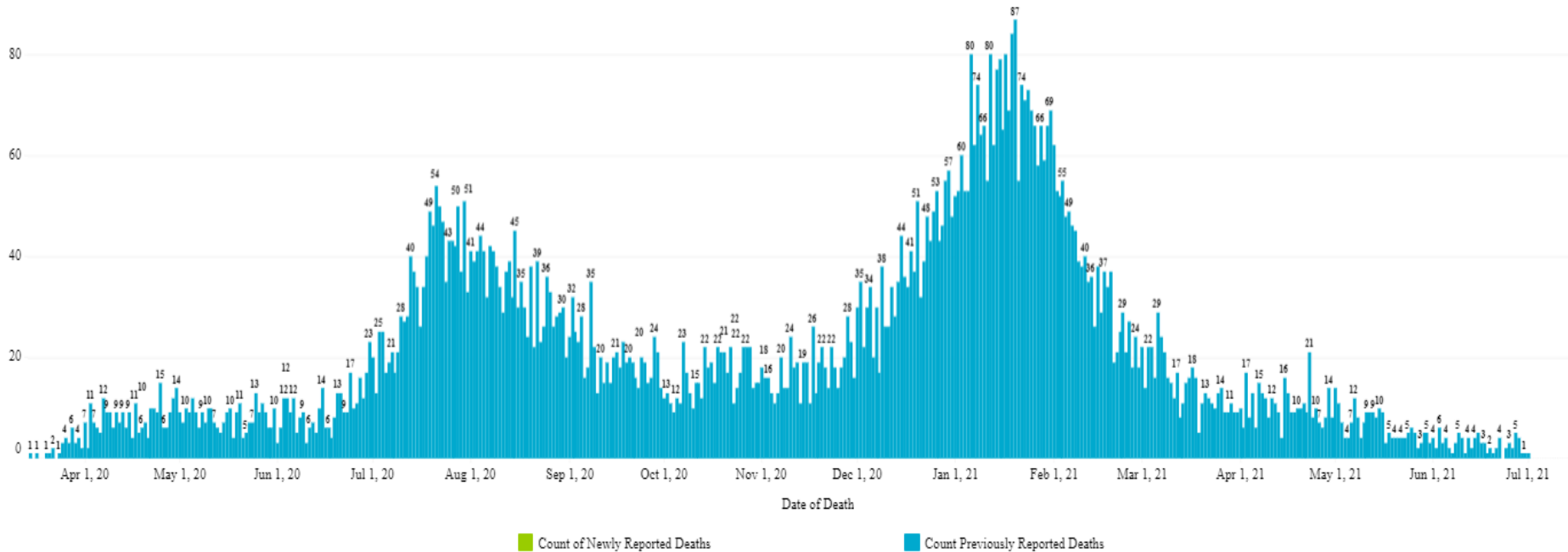


Note: As of June 14, DHEC is reporting probable COVID-19 cases. These cases are grouped in with the confirmed cases. To date, there have been 106,068 probable COVID-19 cases.



# Deaths...

**Reported Deaths by Date, as of 7/4/21 (9,843)**



# High-Risk Groups

- Risk of Exposure

- Occupation
- Congregate Settings
- Social Circumstances
- **Racial and Ethnic Minorities**

- Risk of Complications

- Age
- Underlying conditions
- Environmental risk
- Social Circumstances
- **Racial and Ethnic Minorities**

## Update

Current High-Risk Group = Not Fully Vaccinated

- 94% of new cases
  - 90% of Hospitalizations
    - 100% of deaths
- (SC data from June 1-14, 2021)



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# New Light on Health Disparities

