

Health Disparities and Social Determinants of Health in Connecticut February 2021

A NEIGHBORHOOD IN WEST HARTFORD

91.0% White, 0.2% Black, 5.1% Hispanic

TYLER



Median Earnings
\$96,000

50

Life Expectancy

RIP 86.2

MILES AWAY, YET WORLDS APART

A NEIGHBORHOOD IN HARTFORD

4.9% White, 59.7% Black, 34.3% Hispanic

MARCUS



Median Earnings
\$37,000



Life Expectancy
68.9

RIP

Born on the same day, the life experiences of Marcus and Tyler are dramatically different.

* DOB DEC 31 2020



3.38 x Higher Infant Mortality Rate

Marcus reaches his first birthday, despite facing a higher infant mortality rate than Tyler.

Both boys develop asthma, but school attendance is a challenge for Marcus (24.18% Absenteeism Rate vs 5.94%) as his asthma is untreated.

13.4 x Higher Uninsured Rate

36.0% Rate of Obesity vs 26.1%

Both try out for football. With untreated asthma, Marcus is cut. This, plus few healthy food options (2.60 x higher Food Insecurity Rate), contribute to his increasing weight.

77.46% Earn a High School Diploma vs 97.57%

Despite his attendance, Marcus works hard to graduate on time, as does Tyler.

Both boys dream of college, but Marcus can't afford it and, due to health-related absenteeism, his GPA is too low for scholarships.

7.51% Earn a Bachelor's Degree vs 80.79%

Without a degree, Marcus's opportunities are limited. His low-paying job has no benefits and just covers rent and inexpensive, processed food.

11.6% Diagnosed with Diabetes vs 8.9%

29.2 x Higher Uninsured Rate (Adults only)

Both reach 50, but Marcus spends it in the ER. He learns he'll need medications, which he can't really afford.

Marcus continues to struggle and dies as a result of diabetes at age 68.

Given life expectancy rates, Tyler goes on to live well into his 80s.

Table of Contents

I. Executive Summary	1
II. Tracking Health Disparities during a Pandemic: Underlying Causes of Disparity	6
The Major Dimensions of Disparity in the United States and Connecticut	10
A Note on Racial and Ethnic Disparity	13
III. The Social Determinants of Health (SDoH)	14
Food Access, a SDoH	17
Access to Healthcare, another SDoH	18
IV. The COVID-19 Pandemic Underscores Health Disparity and a Lack of Health Equity	22
Racial and Ethnic Distribution of COVID-19 Cases Across Connecticut	25
Plotting COVID-19 Across Connecticut Towns: Risk Factors for Morbidity	27
Further Exploration of the SDoH	30
V. Stakeholder Assessment: Addressing Health Disparities in Connecticut	36
Motivation and Methodology	37
Stakeholders' Views of Access Health CT and its Role in Addressing Health Disparities	37
Addressing Health Disparities in Connecticut: Stakeholder Lessons	39
VI. Consumer Survey: Understanding Connecticut Residents' Views on Health and Health-Related Topics	44
Challenges Residents Experience Related to Social, Behavioral, and Lifestyle Determinants of Health	45
Barriers to Equitable Healthcare Access and Engagement, and the Root Causes of These Barriers	46
Interest in Insurance and Other Health-Related Products and Services Evaluation	47
Understanding Consumer Familiarity with and Image of Access Health CT	48
VII. Implications and Recommendations for Access Health CT	49
VIII. Appendices	52
Appendix 1: Activities of Important Stakeholders in Connecticut Health	53
Appendix 2: Description of Interview and Survey Designs	55



I. Executive Summary

Executive Summary

Ranking 5th among states in life expectancy at 80.9 years compared to a U.S. average of 78.5, the health status of Connecticut's 3.5 million people is better than most states. However, indices of average status on which such comparisons rely conceal disturbingly large disparities in both the health status and healthcare delivered to lower income residents in general and lower income people of color more specifically. The fact that different groups experience different burdens of disease and risk of premature death requires stressing that many of these disparities are the social and economic consequences of inequality and discrimination, and importantly, are largely preventable.

An extensive examination of evidence leads to the conclusion that Access Health CT's core mission to improve the health of the people of Connecticut by reducing the population without health insurance, and increasing access to and utilization of health and medical services, cannot be achieved without addressing the substantial health disparities between the state's racial/ethnic and income groups, its cities, and within cities, across neighborhoods. This conclusion follows directly from a consideration of Access Health CT's mission:

- Reducing the uninsured population is not possible without targeting the subpopulations with the largest groups of uninsured. Only 5.9% of Connecticut's population is uninsured, but this relatively small number hides significant disparities among race/ethnic groups and across space
 - Hispanics in Connecticut are almost 4 times more likely to be uninsured than Non-Hispanic Whites; Blacks are 3 times more likely than Whites. Blacks and Hispanics have also lost health insurance coverage at a greater rate during the pandemic
 - While most Connecticut neighborhoods cluster in a range with 2% to 6% uninsured residents, many neighborhoods across the state have 20% or more uninsured residents, several exceed 30%
 - Invariably, the latter neighborhoods are disproportionately composed of Hispanics or Blacks as are the cities and towns where the neighborhoods are located
- Both objective data and self-reports from Connecticut consumers reveal large disparities in access to health and medical services that are

driven by social determinants of health (SDoH) such as income, education, and housing, each highly correlated with the spatial and group differences mentioned above

- About 1-in-11 Connecticut neighborhoods are both food and medical deserts where a dearth of supermarkets selling fresh and healthy food options and a lack of medical facilities interact with other SDoH to undermine healthy choices and health outcomes
- African American, Hispanic, and lower to moderate income respondents to surveys are significantly more likely to report barriers to medical services and healthy lifestyle choices that are based on lack of access to relevant resources
- This research uncovered how consumer experiences within the healthcare delivery system often exacerbate the impact of other SDoH and cause underutilization of the healthcare delivery system. Particularly, there are three key areas of experience that provide barriers to the healthcare delivery system:
 - Not all insurance plans are accepted or treated equally
 - For consumers, the cost of healthcare is unmanageable
 - Poor patient/provider relations exist

What is a Health Disparity?

We adopt the definition of health disparity suggested by the U.S. Department of Health and Human Services. A health disparity is:

“a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic-status, gender, age, or mental health; cognitive, sensory, or physical disability; social orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

This Report summarizes a data-grounded project designed to identify the needs and opportunities of many communities in Connecticut to allow Access Health CT to build a strategic framework that brings together appropriate public, private and non-profit

sector entities in support of developing new products, services and delivery methods that can address health disparities and make meaningful differences in people's lives. The project was completed in three parts.

- **Part 1:** a review of third-party public data to identify and quantify health and health-related issues, morbidity and mortality causes, and their relationship to demographic and socioeconomic status
- **Part 2:** solicitation of collective feedback from Connecticut stakeholders to understand perceptions of health disparities along with perceptions of Access Health CT for potential partnership opportunities and product, service and support ideas
- **Part 3:** distribution of a consumer survey designed to understand Connecticut residents' views on health and health-related topics along with interests and desires to engage with health-related products, services and supports

The Drivers of Health Disparity

Health disparities are easily visible as differences among race/ethnic groups, but the drivers of those disparities (their root causes) stem from a complex and interrelated set of individual, health system, societal, and environmental factors including poverty, poor educational attainment, inadequate housing, unsafe working conditions, and inadequate access to insurance and health care. They are thus reflections of the persistent inequities that exist in society.

- Large differences in life expectancy across Connecticut towns (and within towns, across neighborhoods) are driven by gross racial and ethnic differences in poverty, education, and access to health care
 - The highest life expectancy, a neighborhood of Westport with an 89.1-year life expectancy, is 91% White; by contrast, a neighborhood in Northeast Hartford with a life expectancy 68.9 years is 94% Black and Hispanic
 - In the Westport neighborhood, 8 of 10 adults graduated college, in the Northeast Hartford neighborhood, less than 1 of 10; the Westport neighborhood's poverty rate is 4 in 100, the Northeast Hartford neighborhood's, 44 in 100
- Many health disparities are linked to differences in insurance coverage and associated differential access to a regular health care provider. In Connecticut:
 - 18% of Hispanics and 11% of Blacks were uninsured during 2018, compared to only 8% of Whites
 - More than 1-in-4 Hispanic adults had no personal doctor in 2017. Among White adults, it was just over 1-in-10
 - Hispanic adults were more than twice as likely as Whites to report cost as the reason they did not see a doctor during the previous 12 months
- Barriers to accessing healthcare are very pervasive, and residents who are experiencing barriers often experience multiple challenges rather than a single isolated problem. Across the board, the following groups are more likely to experience barriers to getting healthcare:
 - Low socioeconomic status (SES) residents
 - Residents below 400% of the federal poverty level (FPL) are more likely to experience barriers to healthcare compared to people who are above this threshold. Findings are similar for household income (HHI). Only when HHI exceeds \$50,000–\$75,000 do barriers start disappearing
 - Residents insured through Medicaid, Husky, or a non-traditional plan
 - These residents are more likely to experience multiple barriers, especially finding a provider who takes their insurance, getting an appointment when needed, and barriers related to cost or insurance in general. They are more likely than others to distrust or fear going to the doctor
 - Residents who are in poorer health
 - People who are in poorer health and/or have a serious health condition are more likely to experience multiple barriers
 - Black residents
 - These residents are especially likely to experience various barriers, especially those related to cost and insurance coverage, getting an appointment when needed, and finding a doctor who accepts their insurance
 - Women
 - Women experience some barriers to a greater degree, and this could be interrelated with other characteristics such as SES
 - Having other SDoH risk factors
 - People who think they are at a health disadvantage, because something in their

world or reality is impossible or hard to change, actually are at a disadvantage—they are disproportionately likely to face barriers. This supports the idea that health inequity is partly grounded in the reality that we are held back because of the world that we live in and emphasizes the importance of system-level changes to close the gap in health equity

While these findings indicate relationships between SDoH and various challenges that may have implications for health outcomes, the fact that such relationships exist does not necessarily mean that these factors are drivers of health inequity or that Access Health CT needs address these challenges to meaningfully reduce health disparities. We must consider other root causes.

Because the uninsured are less likely to seek preventive care, diseases go untreated until at an acute stage or they require emergency care. Consequently, the burden of disease and consequences of poor disease management negatively impact health outcomes. Reducing these disparities is important not only from a health equity standpoint, but also from an economic perspective.

- That lack of health insurance and inadequate preventive care causes delayed treatment is consistent with the fact that for several diseases such as cancer and cardiovascular disease, although Whites have the highest prevalence, Blacks have the highest hospitalization and mortality rates
- A recent study at Yale Medical School found that expansion of health insurance through Medicaid lowered the average rate of diagnosis of breast cancer in women largely because lower income women with insurance more readily sought health services earlier. The effects were largest among African American women
- Largely due to emergency room use, the excess hospital cost of Black residents is over \$384 million and that of Hispanics over \$121 million compared with non-Hispanic White residents

Lessons from COVID-19 in Connecticut

- Connecticut's COVID-19 disease and mortality burdens differ considerably from national trends, and the differences convey the socioeconomic

determinants of contracting the disease versus the medical and age-related factors determining who dies

- Although Black and Hispanic residents are disproportionately at risk of contracting the disease, Whites are more likely to die once they have the disease
 - The White percent of COVID-19 cases is only about half their population share.
 - Whites with COVID-19 have died at more than twice the rate of their population proportion among those with the disease
 - Hispanics with COVID-19 have died at less than half their population proportion among those with the disease
 - Blacks with COVID-19 die at about a 15% higher rate than their population proportion among those with the disease
- SES factors appear most significant in determining who contracts the disease
- Who is more likely to die once infected is determined more by health and medical factors such as age and preexisting medical conditions associated with severe COVID-19 cases. The relevant medical conditions are highly correlated with race and ethnicity.

Implications and Recommendations to Access Health CT

The research shows there are five key areas of focus and recommended actions for Access Health CT as the organization builds out its strategic framework for addressing health disparities in Connecticut.

1. Address systemic causes of health inequity: healthcare cannot be an observer of issues or continue to suggest that health inequity is sustained by broader social forces alone.

Much of the discussion on health disparities addresses individual socioeconomic and behavioral determinants. Yet, health inequities are not a product of such characteristics alone. Our research shows that vulnerable groups feel that the healthcare system shuts them out and hinders their engagement in various ways. It is clear that consumer experiences *within the healthcare delivery system* exacerbate the impact of other SDoH and play a powerful role in perpetuating unequal health outcomes.

Implementing solutions at the system level will be critical for meaningful advances in health equity

and reducing root causes of consumer healthcare avoidance. Solutions should include efforts to:

- Reduce cost of care
 - This was consumers' top suggestion for improving healthcare in their community
 - This was also a high priority for stakeholders interviewed
- Improve insurance coverage
 - Health insurance is a way to pay for care but is not the only means of accessing care. It is not enough to be insured. The type and quality of coverage matters, and Access Health CT is well-positioned to advocate for improvements or the creation of new products and services in this area
- Improve quality of patient-provider interactions
- Increase the number of providers and choices available to people; reduce disparities in insurance acceptance by providers
- Improve ability to get timely care
- Improve health and health insurance literacy

2. To improve patient-provider interactions, we must address implicit bias in healthcare and recognize how providers may be unwittingly contributing to inequities.

Strategies should aim to reduce the impact of bias rather than eliminate it entirely. Examples include:

- Efforts to make care more patient-centered—getting physicians to see each patient as an individual and fostering a team approach to patient care
- Bias training and cultural competency training that can help providers to become better attuned to implicit biases and develop skills to address them
- Foster an organizational climate that is truly committed to equity—this has been found to be more effective at reducing bias than formal diversity curricula
- Encourage diversity in physicians and organizational leaders

3. Take proactive measures to get people to engage with care

People benefit from both intrinsic and extrinsic rewards to take interest in their health and well-being and to get and stay on any form of care path. However, they also need someone to reach out to bring them into the system first before they can get on this path. Once they are in, helping them

understand more about themselves and their health is critical and providing guidance along the way to keep them focused and on a plan. Supporting the work of Community Health Workers or Care Coordinators as “super navigators” is an area to explore further.

4. Assess current work around Data and Information centralization to see how Access Health CT can help

True integration of care to support the whole person requires information sharing. For the commissions, organizations or providers that support underserved communities, there are limitations to how data is shared or a lack of data sharing. For example, many struggle with the costs of Electronic Patient Record (EPR) systems or are unable to access these types of systems. All of this creates barriers for patients. As the State of Connecticut is working to centralize data, make data more accessible or enhance reporting to better support whole person health, Access Health CT should assess this work in progress in these areas to understand how the data Access Health CT has can support or enhance these efforts.

5. Access Health CT brand perception is neutral to positive

With a lack of trust for public and private institutions growing among consumers, yet Access Health CT brand perception being neutral or positive, Access Health CT has the opportunity to take on the role of building trust and relationships, and represents an opportunity to expand its current role to better help those in need.

These initial recommendations encompass six areas that will guide development of more specific new products, services and supports forthcoming in the next phase of the project.



II. Tracking Health Disparities During a Pandemic: Underlying Causes of Disparity

Tracking Health Disparities During a Pandemic: Underlying Causes of Disparity

The 80.8 years of life expectancy bequeathed a baby born in Connecticut exceeds the national average of 78.5 years.¹ However, as the hypothetical examples of Marcus and Tyler illustrate, the state average obscures vast differences between cities and, within cities, even across neighborhoods, see Figure 1. In a neighborhood of Northeast Hartford, life expectancy is just 68.9 years—nearly 12 years shorter than the state average and more than 20 years shorter than sections of Westport, the affluent coastal town whose residents enjoy the highest life expectancy in Connecticut.²

Given historic patterns of racial and class segregation in housing and schools, these geographic disparities also manifest along racial and ethnic lines. The proportion of Blacks or Hispanics living in most of the neighborhoods with the lowest life expectancies greatly exceed their respective state population shares of 12.2 and 16.9%, see Table 1.³ For example, in the area of Westport with a life expectancy of 89.1 years, 91% of residents are non-Hispanic White.

By contrast, Northeast Hartford, which has a life expectancy below 70 years, is 98% Black and Hispanic. These disparities in life expectancy at birth reflect well known differences in the health of Connecticut residents.

In furtherance of the Affordable Care Act's mandate to provide "quality affordable health care for all Americans," Access Health CT asked BJM Solutions and Mintz + Hoke to assess the state of health disparities in Connecticut and recommend any interventions the organization might take to help redress such health disparities.⁴

In early 2020, just as the assessment began, the COVID-19 pandemic erupted, catapulting concerns about such health disparities to a new level of public consciousness. Various reports indicate that group differences in the incidence of COVID-19 morbidity and mortality reflect many of the group health disparities long recognized by public health experts. The virus exposes the sources of these disparities in a particularly salient manner, providing clear evidence that major causes and covariates of health disparity such as

Highlights

- **Significant differences in the average life expectancy of various communities in Connecticut track health disparities across its cities.**
- **Disparities in life expectancy reflect large disparities in morbidity such as low birth rates, obesity, diabetes, and cardiovascular disease.**
- **Group differences in COVID-19 incidence reflect health disparities long recognized by experts, exposing the sources of these disparities clearly.**
- **COVID-19 data show how occupation, income and education, age, gender, and geography (each closely tied to race and ethnic origin), drive health disparities.**

occupation, income and education, age, gender, and geography (recognized drivers of health disparity), are closely tied to race and ethnicity.

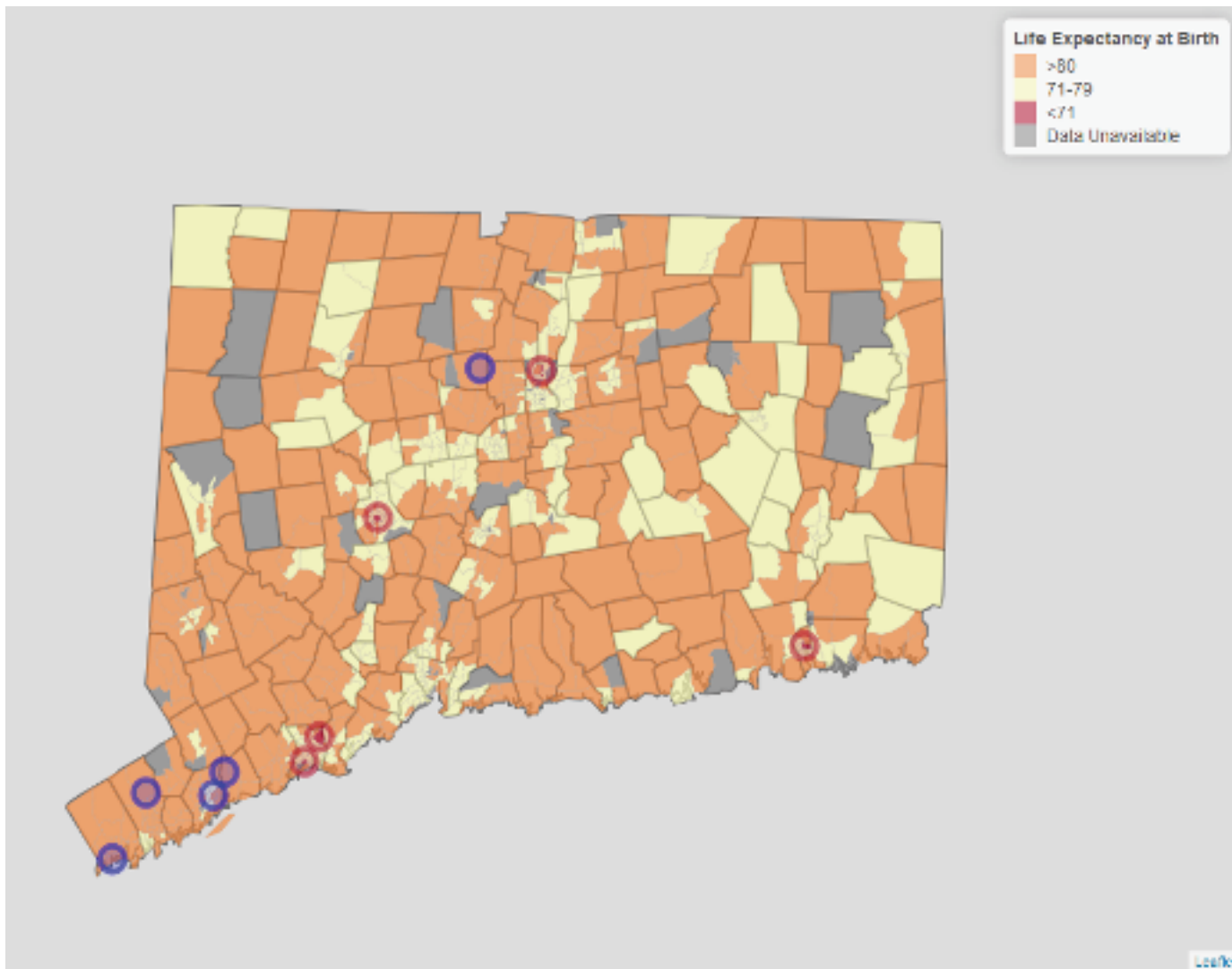
This report documents Connecticut's significant health disparities by focusing special attention on the public health lessons learned during this pandemic. Because the virus targets subpopulations with demographic and socioeconomic characteristics that make Connecticut's most vulnerable communities most at risk of contracting it, comparing the differential impact of COVID-19 to measured health disparities more generally provides an illuminating framework for ascertaining the drivers of health disparity across the state.

