

# Quinnipiack Valley Health District Community Health Assessment

December 2023 Updated April 2025 **DataHaven** 

#### Prepared by

Kelly Davila, MS, MA, Senior Research Associate, DataHaven Camille Seaberry, MPS, Senior Research Associate, DataHaven

#### With assistance from

Emily Melnick, MA, Consultant
Mark Abraham, MPH, Executive Director, DataHaven
Alicia Mulvihill, MPH, Director of Community Programs, QVHD
Kara Sepulveda, MPH, Public Health Programs Assistant, QVHD
Luis Pantoja, MPH, Director of Health, QVHD
Andrew Carr, PhD, Research Associate, DataHaven

December 2023



The Quinnipiack Valley Health District (QVHD) provides public health and other services to the residents of Bethany, Hamden, North Haven, and Woodbridge, Connecticut.

Contact QVHD at 203-248-4528 or info@gvhd.org or by scanning the QR code below.



# **DataHaven**

DataHaven is a non-profit organization with a 30-year history of public service to Connecticut. Our mission is to empower people to create thriving communities by collecting and ensuring access to data on well-being, equity, and quality of life. DataHaven is a formal partner of the National Neighborhood Indicators Partnership of the Urban Institute in Washington, DC.

Introduction	2
Methods	2
Executive Summary of Findings	6
Overview	10
Demographics	11
People	11
Households	15
Employment and Income	17
Poverty and Resource Insecurity	19
Community Satisfaction	24
Weather, Climate, and the Environment	28
Climate Change	28
Mosquitoes	29
Lyme Disease	29
Lead	30
Environmental Justice	30
Health Risk Factors	33
Sexually Transmitted Infections	36
Access to Healthcare	38
Preventive Care	40
COVID-19	41
Maternal Health and Birth Outcomes	42
Youth and Adolescent Health and Wellbeing	44
Mental Health	47
Suicide	50
Overdose	51
Mortality	55
Conclusion	59
Recommendations	60
Appendix A: Key Informant Interview and Survey Response Summaries	62
Key Informant Interviews	63
Intercept Surveys	64
Online Survey Responses	65
Appendix B: Community Resources	70
Figure and Table Notes	72
Figures	72
Tables	75

# Introduction

The Quinnipiack Valley Health District (QVHD) serves the towns of Bethany, Hamden, North Haven, and Woodbridge, Connecticut. One of the core services of QVHD is to protect, educate, and enforce public health priorities in the district. A community health assessment (CHA) is a document that helps QVHD and its partners and residents better understand the status of health—physical, mental, and environmental—in the community. It also serves as an opportunity to gather information directly from residents and stakeholders to better understand the needs and priorities of the community.

### **Methods**

### **Primary Data Collection**

Primary data collection consisted of three main efforts. The first was an online survey, available in English and Spanish, that included several dozen questions about personal and community health. In all, 480 responses were collected between August and November, 2023. The survey is a convenience sample—meaning the respondents were easiest to reach and are not necessarily representative of the community at large. As a result, the respondent pool is heavily skewed towards white residents, as well as residents of North Haven. A summary has been provided in a separate document, but is not included here to prevent individuals from using it as a source of representative information about the area. Summaries of general disparities are provided in Appendix A, and themes are mentioned throughout the text of this report.

The second was a series of key informant interviews conducted between September and October, 2023. Key informant interviews are structured, one-on-one conversations using a protocol that was designed to identify perceived public health issues or challenges in a person's community or area of expertise (e.g., in community schools). In all, 20 residents and leaders of the four-town area were interviewed. A summary of themes that emerged from these conversations are provided in Appendix A.

The third was a series of intercept surveys conducted over two evenings at a local food pantry distribution event. Intercept surveys are qualitative surveys designed to be quick and informal, to collect as much data as possible in a short time. Questions asked included what could be done to improve the individual's health and the health of their community. A summary of findings is provided in Appendix A.

A fourth effort, focus groups, were ultimately dropped due to lack of attendance at two separate events (one in-person and one virtual event). Another virtual event proved promising but ended in a spam attack that ultimately resulted in its cancellation. We regret that we were unable to hold these events, but welcome comments on this document. Contact information is available on page 2.

### **Secondary Data Collection**

Secondary data analysis was based upon Connecticut Hospital Association standards for CHAs, as well as advisory standards for accreditation established by the Public Health Accreditation Board. Indicators in this report were collectively agreed upon by QVHD and DataHaven in accordance with those standards. Data were collected through numerous sources, including the DataHaven Community Wellbeing Survey, which uses probability sampling—random sampling which is then weighted to reflect the community at large—to create highly-reliable local information that is not available from any other public data source. Led by an advisory committee of more than 300 public and private organizations, the survey provides reliable data for all 169 cities in Connecticut. Other data sources include the American Community Survey, U.S. Decennial Census, Connecticut Department of Public Health, Connecticut Office of the Chief Medical Examiner, Connecticut State Department of Education, among others. See Figure and Table Notes at the end of this document, as well as footnotes, for more information on sources for each graphic in this report.

# **Executive Summary of Findings**

#### **Demographics**

- The four-town region is home to 99,806 people, including 81,653 adults and 18,153 children.
- 37 percent of the population are people of color. 12 percent are foreign-born.
- 10 percent are lesbian, gay, bisexual, or some other sexual orientation other than straight. 1 percent are transgender.
- 18 percent speak a language other than English at home.
- 10 percent have a disability. Ambulatory disabilities are the most common.

#### Households

- There are 36,731 households, of which 71 percent are owner-occupied.
- 44 percent of renters are cost-burdened compared to 25 percent of homeowners.

#### **Employment and Income**

- As of July 2023, the region had a similar unemployment rate to the state and nation, below 4 percent.
- More than two-thirds of Asian adults in the region, and adults in Woodbridge, have a college degree, compared to about a third of Black and Latino adults in the region.
- Incomes statewide and in Hamden have dropped about 2 percent from 2000 to 2021. Incomes rose 16 percent in Bethany, and overall in the region.
- In 2021, the federal poverty limit was \$12,880 for a single person and \$26,500 for a family of four. Seven percent of the regional population had incomes below the poverty limit, but poverty for Black and Latino children was 4 and 7 times higher, respectively, than for white children.
- 12 percent of adults regionally said they had trouble paying for food in the past year, but for Latinos, that rate was 32 percent.
- Connecticut United Ways estimate that a family of four including one infant and one
  preschooler would need more than \$106,000 per year to get by—higher than median
  incomes for all towns in the region other than Woodbridge, one of Connecticut's
  wealthiest towns.