# Impact on Racial and Ethnic Minority Groups

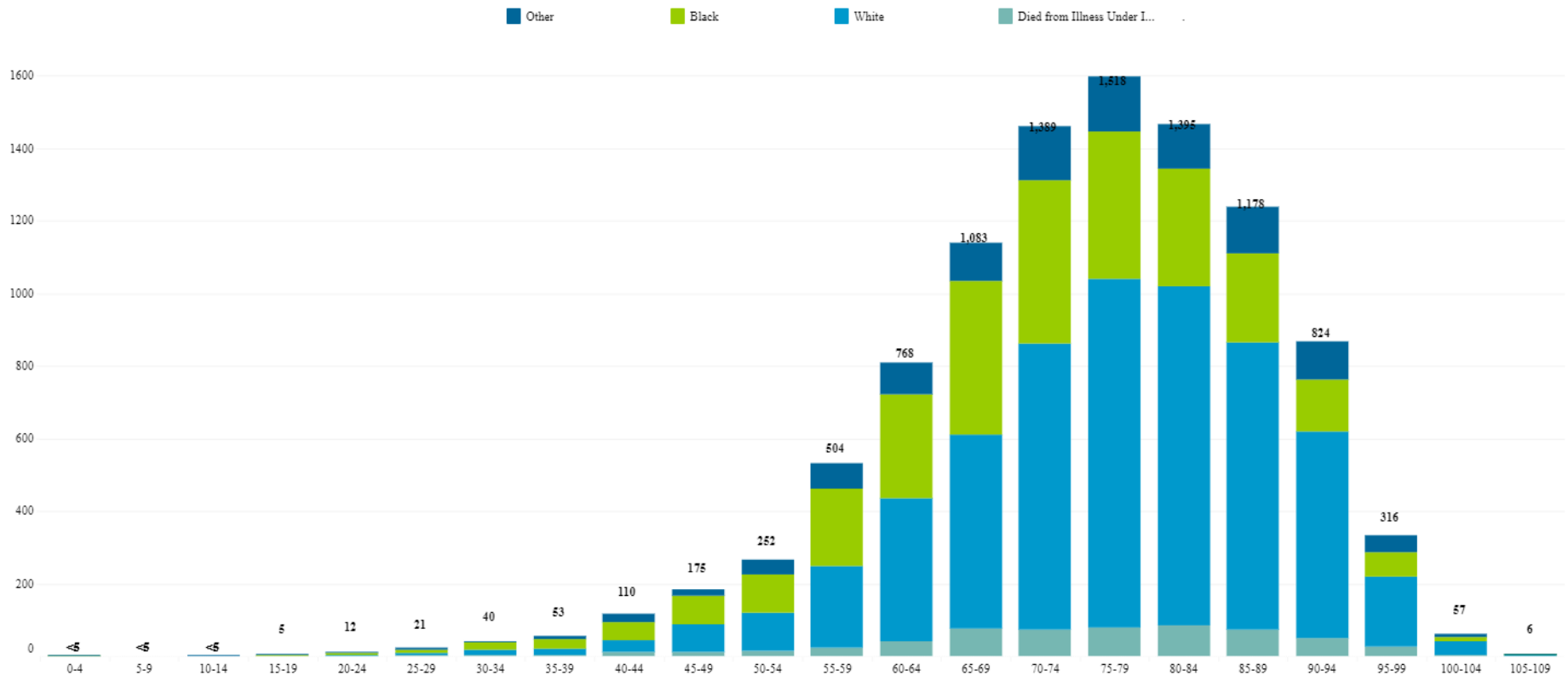
Long-standing systemic health and social inequities put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness.

- Higher prevalence of chronic health conditions
- Economically least resilient
- Limited access to care
- Limited ability to minimize exposure due to work site, transportation, housing.
- Can lead to chronic stress or anxiety disorders.