This part of the report begins by defining what is meant by the term "health disparity," illustrating the concept with examples of disparities in those diseases that are the major causes of group health differences and premature death. The report then discusses the complicated relationship between racial and ethnic categorization and the demographic and socioeconomic factors that mainly drive health disparities. The next section of the report presents several findings documenting the distribution of COVID-19 cases and deaths across Connecticut's 169 towns and cities. This discussion examines

the various social and demographic differences that underly health disparities across the state's landscape, illuminating the role of social and spatial inequities in driving general health disparities. The next two sections summarize findings from qualitative and quantitative interviews and surveys of stakeholders and consumers. These findings with

detailed discussions of Connecticut stakeholders' and consumers' views of Access Health CT prepare a path for making recommendations specific to the mission of Access Health CT. An appendix contains tables and figures of supporting data as well as a summary of important stakeholder activities.

Figure 1. *Life Expectancy at Birth of Connecticut Residents by Census Tract*



**The ten census tracts circled red or blue have, respectively, the lowest and highest life expectancies in Connecticut. The average number of residents in a census tract is about 4,000, but nationwide they range from 1,200 to 8,000 persons.*

Table 1. Top 5 Census Tracts with Highest & Lowest Life Expectancy and Sociodemographic Traits

Town	Census Tract	Expectancy ⁵	NH White ⁶	NH Black ⁷	Hispanic ⁸	College Graduate ²	Poverty ¹⁰	Uninsured ¹¹
Connecticut		80.8 ¹²	67.5%	9.8%	15.7%	21.74%	10.03%	5.58%
Westport	501	89.1	90.5%	0.0%	0.7%	82.67%	3.74%	3.58%
Greenwich	112	88.8	78.5%	0.1%	18.3%	75.28%	6.13%	3.69%
Stamford	204	88.4	69%	3.4%	12.5%	67.76%	3.23%	1.42%
Avon	4622	88.1	72.8%	3.0%	2.8%	81.24%	4.41%	1.30%
Norwalk	436	87.9	65.7%	9.0%	13.0%	39.82%	7.05%	11.26%
Bridgeport	731	71.0	24.2%	28.7%	39.3%	21.21%	18.13%	9.53%
Bridgeport	709	70.4	7.1%	38.4%	51.6%	15.56%	34.83%	16.14%
New London	6905	69.8	38.6%	18.6%	28.7%	19.60%	40.46%	9.81%
Waterbury	3501	69.8	26.2%	14.6%	50.4%	7.38%	56.48%	12.67%
Hartford	5012	68.9	4.9%	59.7%	34.3%	7.51%	44.35%	7.79%

What is a Health Disparity?

“Health” is a complex state of being not easily amenable to a simple definition. For the purposes of this report, we indicate a population’s relative “health” status in terms of objective indicators that measure the incidence, prevalence, and burden of disease or other adverse health conditions such as premature mortality. However, given the complexity of the concept “health,” the term health disparity carries different meanings for different health practitioners. As a recent excerpt from an article in the *American Journal of Obstetrics and Gynecology* reports, “while the term “health disparities” appears to represent a concept which can be intuitively understood, there is much controversy about its exact meaning.”¹³ The authors go on to say that most accepted definitions consider health disparities to be only those health differences that systematically and negatively impact less advantaged groups. Common definitions also restrict attention to health status differences created at least partially by a society itself, because that focus endows the society the greatest potential to ameliorate the health differences. In the international literature, and increasingly in the United States, health disparities across socioeconomic class, gender, disability status and sexual orientation have been added to concerns of health disparities between racial and ethnic groups.

These group categories present difficult measurement issues concerning the definition of groups and even the scientific validity of social concepts such as race. After considering the definitions used by several organizations and government agencies, we adopted the definition of health disparity suggested by the U.S. Department of Health and Human Services (HHS) to guide our report on the state of health disparities in Connecticut. A health disparity is:

“a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, age, or mental health; cognitive, sensory, or physical disability; social orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”¹⁴

A related concept is health equity.

A society attains health equity when each of its members “has access to the resources necessary to attain his or her full health potential,” and no one is “unable to achieve their potential because of their social position or other socially determined circumstances.”¹⁵

Highlights

- **Health disparity:** a health difference linked to social, economic, or environmental disadvantage that adversely affects those who systemically experience greater social or economic obstacles to attaining good health.
- **Health equity:** occurs when members of society have access to the resources necessary to attain their full health potential; no one is unable to achieve their potential due to their social position or socially determined circumstances.

A. The Major Dimensions of Disparity in the United States and Connecticut

Significant group differences in longevity exist in Connecticut. Here we examine objective indices of health that measure the extent of health disparity in a population. We focus on several dimensions of health status:

- **Longevity/Mortality:** Group differences in length of life and rates of mortality from disease
- **Prevalence and Burden of Disease:** Group differences in rates of morbidity, severity of disease, and the onset of disease complications
- **Access:** Group differences in access to preventive health screenings and prescriptive healthcare and resources for disease management, succinctly, differences in who becomes ill

Table 2 exhibits the top ten causes of death in the United States. Nationwide, Blacks and Native Americans experience higher mortality rates both overall (row 1) and for several specific diseases. The mortality figures presented in Tables 2 and 3 suggest that in Connecticut, all groups are faring better than national averages.

Table 3 indicates that, in Connecticut, Black Americans, who have the highest death rates in 6 of 10 of the top causes of mortality, are the only group experiencing systematic and significant divergences from state averages. COVID-19 related deaths also follow interesting trends when studied across racial/ethnic dimension, as will be discussed later. Public health experts began releasing projections of COVID-19-related deaths during the summer of 2020.

As of December 2020, the coronavirus surpassed heart disease to become the leading cause of death. The Institute for Health Metrics and Evaluation estimates there will be about 570,000 deaths from the disease by April 1, 2021.¹⁶

Highlights

- All cause-age-adjusted mortality rates are lower than national averages for all Connecticut groups.
- However, Connecticut mortality rates exhibit significant differences across racial and ethnic groups.
- Connecticut Blacks have the highest all-cause mortality rates, and the highest mortality in 6 of the 10 leading causes of death.
- Hispanic mortality is generally lower, but Hispanic diabetes mortality is 1.67 times Whites’.
- Nationwide, Native Americans have the highest mortality rate.
- COVID-19 is the leading cause of death in 2020.

Table 2*. Age-Adjusted Mortality Rates** by Race & Ethnicity, U.S., 2017¹⁷

Rank	Race/Ethnicity	All	White	Black	Hispanic	Asian	Native
-	All-Cause Mortality	731.9	755.0	881.0	524.7	395.3	800.2
1	Heart Disease	165.0	168.9	208.0	114.1	85.5	151.4
2	Cancer	152.5	157.9	178.0	108.1	95.2	130.0
3	Accidents	49.4	56.2	47.6	32.5	16.7	86.3
4	Chronic Lower Respiratory Diseases****	40.9	46.4	30.2	17.2	11.8	40.7
5	Stroke (Cerebrovascular disease)	37.6	36.4	52.7	31.8	30.3	34.1
6	Alzheimer’s Disease	31.0	32.8	28.5	24.7	15.3	20.6
7	Diabetes	21.5	18.8	38.7	25.5	16.5	46.1
8	Influenza and Pneumonia	14.3	14.4	15.2	11.3	13.0	17.3
9	Intentional Self-harm (suicide)	14.0	17.8	6.9	6.9	6.8	22.1
10	Nephritis, nephrotic syndrome, and nephrosis	13.0	11.7	25.8	11.3	8.5	14.3

Table 3. Age-Adjusted Mortality Rates by Race & Ethnicity (deaths per 100,000 people), CT, 2013-2017¹⁸

Rank	Race/Ethnicity	All	White ^{***}	Black	Hispanic	Asian	Native
-	All- Cause Mortality	648.0	652.49	727.1	516.6	346.4	283.7
1	Heart Disease	144.0	145.4	157.9	136.8	102.6	57.6
2	Cancer	144.0	146.6	158.6	105.8	81.8	67.3
3	Accidents	44.7	49.5	35.6	36.5	14.6	-
4	Chronic Lower Respiratory Diseases ^{****}	29.9	31.4	24.4	16.9	8.3	-
5	Stroke (Cerebrovascular disease)	27.1	26.2	32.4	28.0	21.7	-
6	Alzheimer's Disease	18.6	19.2	16.0	12.2	9.1	-
7	Diabetes	14.4	12.7	30.8	21.2	9.4	-
8	Influenza and Pneumonia	12.6	12.8	10.6	10.1	9.8	-
9	Septicemia	12.6	12.1	18.6	12.5	8.6	-
10	Nephritis, nephrotic syndrome, and nephrosis	11.9	10.9	24.5	10.6	10.5	-

* The rate of the group with the highest age-adjusted mortality appears in red. The all-cause mortality figure identifies the total number of deaths reported by the CDC during a calendar year.

** The age-adjusted mortality rate measures the number of deaths per 100,000 individuals within a population. An age-adjustment accounts for the age structure of a population in order to allow meaningful comparison between two groups who may have different actual age structures.

*** Hispanic individuals can identify as any racial group. Throughout this report, White refers to Non-Hispanic Whites and Black to Non-Hispanic Blacks.

**** Chronic Lower Respiratory Diseases affect the lungs and include Chronic Obstructive Pulmonary Disease (COPD), asthma, pulmonary hypertension, and occupational lung diseases.

B. A Note on Racial and Ethnic Disparity

The data reported in Tables 2 and 3 indicate why much of the literature on health disparities is viewed through racial and ethnic lenses. However, it is important to recognize that race and ethnicity are socially constructed understandings of human difference. Because they are highly correlated with socioeconomic determinants of health, race and ethnicity carry significant predictive power for identifying various health disparities.

Thus, current understandings of racial and ethnic difference impact the measurement of health disparities. Historically, comparisons of Blacks and Whites has dominated this discussion, and a vast literature has documented a sizable disparity between Black and White Americans.

Overall, Black life expectancy is about four years less than Whites', but the degree of health disparity varies by disease. For example, younger Black adults, those in their 20s, 30s, and 40s, are more likely to live with and die from conditions that tend to occur at older ages in White populations.¹⁹ This is partly because risk factors for some of these diseases—high blood pressure among others, are not detected or are not adequately treated in younger Black populations.

Additionally, many diseases correlate with other social disadvantages that further exacerbate observed racial and ethnic disparity. Compared to Asian Americans and Whites, on average, Blacks, Hispanics, and Native Americans have lower educational attainment and greater poverty as well as lower home ownership rates.

These social positions render these groups less able to receive preventive care and to partake in “healthier” behaviors.

Highlights

- Although race and ethnicity are social constructs, they are points of focus in measuring health disparities because race and ethnicity are highly correlated with socioeconomic determinants of health.
- Black, Hispanic, and Native American populations have lower educational attainment and greater poverty rates than do Asian Americans and Whites, conditions that are risk factors for inadequate treatment of chronic conditions.



III. The Social Determinants of Health (SDoH)

The Social Determinants of Health (SDoH)

It is critical to recognize that racial or ethnic identities do not themselves drive disparate outcomes in health. Rather, they are often markers for the systemic discrimination and social disadvantages that do drive health disparities: poorer living conditions, lack of quality education, cultural and language barriers, lower rates of health insurance, and poverty. We proceed with the understanding that, while medical care influences health, the roots of health disparity lie in a group's relative positioning in the social pecking order. Such positioning is associated with various SDoH, characteristics of which influence how a group is treated in society as well as the group's material/resource-based advantages or disadvantages. In combination with actual clinical care and lifestyles, SDoH shape health in powerful ways. This section examines these relationships across Connecticut towns. The following section uses COVID-19 data to show that health status is linked to various social, economic, and environmental disadvantages to which certain populations are more susceptible.

Any population's health status and general well-being depends on three general factors, genetic propensities toward disease, socioeconomic status, and lifestyle choices. A discussion of genetic factors is outside the scope of this report, and it should be stressed that socioeconomic status and lifestyle choices are not always separable. For example, both obesity and diabetes are major sources of health disparity between Blacks and Whites. It has been well documented that much of these disparities can be attributed directly to disparate rates of eating unhealthy foods. Part of this can be attributed to cultural differences in diet preferences, but socioeconomic conditions also play a role. Lower income individuals (disproportionately Black Americans) may simply not be able to eat healthy foods to the extent recommended. Despite more frequently living in substandard housing, lower income households must spend a larger proportion of their income on rent, giving them less opportunity to make healthy (often more expensive or less conveniently obtained) food choices. Figures 2 and 3 illustrate the powerful relationship between life expectancy and the percentages of income spent on housing and food across Connecticut neighborhoods.

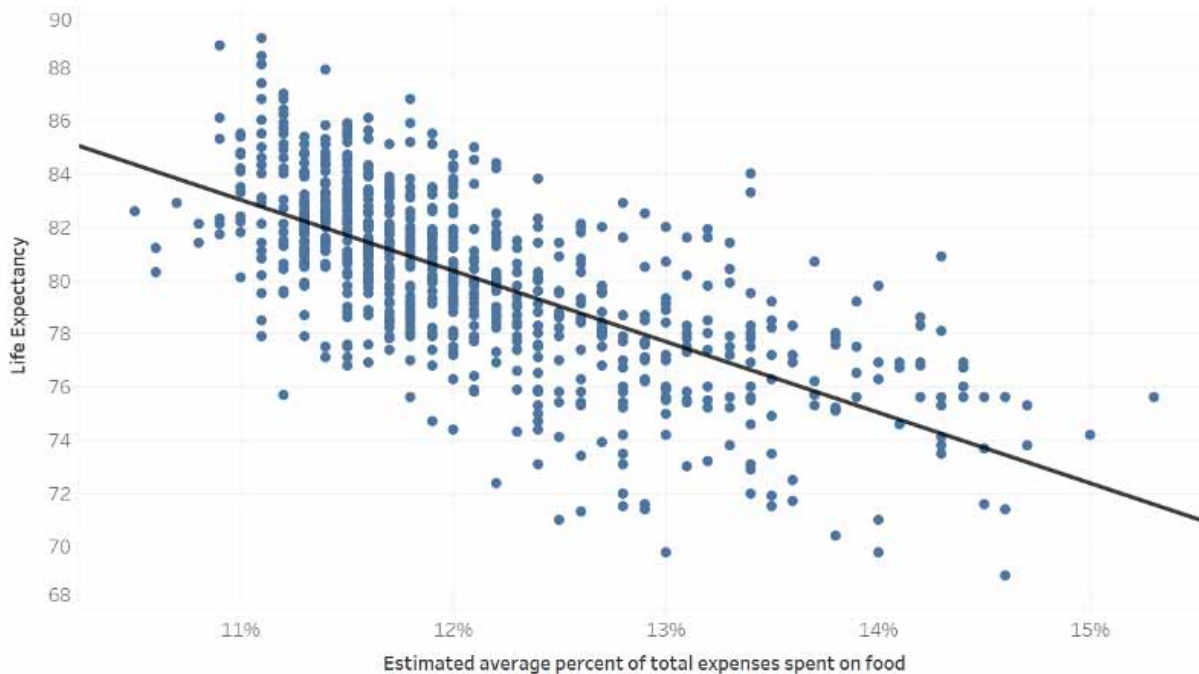
Highlights

- The roots of health disparity lie in a group's relative positioning in the social pecking order.
- Social Determinants of Health (SDoH) are the material/resource-based advantages or disadvantages that have noticeable impact on a group's health outcomes.
- There is a powerful negative relationship between percentage of income spent on housing and life expectancy across Connecticut neighborhoods (Figure 2).
- Despite substandard housing, lower income households (often Black and Hispanic) spend a larger percentage of their income on rent. This limits their ability to consume healthy foods, contributing to higher rates of obesity and diabetes and ultimately shortening life expectancy.

Figure 2. Percentage of Income Spent on Housing and Life Expectancy in CT Neighborhoods



Figure 3. Percentage of Income Spent on Food and Life Expectancy in CT Neighborhoods



Description: Consumer spending data calculated by PolicyMap and Quantitative Innovations using the 2016-2017 Bureau of Labor Statistics Consumer Expenditure Survey and the 2013-2017 U.S. Census Bureau's American Community Survey. Housing expenses include mortgage or rent payments, utilities, personal services such as day care or elder care, housekeeping supplies or services, furniture, and appliances.²⁰ Expenses on food refers to food purchased at grocery stores and meals purchased away from home, including at restaurants, cafeterias, and vending machines.²¹ Life Expectancies provided by CDC 2010-2015 Small-area Life Expectancy Estimates Project (USALEEP).²²

A. Food Access, a SDoH

Obesity and diabetes are often linked to food insecurity. Various reports have shown alarming rates of food insecurity among lower income minority groups. For example, in 2018, 17.3% of Hispanics and 10.0% of Blacks in Connecticut reported being food insecure compared to 5.3% of Whites.²³

Accepted dietary guidelines indicate that people should increase consumption of nutrient-rich foods from a young age. Intake of fruits and vegetables are believed to reduce risk for many of the high disparity diseases such as heart disease, stroke, diabetes, and cancers. While most individuals do not consume the recommended distribution of food groups, those who live in neighborhoods with better access to supermarkets and have adequate levels of income are better able to choose diets that support positive health outcomes.

Most detrimental to healthy eating habits is residence in communities that simply lack supermarkets where a wide variety of foods may be purchased. Many low-income neighborhoods have become virtual food deserts where families must either have private transportation or spend precious income and time on long trips on public transportation to visit a supermarket to avoid eating fast food and buying from relatively expensive small grocers with a lack of variety. This phenomenon has been highlighted by the COVID-19 pandemic because families with low incomes living in food deserts were unable to sufficiently stockpile supplies and practice social distancing as much as their more advantaged counterparts.

Highlights

- Diet is a determinant of many chronic diseases, such as heart disease, stroke, diabetes, and cancer.
- In Connecticut, many minority groups live in virtual food deserts with limited access to a **supermarket or to affordable fruits and vegetables.**
- In Connecticut, **39% of Blacks and 37% of Hispanics report either poor or fair availability of affordable, high-quality fruits and vegetables, compared to 21% of Whites.**

B. Access to Healthcare, Another SDoH

Several organizations dedicated to improving health equity in Connecticut have identified lack of access to health services to be a significant problem for people residing in impoverished communities. Trips to hospital emergency rooms for important but relatively mild health problems is highly expensive and leads to congestion of these services, lowering the quality of service for those with severe conditions. Thus, lack of adequate numbers of urgent care centers in poorer neighborhoods is a serious problem. The issue might appear to be outside the parameters this report has set for determining programmatic solutions to health disparities, but that is not so. The supply of urgent care centers in a community depends on the demand for such services not only in the sense that residents would be willing to use such centers, but that they are also able to pay for them. For this reason, the expansion of health insurance to underinsured communities should increase the supply of urgent care centers and medical services generally in such communities. Such reasoning was a key guiding principle underlying the Medicaid expansion and insurance exchange development provisions of the Patient Protection and Affordable Care Act (ACA). Under the ACA, more than 20 million people have gained health insurance, many of whom are from disadvantaged groups.²⁴

There is also a clear relationship between life expectancy and the prevalence of uninsured persons in Connecticut neighborhoods (Figure 4a). As the proportion of Blacks or Hispanics living in an area increases, the percentage of residents who are uninsured rises (Figures 4b and 4c). In 2018, while only 4% of Whites were uninsured, 6% of Asian/Pacific Islanders, 7% of Blacks and 14% of Hispanic individuals were uninsured in Connecticut.²⁵ Because uninsured individuals are less likely to seek preventive care, it is highly likely that chronic diseases go unnoticed until they are particularly acute or require emergency care. Consequently, the burden of disease alongside poor disease management negatively impacts health outcomes. Stress on the healthcare system by the pandemic has exacerbated these existing biases. For examples, see the notes below Table 5.²⁶

It is important to note that these SDoH are interrelated. Neighborhoods with limited access to healthcare are often food deserts as well, see Figure 5. Compared to other areas, dual food desert and Medically Underserved Areas tend to have larger Black and Hispanic populations (55.2% versus 24.4%),²⁷ higher poverty rates (21.5% versus 10.1%),²⁸ and are home to higher rates of the uninsured (14.3% versus 7.0%).²⁹ The accumulation of these disadvantages translates into significant health disparities for the reasons discussed above.