#### **Community Satisfaction**

- Latino adults report worse-than-average produce availability.
- Woodbridge residents are more likely to say the quality of area sidewalks is not good.
- Area satisfaction region-wide is good, but Woodbridge residents are more likely to say they feel unsafe walking alone at night.

#### **Environmental Quality**

- Climate change is making local weather patterns hotter and wetter.
- Wetter climates increase the number of mosquitoes as well as the likelihood of mosquito-borne illnesses.
- Lyme disease is detected in about 33 residents per year in the region, with much higher rates in Bethany and Woodbridge.
- Lead poisoning rates are highest in Hamden, where housing stock is older and more people of color occupy older housing.
- Environmental contaminants tend to disproportionately affect people in more urban areas, and often co-occur. Hamden is affected much more than other area towns by environmental pollution and contamination.

#### **Health Risk Factors**

- Similar to state averages, about a third of adults regionally report usually getting less than 7 hours of sleep per night. Thirty percent have diagnosed hypertension, 9 percent have diabetes, 5 percent have diagnosed heart disease, 12 percent smoke, and 11 percent have asthma.
- Black and Latino adults have worse self-reported health than white adults in the region, and have elevated rates of obesity.
- 10 percent of Black adults in the region have had a stroke, more than 3 times the regional average.
- Sexually transmitted infections are on the rise in New Haven County and nationally, due in part to low rates of screening. Congenital syphilis is a major concern due to under-screening of pregnant people.
- HIV rates have declined, due in part to the rapid expansion of treatments such as pre-exposure prophylaxis (PreP).

#### **Health Care Access**

- Regionally, 3 percent of the population is uninsured but this varies by age and race/ethnicity. The uninsured rate among Latino adults between the ages of 19 and 64 is 10 percent.
- About a quarter of Latino adults report having no medical home, and 12 percent skipped a prescription due to the cost.
- In Bethany, 33 percent of adults postponed medical care and 37 percent skipped a prescription due to the cost.

#### **Preventive Care**

- Only about 40 percent of women ages 65 and over, regionally and statewide, are up-to-date on core preventive services. A national survey found that reasons for this include high out-of-pocket costs and difficulty getting an appointment.
- Covid vaccine uptake for seniors region-wide is nearly 100 percent. For children, uptake is only about 50 percent.

#### Maternal and Infant Health

- In Connecticut (the smallest reportable geography), maternal mortality is 15.5 deaths per 100,000 live births, lower than the U.S. rate of 19.3, but still alarmingly high for a wealthy state in a wealthy nation.
- In Connecticut (the smallest reportable geography), infant mortality for black babies is 9.09 per 1,000 live births—or 0.9 percent of births—while infant mortality for white babies is 3.05.

#### Youth and Adolescent Health

- Chronic absenteeism (missing 10 percent of school days or more) is still high after spiking during the pandemic lockdowns. Missing school may deprive students of school-based resources like meals and social-emotional supports. Sixteen percent of students regionally, and 35 percent in Hamden, were chronically absent in the 2021–22 school year.
- A recent statewide survey of K–12 students found that 36 percent felt hopeless. Those rates were twice as high for girls (48 percent) than for boys (24 percent).
- Of students who reported feeling depressed or anxious, only 22 percent said they received the support they needed.
- Only about 1 in 5 students get 8 or more hours of sleep per night.
- Drug use among students has declined overall since 2009.

#### Mental Health

- 16 percent of Latino adults report feeling depressed compared to just 5 percent of white adults. About 1 in 8 adults regionally report feeling anxious.
- In Connecticut and nationwide, suicide is most common among white men, and more than half involve firearms.
- Suicide rates for Black and Latino populations rose in 2020 while they dropped for white populations.
- Suicide rates are highest in Bethany, at 10.1 per 100,000 people.

#### Overdose

- Overdose rates peaked in 2021. Opioids are found in 90 percent of overdose deaths and fentanyl in 79 percent. Alcohol-involved overdoses are on the rise.
- The regional overdose rate is 23.5 per million, lower than the statewide rate of 24.2.
- After converging, overdose rates for Black and Latino populations statewide have overtaken the rate for white populations.
- An update to Overdose Data to Action: Trends in Substance Use, Overdose, and Treatment in the Quinnipiack Valley Health District and New Haven<sup>1</sup> is forthcoming which will cover regional overdoses in more detail.

#### Mortality

- Regionally, Black populations have elevated rates of chronic kidney disease, which is largely preventable.
- Crude death rates due to COVID-19 vary by location, but are highest in Woodbridge at 56 per 10,000 population.
- Overall, all-cause mortality is highest for Black residents regionally (738 per 100,000), and residents of Hamden (679) compared to the regional average (625).

#### A note on the April 2025 update to this report

Corrections were issued that modified mortality data (Figures 19, 24, and 25). The update corrects an error in the data that used age-ranges that were not mutually exclusive, leading to a slight overcount in the number of deaths for records erroneously associated with two age groups. The results are slightly different values and comparisons to the state average for individual causes of death (Figures 19 and 24) and all-cause mortality (Figure 25).

In addition, the method of determining mortality for two causes of death were modified. For chronic kidney disease (CKD), only records where the primary cause of death was CKD were counted in the updated data. The old data included records where CKD was a secondary cause of death. This aligns with CDCs's method of estimating deaths due to CKD. For heart disease, congenital heart diseases were dropped in the updated dataset since they are generally not preventable. They were included in the old data. The changes affect Figure 24.

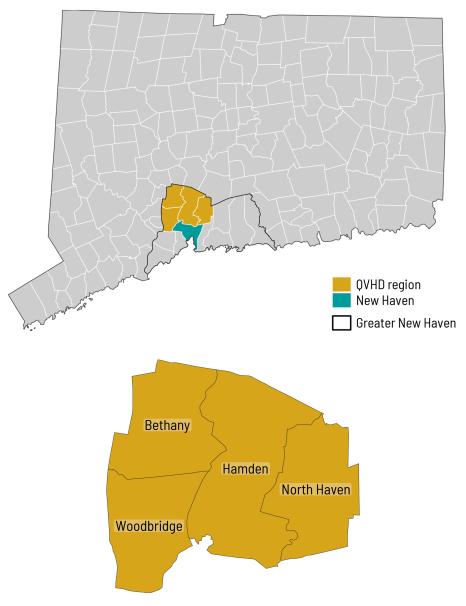
All text referencing these figures and data have also been updated. For questions, contact the report author.