## Reported Deaths by Age group & Race, as of 7/4/21 (9,712)



Note: Blank age groups indicate no death has occurred. Values between 1 and 4 are suppressed and displayed as (<5)

## COVID-19 ASSOCIATED HOSPITALIZATION RELATED TO UNDERLYING MEDICAL CONDITIONS

### FACTORS THAT INCREASE COMMUNITY SPREAD AND INDIVIDUAL RISK



CROWDED SITUATIONS



CLOSE / PHYSICAL CONTACT



ENCLOSED SPACE



DURATION OF EXPOSURE

RISK FOR HOSPITALIZATION IF YOU HAVE ANY OF THESE CONDITIONS AND GET COVID-19 COMPARED TO PEOPLE WITHOUT THE CONDITION(S).



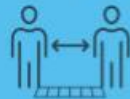
\*Conditions include asthma, obesity, diabetes, chronic kidney disease, severe obesity, coronary artery disease, history of stroke and COPD.

Data has shown that racial and ethnic minority groups with the referenced conditions are at even higher risk for severe COVID-19 illness. 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).

### ACTIONS TO REDUCE RISK OF COVID-19



WEARING A MASK



SOCIAL DISTANCING (6 FT GOAL)



HAND HYGIENE



CLEANING AND DISINFECTION



ALTHOUGH RISK GENERALLY INCREASES WITH AGE, ALL INDIVIDUALS SHOULD ROUTINELY TAKE ACTIONS TO REDUCE RISK OF INFECTION AND AVOID ACTIVITIES THAT INCREASE COMMUNITY SPREAD.

[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

Source: Ko JY, Danielson ML, Town M et al. 2020.

CS319360-A 08/08/2020

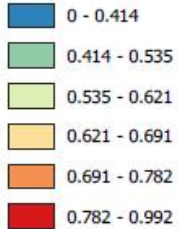
Source: Dr. George Avirappattu, Kean University

South Carolina: Social Vulnerability Index (SVI) versus COVID-19 Case and Mortality Rates by ZIP CODES