Highlights

- Life expectancy in a town falls as the prevalence of uninsured persons rises see (Figure 4).
- Blacks in Connecticut are 3 times more likely to be uninsured compared to Whites. Hispanics are almost 4 times more likely. These groups have also lost health insurance coverage at a greater rate during the pandemic.
- Expansion of health insurance to underinsured communities should increase the supply of medical services and access to care in these communities.

Figure 4a. *Uninsured Rate and Life Expectancy Across CT Neighborhoods.*

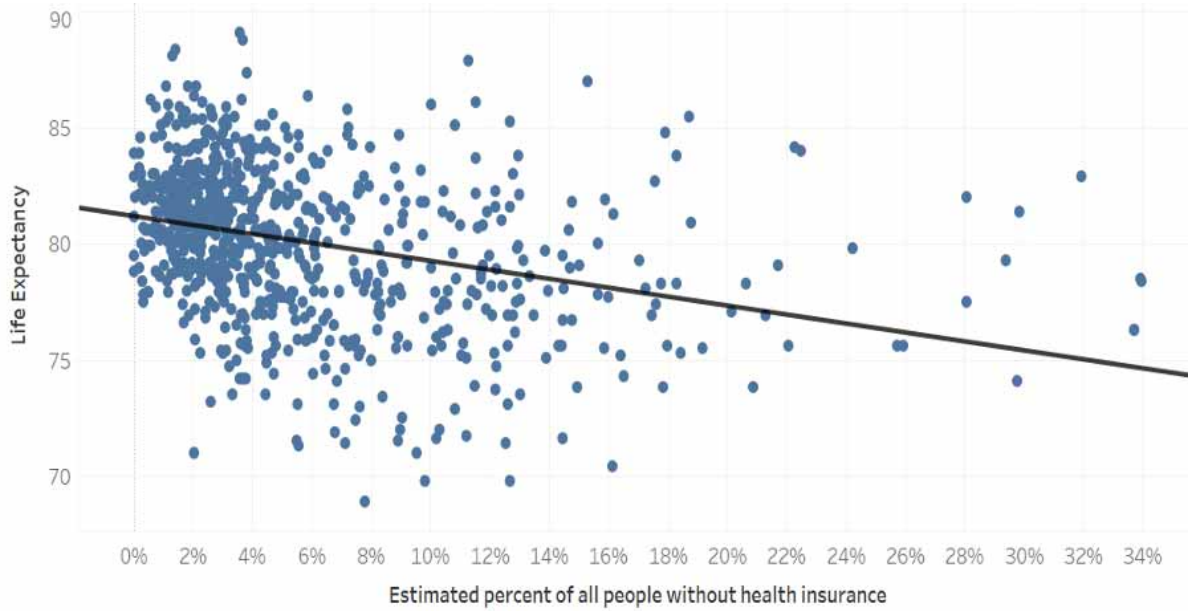
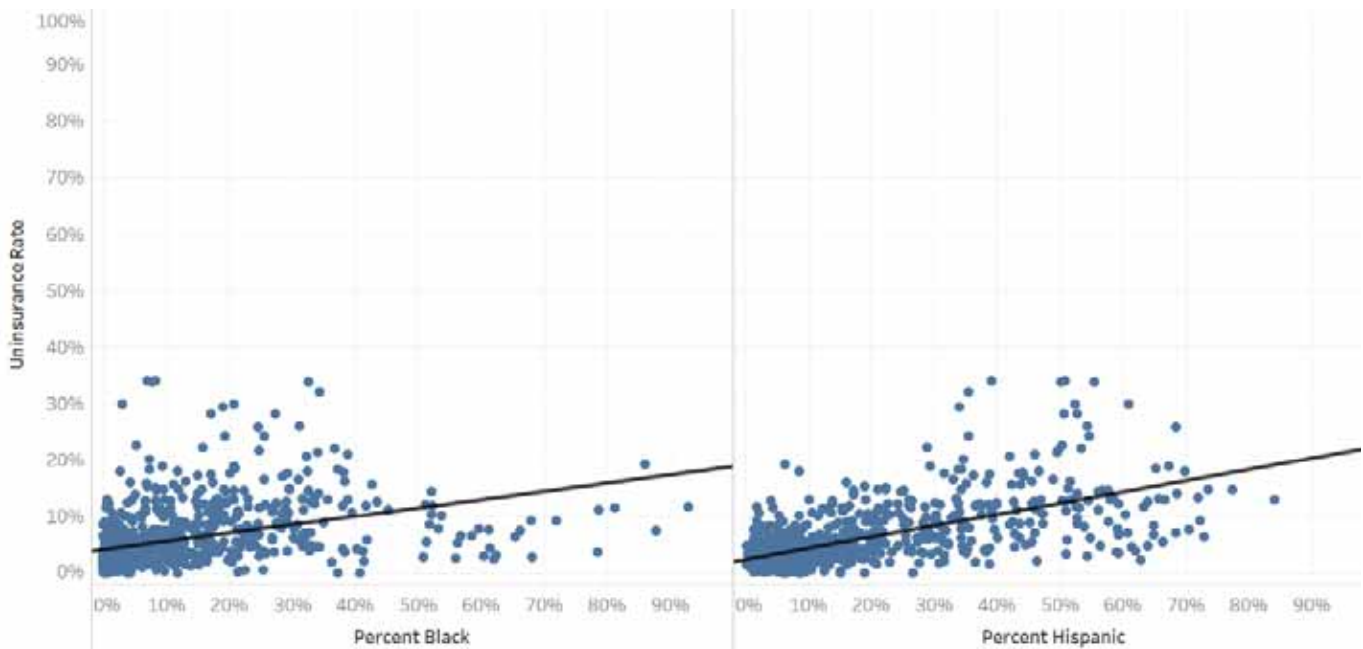
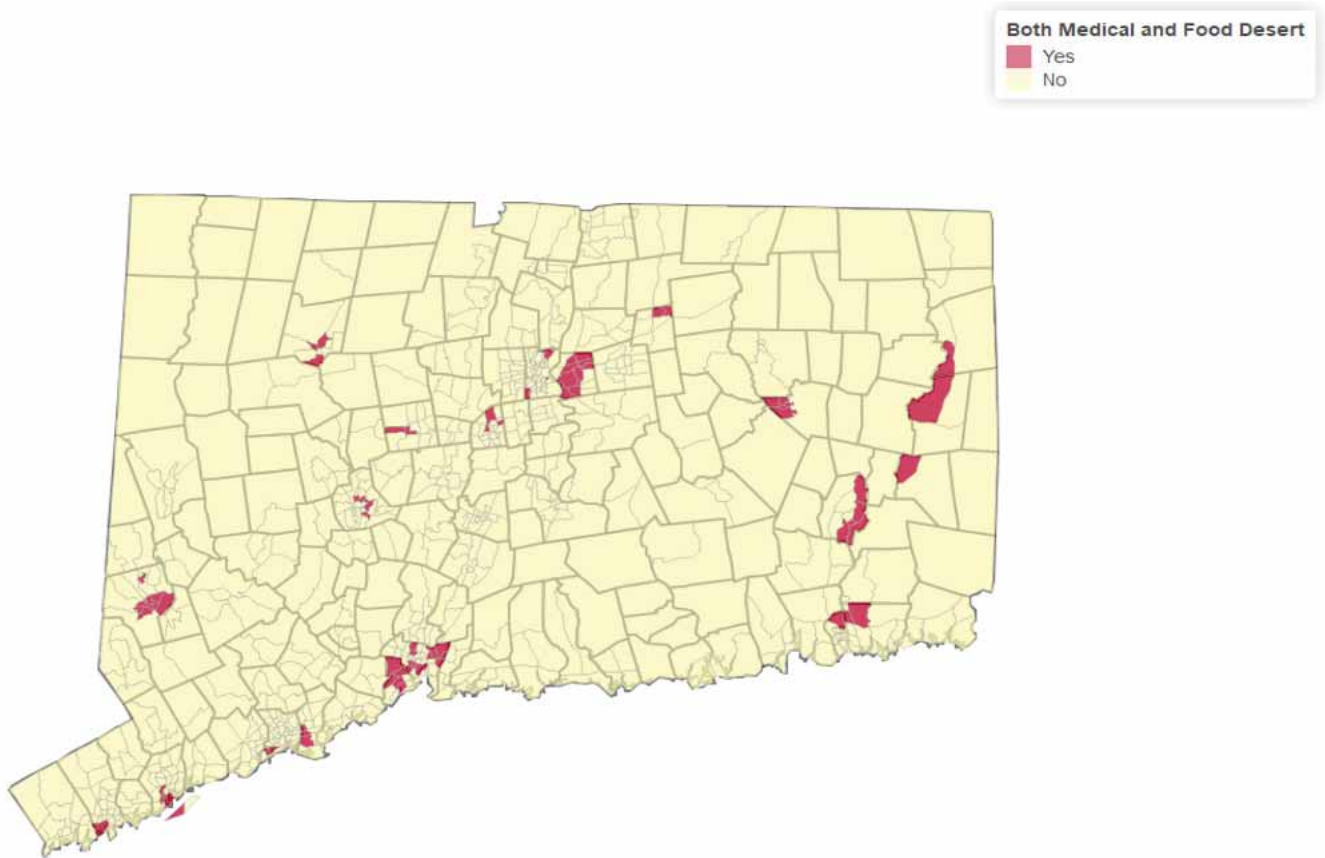


Figure 4b,4c. *Percentage of Black Individuals and Percent Uninsured Across CT Neighborhoods.*



Description: Uninsured rate³⁰ and demographic percentages³¹ based on responses to 2014-2018 Census American Community Survey. Life Expectancies provided by CDC 2010-2015 Small-area Life Expectancy Estimates Project (USALEEP).³² The slope of the line in Figure 4a is -0.193035 suggesting a 5 percentage point increase in the uninsured rate reduces life expectancy by 1 year. The correlation between insurance rate and life expectancy is -0.318848 .

Figure 5. *Food Deserts and Medically Underserved Areas in Connecticut Towns.*



Description: Connecticut Census Tracts that have been designated as both food deserts and Medically Underserved Areas (MUAs) are highlighted in red.

Food deserts are defined by USDA as Low-Income Tracts at least 500 people or 33% of the population living more than 0.5 miles (in urban areas) or more than 10 miles (in rural areas) from the nearest supermarket supercenter, or large grocery store.³³

Medically Underserved Areas (MUAs) are census tracts designated by the Health Resources and Services Administration to have too few primary care providers, high infant mortality, high poverty, and/or a large elderly population.³⁴

Highlights

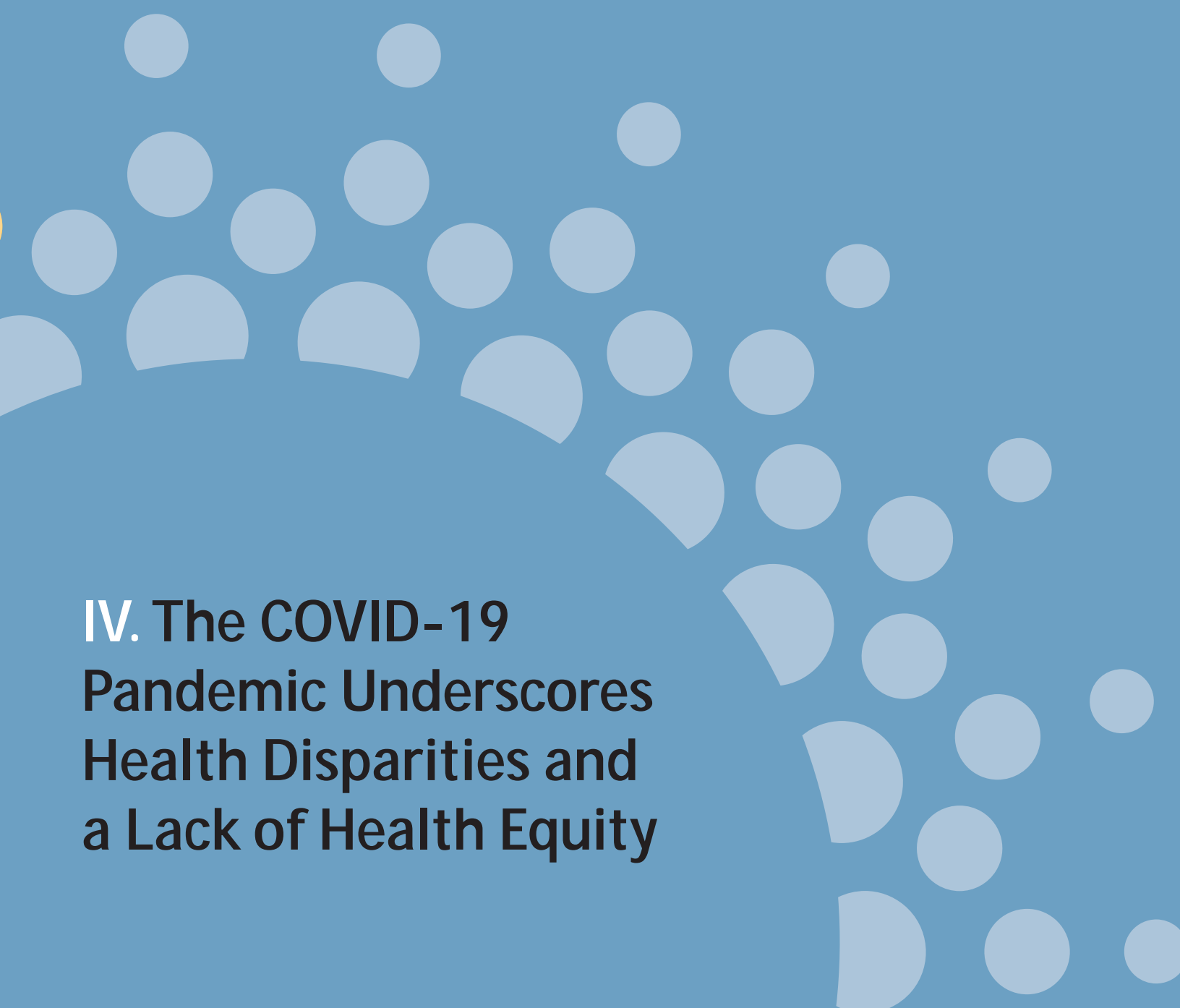
- 76 of Connecticut's 833 census tracts are both food and medical deserts.
- 16 Connecticut cities have two or more census tracts that are both food and medical deserts.
- Residents of these dual desert neighborhoods are 2 times more likely to be in poverty and to be without health insurance. They have a life expectancy 4 years less than people not living in food or medical deserts.
- Cities with 4 or more census tracts that are food and medical deserts and number:
 - Danbury, 8; East Hartford, 9; Hartford, 3; New Britain, 3; New Haven, 11; Norwalk, 3; Norwich, 4; Stratford, 3; Torrington, 3; Waterbury, 5; West Haven, 5; Windham, 4.
 - In some cities, a majority of residents live in both food and medical desert census tracts: Danbury, 54%; East Hartford, 70%; Norwich, 63%; Windham, 72%.

Food Insecurity

- 12% of men and 15% of women report they did not have enough money to buy food for themselves or their family at some point during the past year. White adults 9%; Black adults 22%, and Hispanic adults 27% .

Data reported in highlight box above are based on our calculations of data from several sources: 2018 DataHaven Community Wellbeing Survey Statewide Connecticut Crosstabs. New Haven, CT: DataHaven. Available at <http://ctdatahaven.org/reports/datahaven.community.wellbeing.survey>; U.S. Census Bureau American Community Survey. *Estimated percent of all people that are living in poverty, as of 2014-2018*. PolicyMap. <https://plcy.mp/8wPZ35m>. (14 July 2020). U.S. Census Bureau

American Community Survey. *Estimated percent of all people without health insurance, between 2014-2018*. PolicyMap. <https://plcy.mp/vL03Qy3>. (14 July 2020). CDC. *Life expectancy at birth, as of 2010-2015*. PolicyMap. <https://plcy.mp/4S9RhCT>. (14 July 2020). HRSA. *Medically Underserved Areas (MUA), as of 2019*. PolicyMap. <https://plcy.mp/FQn5QBJ>. (3 November 2020). USDA. *Low Income and Low Access Tract, as of 2015*. PolicyMap. <https://plcy.mp/SCHzyYC>. (3 November 2020).



**IV. The COVID-19
Pandemic Underscores
Health Disparities and
a Lack of Health Equity**

The COVID-19 Pandemic Underscores Health Disparities and a Lack of Health Equity

Viewing health disparities through the lens of COVID-19 is illuminating because risk factors for infection and risk factors for death upon infection are clear. Although complex entanglements between socioeconomic status (SES) and race/ethnicity still cannot be completely separated, exploring these risk factors enables considerable separation of their effects. Socioeconomic factors appear most significant in determining who contracts the disease, while risk of death is dependent on health indicators, namely preexisting conditions that are associated with severe presentation of COVID-19. As discussed previously, these medical conditions are highly correlated with age and race/ethnicity.

Data from the 50 states and the District of Columbia provide clear evidence of these relationships. African Americans and Hispanics are the only groups whose shares of COVID-19 incidence and mortality exceed their population shares, Table 4. Hispanic Americans represent 18.3% of the U.S. population, but as of November 2020, suffered 24.9% of known COVID-19 cases—i.e., Hispanics contract the disease at a rate 1.3 times larger than their population share.

Similarly, Black Americans represent 13.4% of the U.S. population, but had suffered 14.7% of known cases. Disparities in death rates are particularly striking. Collectively, Black Americans represent 13.4% of the population in the U.S., but they have suffered 20.3% of known COVID-19 deaths—i.e., they are dying at about 1.5 times their population share. Overall, Black Americans are over-represented in deaths in 30 states and Washington, D.C., where their share of deaths exceed their share of the population by as much as 10 to 30 percentage points—extremely large disparities.

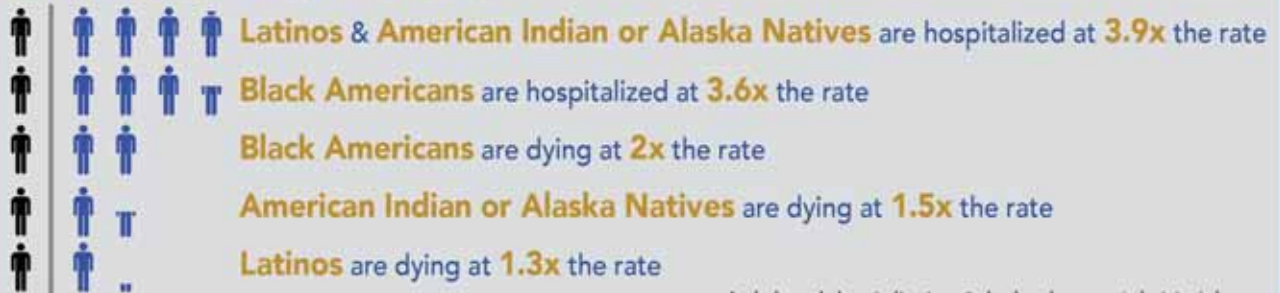
Similarly, the proportion of deaths among Hispanics is 12% higher than their share of the population, although the relatively smaller discrepancy between Hispanic population share and deaths is likely due to the population's younger age distribution.

This phenomenon is in stark contrast to what we observe among Whites, who are considerably less likely to die from COVID-19 than expected given their share of the population. White Americans represent 60.4% of the population in the U.S., but they have experienced 54.3% of deaths. Based on these estimates, if these minority groups had the same death rate as White Americans, about 21,200 Blacks and 10,000 Hispanic Americans would not have died from the disease.³⁵ Clearly, minority groups are dying at unnecessarily high rates.

