Racial and Ethnic Disparities in COVID-19: Addressing Health Equity in Connecticut and West Virginia

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Background

Connecticut's Urban Service Track (UST)/AHEC Scholars Program is designed to engage students across various health disciplines in clinical, didactic, and community-based activities that draw attention to and build skill sets that can address the needs of Connecticut's urban underserved communities. Students from the UST were encouraged to supplement these efforts through participation in monthly interest group meetings for the 2020-2021 academic year. This year, the UST program also invited students from West Virginia's AHEC Rural Scholars Program to join in on these interest group discussions. As part of the Healthcare Advocacy and Policy Interest Group, we used this time to research how the COVID-19 pandemic has impacted minority communities in Connecticut and West Virginia and how we may be able to take steps to reduce the disparities recognized in these underserved communities.

Methods

UST scholars conducted a retrospective cross-national analysis of COVID-19 infection in minority communities with a focus on disparities in Connecticut and West Virginia. Data was gathered from public resources including the CDC, WHO COVID-19 surveillance database, and The COVID Tracking Project.

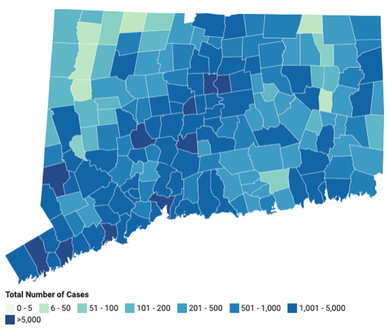
Objectives

- Compare COVID-19 incidence and outcomes based on race and ethnicity
- Assess disparities primarily in Connecticut and West Virginia
- Question addressed: Why is COVID-19 hitting certain communities harder than others?

Results

- In July of 2020, Black CT residents accounted for **18%** of all positive COVID-19 cases, despite making up **12%** of the population.
- From January 2020 - February 2021, cases were most concentrated in Fairfield County (primarily Bridgeport, CT), Hartford County, and New Haven County.

Fig. 1: COVID-19 Cases by Town in CT



Race and Hispanic Origin	
White alone, percent	79.7%
Black or African American alone, percent	12.2%
American Indian and Alaska Native alone, percent	0.6%
Asian alone, percent	5.0%
Native Hawaiian and Other Pacific Islander alone, percent	0.1%
Two or More races, percent	2.5%
Hispanic or Latino, percent	16.9%
White alone, not Hispanic or Latino, percent	65.9%

Table 1: Title: CT Race and Hispanic Origin Distribution 2019

Race	Percentage of population	Percentage of cases	Percentage of deaths
Black or African American alone	4%	4%	2%
Asian alone	<1%	0%	0%
Native Hawaiian and Pacific Islander alone	<1%	0%	0%
American Indian or Alaska Native alone	<1%	0%	0%
Two or more races	<1%	0%	0%
White alone	93%	94%	96%
Some other race alone	2%	3%	2%

Table 2: Title: WV Race and Ethnicity Distribution of COVID-19 Cases

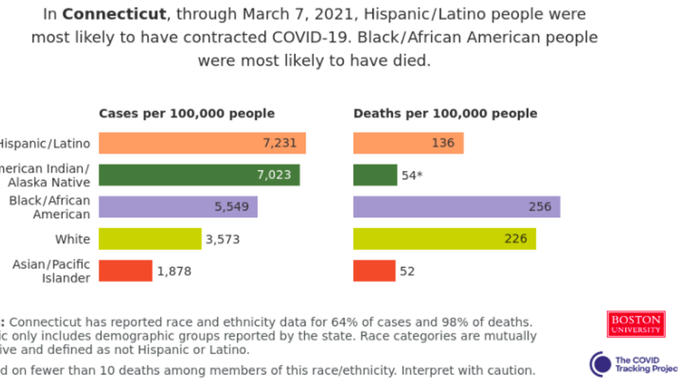


Fig. 2: Title: Connecticut Cases and Deaths Per Capita through March 7th, 2021

Fig. 3: West Virginia Cases and Deaths Per Capita through March 7, 2021

Discussion

- Structural determinants explain the disproportionately higher out-of-hospital deaths in Black and Hispanic communities due to COVID-19.
- Per Johns Hopkins University, of 131 predominantly Black counties in the United States, infection rate and death rate is 3-fold and 6-fold higher, respectively, than in predominantly white counties.
- Various factors contribute to the higher morbidity and mortality, including racial and ethnic minorities being 3x as likely to be on Medicaid, 2x as likely to live in low-income areas, and overall more likely to have one or more chronic comorbidities.
- WV has seen a disproportionately higher number of cases per 100,000 people than in CT in both Black and white patient populations. WV's disparities may be influenced by a greater burden of underlying conditions known to put patients at risk for COVID-19 morbidity and mortality, and a lack of access to care influenced by the rural setting of WV.
- Resident zip codes and associated poverty explain the higher rates of COVID-19 positive cases and hospitalization.
  - CT underserved locations including Bridgeport, New Haven, and Hartford with more concentrated cases.

Health Equity Strategies

- American Rescue Plan Act of 2021 passed as of March 11, 2021 - Title II Subtitle D Public Health, Title III Urban Affairs, Subtitle J Medicaid
  - Emergency grants for rural health care development
  - Funding for COVID-19 Vaccine Activities and Testing - expansion to marginalized communities and mobile health units in primarily underserved areas
  - Expansion of healthcare facilities in underserved areas
  - Federal transit administration grants for transportation barriers
  - Mandatory coverage of COVID-19 treatment under Medicaid, both inpatient and outpatient
  - Additional support for Medicaid home and community-based services
  - Prioritizing entities serving communities disproportionately impacted by COVID-19 and utilizing culturally competent and multilingual strategies in the provision of health services, including racial, ethnic, socioeconomic, linguistic, or geographic diversity
- Per CDC, pivotal and continuously growing role of community pharmacies in mitigating the spread of COVID-19 via vaccinations, testing, population health promotion - especially in disproportionately affected communities.

Conclusions and Future Direction

- Further studies are warranted to assess how community-based health interventions via community or religious leaders (i.e. through churches, apartment complex committees, etc.), and community-based health centers may reduce future COVID-19 infection rates in minority communities.
- Addressing disparities in technology, transportation, language barriers, and vaccine hesitancy are all necessary measures to ensure reduction in COVID-19 morbidity and mortality across racial and ethnic minorities.
- UST Scholars should focus on the effects of the nationally implemented health equity strategies during the pandemic in future studies.

References

CT AHEC Program at UConn Health Center Urban Service Track/AHEC Scholars Program h.uconn.edu/UST

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