<sup>&</sup>lt;sup>1</sup> Davila, K. (2021, August 8). Overdose Data to Action: Trends in Substance Use, Overdose, and Treatment in the Quinnipiack Valley Health District and New Haven. https://ctdatahaven.org/sites/ctdatahaven/files/OD2A\_final.pdf

# **Overview**

The Quinnipiack Valley Health District (QVHD) comprises four towns in Southern Connecticut: Bethany, Hamden, North Haven, and Woodbridge. These towns surround the northern border of the city of New Haven and are part of Greater New Haven in Southern Connecticut. In this report, QVHD will be compared to the state and, where applicable, New Haven. The words "region" or "area" may be used to describe the four-town QVHD jurisdiction.

Figure 1: Map of the QVHD region and New Haven within Greater New Haven and Connecticut, with detail below



# **Demographics**

# **People**

As of the 2020 Census,<sup>2</sup> the QVHD region was home to 99,806 people, including 81,653 adults and 18,153 children. Hamden is the largest of the four towns with 61,169 residents. Bethany is the smallest with 5,297 residents. Thirty-seven percent of the population of the QVHD area are people of color, compared to 41 percent in New Haven and 37 percent statewide. Regionwide, 12 percent of the population are foreign-born.<sup>3</sup>

Table 1: The region is similar in racial/ethnic composition to the state, but Hamden is most diverse among the four towns

Population by race/ethnicity, 2020

Area	Total population	Percent White	Percent Black	Percent Latino	Percent Asian	Percent Other race
Connecticut	3,605,944	63%	10%	17%	5%	5%
QVHD	99,806	63%	16%	10%	6%	4%
Bethany	5,297	86%	2%	3%	5%	4%
Hamden	61,169	53%	24%	13%	6%	4%
North Haven	24,253	81%	4%	6%	6%	3%
Woodbridge	9,087	73%	3%	6%	13%	5%

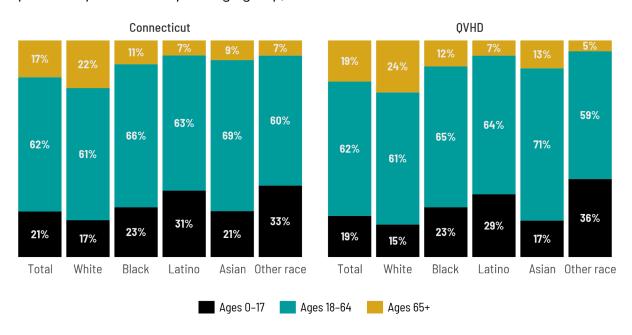
<sup>&</sup>lt;sup>2</sup> Although more recent estimates are available, the 2020 Census represents the latest, most accurate count of populations by race and ethnicity.

<sup>&</sup>lt;sup>3</sup> DataHaven analysis (2022) of data from the 2020 Census.

As predominantly white Baby Boomers age, the state and QVHD region will continue to diversify racially and ethnically. Black and Latino populations are growing, and skew much younger than white populations.

Figure 2: The region's population distribution by race and age looks similar to the state's

Population by race/ethnicity and age group, 2021



Values may not add up to 100 percent due to rounding

Ten percent of adults in the QVHD area identify as something other than straight (e.g., lesbian, gay, bisexual, questioning, etc.), and approximately 1 percent of adults are transgender. These values are similar to the state averages.<sup>4</sup>

12

<sup>&</sup>lt;sup>4</sup> DataHaven analysis (2023) of data from the DataHaven Community Wellbeing Survey, 2015–2021.

Regionally, English is the most common language spoken at home, with 82 percent of the population over 5 years of age speaking English primarily. Another 10 percent speak Spanish at home, 1 percent speak Polish, and the remaining 7 percent speak another language.<sup>5</sup>

Linguistic isolation can occur when a person self-reports that they speak English less than "very well." This can lead to difficulties in obtaining healthcare or completing necessary errands in a primarily English-speaking area. While just 5 percent of the population in the QVHD region speak English less than "very well," nearly one in three Asian residents may be linguistically isolated.<sup>6</sup>

Figure 3: Asian and Latino residents in the region are more likely to be linguistically isolated

Share of the population ages 5+ who speak English less than "very well" by race/ethnicity, 2021



<sup>&</sup>lt;sup>5</sup> See notes for Figure 3.

<sup>&</sup>lt;sup>6</sup> Ibid. (See notes for the previous footnote)

Approximately 10,000 people in the region—or 10 percent of the population—have a disability. Many people have multiple disabilities, the roots of which can be anything from genetic complications to traumatic injury or the effects of a chronic illness. These difficulties can create barriers to accessing health care, housing, or other services that can help someone live independently. Individuals with disabilities are also at greater risk for preventable health outcomes like obesity.<sup>8</sup>

Table 2: Difficulty walking and climbing stairs (ambulatory difficulties) are among the most common disabilities in the region

Share of the population with a disability related to the following, 2021

Area	Cognitive difficulty	Hearing difficulty	Self-care difficulty	Vision difficulty	Ambulatory difficulty	Independent living difficulty
Connecticut	5%	3%	2%	2%	5%	4%
QVHD	4%	2%	2%	1%	5%	4%

Statewide, disability affects older people more than younger people. Fewer than 10 percent of children have a disability, compared to 20 percent of adults ages 65–74 and 43 percent of adults 75 or older. Hearing, ambulatory, and independent living disabilities are more common among adults 65 or older, while cognitive disabilities are the most common in children.<sup>9</sup>

<sup>8</sup> Disability and Health Overview. 2020, September 16). Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html

<sup>&</sup>lt;sup>7</sup> See notes for Table 2.

<sup>&</sup>lt;sup>9</sup> DataHaven analysis (2023) of data from the American Community Survey 2016–2021 5-year estimates.

# Households

There are 36,731 households in the QVHD region, of which 71 percent are owner-occupied, compared to 66 percent statewide and just 28 percent in New Haven. Bethany has the highest homeownership rate in the region at 93 percent, while Hamden has the lowest at 62 percent.