COVID-19 CONTINUES TO PLACE A HEAVY BURDEN ON COMMUNITIES OF COLOR

Severe cases and deaths are disproportionately Black, Latino and Native American

Compared to White Americans:



Moreover, despite much higher incidence and hospitalization rates due to COVID-19, nationwide, Black communities have received fewer resources to combat the disease. The figures in the graphic below

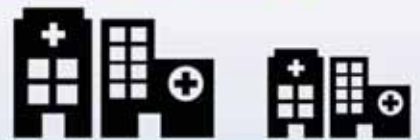
offer a glaring illustration of the inequities created by current policy, many of which appear race neutral on their face.

RESOURCES HAVE NOT BEEN DISTRIBUTED EQUITABLY DURING THE PANDEMIC

Racial bias in how federal financial relief resources were allocated to hospitals:

Initial federal relief funding -distributed based on revenue- resulted in smaller hospitals with large numbers of Black patients receiving disproportionately lower funding to manage a greater COVID-19 burden.

Impact: Hospitals in predominantly Black communities had less funding for resources like testing and protective equipment



Inequitable access to testing early in the pandemic:

Counties with a higher percentage of people of color had longer travel times to a testing location



Access to testing resources were initially limited or not available in minority communities

Zip codes with predominantly White populations had more testing sites per capita than zip codes with predominantly Black populations



Access to testing was lower in rural areas, and rural Black Americans were 1.7x as likely to be in a testing desert than the general rural population



Variation in hospital resources, care and outcomes in March & April:

Patients at some community hospitals in New York City were 3x more likely to die than patients at medical centers in the wealthiest parts of the city



Patients admitted to hospitals with fewer ICU beds had a higher risk of death and the share of patients that received medications or supportive therapies varied widely by hospital



A. Racial and Ethnic Distribution of COVID-19 Cases Across Connecticut

Connecticut’s COVID-19 disease and mortality burdens appear to differ considerably from what might be expected given our previous discussion. While, both Black and Hispanic residents of Connecticut are disproportionately at risk of contracting the disease, Whites are more likely to die once infected. While the proportion of total cases

seen among White residents is only about three-quarters of the White population share, Whites are overrepresented in deaths, Table 5. In fact, *White death rates are 50% greater than what would be expected if there were no group differences in mortality once the disease is contracted.* These findings again suggest that important group differences act as risk factors for death upon infection. This is shown by Figures 7 and 8.

Table 4. U.S. COVID-19 Cases & Deaths by Race/Ethnicity, November 2020*

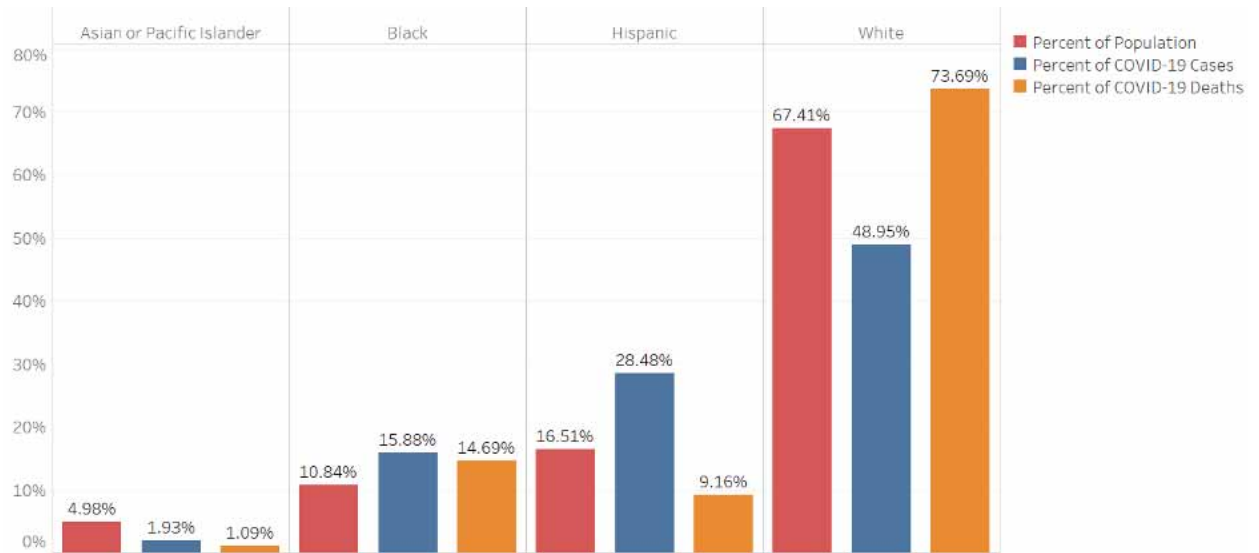
	White	Black	Hispanic	Asian	Native
Percent of Total U.S. Population ³⁶	60.4%	13.4%	18.3%	5.9%	1.3%
COVID-19 cases ³⁷	51.2%	14.7%	24.9%	3.0%	1.1%
COVID-19 deaths ³⁸	54.3%	20.3%	20.6%	3.8%	1.1%

Table 5. Connecticut COVID-19 Cases by Race/Ethnicity November 10, 2020³⁹

	White	Black	Hispanic	Asian
Percent of CT Population	67.41%	10.84%	16.51%	4.98%
COVID-19 cases	48.95%	15.88%	28.48%	1.93%
COVID-19 deaths	73.69%	14.69%	9.16%	1.09%

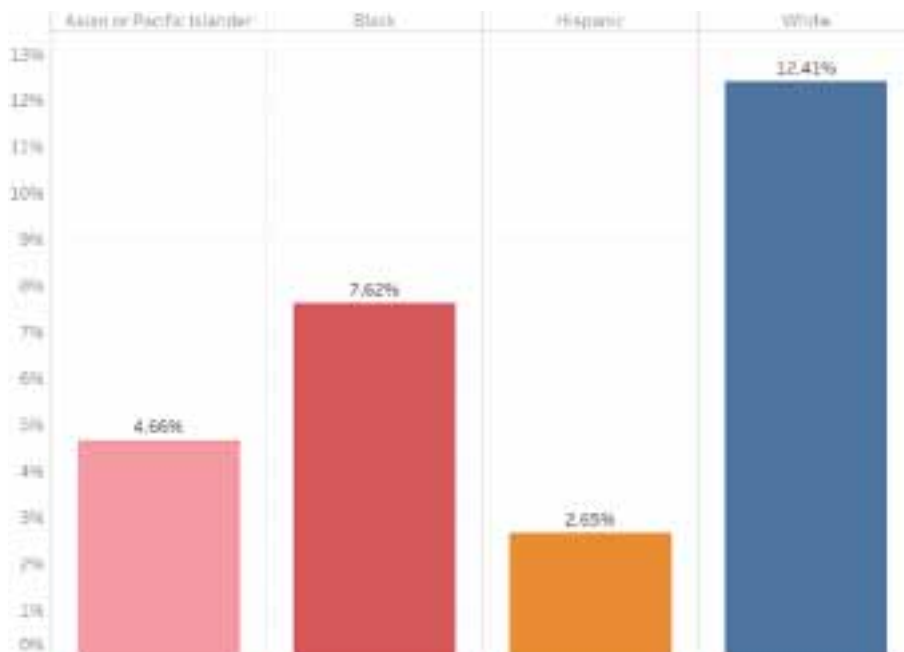
*The mortality data presented in tables 4 and 5 include information compiled and analyzed independently by APM research lab for 45 states and Washington D.C. for which full or partial COVID-19 data is publicly released. It was supplemented with data available through the CDC’s National Center for Health Statistics. Hawaii, Nebraska, New Mexico, North Dakota, South Dakota, and West Virginia were excluded because data was not readily available.

Figure 7: Share of COVID-19 Cases and Mortalities by Race/Ethnicity in Connecticut



Description: Population share, proportion of COVID-19 cases, and proportion of COVID-19 deaths by race-ethnicity in Connecticut. Cases and deaths are cumulative as of November 10, 2020.⁴⁰

Figure 8. Proportion of Cases Resulting in Death by Race/Ethnicity in Connecticut



Description: Percentage of cases resulting in death equals the number of deaths divided by the number of cases for each race-ethnicity population subgroup. Cases and deaths are cumulative as of November 10, 2020.⁴¹

The data in Figures 7 and 8 tells a simple but informative story. Each section of the chart depicts one of the four most populous racial/ethnic groups in Connecticut showing in succession: the group's percentage of the state's total population, percentage of the state's COVID-19 cases, percentage of the state's COVID-19 deaths, and the likelihood of death upon infection. If there were no group disparities, group observation of cases and deaths would be relatively equal to each group's population share. Each group would also be equally likely to die from COVID-19 once infected. However, relative to each groups' population share:

Asian or Pacific Islander Americans are:

- Significantly underrepresented with respect to infections; 40% less than expected given their population share
- Considerably underrepresented among deaths; their share of deaths is only 20% what they would be were there no group differences in mortality
- Much less likely to die once infected; only about 38% of Whites' likelihood

Blacks are:

- Significantly overrepresented with respect to infections; 46% more than expected given their population share
- Considerably overrepresented among deaths; their share of deaths is about 36% above what they would be were there no group difference in mortality
- Less likely to die once infected; only about 60% of Whites' likelihood

Hispanics are:

- Significantly overrepresented with respect to infections; 73% higher than expected given their population share
- Considerably underrepresented among deaths; their share of deaths is about 50% less than they would be were there no differences between groups
- Much less likely to die once infected; only about 20% of Whites' likelihood

Whites are:

- Significantly underrepresented with respect to infections; 27% less than expected

- Slightly overrepresented among deaths; their share of deaths is about 9% above what they would be were there no group differences
- Much more likely to die once infected; nearly 5 times the likelihood of death within the Hispanic population

Exploring the factors contributing to the group disparities described above allows one to understand the various impacts of both socioeconomic and medical factors, offering considerable insight into the general patterns of health disparities present in Connecticut.

B. Plotting COVID-19 Across Connecticut Towns: Risk Factors for Morbidity

To better understand the relationship between racial/ethnic disparities in disease incidence and various other covariates of the disease such as age, medical conditions, and socioeconomic status, we conducted an analysis of COVID-19 case and mortality rates across Connecticut towns. The findings of this analysis illuminate how patterns of COVID-19 disparity replicate general patterns of health disparity in Connecticut.

A statistical analysis based on multiple regression determined that approximately 75% of the variation in COVID-19 case rates within Connecticut cities could be explained by city differences in a relatively small number of explanatory variables. The most important explanatory factors were race/ethnicity (percentage of the town's population Black and Hispanic); measures of residential density (number of nursing home beds, presence of a carceral institution, and percentage of detached single home residences); and distance from New York City, the epicenter of the pandemic's first wave.

Age. Considerable media attention has been devoted to the importance of age as perhaps the most important covariate in COVID-19 mortality. As expected, age is a very strong covariate of mortality in Connecticut. 94% of all COVID-19 related deaths are among people aged 60 years or greater.⁴² However, closer examination of this phenomenon indicates that various patterns of socioeconomic and racial/ethnic difference persist among senior age groups.

Interesting dynamics underly age-related risk of COVID-19 infection and mortality which can be better understood when we compare variations

in COVID-19 incidence across Connecticut towns. Despite the fact that at least 81% of COVID-19 deaths are attributed to people above age 65, as a town's percentage of residents above age 65 increases, the COVID-19 caseload declines. Additionally, there is no relationship between a town's COVID-19 death rate and the percentage of residents age 65 or higher, see Figures 9a and 9b.

At first glance, the latter finding seems to contradict the finding initially shared, that over 94% of all COVID-19 deaths in Connecticut occur in people above the age of 60. How can these findings be reconciled? To die from COVID-19, you must first contract it. The analysis of COVID-19 incidence across Connecticut towns confirms the need to *separate the factors that lead to high rates of COVID-19 morbidity and factors that lead to high rates of mortality among those with the disease.*

The determinants of morbidity are more particularly based in those SES characteristics that put people at risk of contraction, while the primary determinants of mortality are underlying preexisting health factors and related demographic factors such as age. SES differences as well as residential segregation based on SES and race/ethnicity play a strong role in causing the disease disparities, factors making race-ethnicity important covariates of the disease. The high incidence of COVID-19 mortality among the elderly occurs in nursing homes. Thus, with the exception of *towns with high proportions of nursing home beds with dense living conditions*, the risk of contracting COVID-19 declines as the share of a Connecticut town's population over age 65 rises.

Highlights

- Over 80% of COVID-19 deaths are people above age 65.
- Hispanics' share of infections is 73% greater than their population share.
- Blacks' share of infections is 46% greater than their population share.
- Connecticut's elderly population is disproportionately White and higher SES with a lower risk of contracting COVID-19 unless they live in dense housing such as a nursing home.
- If they contract COVID-19, the elderly have a much higher risk of dying because age is correlated with health risk factors.

Figure 9a: COVID-19 Cases Across Connecticut Towns, by Percentage Age 65 or Greater

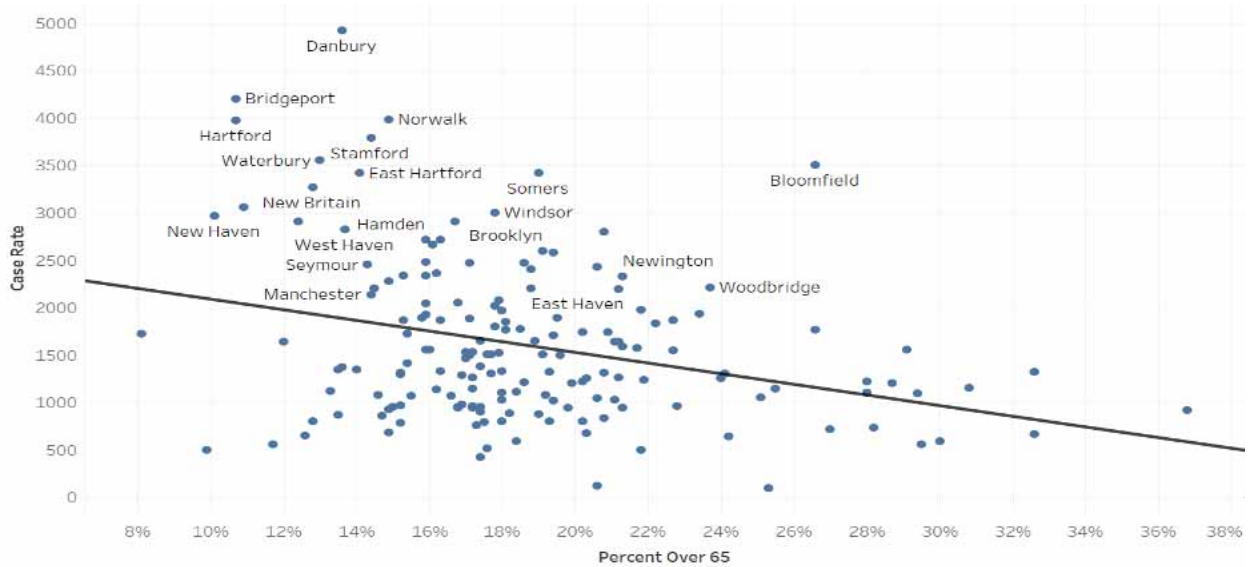
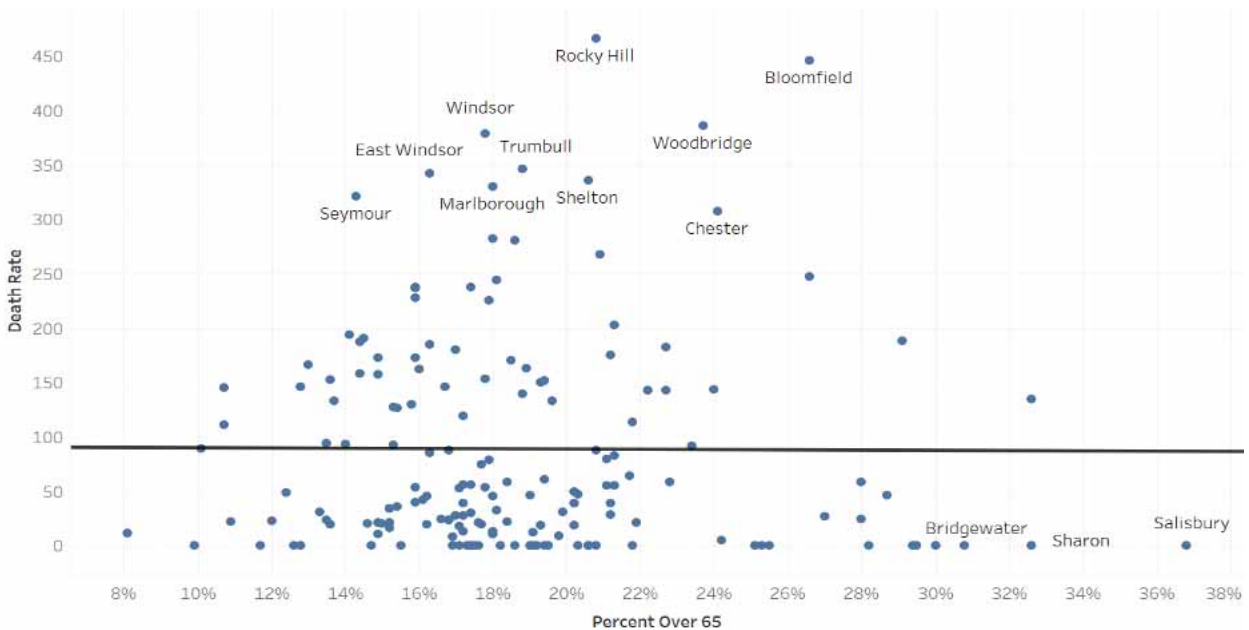


Figure 9b: COVID-19 Deaths Across Connecticut Towns, by Percentage Age 65 or Greater



Description: COVID-19 cases (Figure 9a) and deaths (Figure 9b) per 100,00 residents⁴³ plotted against estimated percent of the town's population that is over 65 years old.⁴⁴ Cases and deaths are cumulative as of November 10, 2020. The negative line of Figure 9a suggests, on average, a one percentage point increase in seniors in a town decreases the number of COVID-19 cases per 100,000 residents by 56. In Figure 9b, the estimated relationship between senior's share of a town's population and its death rate is virtually flat, implying that increasing a town's percentage of seniors by one percent has no effect on its death rate. Below we show how these results differ if one considers additional factors such as location of a nursing home in town which increases housing density, a social determinant of health that underscores the vulnerability of the poor as well as seniors in nursing homes.

Devoting attention to the positive outliers in Figures 9a and 9b is instructive. Each of the labeled towns lies far above the estimated lines, meaning each town's actual COVID-19 incidence rate far exceeds the rate expected when only considering the proportion of its population over age 65. This suggests some factor(s) other than age of population are important determinates of the town's case and death rates. In fact, each of the labeled towns in Figure 9a has either a large number of nursing home beds or a prison, or a large Black and/or Hispanic population. For example, Bridgeport, Hartford, New Haven, and Stamford all have large minority populations ranging between about 90% in Hartford to more than 40% in Stamford. These cities also have significantly larger numbers of nursing home beds than the state average. These are two statistically determinative combinations when it comes to COVID-19. Even smaller neighborhoods with this combination have high death rates. For example, Bloomfield, a suburb of Hartford is 62% African American, has slightly more than a quarter of residents over age 65, and nursing home beds 43% higher than the state average. Bloomfield also has one of the state's highest COVID-19 death rates at 446 per 100,000 residents, a number 5 times the state's average of 89.⁴⁵

Figures 10a and 10b illustrate the relationship between COVID-19 case rates and proportion of a town's Black or Hispanic population rises. In contrast to the proportion of seniors and respective death rates, communities with a larger minority presence have a significantly higher caseload across Connecticut cities.

Similar relationships exist between minority proportions and a town's death rates. As with Figures 9a and 9b, cities that are substantial outliers imply other factors are important determinants of COVID-19 incidence.

For example, Stamford's proximity to a COVID-19 epicenter in New York City (24 miles) and its significant proportion of residents who work out of state (1 in 5),⁴⁶ as well as having more than twice the state's average number of nursing beds (574)⁴⁷ likely explain why the city's case rate significantly exceeds the rate expected solely on the basis of its Black and Hispanic population.

Similarly, we also note that when plotting against the proportion of residents who are Black or Hispanic, Bloomfield's case rate becomes substantially

overpredicted instead of underpredicted as when only age of population was considered. These outliers in the data depicted in Figures 10 suggest the risk of contracting COVID-19 is strongly correlated with socioeconomic status variables that put people in situations where the disease is highly transferable.