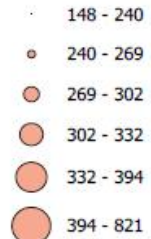


**SC: SVI versus COVID-19**

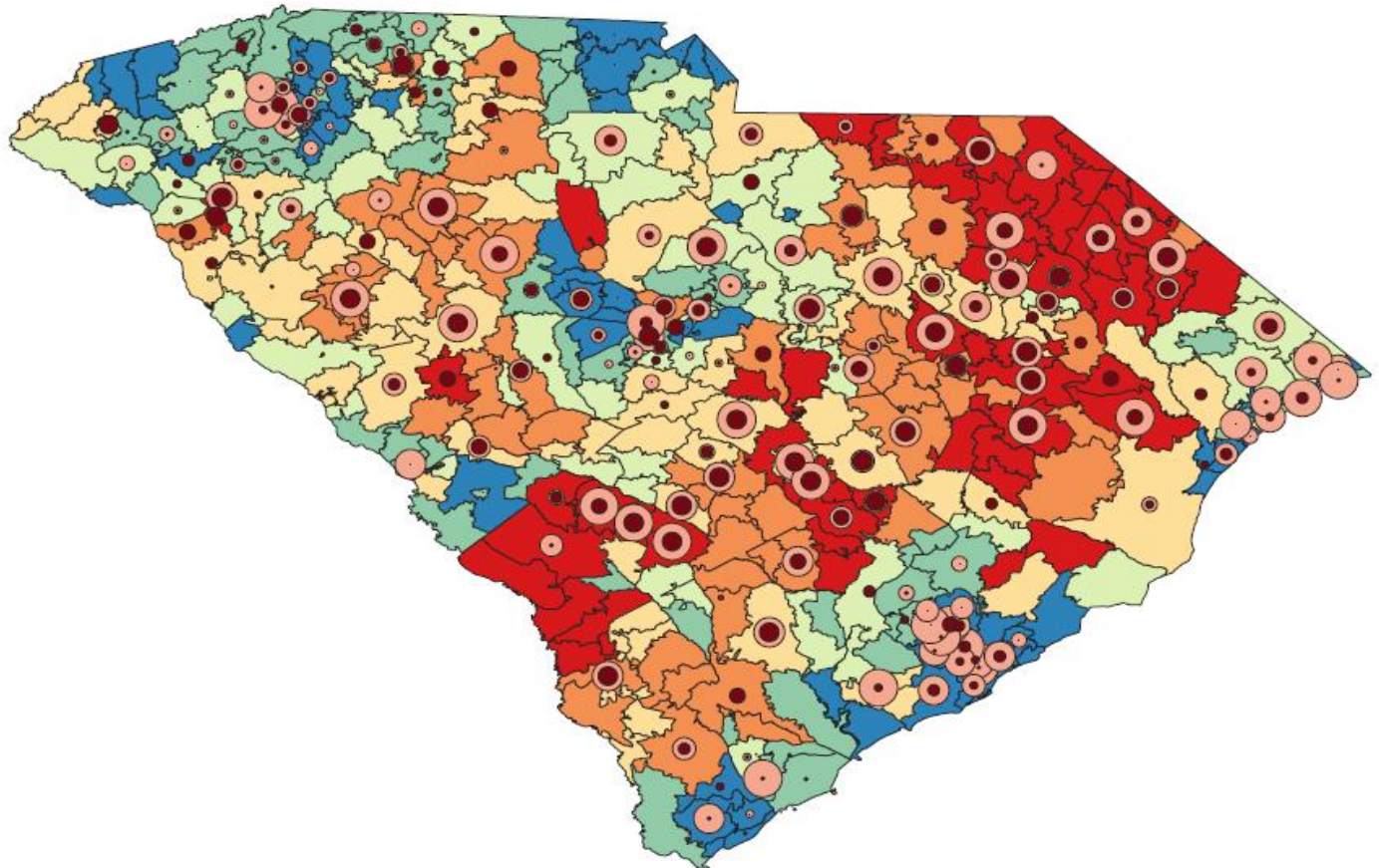
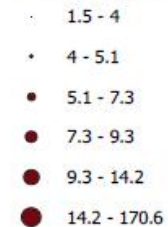
SC: SVI (in Quantiles)



Covid Case Rates



Covid Mortality rates



# Stress from Social Circumstances and Risks

- Economic devastation
- Disconnection from community resources and support systems
- Potential adverse physical and mental health outcomes:
  - higher risk of chronic disease
  - substance use
  - depression
  - post-traumatic stress disorder
  - domestic abuse



## The New York Times

# Pandemic's Racial Disparities Persist in Vaccine Rollout

By [Amy Schoenfeld Walker](#), [Anjali Singhvi](#), [Josh Holder](#), [Robert Gebeloff](#) and [Yuriria Avila](#) March 5, 2021

Communities of color, which have [borne the brunt](#) of the Covid-19 pandemic in the United States, have also received a smaller share of available vaccines. The vaccination rate for Black Americans is half that of white people, and the gap for Hispanic people is even larger, according to a [New York Times analysis](#) of state-reported race and ethnicity information.



# ***The Wealthy Are Getting More Vaccinations, Even in Poorer Neighborhoods***

Officials acknowledge that the coveted shots are disproportionately going to white people and that planners' efforts to course-correct are having limited effect.

WASHINGTON — As soon as this city began offering [Covid vaccines](#) to residents 65 and older, George Jones, whose nonprofit agency runs a medical clinic, noticed something striking.