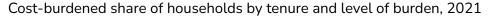
Table 3: Homeownership is generally high in the region

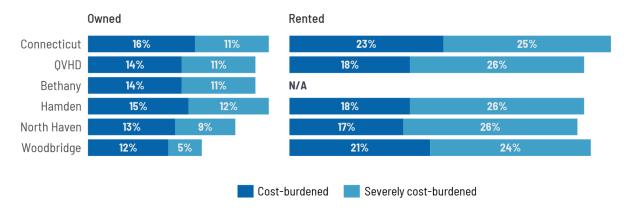
Households by tenure, 2021

Area	Total households	Percent Owner-occupied	Percent Renter-occupied
Connecticut	1,397,324	66%	34%
QVHD	36,731	71%	29%
Bethany	1,768	93%	7%
Hamden	22,403	62%	38%
North Haven	9,503	82%	18%
Woodbridge	3,057	88%	12%

Households are considered cost-burdened when they spend 30 percent or more of their income on housing. Severe housing cost-burden occurs when 50 percent or more of a household's income is spent on housing. This tends to affect renters much more than homeowners since the rising cost of rent in recent years has outpaced any increase there may have been in household income (see Figure 6). Higher shares of Black and Latino households compared to white households rent their homes, <sup>10</sup> so racial inequities in housing affordability are pronounced. In the QVHD region, 44 percent of renter households are cost burdened compared to 25 percent of owner-occupied households.

Figure 4: Renters across the region are more likely to be housing cost-burdened than homeowners





Shares for estimates of fewer than 200 total households have been omitted due to high margins of error

https://ctdatahaven.org/reports/greater-new-haven-community-wellbeing-index

16

<sup>&</sup>lt;sup>10</sup> In Greater New Haven in 2020, the homeownership rate for white households was 72 percent compared to 36 percent for Black households and 32 percent for Latino households. See Abraham, A., Seaberry, C., Davila, K., & Carr, A. (2023). *Greater New Haven Community Wellbeing Index* 2023.

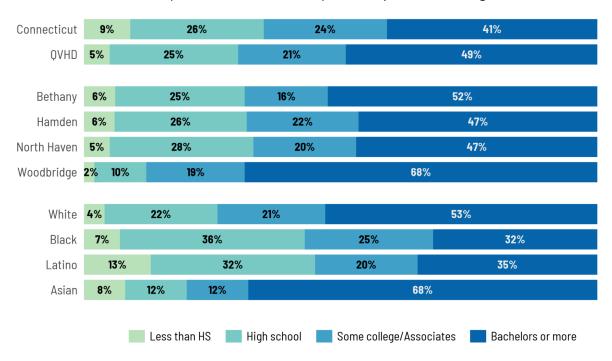
# **Employment and Income**

Connecticut has a similar unemployment rate (3.7 percent) to the United States (3.5 percent) as of July 2023.<sup>11</sup> In order to compare unemployment across racial/ethnic groups, estimates from 2021 must be used, although at this time unemployment was much higher than in 2023. In 2021, unemployment ranged from 7 percent in Hamden to 4 percent in North Haven. White workers in the four-town region were unemployed at a rate of 5 percent, lower than the rates for Black and Latino workers at 8 percent each.<sup>12</sup>

Educational attainment is highly correlated with employment and income. While more than two-thirds of adults in Woodbridge and Asian adults in the four-town region have a college degree, only about one-third of Black and Latino adults do. Latino adults are more likely than other racial/ethnic groups to lack a high school diploma, which can limit the number of potential jobs for which they may be eligible.

Figure 5: Asian adults in the QVHD region and adults in Woodbridge are more likely to have college degrees

Educational attainment by area and race/ethnicity within QVHD, adults ages 25+, 2021



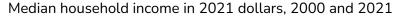
Values may not add up to 100 percent due to rounding

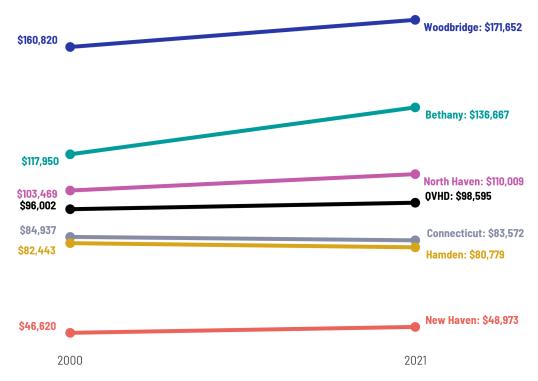
<sup>&</sup>lt;sup>11</sup> DataHaven analysis (2023) of data from the Bureau of Labor Statistics.

<sup>&</sup>lt;sup>12</sup> DataHaven analysis (2022) of data from the American Community Survey 5-year estimates, 2017–2021.

Incomes have largely been stagnant in many parts of the country, including Connecticut. Between 2000 and 2020, many towns did not see median household incomes rise. Statewide, adjusted for inflation, median household income dropped 2 percent. Median income in Hamden also dropped 2 percent during that time period, while in Bethany it rose 16 percent. Median income is highest in Woodbridge at \$171,652—double that of incomes in Hamden (\$80,779) and statewide (\$83,572).

Figure 6: Adjusting for inflation, median household incomes in Hamden and statewide fell by about 2 percent





# **Poverty and Resource Insecurity**

The federal poverty threshold is another measure of income. In 2021, the poverty threshold was \$12,880 for a single person and \$26,500 for a family of four. While imperfect, it remains a simple method to identify very low-income families. Poverty rates tend to be higher for children than adults, revealing deep inequities with regard to the resources available to children as they grow up. The poverty rates for Black and Latino children in the QVHD region are four and seven times higher, respectively, than for white children. Because Connecticut has a high cost of living, it is sometimes useful to estimate the number of households who earn twice the poverty limit. Some means-tested programs, such as SNAP (also known as food stamps) have an income limit set at twice the poverty threshold. Other means-tested programs, such as subsidized health insurance, will also use multiples of the poverty threshold (see Table 9).