For example, COVID-19 cases and deaths for the cities of Rocky Hill and Somers are substantially underpredicted when we consider population age and the relative size of their minority populations (by about 10% each). For Rocky Hill, part of the explanation for its case rate of 2800 per 100,000 residents compared to the state's city average of 1605 is its relatively large number of nursing beds (460).⁴⁸

However, although Somers with one of the state's highest case rate (3424 per 100 thousand) has no nursing facilities, it does have a correctional facility. Moreover, both cities have higher proportions of working class White populations with the proportion of adults who are high school graduates or beyond below the state's median of 94.5% and substantially so for Somers at 90.4%.⁴⁹

C. Further Exploration of the Social Determinants of Health (SDoH)

Understanding why Connecticut's elderly have both a lower risk of contracting COVID-19, but a higher risk of mortality if they have it, is important for its own sake. However, it is also instructive for understanding why Blacks and Hispanics have disproportionate rates of the disease. Overall, Connecticut's elderly population are less likely to contract the disease because, people above age 65:

- Are often not in the labor force and thus are shielded from risky occupations
- Are not using public transportation to commute to hot spots
- Are more able to practice social distancing by staying home
- Are likely living in towns with higher percentages of White residents, implying higher incomes and better housing conditions

Figure 10a: COVID-19 Cases Across Connecticut Towns, by Percent Black

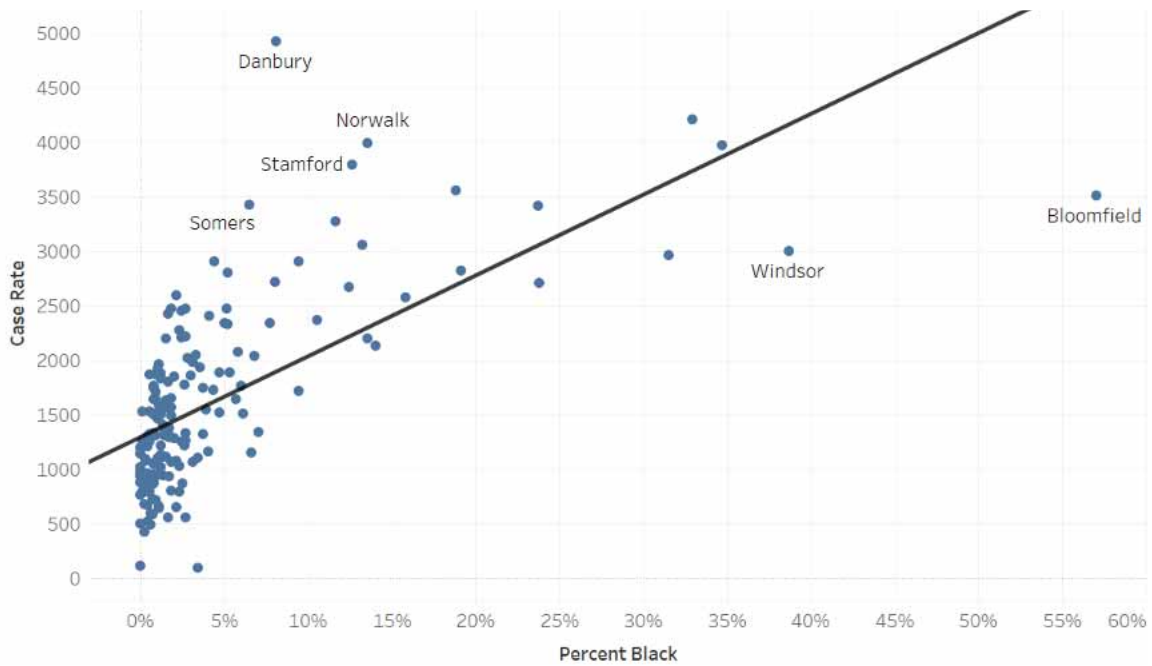
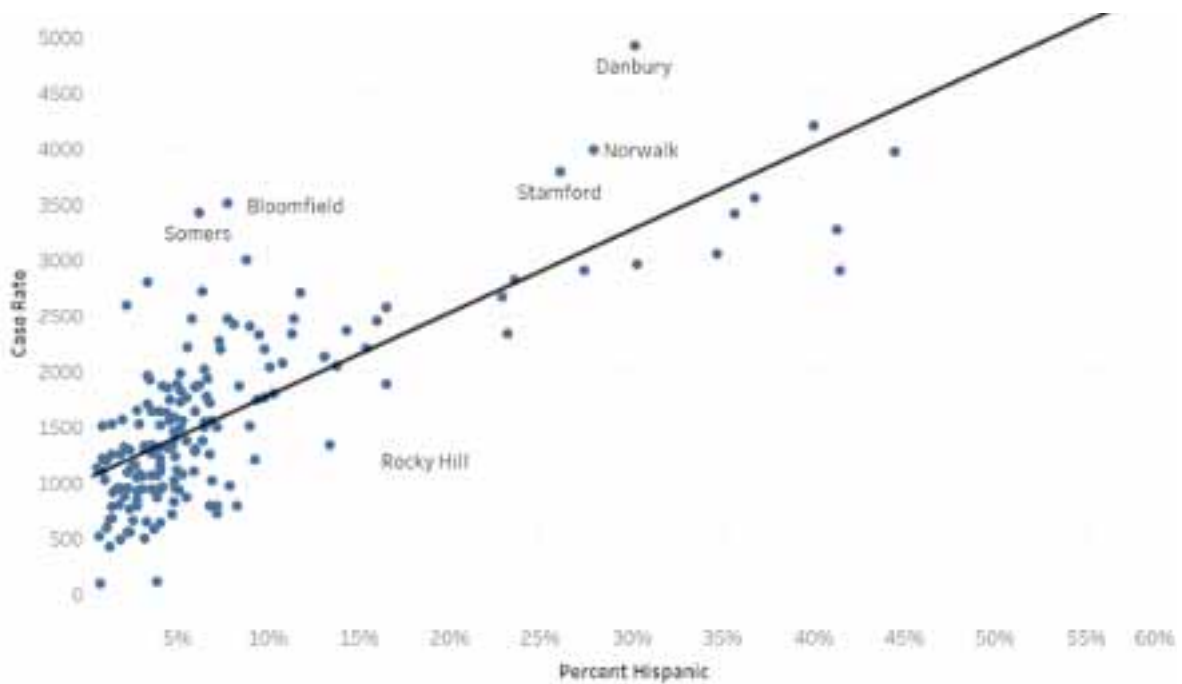


Figure 10b: COVID-19 Cases Across Connecticut Towns, by Percent Hispanic



Description: COVID-19 cases per 100,000 residents⁵⁰ plotted against estimated percent of the town's population that is Black (Figure 10a) and Hispanic (Figure 10b).⁵¹ Cases are cumulative as of November 10, 2020.

In contrast, Blacks and Hispanics, who, on average, have lower incomes, are more likely than the general population to be working in risky occupations, commuting on public transportation, and living in dense housing where it is difficult to practice social distancing, even at home. That these two groups experience lower average SES and greater likelihood of COVID-19 disease complement a vast research literature showing that people of lower SES have worse health outcomes from birth to death and these adverse health effects accumulate over a lifetime.⁵² In illustration, we next consider the strong relationship between education and the incidence of COVID-19 cases across Connecticut towns.

Educational attainment directly impacts occupation, employment, and income, and its therefore high correlations with other SDoH, require that we give it special focus, particularly because there is considerable racial disparity of educational attainment in Connecticut. The fact that education (and poverty) is so highly correlated with race and ethnicity is one of the major reasons why race and ethnicity are such strong predictors of health disparity.

Figures 11a and 11b show that as the percentage of adults with at least a high school diploma increases across Connecticut cities, COVID-19 cases decline, and although this relationship is more powerful for the White percentage of a town's population, it also holds for the Black and Hispanic percentage, see Figure 11b. Thus, the COVID-19 case rate declines as the high school graduation rate increases even in cities where the Black and Hispanic population percentages exceed the state average. However, in communities with a large proportion of minorities, case rates are consistently higher than in communities smaller minority populations.

One explanation for this phenomenon is the poverty rate, an index disproportionately high among minority groups. Hence, as shown in Figure 12a, higher city poverty rates are strongly associated with higher COVID-19 case rates. Interestingly, poverty is not a particularly high covariate of COVID-19 death, Figure 12b.

This difference is likely related to the important observation that, in Connecticut where a significant proportion of the poor are the working poor, poverty status is not a completely reliable indicator of the major covariates of COVID-19 mortality such as advanced age and its underlying medical conditions.

The substantial outlier cities with case or mortality rates well above the predictions based on the city's poverty rate are again largely explained by other considerations that intensify the effects of poverty on health.

For example, although Danbury has an average poverty rate of about 16%, 8 of its neighborhoods (which contain 54% of its population) are both food and medical deserts. Moreover, Somers has a correctional facility and 60% of the cases in Woodbridge are in nursing homes or assisted living facilities.⁵³ Other cities that are substantial outliers in Figures 11a and 11b contain higher percentages of minorities with the attendant work risk factors alluded to earlier.⁵⁴

Highlights

- 1 in 3 Black workers compared to only 1 in 8 White workers believe their employer is not doing enough to ensure safety in the workplace.
- 61% of Blacks, more than twice the rate of Whites (24%) and Hispanics (25%) are worried about exposing family members to COVID-19 after exposure at work.
- In Connecticut, Blacks and Hispanics are, respectively, 8 and 5.5 times more likely to use a public bus system as the primary means of transportation than are Whites (2%).
- In Connecticut, 1 in 3 African Americans and 1 in 4 Hispanics reported that if someone in their household contracted COVID-19 they would not be reasonably able to self-isolate. For Whites it is 1 in 6.
- As DataHaven reports, mask wearing is highest among Black adults and lowest among White adults.

Figure 11a: COVID-19 Across Connecticut Towns, by Percentage at Least High School Graduate

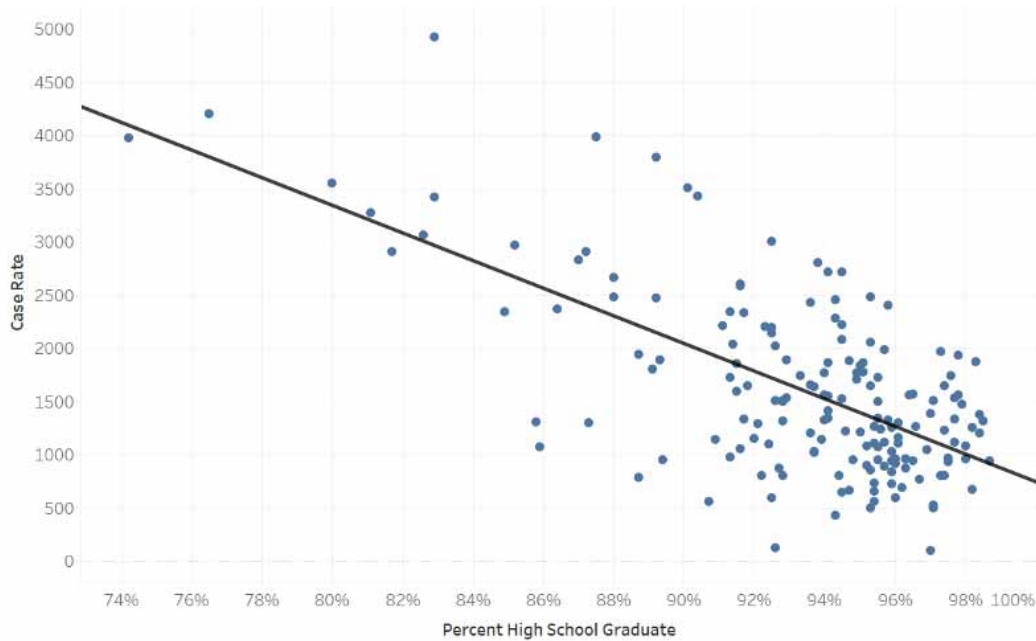
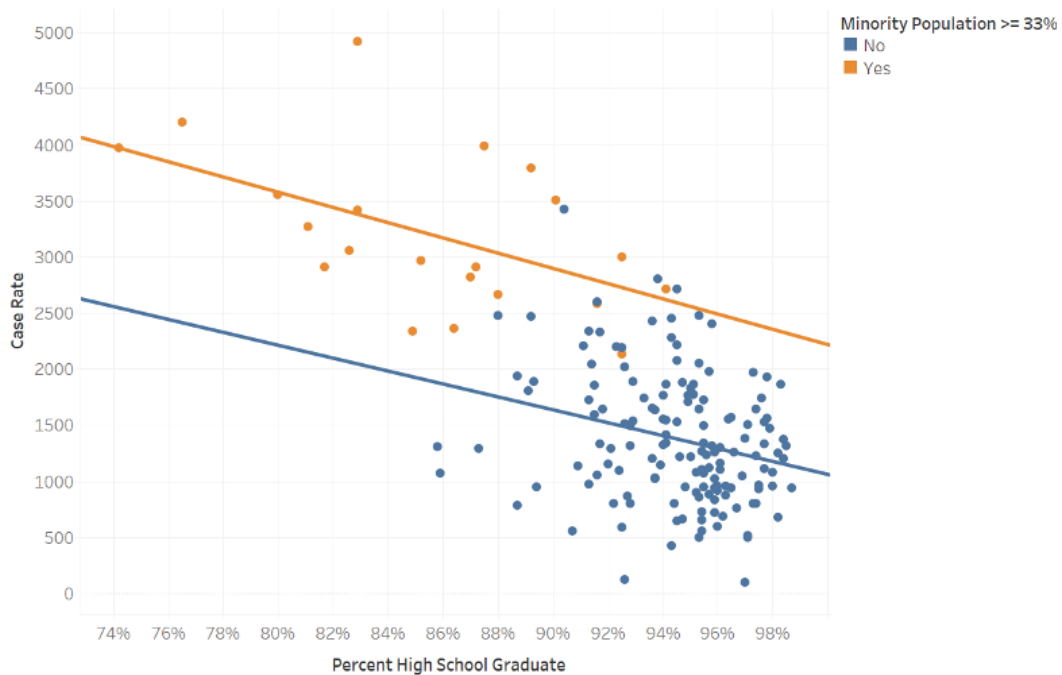


Figure 11b: COVID-19 Across Connecticut Towns, by Percentage at Least High School Graduate based on Minority Population



Description: COVID-19 cases per 100,000 residents⁵⁵ plotted against the estimated percent of each town's population over 25 years old that has graduated high school.⁵⁶ Cases and deaths are cumulative as of November 10, 2020. Figure 11b plots the same relationship but with Connecticut towns split into two groups based on the size of the minority population. A town's minority population is defined here as the percent that is not non-Hispanic White. Given that, state-wide, the non-White population is around 33%, this grouping is meant to reflect those towns which have proportionally larger minority populations. Estimated percent of each municipality's non-Hispanic White population is from the U.S. Census Bureau's American Community Survey.⁵⁷

Figure 12a: *Figure 12a: COVID-19 Case Rates Across Connecticut Towns, by Town Poverty Rate*

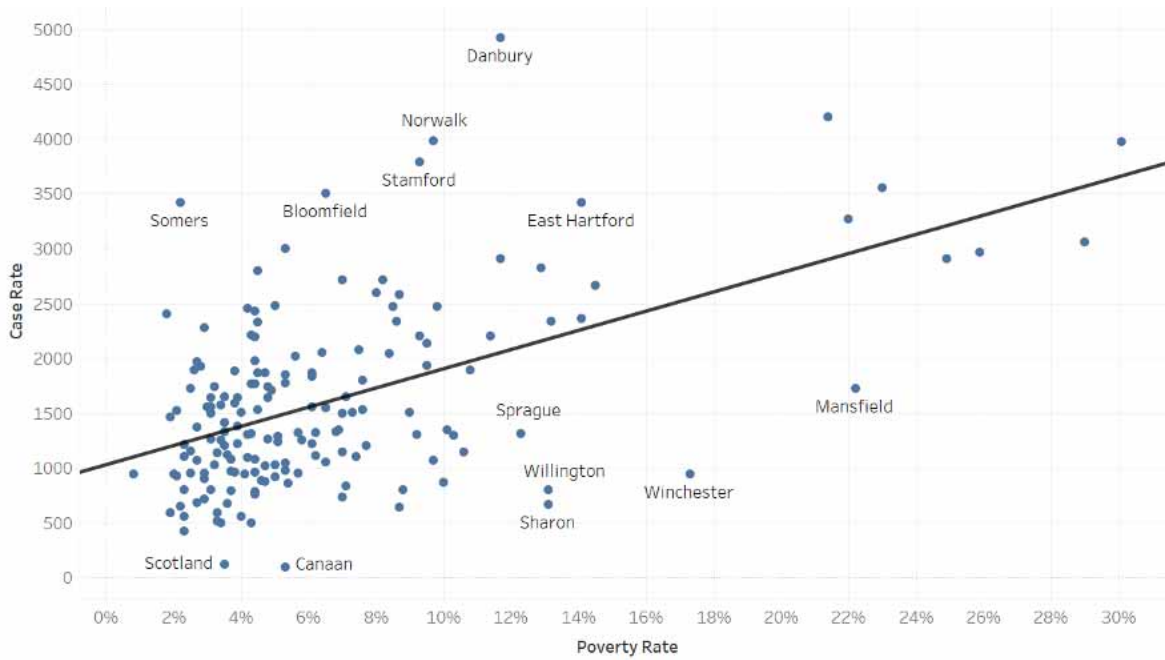
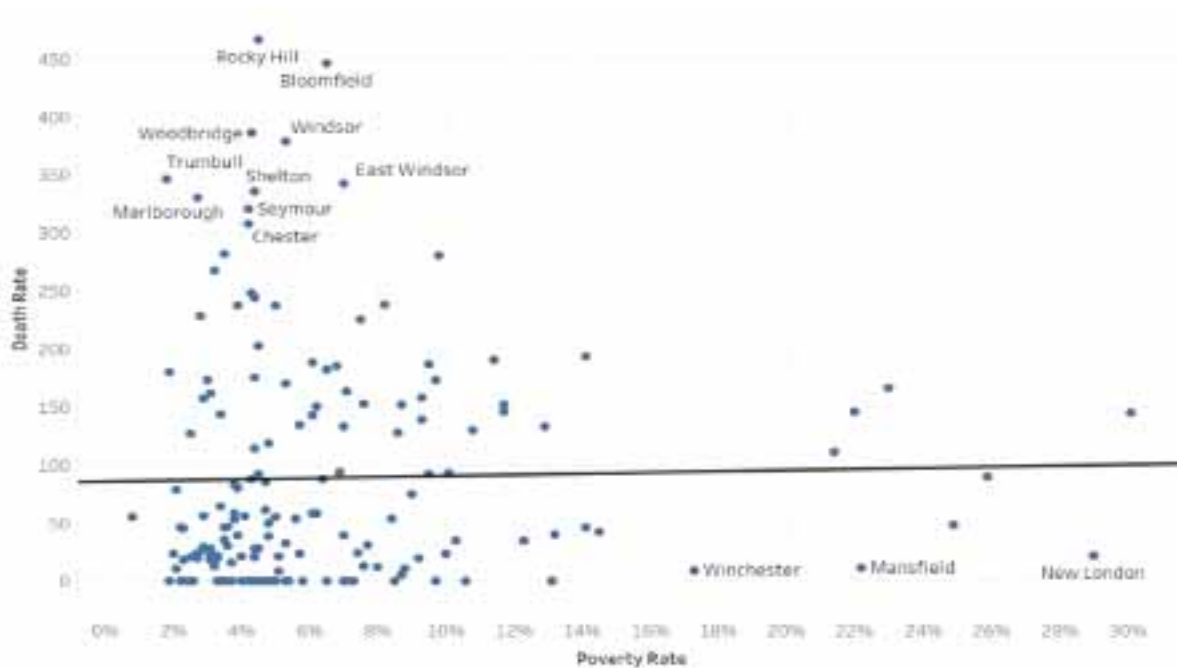