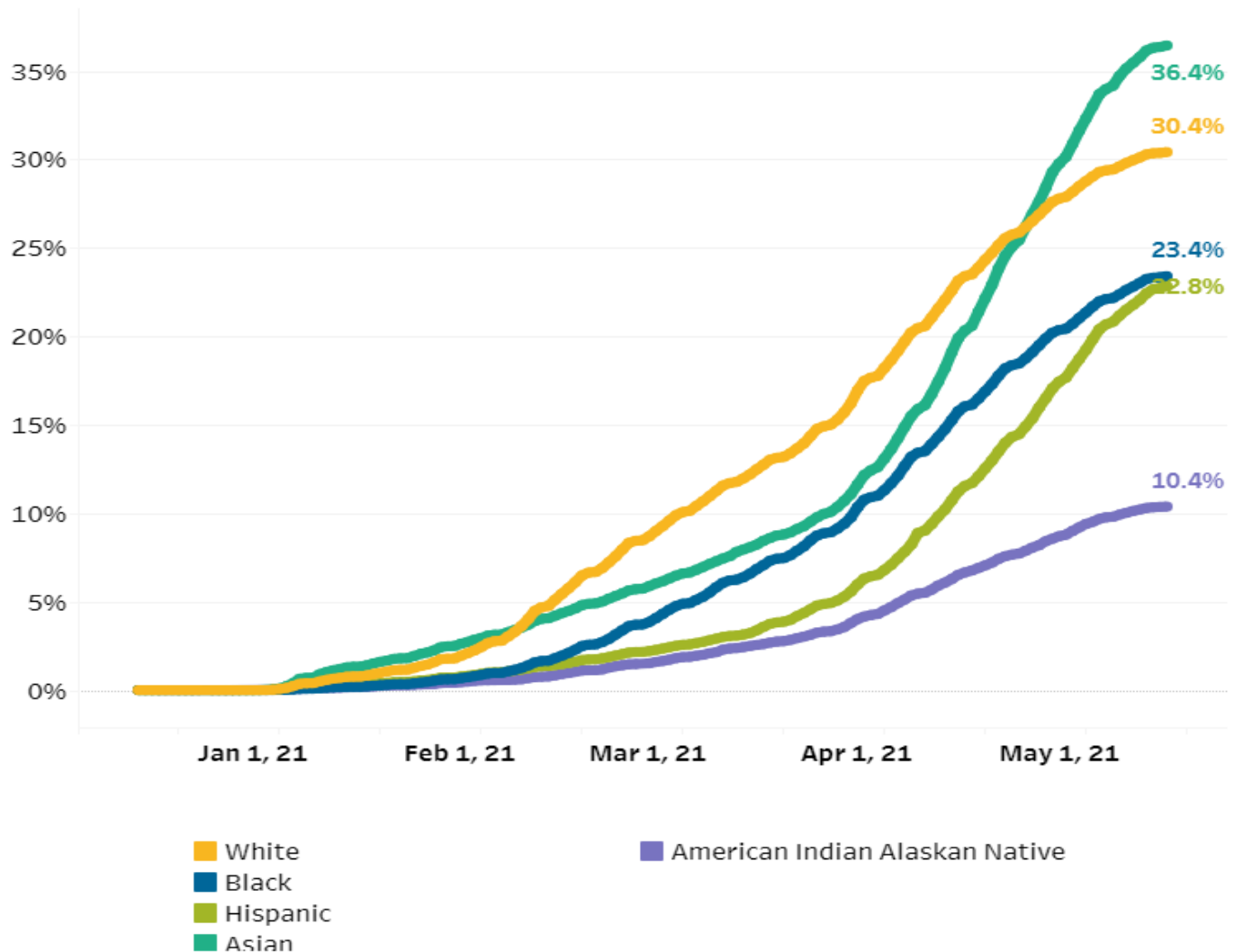
“Suddenly our clinic was full of white people,” said Mr. Jones, the head of Bread for the City, which provides services to the poor. “We’d never had that before. We serve people who are disproportionately African-American.”

Similar scenarios are unfolding around the country as states expand eligibility for the shots. Although low-income communities of color have been hit hardest by [Covid-19](#), health officials in many cities say that people from wealthier, largely white neighborhoods have been flooding vaccination appointment systems and taking an outsized share of the limited supply.