Table 4: Poverty rates are higher for Black and Latino residents and children in the region

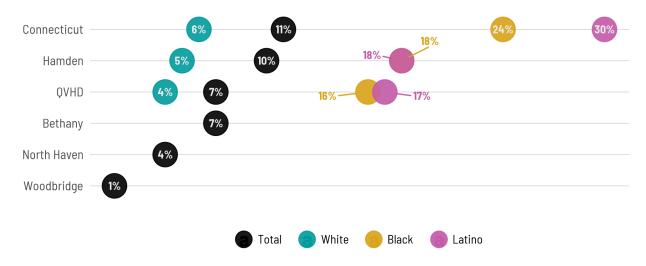
Share of population by age and race/ethnicity by poverty and low-income levels, 2021

Area	Poverty (1x poverty threshold)			Low income (2x poverty threshold)		
	All ages	Ages 0-17	Ages 18+	All ages	Ages 0-17	Ages 18+
Connecticut	10%	13%	9%	22%	30%	21%
QVHD	7%	8%	7%	16%	18%	16%
Bethany	N/A	N/A	N/A	4%	N/A	5%
Hamden	9%	10%	9%	20%	24%	19%
North Haven	6%	8%	5%	14%	14%	14%
Woodbridge	N/A	N/A	N/A	9%	N/A	10%
By demograph	ic within QVHD	region				
White	5%	3%	5%	N/A	N/A	N/A
Black	11%	12%	10%	N/A	N/A	N/A
Latino	17%	21%	16%	N/A	N/A	N/A
Asian	5%	N/A	6%	N/A	N/A	N/A

Note: Values replaced with N/A due to high margins of error, but values are included in regional totals. Low-income is not available by race/ethnicity.

Not surprisingly, higher shares of Black and Latino households receive SNAP benefits because they earn less than twice the federal poverty threshold.

Figure 7: Higher shares of Black and Latino households receive SNAP benefits Share of households receiving SNAP benefits by race/ethnicity of head of household, 2021



Food insecurity is correlated with general life satisfaction, as well as higher self-rated health. A 2023 DataHaven analysis found that only 36 percent of Connecticut adults who were food insecure were satisfied with life, compared to 72 percent who could afford food.<sup>13</sup>

Pandemic relief programs and stimulus money provided a much-needed safety net to food insecure families in Connecticut. As a result, the rate of food insecurity fell to 10 percent of the general adult population in 2021, although this rate was more than 3.5 times as high for Latino adults and 2.7 times as high for Black adults than white adults. By 2022, the rate of food insecurity was higher than pre-pandemic levels, likely as a result of the rising costs of food and housing compared to moderate (if any) increase in wages. Adults living with children saw their rate of food insecurity double from 12 percent in 2021 to 23 percent in 2022.<sup>14</sup>

Good nutrition and a balanced diet contribute to overall good health. People who are food insecure are two to three times more likely to report having diabetes than people who are not.<sup>15</sup> Diabetes in turn creates higher risks for heart disease and chronic kidney disease—two

<sup>&</sup>lt;sup>13</sup> Abraham, A., Seaberry, C., Davila, K., & Carr, A. (2023). *Greater New Haven Community Wellbeing Index 2023*. https://ctdatahaven.org/reports/greater-new-haven-community-wellbeing-index <sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Food and Nutrition Insecurity and Diabetes: Understanding the Connection. (2022, August 1). Centers for Disease Control and Prevention.

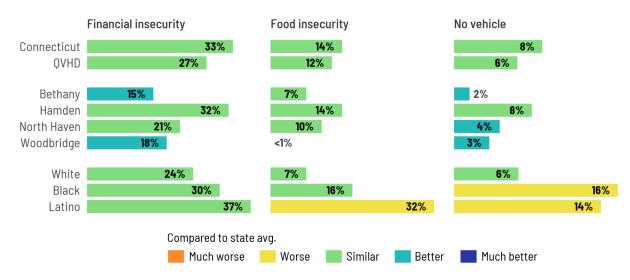
https://www.cdc.gov/diabetes/library/features/diabetes-and-food-insecurity.htm

major causes of death in Connecticut and nationwide (see Figure 24). According to Connecticut 2-1-1, there are at least seven food pantries in the region: five in Hamden and two in North Haven.<sup>16</sup>

When asked about specific challenges facing their families, nearly a third of Latino residents in the region said they had struggled to pay for food at some point in the past year. One in eight adults regionally were also food insecure.

Figure 8: Nearly a third of Latino residents in the region face food insecurity, while nearly one in seven Black households lack a vehicle

Food insecurity, financial insecurity: Share of adults, pooled 2015–2021 data; No vehicle: Share of households by race/ethnicity of head of household, 2021



Regionwide, more than a quarter of adults say they are just getting by or struggling financially. Elevated rates of food insecurity are associated with elevated rates of financial insecurity more generally. In fact, a 2023 statewide survey conducted by the U.S. Census Bureau found that 21 percent of adults were unable to get the food they needed because they could not afford it, and 32 percent of adults said their children were not eating enough because they could not afford food.<sup>17</sup>

The same survey found that 3 percent of adults said they could not find transportation to get food. Vehicles are an important asset when it comes to obtaining household items as well as finding employment or moving to more affordable neighborhoods farther from city centers, but

<sup>&</sup>lt;sup>16</sup> DataHaven analysis (2023) of data from Connecticut 2-1-1, retrieved 14 September 2023. See Appendix B.

<sup>&</sup>lt;sup>17</sup> DataHaven analysis (2023) of data from the Household Pulse Survey, 2020–2023.

roughly one in seven Black-led households lack a vehicle. Outside of New Haven and Hamden, transit access in the region is very limited. There are two transportation services in the region, both located in Hamden but serving all of Greater New Haven. 18

Another measure of income versus expenditures comes from the United Way's definition of asset-limited, income-constrained, employed (ALICE) households. According to the Connecticut United Ways, in 2021, a single adult would need an annual salary of \$33,120 to meet their basic needs. A family of four including one infant and one preschooler would need \$106,632.19 The poverty threshold for a single adult in 2021 was \$12,880 for one person and \$26,500 for a family of four.<sup>20</sup>

Table 5: Nearly 40 percent of households in Hamden may be struggling to make ends meet

Share of households below ALICE threshold, including those in poverty, 2021

Connecticut	New Haven	Bethany	Hamden	North Haven	Woodbridge
39%	59%	18%	37%	27%	12%

Families with children have the added challenge of paying for childcare, which is both scarce and expensive regionally and in Connecticut. In the QVHD region, there are an estimated 4,162 children under age six. Of those, 1,337 are enrolled in childcare. At the facilities available, there are an additional 435 vacant seats that a child could occupy—meaning the region lacks capacity for 2,390 children, or 57 percent of the population of kids under age six—without accounting for the fact that facilities may not be accessible to families or match their scheduling needs. While not all families opt to enroll their children in childcare outside of their home, this lack of coverage nevertheless reflects a shortage.