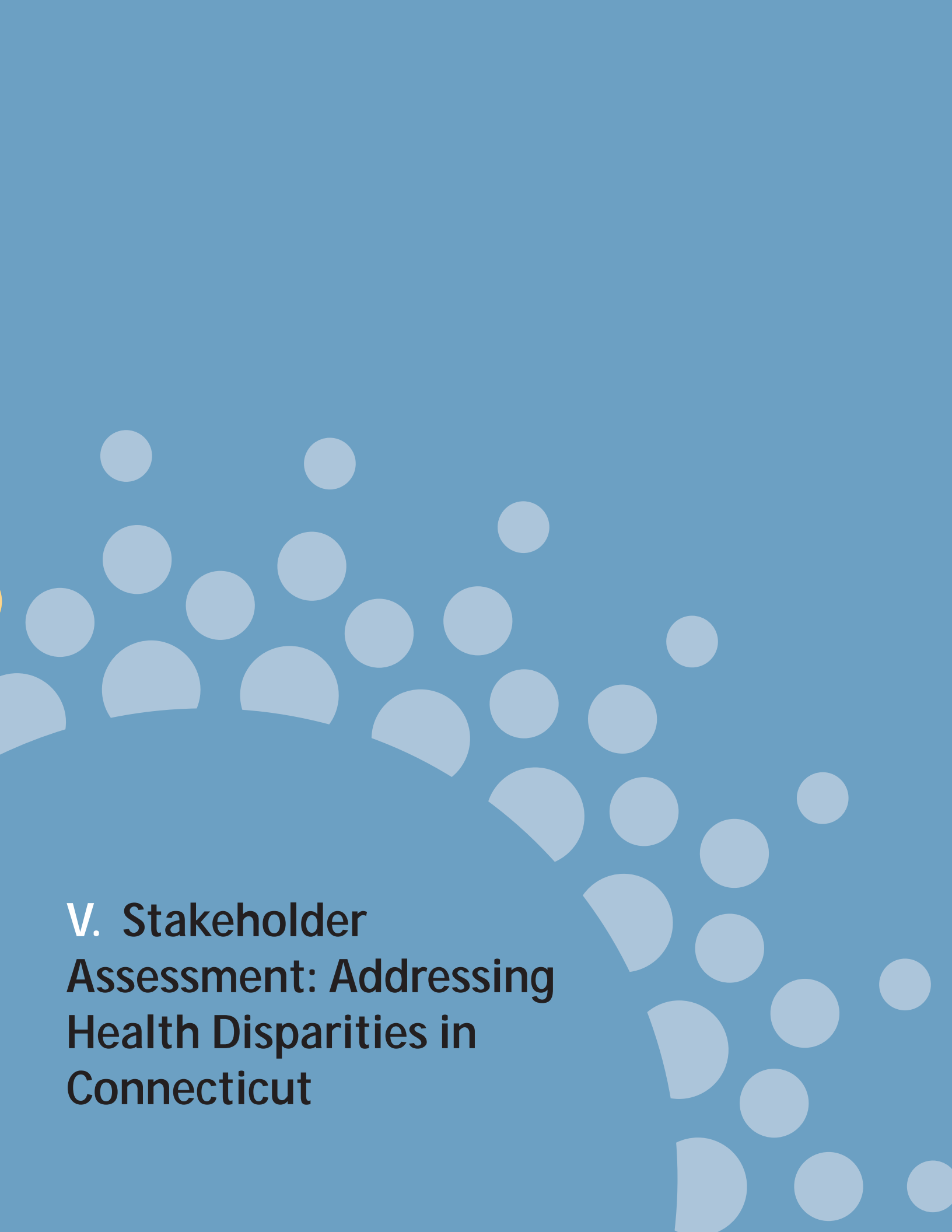
Figure 12b: *COVID-19 Death Rates Across Connecticut Towns, by Town Poverty Rate*



COVID-19 cases (Figure 12a) and deaths (Figure 12b) per 100,000 residents⁷² plotted against estimated percent of the town's population living in poverty.⁷³ Cases and deaths are cumulative as of November 10, 2020.

Highlight Conclusions

- The data from Connecticut illustrate markedly that the socioeconomic and racial/ethnic factors contributing to the COVID-19 experience trace similar disparities in health status and health equity in general.
- **More specifically, the epidemiology of COVID-19 mimics disparities seen in many other community-acquired infectious diseases such as influenza.**
 - Persons of color report work outside the home more often than Whites and are more likely using public transportation to do so. They are therefore more likely to be exposed to community transmission.
 - Black adults are more likely to know someone who has died of COVID-19 and are understandably more concerned about household transmission than are others.
 - Hispanic workers are more likely to have lost their jobs or to have been furloughed than others making them especially vulnerable to the economic effects of the pandemic.
 - Blacks and Hispanics are also more likely living in dense housing and in neighborhoods that are food and/or medical deserts compounding the effects of disease because of the difficulty of social spacing and obtaining healthy foods.



**V. Stakeholder
Assessment: Addressing
Health Disparities in
Connecticut**

Stakeholder Assessment: Addressing Health Disparities in Connecticut

This report documents the existence of significant health disparities between racial and ethnic groups across the state of Connecticut. These health disparities (which also provide evidence of inequities in the state's delivery of health services more broadly) vary substantially across illnesses, but they are intricately entangled with geography and spatial inequalities associated with substantial residential segregation in terms of race, ethnicity, and SES. Connecticut residents living in such areas exhibit a cluster of highly correlated conditions: poverty, environmental exposures, high healthcare costs, high deductible health plans, poor schools and housing, experience higher rates of cardiovascular disease, infant mortality, diabetes, asthma, smoking, and HIV, many of which are important risk factors for COVID-19.

To understand what greater role Access Health CT could assume in addressing the broad list of health disparities, it is essential to recognize that many important Connecticut organizations have already staked out areas of health disparity and initiated programs addressing health inequities. Mindful of these organizations' important ongoing work, we canvassed Connecticut's relevant stakeholders to ascertain what these stakeholders believe should be prioritized; what is already being done; what stakeholders believe the role of Access Health CT is and should be in the area of health inequity; and how Access Health CT might partner with existing stakeholders to improve the health of Connecticut's people.

A. Motivation and Methodology

The assessment of stakeholder perspectives incorporates external perspectives and viewpoints of key stakeholders within public, non-profit and private sector entities whose support will be critical for the successful evolution of Access Health CT and its role in eliminating health disparities in Connecticut. The goal of the assessment is to assess key stakeholders' opinions about the opportunities and obstacles to expanding Access Health CT's role in providing additional products or services intended to address health disparities and how to position Access Health CT in that role. This report identifies initial

opportunities and implications for Access Health CT—specifically prioritizing key areas of focus required in building trust and credibility with stakeholders, in order to reach other opportunities and spaces outside of the traditional products and services Access Health CT currently offers. This external viewpoint, coupled with the current assessment of health disparities in Connecticut and a quantitative assessment of consumers and key stakeholders provide the foundation necessary to explore new and different ideas for how Access Health CT can eliminate health disparities and develop strategic positioning that will align internal and external audiences.

The stakeholder assessment is part of a multidisciplinary study of potential roles Access Health CT might play in efforts to reduce health disparities in Connecticut. The first phase began during June, 2020 with a study of stakeholders' published reports, news articles, and stated goals and programs contained on organization websites. In the second phase, the firm Market Street Research was asked to conduct in-depth interviews with 45 leaders of key stakeholder organizations between August 5 and October 23, 2020 regarding: familiarity with and understanding of Access Health CT; knowledge of Access Health CT's current efforts to reduce health disparities; opportunities for Access Health CT to reduce health disparities directly; opportunities for Access Health CT to partner with others in addressing health disparities; barriers Access Health CT is likely to face in addressing health disparities. Interviews (ranging from 20-50 minutes each) were recorded, transcribed, and analyzed solely by Market Street Research who guaranteed respondents confidentiality. The third quantitative phase of the assessment is an online stakeholder survey of CACs, brokers, community partners, and navigators that began during December 2020.

B. Stakeholders' Views of Access Health CT and its Role Addressing Health Disparities

The interviews reveal that the relevant stakeholders have a generally positive view of Access Health CT and its important role in the health of the state's population. These views were based in objective evaluations encompassing what stakeholders believed Access Health CT's mission to be, how well it was performing its mission, and what Access Health CT's overall impact on Connecticut's health status has been, should be, and could be. With respect to Access Health CT initiating new programs to eliminate health disparities, stakeholders voiced two general concerns:

- Mission creep: Some of the stakeholders said they see a definite, positive role for Access Health CT in addressing health disparities, but they are concerned that Access Health CT not lose sight of its own mission and accomplishments by moving into new arenas
- Stakeholders are concerned that Access Health CT not “reinvent the wheel” by trying to address health disparities when there are already efforts to do so underway. Their concerns are two-fold:
 - Duplication of effort: Access Health CT may want to support existing efforts rather than try to convene communities and organizations for a new effort.
 - Examples of organizations mentioned by the stakeholders that have a similar focus and/ or are doing similar collaborative work in Connecticut are:
 - Health Equity Solutions (hesct.org)
 - Health Disparities Institute at UConn (health.uconn.edu)
 - Ministerial Health Fellowship (mfct.org)
 - Medicaid Strategy Group (medicaidstrategygroup.org)
 - Connecticut Hospital Association (cthosp.org)
 - DPH Office of Health Equity (<https://portal.ct.gov/DPH/Workforce--Professional-Development/Office-of-Health-Equity/Office-of-Health-Equity>)
 - Office of Health Strategy Health Enhancement Communities (<https://portal.ct.gov/OHS/SIM-Work-Groups/Population-Health-Council/Resources>) and Healthcare Cost Containment initiative (news release)
 - DSS Husky Health Equity (<https://www.huskyhealthct.org/providers/pcmh/pcmh-health-equity.html>)
 - Connecticut Health Foundation (<https://www.cthealth.org/>)
 - Community Health Workers Association of Connecticut (<https://www.cpha.info/page/CHWACT>)
 - Connecticut Association of Directors of Health (<https://cadh.org/health-equity-initiative/>)
 - DataHaven—Toward Health Equity in Connecticut

Highlights

45 in-depth telephone interviews of key stakeholder organization leaders (conducted August 5-October 23, 2020) revealed concerns that:

- AHCT not lose sight of its mission and accomplishments by moving into new arenas.
- AHCT not “reinvent the wheel” by trying to address health disparities when there are already efforts to do so underway.
- AHCT must improve public relations and build organizational trust with stakeholders through demonstrable actions if it is to forge joint efforts with key stakeholders to broaden health equity in Connecticut.
- AHCT must clarify what it believes its mission is and how that mission overlaps with the activities of stakeholders before undertaking new programs to diminish health disparities and increase health equity more broadly.

It is clear that before Access Health CT undertakes significant new programs directed at diminishing health disparities and increasing health equity more broadly, Access Health CT must clarify what it believes its mission is and how that mission overlaps with the activities of stakeholders. In short, if Access Health CT is to expand its role in reducing health disparities by going beyond reducing the number of individuals without health insurance (a goal defined by statute at Conn. Gen. Stat. §38a-1083(b)), then it must forge stronger relationships with key stakeholders and allies; build their trust in the organization through demonstrable actions and enhanced public relations efforts; and participate in joint efforts to broaden health equity in Connecticut.

C. Addressing Health Disparities in Connecticut: Stakeholder Lessons

The following discussion of important takeaways from the analysis of stakeholder reports, websites, and telephone interviews focuses on policy interventions aimed at reducing the overall health risk and healthcare costs of underserved groups in Connecticut. Consistent with this report's emphasis on identifying programs that address the underlying drivers of health disparities, the discussion prioritizes programmatic solutions that target root causes rather than specific health disparities.

The surveys of stakeholders and the repository of stakeholder websites and reports identify four broad themes:

1. Establishing health equity requires the development of partnerships and cooperative efforts utilizing the resources and skills of the state's many healthcare stakeholders
2. Expanding access to health care and reducing state health costs require: expanding health insurance to lower income minority communities
3. Establishing racial and ethnic equity in health outcomes and reducing cost of services requires greater participation and leadership roles for minorities in local communities
4. Large gaps in information about health and health care options in minority communities must be addressed with better dissemination of educational information to improve understanding of health care options and lifestyle choices

Develop Partnerships and Cooperative Efforts

Stakeholders want Access Health CT to clarify what its role could be given the organization's characteristics, mission, and goals. Stakeholders ask: does Access Health CT want to be a convener that pulls together communities and organizations to identify problems and work toward solutions to health disparities? Or does Access Health CT want to take a supporting role by offering services? Stakeholders' specific questions about Access Health CT's role in expanding health equity include: what is Access Health CT's role in conceptualizing vs. implementing solutions? Is the goal or reality that Access Health CT wants or needs to make a profit, or are they dedicating resources toward the greater common good? What realistically

Highlights

Stakeholder support of Access Health CT moving into new ventures requires they understand the scope of Access Health CT's vision:

- What role does Access Health CT aspire to in terms of conceptualizing vs. implementing solutions?
- Is Access Health CT's goal profit, or will it dedicate resources toward the greater common good?
- What can Access Health CT offer and what does it want in return for collaborating?
- Will Access Health CT demonstrate its commitment with an investment of budgetary resources?

Through community partnerships, find products and services that increase the ability of impacted communities to access healthcare:

- Establish/encourage community based healthcare facilities with flexible or extended hours
- Establish/encourage virtual care options
- Establish/encourage "foot in the door" healthcare programs such as low-cost or free routine dental care or health screenings

can Access Health CT offer in a collaboration? What realistically would Access Health CT want in return for collaborating? How is Access Health CT demonstrating their commitment (preferably in the form of an investment of budgetary resources)? Until stakeholders understand the scope of Access Health CT's vision and accomplishments in these areas, they will resist and may hold back support for Access Health CT moving into other areas.

In partnership with community groups, Access Health CT should expand, enhance, or create programs and services that focus on stakeholders' high priority issues. Resolution of problems engaging with healthcare should be based on a deep understanding of the community, and therefore needs to be driven by the community. While community partnerships will help determine the actual strategies, products and services, they may include one or more of the following: increasing the ability of impacted communities to access healthcare; establish or encourage community-based healthcare facilities; establish or encourage flexible or extended hours for health service providers; establish or encourage virtual care options; establish or encourage programs that can be a "foot in the door" to engage people with healthcare, such as low-cost or free routine dental care or health screenings.

Expand Health Insurance to Lower Income Minority Communities

Health disparities are partly caused by differences in insurance coverage and associated differential access to a regular health care provider. For minorities, the most common reason given for discrimination in accessing health care is insurance status. More than 1-in-4 Hispanic adults, or 27.6%, had no personal doctor in 2017. Among White adults, it was just over one in 10, or 11%. Hispanic adults were more than twice as likely as Whites to report not seeing a doctor during the previous 12 months because of the cost.⁵⁸

To help people get insurance coverage, stakeholders recommend focusing enrollment efforts on communities with high rates of uninsured residents. Efforts should concentrate on affordable options for people earning just above the Medicaid threshold—the group most likely to be uninsured. Access Health CT should support outreach efforts to ensure people who qualify for Medicaid are enrolled; focus on getting more people insured in the programs for which they are eligible (i.e. Medicaid or other public coverage as well as plans available through Access Health CT); advocate for more benefits for individuals who are not eligible for HUSKY but are at or below 200% of the federal poverty level; engage consumers by promoting insurance plans that remove financial barriers to, or introduce rewards for preventive care, medication adherence, chronic disease management, and high-quality provider selection; advocate at the government level for consumer needs.

Highlights

Expand Insurance Coverage

- **Focus enrollment efforts on groups with high uninsured rates**
- **More affordable options for people earning just above Medicaid threshold—those most likely to be uninsured**
- **Get more people into the programs for which they are eligible (i.e. Medicaid or other public coverage as well as plans available through Access Health CT)**

Increase Minority Participation and Leadership Roles

Access Health CT should work with community-based leaders to develop sustainable strategies that address root barriers to health equity. For example, three current barriers include lack of caregivers who not only represent the ethnic diversity of the community but understand the unique goals, outlook and challenges of people from the community; disparities in education level; and lack of well-compensated, reliable employment opportunities. Stakeholders have identified empowered, effective, community-based leaders as a significant determinant in the extent to which a community is able to address health disparities, but there are too few of these leaders in the five to six key Connecticut communities. Access Health CT can identify, mentor, and support the development of community leaders. Community leaders should be from the community and actively living and engaging with the community. Community leaders can help to identify the path to real improvement if Access Health CT and other state leadership engage in authentic, meaningful dialogue with them and with members of target populations who are focused on understanding needs and barriers to health within their community.

Stakeholders suggest Access Health CT develop community leaders from the target communities, and work with them to create and deploy community-

specific strategies, products and services. Access Health CT could work with community, state, healthcare and educational leaders to establish a subsidized healthcare training program and career path which enables community members to train for medical positions, such as phlebotomist, nurse, nurse practitioner, physician, physician's assistant, etc.

Expenses could be subsidized if the student agrees to work for a period of time in their community healthcare facility. Ideally, this could also pave the way for addressing a fourth problem, lack of community-based healthcare facilities, by providing more employees to staff those facilities. Support specific needs: support community leaders in building and executing plans to address barriers to health. Community needs and barriers at this point may be very diverse and community-specific, such as access to healthy food, transportation, citizenship status, language barriers, etc. Partner with community groups, who are trusted and have relationships with historically disenfranchised residents, to better understand the needs and barriers of Access Health CT's target populations, encourage a healthier lifestyle and engagement with healthcare, connect Access Health CT to individuals who belong to their target populations, and provide greater support to overcome barriers such as impaired literacy or cognitive functioning.

Highlights

Target root barriers to health equity.

- Current barriers to health equity include lack of providers who represent the ethnic diversity of minority communities, disparities in education level and well-compensated, reliable employment opportunities.
- Foster inclusion of people of color on consumer advisory boards and in working groups.
- Develop community leaders in the target communities, and work with them to create and deploy community specific strategies, products & services.
- Work with community, state, healthcare and educational leaders to establish a subsidized healthcare training program and career path to help community members to train for medical positions, such as phlebotomist, nurse, nurse practitioner, physician's assistant, physician, etc.

Address Large Gaps in Information about Health and Health Care Options in Minority Communities

Stakeholders opine that commercial health insurance products are unnecessarily complex, leading to patient errors and wasteful spending. One consequence of this complexity is low health insurance literacy. Too many consumers do not understand how to purchase the right plan for their needs, what their costs will be, and what benefits they receive for those costs. This lack of health literacy is said to be particularly serious in lower income minority communities.

For those reasons, stakeholders place a high priority on activities that inform consumers about healthcare and health insurance, and they are especially concerned that Access Health CT do more to provide consumers greater health insurance navigation support to overcome structural racial/ethnic disadvantages. Such information should help consumers: understand how affordable health insurance can be if they qualify for subsidies and credits; understand how health plans work, how to use them and how to access free preventive care.

Highlights

- Stakeholders prioritize informing consumers about healthcare and health insurance.
- Access Health CT should provide consumers more health insurance navigation support to overcome structural racial & ethnic disadvantages.
- Such information should help consumers understand how:
 - Affordable health insurance can be if they qualify for subsidies and credits
 - Health plans work, how to use them and how to access free preventive care

In summary, stakeholders consider increasing health literacy a core issue, and they believe it should be a high priority for Access Health CT. Moreover, stakeholders believe that the mere fact that these issues persist as challenges today serves as evidence Access Health CT must not be addressing these issues, or not addressing them effectively.⁵⁹


Other Recommendations from Stakeholders

Stakeholders offered a variety of related recommendations many of which we list below:

- Create a robust communication campaign to drive a greater level of understanding of Access Health CT's activities and accomplishments. This could include communicating about Access Health CT's efforts to:
 - Support consumers with lower levels of literacy, English-language learners, and consumers with reduced cognitive ability
 - Harness insights from the Access Health CT database of consumers to better understand level of plan usage, challenges with usage, why consumers drop coverage, who drops coverage, and whether there are particular groups experiencing specific challenges. In addition to communicating how Access Health CT uses data to identify opportunities, address how that information is acted upon
 - Connect providers to health information to enable them to draw their patients into programs that will support good health
 - Beyond early efforts to ensure consumers know how to use their plans, advocate for consumers in other ways, including connecting them to resources if they have a problem, such as advocacy programs if they have a claim denied
 - Support communities with information, logistical support, expertise/mentoring and financial support (such as assistance with connections to grantors or with grant applications), following their lead in terms of issue priority
- Create an information technology hub for community organizations to improve their coordination with local health providers
- To back community health workers, pursue voluntary certification programs (such as the certification program enacted in recent Connecticut legislation managed by Department

of Public Health), hiring those workers to reach specific patient populations and exploring ways to pay for their services

- Use community health workers and increase referrals and access to community-based self-management programs for chronic diseases
- Provide safe and accessible places for physical activity
- Serve nutritious foods and beverages at schools
- Use the internet more effectively for coordinated communication about health, wellness, and insurance issues. Consider partnering with leading organizations like NAACP, Urban League and faith-based communities to embed educational content on their websites
- Any internet-based communication needs to be: workable (easily navigated, "bugs" worked out so links function correctly); content-rich and delivered in easy-to-comprehend language; mobile-friendly



**VI. Consumer Survey:
Understanding
Connecticut residents'
views on health and
health-related topics**

Understanding Connecticut residents' views on health and health-related topics

The overall goal of this phase of the project was to assess barriers consumers say they face in accessing health insurance and healthcare and to gauge their interest in various products and services. This section presents the findings of an online survey of healthcare consumers in Connecticut. The specific objectives of the survey are to assess:

- The extent to which residents are experiencing challenges related to social, behavioral, and lifestyle determinants of health
- The reasons consumers give for having health insurance as part of maintaining overall health
- Their access to healthcare providers and reasons for recent healthcare appointments
- Perceived barriers to accessing healthcare
- Interest in various health-related products and services designed to make accessing healthcare easier, including specific benefits which might be offered by a health insurance plan
- Connecticut consumers' familiarity with and image of Access Health CT

Methodology:

Between November 23, 2020 and December 21, 2020, a total of 1,006 residents of Connecticut completed an online survey. Most online respondents were members of panels provided by Dynata and Paradigm Sample, and additional respondents were connected to the survey via social media advertising on Facebook. All consumers were screened to ensure they are a resident of Connecticut and age 18 and over. The respondents included:

- 179 Medicaid-eligible consumers
- 136 consumers between Medicaid-eligible and 200% of FPL
- 190 consumers between 200% and 400% of FPL
- 501 consumers over 400% of FPL
- The margin of error for the study is ± 1.9 to 3.1 percentage points

Challenges residents experience related to social, behavioral, and lifestyle determinants of health.