### Percent of SC Residents to Complete Vaccination by Race/Ethnicity

Data as of: 5/17/2021





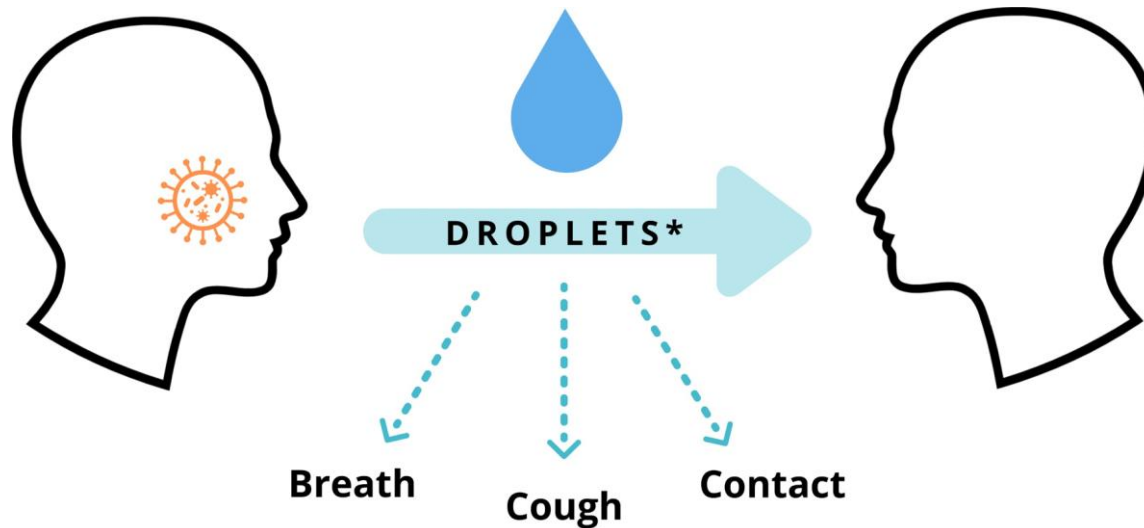
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# Challenges



# Evolving Understanding of COVID



*\* Droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.*

# Evolving Public Health Guidance

## Major Issues:

- Testing
- Reporting
- Case Investigation
- Public Messaging
- Masks & Distancing
- Re-openings
- Vaccinations

## Challenges:

- Capacity
- Keeping abreast of evolving guidance
- Information sources
- Pandemic politics

# Public Messaging

- Provide guidance based on scientific facts & data
- Utilized a wide variety of methods and channels to reach various audiences
  - Press releases, telebriefings, press conferences, interviews, presentations
  - Print media, TV, radio, social
  - Billboards, gas station ads, PSAs
- Public desire for detailed, real-time data but needed to be accurate, timely, & actionable
- Importance of NPIs but poor compliance
  - Mistrust of government; politicization of topics

# Addressing Vaccine Hesitancy

- Identify the roots of concerns
  - Historical mistrust
  - Questions about safety
  - Ideological position
  - Questions about disease risk
- Provide accurate information about risks, benefits and myths
- Reduce barriers to access
- Monitor for safety