Childcare is not only necessary for parents to work, but also provides an opportunity to kickstart early learning to prepare children for preschool. In 2016, the Department of Health and Human Services (HHS) concluded that "affordable" childcare should cost no more than 7 percent of a family's annual income, 21 and yet the average cost of childcare in New Haven

<sup>18</sup> See Appendix B.

<sup>&</sup>lt;sup>19</sup> Alice in Connecticut 2023. (2023 April). Connecticut United Ways. https://alice.ctunitedway.org/wp-content/uploads/2023/09/23UFA\_Report\_Connecticut\_4.11.23\_FINAL. pdf

<sup>&</sup>lt;sup>20</sup> 2021 Poverty Guidelines. (2021 February 1). U.S. Department of Health and Human Services. https://aspe.hhs.gov/2021-poverty-guidelines

<sup>&</sup>lt;sup>21</sup> Child Care and Development Fund Program. 45 CFR Part 98. (2016). https://s3.amazonaws.com/public-inspection.federalregister.gov/2016-22986.pdf

County is approaching \$20,000 per year. At licensed daycare centers, the average annual cost for childcare is \$18,203.<sup>22</sup> To remain at the 7 percent affordability threshold established by HHS, a family would need to earn \$260,043 per year to afford care for just one child. Table 6 provides the share of median income that may be allocated to childcare for a family with one preschool aged child. While there are dozens of childcare options in the region, not all are accepting new students.

Table 6: No town in the region has a high enough median income to meet the HHS "7 percent" affordability threshold for childcare

Childcare costs as a share of median household income by town, 2021

Town	Median income	Share of median income needed to cover childcare for one child
Bethany	\$136,667	13%
Hamden	\$80,779	23%
North Haven	\$110,009	17%
Woodbridge	\$171,652	11%

\_

<sup>&</sup>lt;sup>22</sup> DataHaven analysis of data from the National Database of Childcare Prices available at <a href="https://www.dol.gov/agencies/wb/topics/featured-childcare">https://www.dol.gov/agencies/wb/topics/featured-childcare</a>. Childcare prices are from 2018 and have been inflation-adjusted to 2021 dollars.

# **Community Satisfaction**

Community resources provide residents opportunities for recreation and civic engagement, and contribute to an overall sense of wellbeing. Many facilities are provided by municipalities for the benefit of their residents. Three-quarters of adults in the QVHD region say there are local recreational facilities available, but this value ranges from 68 percent in Bethany and Woodbridge to 76 percent in Hamden and 78 percent in North Haven.<sup>23</sup>

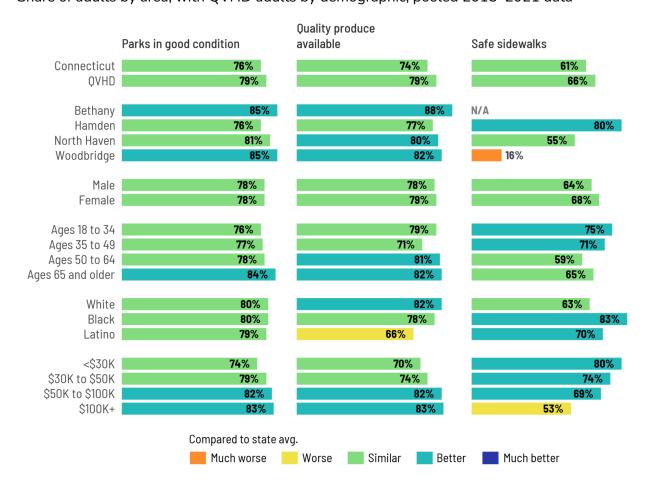
Other local assets include adequate access to certain amenities. West Rock and Sleeping Giant State Parks are centrally located in the region, among many other local parks. Residents in the QVHD region report average to above average quality of parks nearby. The presence of affordable, high-quality produce is more mixed, with about one-third of Latino adults saying there is not enough affordable produce nearby, compared to about 18 percent of white adults. Safe sidewalks can encourage physical activity and provide pedestrian access to shops and services, but only 16 percent of Woodbridge residents say there are safe sidewalks nearby, compared to 80 percent of Hamden residents.

2

<sup>&</sup>lt;sup>23</sup> DataHaven analysis (2023) of data from the DataHaven Community Wellbeing Survey, 2015–2021.

Figure 9: Latino adults in the QVHD region report worse-than-average produce availability in their area, while Woodbridge residents lack safe sidewalks

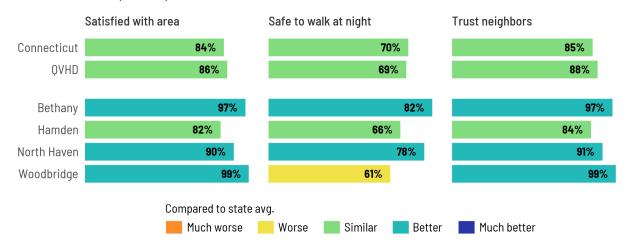
Share of adults by area, with QVHD adults by demographic, pooled 2015–2021 data



Perceptions of safety also go a long way toward building a sense of community. Adults in the QVHD region report average feelings of safety at night, but adults in Bethany and Woodbridge are more likely to say they are satisfied with their area and to trust their neighbors.

Figure 10: Adults in the region have similar satisfaction with their area compared to adults statewide

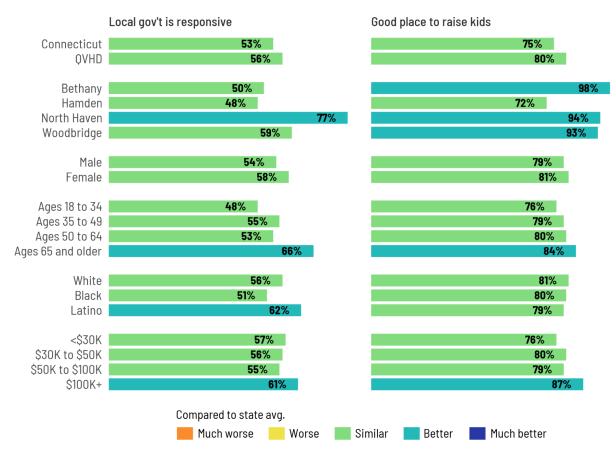
Share of adults by area, pooled 2015–2021 data



Finally, virtually all surveyed adults in Bethany say that their area is a good place to raise kids, compared to 77 percent of adults in Hamden. Similarly, adults earning \$100,000 per year or more were more likely to say they lived in a good place to raise kids than adults earning \$30,000 per year or less. Higher shares of adults ages 65 and over felt the government in their town was responsive than adults younger than 35.