Social and demographic characteristics associated with health disparity risk

The consumer survey showed considerable diversity in residents' personal characteristics, life circumstances, and experiences with healthcare. There is diversity in the types of people who experience disparities, or who are at risk, but they are likely to have one or more of the following characteristics:

- Race (being a person of color)
- Low SES
 - Residents who are most at risk have a median household income of \$30,800
 - 2 in 3 are at or below 200% the FPL
 - Approximately half have no more than a high school degree
 - They are more likely to be unemployed
- Health insurance status
 - Approximately 1 in 3 residents who are most at risk did not have health insurance

Barriers related to behavior and life situation

Survey responses indicate residents who are most-at-risk for experiencing health disparities often face financial struggles and are disproportionately likely to be challenged meeting basic needs, including basic healthcare and medications; food; transportation; and adequate housing.

Engagement in health-related behaviors, such as exercise or avoiding tobacco use, tends to align with other SDoH such as SES; however, there did not appear to be a strong causal association between these behavioral factors and health disparity risk. Barriers to being physically active, for example, are mostly related to personal reasons, such as lack of motivation, rather than systematic differences in factors that typically correspond with equity gaps. In other words, some health-related behaviors are likely to be symptomatic of other causes rather than population-specific drivers of health disparities.

Health status and health disparity risk

Not all differences in health status are disparities. Nonetheless, groups that typically do not experience

health disparities usually report being in very good health. That experience is less true for vulnerable populations. At-risk residents are more likely to report being in poorer health, and roughly 1 in 3 are experiencing significant challenges with physical or mental health. Vulnerable groups also reported higher rates of obesity and asthma, accounting for age.

Social and demographic characteristics associated with barriers to healthcare access

Barriers to accessing healthcare are very pervasive, and residents who encounter barriers often experience multiple challenges rather than a single isolated problem. Across the board, the following groups are more likely to experience barriers to getting healthcare:

- Low SES residents
 - Residents below 400% FPL are more likely to experience barriers compared to people who are above this threshold
 - Only when household income exceeds \$50,000 - \$75,000 do barriers start disappearing
- Residents insured through HUSKY, or a non-traditional plan
 - These residents were more likely to experience multiple barriers, especially finding a provider who takes their insurance; getting an appointment when needed; and barriers related to cost or insurance in general. They are more likely than others to distrust or fear going to the doctor
- Residents who are in poorer health
 - People who are in poorer health and/or have a serious health condition are more likely to experience multiple barriers
- Black residents
 - Black residents are especially likely to experience various barriers, especially those related to cost and insurance coverage, getting an appointment when needed, and finding a physician who accepts their insurance
- Women
 - Women experience some barriers to a greater degree, and this could be interrelated with other characteristics such as SES

- Having other SDoH risk factors
 - People who think they are at a health disadvantage, because something in their world or reality is impossible or hard to change, actually are at a disadvantage—they are disproportionately likely to face barriers. This supports the idea that health inequity is partly grounded in the reality that we are held back because of the world that we live in and emphasizes the importance of system-level changes to close the gap in health equity

While these findings indicate relationships between SDoH and various issues that may have implications for health outcomes, the fact that such relationships exist does not necessarily mean they are causal drivers of health inequity or that Access Health CT must address each of these challenges separately to meaningfully reduce health disparities. We must consider other root causes discussed below.

Identify barriers to equitable healthcare access and engagement, and the root causes of these barriers

The consumer research revealed that health disparities are not a product of individual socioeconomic and behavioral determinants alone; rather, consumer experiences within the healthcare delivery system often exacerbate the impact of other SDoH. Insights from vulnerable consumers suggest that the following are root causes of health inequity and that these causes are perpetuated by the healthcare system itself.

Differences in insurance plans mean unequal opportunities for consumers to access healthcare

One example of how the healthcare system creates inequities relates to the impact of insurance status and plan type on opportunities to get care. Simply having insurance does not guarantee equitable access or treatment. We found that Medicaid/HUSKY members are especially likely to struggle with finding a provider who will take their insurance and have difficulty getting appointments when needed. Residents report experiencing delays in getting care and receiving poor quality service due to having a certain type of plan, and they feel discriminated against when these challenges occur. Residents begin to distrust and resent the system when they feel that

their insurance plan dictates care more than doctors' assessments of patients' best interests. On the other hand, residents insured through an employer-sponsored health insurance plan or Medicare were less likely to report these types of issues.

The cost of healthcare is unmanageable, and this discourages vulnerable groups from engaging

Members of vulnerable groups are disproportionately likely to say that "cost [of care] or insurance coverage" is a top barrier to healthcare engagement. Even with insurance, many residents feel that the cost of healthcare is unmanageable—this includes co-pays or deductibles on top of insurance premiums. Cost concerns result in chronic dread and avoidance around getting care because many consumers feel they cannot afford it even with coverage. Some people even feel exploited by healthcare providers due to perceived financial conflicts of interest or experiences with care that were poor in quality yet high in cost.

Poor patient-provider interactions, often rooted in provider implicit bias, drive unequal health outcomes in multiple ways

There is a misconception among some stakeholders that vulnerable consumers, especially people of color, distrust healthcare institutions, and that this distrust is historically or culturally based. Instead, our consumer research suggests that consumer distrust and anxiety is rooted in poor interactions with providers, which vulnerable groups seem to experience unduly often. These poor interactions are often fueled by implicit bias (subtle, often nonconscious discrimination) against patients':

- Gender or gender identity (e.g., it was common for women to feel that their concern or pain was not taken seriously, especially by male doctors)
- Race, skin color
- Medical history (especially substance abuse or mental health complexities)
- Medical condition (e.g., obesity, chronic pain, uncommon conditions)
- Insurance
- SES
- Language or accent

Experiences with bias and poor treatment contributes to outcomes such as:

- Patients feel stigmatized, invalidated, ignored, and belittled; they develop a negative image of doctors

- Diminished patient confidence in providers can lead to lesser engagement in care and adherence to treatment
- Worse direct health outcomes: diagnostic error, poorer clinical treatment, delayed or no treatment, poor or no pain management
- Consumer distrust and avoidance of healthcare
- Population-level health disparities

Research suggests that poor patient-provider interactions uniquely drive distrust in the healthcare system. For instance, people who are healthy, regardless of other SDoH, are generally not healthcare-averse. Zero (out of 65) healthy people of color said that anxiety or distrust is a barrier to getting healthcare. Yet, among residents who report struggling with significant physical or mental health challenges, 1 in 3 said that anxiety or distrust is a barrier to healthcare engagement, and this was largely consistent regardless of other SDoH. Moreover, having health challenges was associated with greater experiences with provider bias, especially among women. Ultimately, the people who are most distrusting and fearful of healthcare tend to be low-to-mid SES residents who struggle with health challenges and say they have experienced bias by providers.

These findings illustrate how consumer experiences within the healthcare delivery system interact with social determinants to produce poorer health outcomes among vulnerable groups. Chronic aversion to healthcare is largely rooted in system-level issues that will require system-level solutions to produce meaningful and lasting change.

Evaluate interest in insurance and other health-related products and services

Vulnerable consumers are generally oriented toward maintaining their health and this often includes having health insurance. Roughly 2 in 3 vulnerable consumers said that their health is a high priority, and 4 in 5 say that having health insurance is a high priority. Even among the uninsured, we found that most feel it is a high priority to have insurance (71%) and few said it was a low priority (11%). These findings challenge the idea that vulnerable consumers don't value or undervalue their health or having health insurance.

The following outlines health-related products, services, and solutions found to be of most interest to target audiences.

Products/services with direct, concrete benefits (most appealing overall)

Vulnerable consumers are especially interested in products and services that help them maintain their health in the present and save money on current health expenses. Examples include:

- Lower cost medications
- Free wellness/preventive care
- Discounts, perks, or incentive programs for doing things that support health
 - Higher SES respondents mention interest in free gym memberships/classes as a perk
- Nutrition, food, or diet-related services and personalized coaching have wide appeal
- Dental insurance had wide appeal, especially among higher SES respondents
 - Other forms of insurance tended to be more person-specific in appeal
- Payment plans for insurance
 - Vulnerable consumers and the uninsured are very interested in this; the data suggests that consumers will respond favorably to efforts to put costs within their reach

Solutions that increase opportunities to get (timely) care

- There is some interest in offerings that provide more opportunities to see providers, including telehealth or neighborhood health centers
- Physical access solutions, such as transportation to doctor's appointments, had relatively low appeal among vulnerable consumers in general, but appealed more to Hispanic/Latinx respondents

Engagement-related solutions

- Offering a monetary incentive, such as a gift card or discount, increases vulnerable consumers' interest in engaging with healthcare
 - 79% of vulnerable consumers say that they are more likely to get a free check-up if they were offered an incentive for doing so
 - 73% of vulnerable consumers say they are more likely to purchase health insurance if offered a discount on other things they use

Concierge-type services to assist and connect

- Assistance choosing an insurance plan, finding or applying for programs, and personalized appointment assistance have appeal to some vulnerable consumers

Consider audience-specific communication when discussing insurance perks

Vulnerable groups are oriented toward direct, surefire benefits of having insurance (for example, that it helps pay for current healthcare needs/medications and provides free preventive care). More affluent, low-risk respondents are relatively more oriented toward risk mitigation benefits, such as protection from high costs in the event of an uncertain catastrophic health event.

Collectively, these findings indicate that target audiences will respond well to particular types of health and wellness products and services. While such offerings are unlikely to be stand-alone solutions, they do help address some barriers to health equity and are likely to encourage positive health behaviors and outcomes as part of a comprehensive strategy to reduce health disparities.

Understanding consumer familiarity with and image of Access Health CT

Findings are generally positive regarding consumers' familiarity with Access Health CT and its image among them. Most consumers are familiar with Access Health CT, and nearly all had at least heard of it. Half of the vulnerable consumers surveyed were customers at some point. Most residents, especially vulnerable groups and people who had purchased insurance from Access Health CT, had a positive or neutral image of the organization.

While few consumers had a negative image of Access Health CT (7%), the most common reason for this image was because they believed plans are not affordable. A handful of consumers mentioned issues with customer service/communication, poor plan management, or difficulties using/navigating the site, which suggests room to continue improving customer experience and support.



VII. Implications and Recommendations for Access Health CT

Implications and Recommendations for Access Health CT

The research shows there are five key areas of focus and recommended actions for Access Health CT as the organization builds out its strategic framework for addressing health disparities in the state of Connecticut.

1. Address systemic causes of health inequity: healthcare cannot be an observer of issues or continue to suggest that health inequity is sustained by broader social forces alone.

Much of the discussion on health disparities addresses individual socioeconomic and behavioral determinants. Yet, health inequities are not a product of such characteristics alone. Our research shows that vulnerable groups feel that the healthcare system shuts them out and hinders their engagement in various ways. It is clear that consumer experiences *within the healthcare delivery system* exacerbate the impact of other SDoH and play a powerful role in perpetuating unequal health outcomes.

Implementing solutions at the system level will be critical for meaningful advances in health equity and reducing root causes of consumer healthcare avoidance. Solutions should include efforts to:

- Reduce cost of care
 - This was consumers' top suggestion for improving healthcare in their community
 - This was also a high priority for stakeholders interviewed
- Improve insurance coverage
 - Health insurance is not a means to accessing care. It is a way to pay for care. It is not enough to be insured. The type and quality of coverage matters, and Access Health CT is well-positioned to advocate for improvements or the creation of new products and services in this area
- Improve quality of patient-provider interactions
- Increase the number of providers and choices available to people; reduce disparities in insurance acceptance by providers
 - A person's worth is too often associated with their insurance status. And while one strategy has been to increase everyone's

insurance status, it does not address the lack of humanity

- Improve ability to get timely care
 - More appointment availability; flexible or extended hours; more access opportunities
- Improve health and health insurance literacy
 - Access Health CT should partner with other stakeholders to develop programs to increase insurance knowledge and healthy lifestyle choices

2. To improve patient-provider interactions, we must address implicit bias in healthcare and recognize how providers may be unwittingly contributing to inequities.

Strategies should aim to *reduce the impact* of bias rather than eliminate it entirely. Examples include:

- Efforts to make care more patient-centered—getting physicians to see each patient as an individual and fostering a team approach to patient care
- Bias training and cultural competency training can help providers to become better attuned to implicit biases and develop skills to address them
- Foster an organizational climate that is truly committed to equity—this has been found to be more effective at reducing bias than formal diversity curricula
 - Ensure equity remains on the agenda and ensure accountability toward equity goals. Engage clinicians, healthcare organizations, community partners, and consumers
- Encourage diversity in physicians and organizational leaders
 - While racial concordance between patients and providers is not a panacea, having clinicians who can relate better with patients will improve patients' overall care experience and consequently, health outcomes
 - Positive contact with racial minority peers, mentors, and leaders shows promise as a way to reduce provider bias

3. Take proactive measures to get people to engage with care

Many people respond well to extrinsic rewards to take interest in their health and well-being and to get and stay on a plan of care. However, vulnerable populations also need someone to reach out to bring them into the system first before they can get on this path. Once they are in, helping them understand

more about themselves and their health is critical and providing guidance along the way to keep them focused and on a plan. Supporting the work of Community Health Workers or Care Coordinators as “super navigators” is an area to explore further.

4. Assess current work around Data and Information centralization to see how Access Health CT can help

True integration of care to support the whole person requires information sharing. For the commissions, organizations or providers that support underserved communities, there are limitations to how data is shared or a lack of data sharing. For example, many struggle with the costs of EPR systems or are unable to access these types of systems. All of this creates barriers for patients. As the State of Connecticut is working to centralize data, make data more accessible or enhance reporting to better support whole person health, Access Health CT should assess this work in progress in these areas to understand how the data Access Health CT has can support or enhance these efforts.

5. Access Health CT brand perception is neutral to positive

Although consumer distrust of public and private institutions may be growing, Access Health CT's brand perception remains neutral to positive. Access Health CT can capitalize on that sentiment by doing more to be consumers' trusted ally and by building strong, symbiotic relationships with organizations and communities—ultimately better serving those in need.



VIII. Appendices

Appendices

A. Appendix 1: Activities of Important Stakeholders in Connecticut Health

This report has documented the existence of significant differences in health outcomes for racial and ethnic groups across the state of Connecticut. These health disparities vary substantially for various illnesses, and they are entangled with geography and spatial inequality associated with substantial residential segregation along racial, ethnic, and class lines. Connecticut's residents who live in areas afflicted by a cluster of highly correlated conditions: poverty, environmental exposures, high healthcare costs, High Deductible Health Plans, poor schools and housing, and so on experience higher rates of cardiovascular disease, infant mortality, diabetes, asthma, smoking, and HIV, many of which are important risk factors for COVID-19. These disparities are among those given prominent attention by the *Connecticut Department of Public Health* (DPH) which in partnership with the *Connecticut Health Improvement Coalition*, published the 2019 State Health Assessment that demonstrated certain groups within the state experience a greater share of adverse health events. Specifically, the report highlighted race/ethnic disparities in many conditions: maternal and child health (including unintended pregnancies, teen births, low birthweight, and infant mortality), inadequate healthcare and insurance coverage, lack of access to safe drinking water, work-related injuries, infectious disease trends (STIs, HIV, vaccine-preventable illness), trauma, and various chronic conditions (cardiovascular disease, asthma, and childhood obesity).⁶⁰

These listings are in broad agreement with an array of health disparities enumerated by a multitude of organizations demonstrating their strong commitments to the health of Connecticut's population. As such, such lists identify important trends and current emphases in the state's fight for health equity as this fight is envisioned by important stakeholders in Connecticut's health. During the past year, in addition to DPH, several stakeholders have issued reports documenting health disparities in Connecticut. A few examples illustrate the specific health disparities Connecticut's community of stakeholders consider most pressing. In two other recent reports, *Connecticut Voices for Children* and *The Connecticut Health Foundation* separately surveyed the state of health equity in Connecticut.⁶¹ The reports detail the causes of several racial and ethnic health

disparities, including infant mortality, asthma, cancer, diabetes, and life expectancy. African Americans are 1 ½ times more likely to be uninsured compared to the total population and Hispanics are 2 ½ times more likely to be uninsured. The reports also discuss the persistence of health inequity throughout the course of a resident's lifetime. Black babies are more than four times as likely to die before their first birthday as are babies born to White mothers; Black children (age below 18) with asthma are more than 5 times more likely to go to the emergency department for an asthmatic episode than White children with asthma, and Hispanic children are more than 4 times as likely as Whites. Later in life, Blacks are almost four times as likely as Whites to have a lower-extremity amputation related to onset of diabetes, are more than twice as likely to die from diabetes, and they die from prostate cancer at nearly twice the rate of White men.

Stakeholders' activities are not limited to important reports. For example, *The Community Foundation for Greater New Haven*, a philanthropic institution established in 1928, distributes grants to a broad variety of organizations working to combat health disparities. The forefront of their efforts is their support of *Healthy Start New Haven*, an organization working to combat the marked disparity in infant mortality rates within the city by providing access to prenatal care through a coordinated care model. In light of COVID-19, the Community Foundation has accelerated its grantmaking and launched a new community fund in partnership with United Way to address the challenges various community organizations are facing because of COVID-19.⁶²

Keeping in mind that different organizations specialize in one or more of the disparity areas, three organizations have been particularly instrumental in formulating policies and programs that help set the agendas of all stakeholders: The state of Connecticut, its Department of Public Health, and the Connecticut Health Foundation. Reviewing the work of these organizations affords a summary of the trends and emphases embodied in efforts to improve health equity in Connecticut.

The Connecticut Department of Public Health, in addition to its regular updating of data describing various indicators of health disparity and its published reports addressing health equity issues, has taken a leadership position in the state by piloting program initiatives aimed at uncovering and ameliorating health disparities.⁶³ Rather than detailing specific diseases and their disparities, we focus on suggested

actions aimed at reducing disparities in general, or more precisely increasing health equity.