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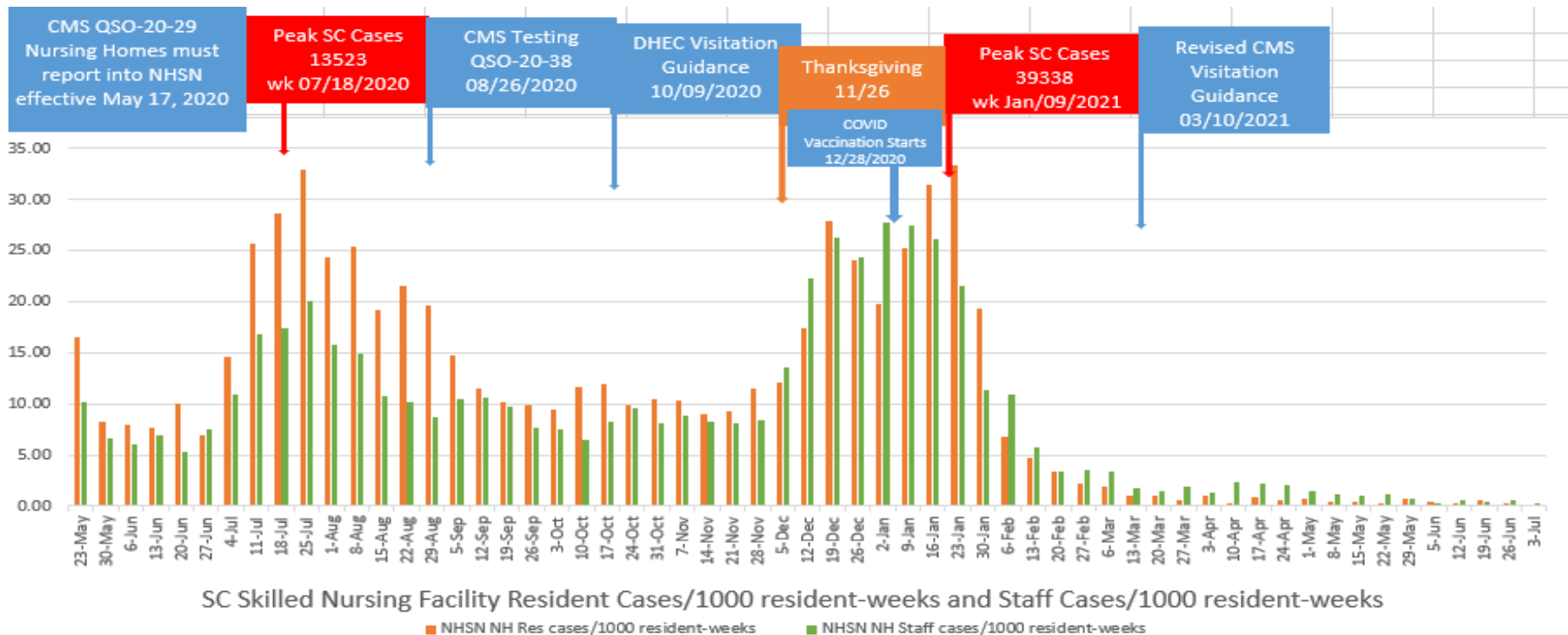
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# A Success Story



# Nursing Homes...

**A Prime Example That Vaccines & NPIs Do Work**





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# Lessons Learned

# Doing the Business of Disease Control during a Pandemic...

- Compounding effect of fear, alternative sources of information, government mistrust, political rhetoric, economic impact, etc.
- Preparedness:
  - Increasing Epidemiology, Lab & IT capacity
    - Special attention to data modernization
  - Communication plan
  - Monitoring and disseminating data to inform decision making and service delivery



# Doing the Business of Disease Control during a Pandemic...

- Leveraging partnerships, collaboration and outreach is key...
  - State and local partners to plan logistics and operations
  - Businesses, school districts, academic institutions and non-profits to do what they can do better than us
  - Health care providers to plan service delivery
  - Community groups, leaders and influencers to communicate prevention messaging and coordinate community services particularly in underserved areas



# Reducing the Impact of COVID-19 among Racial and Ethnic Minorities

- Faith, family, and cultural institutions are sources of social support for individuals and communities to take action to prevent COVID-19, care for those who become sick, and help community members cope with stress.
- Addressing needs of these populations in emergencies includes improving day-to-day life and harnessing the strengths of these groups.

# Addressing Health Disparities

## Equality



## Equity



# Health Inequities Impact **ALL** Populations

Affects populations at large:

- Exhausts resources
- Increases risk for disease exposure
- Increases societal costs
- Impacts essential workforce
- Impacts quality of life for all



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# Thank you!

Disclaimer: The views expressed here are exclusively those of the presenter and do not necessarily reflect the views of DHEC.