Figure 11: High shares of adults in Bethany, North Haven, and Woodbridge think their town is a good place to raise kids, and more than three-quarters of North Haveners feel their local government is responsive

Share of adults by area, with QVHD adults by demographic, pooled 2015–2021 data



# Weather, Climate, and the Environment

### **Climate Change**

Climate change is affecting local and global weather patterns in many ways. In 2023 alone, several extreme weather swings have affected the area. A late May frost after a mild spring and winter abruptly delayed crop development, potentially contributing to inflation as the supply of crops was diminished.<sup>24</sup> In June, Connecticut saw some of the worst air quality days in history as smoke from Canadian wildfires drifted southward and settled over New England and the U.S. Northeast.<sup>25</sup> Periodically since then, plumes have filled the sky with haze and sparked air quality alerts across the eastern portion of the country. On the heels of one of the hottest Julys in recent memory, record-setting rainfall drowned fields along the Connecticut River, with the Greater Hartford region seeing the wettest July in its history.<sup>26</sup>

A 2023 DataHaven analysis of temperature data ranging from 2000 to 2020 found a one-degree Fahrenheit increase in high temperatures as well as a one-degree increase in low temperatures, indicating an overall warming climate in our region. As ocean temperatures rise, the atmosphere is able to hold more of its moisture, increasing relative humidity along with the risk of floods when that moisture releases as rain. Warmer winters with less snowfall can leave the land parched before crops are even planted. With droughts, heat waves, and unpredictable winds comes the threat of wildfire. If 2023 has taught any lesson, it is that local governments and residents must learn to contend with fluctuating and extreme weather, and decision-makers must work quickly to reduce harmful pollutants that contribute to human-induced global warming.

<sup>&</sup>lt;sup>24</sup> Perkins, K. (2023, June 1). *CT* seeks emergency declaration after severe mid-May frost kills fruit, Christmas trees, other crops. Connecticut Public Radio.

https://www.ctpublic.org/news/2023-06-01/ct-seeks-emergency-declaration-after-severe-mid-may-frost-kills-fruit-christmas-trees-other-crops

<sup>&</sup>lt;sup>25</sup> Skahill, P. & Perkins, K. (2023, June 6). What's up with all the haze in CT? Canadian wildfires bring unhealthy air to New England. Connecticut Public Radio.

https://www.ctpublic.org/news/2023-06-06/whats-up-with-all-the-haze-in-ct-canadian-wildfires-bring-unhealthy-air-to-new-england-this-week

<sup>&</sup>lt;sup>26</sup> Breton, R. (2023, July 24). Hartford area breaks the record for wettest July, with more than a week left in the month. FOX 61 Hartford.

https://www.fox61.com/article/weather/climate-matters/hartford-area-breaks-the-record-for-wettest-july

<sup>&</sup>lt;sup>27</sup> Abraham, A., Seaberry, C., Davila, K., & Carr, A. (2023). *Greater New Haven Community Wellbeing Index* 2023. https://ctdatahaven.org/reports/greater-new-haven-community-wellbeing-index

### Mosquitoes

As temperatures rise and heavy rains fall, the conditions for mosquitos to multiply and thrive increases. Most mosquitoes are a nuisance, but a small proportion are capable of spreading viruses and bacteria to humans when they bite. These mosquitoes must first feed on an infected animal, then a human, in order to transmit disease. Oftentimes, people who work outdoors are at higher risk for contracting a mosquito-borne illness. Water management outdoors and around the home can reduce the likelihood of mosquitoes breeding or congregating nearby, while proper attire and bug spray can help prevent bites from occurring.

Statewide, as of October, 2023, mosquitos carrying Eastern Equine Encephalitis (EEE) were observed in 15 towns across Windham and New London Counties. EEE most commonly affects people 50 or older or 15 and younger, and could be fatal.<sup>28, 29</sup>

West Nile Virus is the leading mosquito-transmitted disease in the United States, and has been observed in mosquitoes across 33 towns in Connecticut, including New Haven, East Haven, West Haven, and Branford, among others along the shoreline. In 2023, two individuals—one in New Haven County and one in Hartford County—were diagnosed with West Nile. Only about 20 percent of people with West Nile Virus develop a fever and fewer than 1 percent develop severe symptoms such as encephalitis, which can be fatal. 30, 31

## Lyme Disease

Connecticut is home to many large parks and opportunities to hike, camp, and enjoy the outdoors. With the opportunity for recreation comes the risk of several tick-borne illnesses, including Lyme disease (bacteria), babesiosis (parasite), anaplasmosis (bacteria), and Powassan virus disease (virus). While relatively rare, it can be debilitating.<sup>32</sup> According to the Connecticut Department of Energy and Environmental Protection (DEEP), from 2018 to 2020, a statewide

<sup>&</sup>lt;sup>28</sup> Connecticut Horse Confirmed Positive for Eastern Equine Encephalitis Virus. (2023, October 4). State of Connecticut Mosquito Management Program.

https://portal.ct.gov/Mosquito/Press-Room/2023-Press-Releases/Connecticut-Horse-Confirmed-Positive -for-Eastern-Equine-Encephalitis-Virus

<sup>&</sup>lt;sup>29</sup> Eastern Equine Encephalitis Fact Sheet. (2016 December). New York State Department of Health. https://www.health.ny.gov/diseases/communicable/eastern\_equine\_encephalitis/fact\_sheet.htm

<sup>&</sup>lt;sup>30</sup> DPH announces second case of West Nile virus infection this year. (2023 September 7). State of Connecticut Mosquito Management Program. https://portal.ct.gov/Mosquito/Press-Room

<sup>&</sup>lt;sup>31</sup> West Nile Virus. (2023, June 13). Centers for Disease Control and Prevention. https://www.cdc.gov/westnile/index.html

<sup>&</sup>lt;sup>32</sup> Lyme Disease. (2021, January 15). Centers for Disease Control and Prevention. https://www.cdc.gov/lyme/signs\_symptoms/index.html

average of 1,260 people had confirmed or probable cases of Lyme disease each year, including about 33 people per year in the QVHD region. While not confined to any specific type of environment, tick bites are more common with exposure to heavily wooded and rural areas. In that three-year period, statewide, the Lyme disease rate per 10,000 residents was 3.5, but in the more rural areas of Bethany and Woodbridge, those rates were 7.2 and 11.8, respectively. Rates were lower than average in Hamden (2.0) and North Haven (2.8), and much lower in New Haven (0.97).<sup>33</sup>

#### Lead

Lead poisoning is an environmental risk that primarily affects children. Its effects can be significant, particularly with regard to cognitive developmental problems. In severe cases, the brain and nervous system can become irreparably damaged.<sup>34</sup> Adults can also be exposed if they work near lead products such as in recycling or metal smelting industries.