- 2006-2008, DPH commissioned Office of Health Equity to spearhead an effort to improve the statewide infrastructure for documenting, reporting, and addressing health disparities among racial and ethnic minorities (*The Connecticut Health Disparities Project*)⁶⁴
- 2013-2015, Using a State Partnership Grant from the Federal Government's Office of Minority Health, the DPH partnered with the *Connecticut Multicultural Health Partnership*, a statewide coalition of health and social service organizations, public health entities, advocacy and coalition groups, colleges and universities, small businesses and community members. The collaboration funded two projects to raise awareness of health disparities among health professionals, policy makers, and the general public
 - Promotion and implementation of the Enhanced National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care in DPH contractor, local health, and community-based agencies via an intensive CLAS educational intervention
 - The statewide Social Determinants of Health Task Force, created to develop a long-term plan and strategy for addressing racial and ethnic disparities in three areas: cancer, cardiovascular disease, and infant mortality (and associated low birth weight)⁶⁵
- 2018, DPH published a report detailing the "*Financial Impact of Racial and Ethnic Health Disparities in Connecticut.*" It found exorbitant economic costs associated with providing care to racial and ethnic minorities as compared to Whites in Connecticut⁶⁶
 - The excess hospital cost of non-Hispanic Black residents is over \$384 million and that of Hispanics over \$121 million compared with non-Hispanic White residents, see Dec 2018 Report

Between 2014-2020, the state of Connecticut, received a \$45 million State Innovation Model (SIM) grant from the Centers of Medicare & Medicaid Innovation to support the development and implementation of state-led, multi-payer healthcare payment and service delivery model reforms that improve patient experiences accessing and using services, reins in escalating health care costs, and addresses health inequalities. Connecticut's SIM

is now led by the newly formed Office of Health Strategy.⁶⁷ Working groups featuring consumers, employers, healthcare providers, community organizations and subject matter experts are aimed at driving particular components of the SIM including, health information technology development, quality measurement, and practices. SIM was charged with moving the state's health care infrastructure from a fragmented system providing state residents disparate access and health outcomes toward a more equitable system for the state's entire population. SIM focused on several general objectives:

- Development of a value-based payment system based on whether individuals receive care that leads to better healthcare at a reasonable cost
- Offering technical assistance and supports to healthcare providers that want to succeed under these new payment models, so they can connect individuals to community and behavioral supports, deploy community health workers, and use data to track and improve their performance
- Enhance consumer engagement through the promotion of value-based insurance plans that remove financial barriers to, or introduce rewards for preventive care, medication adherence, chronic disease management, and high-quality provider selection as well as public meetings and listening groups to encourage consumer outreach
- Creation of a Population Health Plan that combines innovations in clinical healthcare delivery, payment reform, and population health strategies to improve health via a "community approach" that builds community structures to improve health rather than sole focus on patient panels

The Connecticut Health Foundation (CHF), the state's largest independent philanthropic organization dedicated to health issues, is addressing the health of Connecticut residents via four broad pathways each consistent with the objectives of SIM:⁶⁸

1. *Coverage and Access.* The foundation works to ensure people have health insurance, know how to use it, and are connected to a source of quality preventive care. The foundation does so by: (i) funding policy analyses and advocacy efforts to ensure that people can get health insurance and use it to get the appropriate care, (ii) publishing reports on Medicaid and how to improve it, and (iii) providing grants to improve care delivery at school-based and community health centers; both key access points for quality care.

2. *Improve Healthcare Delivery.* The foundation seeks better health for everyone, and a health care system focused on improving outcomes and tracking and targeting racial and ethnic health disparities.
 3. *Linking Care to Community.* The foundation supports work that creates strong links between the clinical care system and the communities where people live.
 4. *Advocacy and Leadership.* The foundation supports efforts to talk to and educate decision makers on the issues that affect the health of Connecticut residents; ensuring that those most impacted by policy changes have a voice that is heard. The foundation also offers a Health Leadership Fellows Program and an Academy for Health Equity, Advocacy and Leadership that equip healthcare professionals with knowledge of health policy, advocacy skills, and partnership opportunities.
- *The University of Connecticut Health Disparities Institute* has issued various virtual gatherings aimed at discussing various COVID-related events. For example, the institute recently held “Racial Profiling of Black Men During the Pandemic” over Facebook Live⁶⁹
 - More generally the institute aims to “reduce disparities by turning ideas shown to work into policies and actions.” This means estimating the true health disparities within Connecticut populations by designing and analyzing studies, offering consulting services to ongoing projects, and designing various community-based interventions⁷⁰
 - *The University of Connecticut’s Health Disparities Institute* (HDI) served several of the key focus objectives with its 5-year Health Insurance Advance (HIA) project (2015-2019) aimed at “[enhancing] the value of health insurance for the newly insured, and in doing so, improve their overall health and well-being.”⁷¹ The project was funded by the Connecticut Health Foundation and took place in two phases:
 - *Years 1-3:* Measure the level of health insurance literacy in the state and measurably advance the level of health insurance literacy in high-risk populations by developing consumer support tools and health insurance coaching at the point of use
 - *Years 4-5:* Promote policy changes aimed at simplifying health insurance designs.

HIA partnered with Access Health CT to incorporate strategic thinking on health insurance literacy into the pre-open enrollment process

Other Organizations Making Important Contributions to the Health of Connecticut

- DPH Office of Health Equity (<https://portal.ct.gov/DPH/Workforce--Professional-Development/Office-of-Health-Equity/Office-of-Health-Equity>)
- Office of Health Strategy Health Enhancement Communities (<https://portal.ct.gov/OHS/SIM-Work-Groups/Population-Health-Council/Resources>) and Healthcare Cost Containment initiative (news release)
- DSS Husky Health Equity (<https://www.huskyhealthct.org/providers/pcmh/pcmh-health-equity.html>)
- Community Health Workers Association of Connecticut (<https://www.cpha.info/page/CHWACT>)
- Connecticut Association of Directors of Health (<https://cadh.org/health-equity-initiative/>)
- DataHaven—Toward Health Equity in Connecticut

B. Appendix 2: Description of Interview and Survey Designs

Qualitative Evaluation Of Stakeholder Views

Beginning in August 2020, Market Street Research conducted in-depth interviews with key organizational stakeholders regarding:

- Familiarity with and understanding of Access Health CT
- Knowledge of Access Health CT’s current efforts to reduce health disparities
- Opportunities for Access Health CT to reduce health disparities directly
- Opportunities for Access Health CT to partner with others in addressing health disparities
- Barriers Access Health CT is likely to face in addressing health disparities

Methodology:

- 45 telephone interviews (ranging from 20-50 minutes)
- Interviews completed between August 5 and October 23, 2020
- Respondent anonymity guaranteed

- Interviews recorded, transcribed, and analyzed by Market Street Research

Stakeholders participating in this study have a broad range of roles and have many different responsibilities relating to addressing health inequities in Connecticut:

- Personal (resides in Connecticut, is a member of a community experiencing health inequities)
- Community involvement and leadership (on non-profit boards or forums, partners with other organizations either personally or as an organization)
- Organizational leadership (organization's specific focus is on health and/or communities experiencing health inequities)
- Advocacy (on behalf of communities experiencing health inequities)
- Political leadership (personal or organizational efforts to influence policy in Connecticut or nationally)

Quantitative Evaluation of Stakeholder Views

Rationale & Objectives

Between December 10, 2020 and December 31, 2020, Market Street Research released an online survey to better understand:

- Stakeholder familiarity with and image of Access Health CT
- Insights into opportunities or services to meaningfully reduce healthcare disparities, especially among historically disenfranchised populations

A total of 89 Access Health CT stakeholders completed the online study.

Sample Information

- Respondents were contacted by Access Health CT through two waves of email recruitment communications, from a list of 4287 stakeholders across Connecticut
- Access Health CT contacted stakeholders by email, which included an online link to the survey
- In addition, there was personal email outreach to about 25 of the stakeholders from a contact with Access Health CT

Stakeholders participating in this study have a broad range of roles and have many different responsibilities relating to addressing health inequities in Connecticut:

- Personal (resides in Connecticut, is a member of a community experiencing health inequities)
- Community involvement and leadership (on non-profit boards or forums, partners with other organizations either personally or as an organization)
- Organizational leadership (organization's specific focus is on health and/or communities experiencing health inequities)
- Advocacy (on behalf of communities experiencing health inequities)
- Political leadership (personal or organizational efforts to influence policy in Connecticut or nationally)

Technical Information

- The margin of error for this study is ± 6.1 to 10.2 percentage points

Endnotes

- ¹ Elizabeth Arias and Jiaquan Xu, "National Vital Statistics Reports, United States Life Tables, 2017" 68, no. 7 (June 24, 2019): 66.
- ² "Dear Connecticut Residents: Your Neighborhood Might Determine How Long You'll Live," Connecticut Health Foundation, September 13, 2018, <https://www.cthealth.org/latest-news/blog-posts/dear-connecticut-residents-your-neighborhood-really-does-determine-how-long-youll-live/>.
- ³ "U.S. Census Bureau QuickFacts: United States," accessed June 14, 2020, <https://www.census.gov/quickfacts/fact/table/US/PST045219>.
- ⁴ Patient Protection and Affordable Care Act of 2020. Pub. L. No. 111-148, 124 Stat. 119 (2010)
- ⁵ CDC. *Life expectancy at birth, as of 2010-2015*. PolicyMap. <https://plcy.mp/4S9RhCT>. (14 July 2020).
- ⁶ U.S. Census Bureau, *American Community Survey 2018 5-year estimates*, Table DP05 (December 19, 2019), ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁷ U.S. Census Bureau, *American Community Survey 2018 5-year estimates*, Table DP05 (December 19, 2019), ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁸ U.S. Census Bureau, *American Community Survey 2018 5-year estimates*, Table DP05 (December 19, 2019), ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁹ U.S. Census Bureau American Community Survey. *Estimated percent of people with at least a Bachelor's degree, between 2014-2018*. PolicyMap. <https://plcy.mp/gG8FtSS>. (14 July 2020).
- ¹⁰ U.S. Census Bureau American Community Survey. *Estimated percent of all people that are living in poverty, as of 2014-2018*. PolicyMap. <https://plcy.mp/8wPZ35m>. (14 July 2020).
- ¹¹ U.S. Census Bureau American Community Survey. *Estimated percent of all people without health insurance, between 2014-2018*. PolicyMap. <https://plcy.mp/vL03Qy3>. (14 July 2020).
- ¹² Dear Connecticut Residents: Your Neighborhood Might Determine How Long You'll Live," Connecticut Health Foundation, September 13, 2018, <https://www.cthealth.org/latest-news/blog-posts/dear-connecticut-residents-your-neighborhood-really-does-determine-how-long-youll-live/>.
- ¹³ "Health Disparities: Definitions and Measurements," posted on the Department of Health and Human Services (HHS) from "Disparities in Family Planning," *American Journal of Obstetrics and Gynecology*, 2010, March Vol 202.
- ¹⁴ "The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Phase I Report: Recommendations for the Framework and Format of Healthy People 2020" (U.S. Department of Health and Human Services, October 28, 2008), http://www.healthypeople.gov/sites/default/files/PhaseI_0.pdf.
- ¹⁵ Brennan Ramirez, Laura K, Elizabeth A Baker, and Marilyn Metzler. *Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health*. Atlanta, GA: Centers for Disease Control and Prevention, 2008.
- ¹⁶ "COVID-19 Projections," Institute for Health Metrics and Evaluation, accessed July 19, 2020, <https://covid19.healthdata.org/>.

- ¹⁷ Kenneth Kochanek et al., "Deaths: Final Data for 2017," *National Vital Statistics Report* 68, no. 9 (June 24, 2019): 77.
- ¹⁸ "Mortality Tables 2000 to 2014 with 74 Cause of Death Codes," CT.gov - Connecticut's Official State Website, accessed July 19, 2020, <https://portal.ct.gov/DPH/Health-Information-Systems--Reporting/Mortality/Mortality-Tables>.
- ¹⁹ Crawford, C. (2017, May 9). Despite Narrowing Gap, Racial Health Disparities Remain. Retrieved from <https://www.aafp.org/news/health-of-the-public/20170509mmwr-healthdispar.html>
- ²⁰ *Estimated average percent of total expenses spent on housing as of 2017*. PolicyMap, <https://www.policymap.com> (based on data from PolicyMap, QI, BLS, and Census; Accessed 14 July 2020).
- ²¹ PolicyMap, QI, BLS, and Census. *Estimated average percent of total expenses spent on food as of 2017*. PolicyMap, <https://www.policymap.com> (based on data from PolicyMap, QI, BLS, and Census; Accessed 14 July 2020).
- ²² CDC. *Life expectancy at birth, as of 2010-2015*. PolicyMap. <https://plcy.mp/4S9RhCT>. (14 July 2020).
- ²³ Zheng, Xi. (2019) CT 2018 BRFSS Prevalence Estimates for Risk Factors and Health Indicators: Selected Summary Tables, Connecticut Department of Public Health, Hartford, Connecticut (www.ct.gov/dph/BRFSS).
- ²⁴ "Chart Book: Accomplishments of Affordable Care Act," Center on Budget and Policy Priorities, March 18, 2019, <https://www.cbpp.org/research/health/chart-book-accomplishments-of-affordable-care-act>.
- ²⁵ "Uninsured Rates for the Nonelderly by Race/Ethnicity," KFF (blog), December 4, 2019, <https://www.kff.org/uninsured/state-indicator/rate-by-raceethnicity/>.
- ²⁶ Donna L Washington, "Charting the Path from Lack of Insurance to Poor Health Outcomes," *Western Journal of Medicine* 175, no. 1 (July 2001): 23.
- ²⁷ U.S. Census Bureau, *American Community Survey 2018 5-year estimates*, Table DP05 (December 19, 2019), ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ²⁸ U.S. Census Bureau American Community Survey. *Estimated percent of all people that are living in poverty, as of 2014-2018*. PolicyMap. <https://plcy.mp/8wPZ35m>. (14 July 2020).
- ²⁹ U.S. Census Bureau American Community Survey. *Estimated percent of all people without health insurance, between 2014-2018*. PolicyMap. <https://plcy.mp/vL03Qy3>. (14 July 2020).
- ³⁰ U.S. Census Bureau American Community Survey. *Estimated percent of all people without health insurance, between 2014-2018*. PolicyMap. <https://plcy.mp/vL03Qy3>. (14 July 2020).
- ³¹ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table DP05, ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ³² CDC. *Life expectancy at birth, as of 2010-2015*. PolicyMap. <https://plcy.mp/4S9RhCT>. (14 July 2020).
- ³³ HRSA. *Medically Underserved Areas (MUA), as of 2019*. PolicyMap. <https://plcy.mp/FQn5QBJ>. (3 November 2020).
- ³⁴ USDA. *Low Income and Low Access Tract, as of 2015*. PolicyMap. <https://plcy.mp/SCHzyYC>. (3 November 2020).
- ³⁵ "COVID-19 Deaths Analyzed by Race and Ethnicity," APM Research Lab, 19, accessed November 30, 2020, <https://www.apmresearchlab.org/covid/deaths-by-race>.
- ³⁶ "U.S. Census Bureau QuickFacts." <https://www.census.gov/quickfacts/fact/table/US/PST045218>

- ³⁷ CDC, "COVID-19 Cases, Deaths, and Trends in the US | CDC COVID Data Tracker," Centers for Disease Control and Prevention, March 28, 2020, <https://covid.cdc.gov/covid-data-tracker>.
- ³⁸ "COVID-19 Deaths Analyzed by Race and Ethnicity."
- ³⁹ *COVID-19 Cases and Deaths by Race/Ethnicity* from Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Cases-and-Deaths-by-Race-Ethnicity/7rne-efic>.
- ⁴⁰ *COVID-19 Cases and Deaths by Race/Ethnicity* from Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Cases-and-Deaths-by-Race-Ethnicity/7rne-efic>.
- ⁴¹ *COVID-19 Cases and Deaths by Race/Ethnicity* from Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Cases-and-Deaths-by-Race-Ethnicity/7rne-efic>.
- ⁴² *COVID-19 Cases and Deaths by Age Group*. Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Cases-and-Deaths-by-Age-Group/ypz6-8qyf>.
- ⁴³ *COVID-19 Tests, Cases, and Deaths (By Town)*. Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.
- ⁴⁴ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table DP05, ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁴⁵ *COVID-19 Tests, Cases, and Deaths (By Town)*. Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.
- ⁴⁶ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table S0801, Commuting Characteristics by Sex. Available at <https://data.census.gov>.
- ⁴⁷ *Nursing Facility Registry* provided by Connecticut Office of Policy and Management. Accessed from <https://data.ct.gov/Health-and-Human-Services/Nursing-Facility-Registry/rm6f-b9qj>.
- ⁴⁸ *Nursing Facility Registry* provided by Connecticut Office of Policy and Management. Accessed from <https://data.ct.gov/Health-and-Human-Services/Nursing-Facility-Registry/rm6f-b9qj>.
- ⁴⁹ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table S1501, Educational Attainment. Available at <https://data.census.gov>.
- ⁵⁰ *COVID-19 Tests, Cases, and Deaths (By Town)* provided by Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.
- ⁵¹ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table DP05, ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁵² Why Education Matters to Health: Exploring the Causes. (2015, February 13). Retrieved from <https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html>
- ⁵³ *CMS COVID-19 Nursing Home Dataset* provided by CMS. Accessed from <https://data.ct.gov/Health-and-Human-Services/CMS-COVID-19-Nursing-Home-Dataset/w8wc-65i5>; *Assisted Living Facilities with Residents Positive for COVID-19* provided by Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/Assisted-Living-Facilities-with-Residents-Positive/wjua-euxh>; *COVID-19 Tests, Cases, and Deaths (By Town)* provided by Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.

- ⁵⁴ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table DP04, Selected Housing Characteristics. Available at <https://data.census.gov>.
- ⁵⁵ *COVID-19 Tests, Cases, and Deaths (By Town)* provided by Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.
- ⁵⁶ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table S1501, Educational Attainment. Available at <https://data.census.gov>.
- ⁵⁷ U.S. Census Bureau American Community Survey 2018 5-year estimates, Table DP05, ACS Demographic and Housing Estimates. Available at <https://data.census.gov>.
- ⁵⁸ Survey reasons given for no insurance: see report from Data Haven, p. 28.
- ⁵⁹ "Health Equity Initiative | The Connecticut Association of Directors of Health (CADH) Is a Nonprofit Organization, Comprised of Connecticut's Local Health Directors, That Works to Strengthen Public Health throughout the State," accessed July 19, 2020, <https://cadh.org/health-equity-initiative/>.
- ⁶⁰ "Findings from the 2019 State Health Assessment," September 20, 2019, https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/state_health_planning/SHA-SHIP/HCT2025/Summit-Data-Packet_FINAL.pdf?la=en.
- ⁶¹ "Health Disparities in Connecticut: Causes, Effects, and What We Can Do," Connecticut Health Foundation, accessed July 19, 2020, <https://www.cthealth.org/publication/health-disparities-in-connecticut-causes-effects-and-what-we-can-do/>.
- ⁶² "Greater New Haven COVID-19 Community Fund," The Community Foundation for Greater New Haven, accessed July 19, 2020, <https://cfgnh.org>.
- ⁶³ "Findings from the 2019 State Health Assessment."
- ⁶⁴ "Office of Health Equity," accessed July 19, 2020, <https://portal.ct.gov/DPH/Workforce--Professional-Development/Office-of-Health-Equity/Office-of-Health-Equity>.
- ⁶⁵ "Connecticut State Partnership Grant Program to Improve Minority Health - The Office of Minority Health," accessed July 19, 2020, <https://minorityhealth.hhs.gov/omh/content.aspx?ID=16&lvi=2&lvid=51>.
- ⁶⁶ Joshua W Elder, "Financial Impact of Racial and Ethnic Health Disparities in Connecticut," n.d., 3.
- ⁶⁷ [https://portal.ct.gov/-/media/OHS/Healthcare-Cabinet/2016-Meetings/State-Innovation-Model_HCC_Description_6-14-16_Final-\(003\).pdf?la=en](https://portal.ct.gov/-/media/OHS/Healthcare-Cabinet/2016-Meetings/State-Innovation-Model_HCC_Description_6-14-16_Final-(003).pdf?la=en)
- ⁶⁸ "What We Focus On," Connecticut Health Foundation, accessed July 19, 2020, <https://www.cthealth.org/our-focus/>.
- ⁶⁹ Allison Joslyn, "Health Equity & COVID-19 | Health Disparities Institute," April 18, 2020, <https://health.uconn.edu/health-disparities/health-equity-covid19/>.
- ⁷⁰ Financial Impact of Racial and Ethnic Health Disparities in Connecticut Authors: Joshua W. Elder (University of California, Davis); Stephanie M. Poulin and Mehul A. Dalal (Connecticut Department of Public Health), Dec 2018.
- ⁷¹ Kristin Wallace, "Core Services | Health Disparities Institute," May 24, 2016, <https://health.uconn.edu/health-disparities/services/core-services/>.

⁷² Kristin Wallace, "Policy | Health Disparities Institute," May 11, 2016, <https://health.uconn.edu/health-disparities/policy/>.

⁷³ *COVID-19 Tests, Cases, and Deaths (By Town)*. Connecticut Department of Public Health. Accessed from <https://data.ct.gov/Health-and-Human-Services/COVID-19-Tests-Cases-and-Deaths-By-Town-/28fr-iqnx>.