Children are most commonly exposed to lead in the form of lead paint, often present in homes built before 1978. In Connecticut, between 2018 and 2020, 4,392 children were tested for elevated lead levels in the QVHD region and 3.9 percent (or 173 children) were found to have blood-lead levels above the 3.5 micrograms per deciliter threshold established by the CDC in 2021 (the Connecticut Department of Public Health previously used the 5 micrograms per deciliter threshold). These values ranged from 1.5 percent in Bethany to 4.9 percent in Hamden. Statewide, 5 percent, or 10,267 had elevated blood lead levels. New Haven has exceptionally high rates of children with elevated lead in their blood at 11.6 percent, or 1,283 children.<sup>35</sup>

### **Environmental Justice**

Environmental justice stems from the idea that access to quality outdoor spaces, exposure to pollutants and contaminants, and other factors of built and natural environments follow the geographical patterns of socioeconomic disparities and segregation. The goal of environmental

<sup>&</sup>lt;sup>33</sup> DataHaven analysis (2023) of data from the Connecticut Department of Health, retrieved from https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Lyme-Disease-Statistics

<sup>&</sup>lt;sup>34</sup> Lead Poisoning. (2023, August 11). World Health Organization.

https://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health

<sup>&</sup>lt;sup>35</sup> DataHaven analysis (2023) analysis of data from the Connecticut Department of Health, retrieved from

https://portal.ct.gov/DPH/Environmental-Health/Lead-Poisoning-Prevention-and-Control/Surveillance-and-Screening

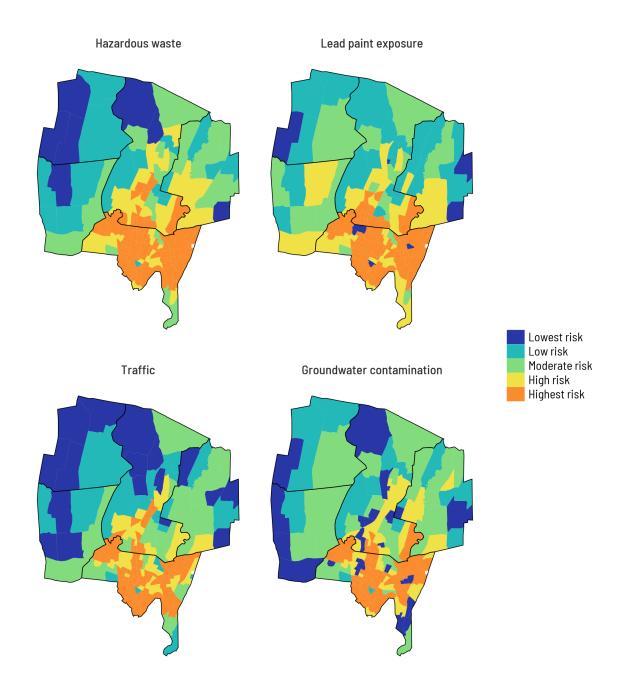
justice is to provide the same degree of protections from harmful contaminants, and to promote equal opportunities to influence decision making that may affect environmental quality. The Environmental Protection Agency has developed an index that ranks small areas (containing about 250 to 550 housing units) throughout the country based on risks of exposure to several hazardous pollutants and contaminants. The index is scaled using demographic data to account for the disparate impacts of harmful exposure to people of color and lower-income people. Figure 12 on the following page shows how similar areas are at higher risk of multiple contaminants and environmental hazards.

Bethany generally has low risks for environmental injustice, reflecting a mostly wealthy and white population in a low-density rural environment. Closer to urban centers, environmental justice risks are elevated. Leaking underground storage containers infiltrate groundwater by leaking poisonous compounds into the soil. Remediating these leaking tanks is costly, and unfortunately many residents in areas affected by this problem are unaware. Similarly, hazardous waste is concentrated in certain areas, often with sites established without the knowledge or consent of those living nearby. The locations and facilities produce harmful chemicals that can be airborne or linger in soil or water. Lead paint exposure is generally related to the age of housing in an area, but the potentially devastating effects of lead poisoning cannot be understated. Exposure to the pollutants generated by traffic in the region is more likely to occur along the I-91, I-95, and Merritt Parkway corridors.

Pollution, resource insecurity, and poor neighborhood and community assets all contribute to health inequities across the region.

Figure 12: Neighborhoods exposed to one kind of contaminant are often exposed to many

EPA Environmental Justice Index values for QVHD and New Haven block groups, 2022



### **Health Risk Factors**

Health risks are often preventable factors that keep people from achieving good health, and can be behavioral, environmental, or medical. Environmental factors such as poor air quality or poor quality housing can induce or exacerbate asthma, which can make other respiratory issues—even minor ones like allergies—more challenging to overcome.<sup>36</sup> Behaviors, such as smoking, are clearly linked to poor health outcomes such as cancer, but smoking can also suppress the immune system and make an individual more susceptible to severe illness than if they did not smoke. Other behaviors, such as poor sleep (sleeping less than 7 hours per night), can also indicate an underlying issue such as depression or anxiety, but also carry added risks for chronic illnesses like high blood pressure, diabetes, and cardiovascular diseases.<sup>37</sup> Once those chronic conditions are developed, the likelihood of severe illness, cancer, or death increases greatly. Economic disadvantage has been linked to increased stress levels and constrained access to healthcare, both of which contribute to increased health risks.<sup>38</sup>

-

<sup>&</sup>lt;sup>36</sup> Samuels, E. A., Taylor, R. A., Pendyal, A., Shojaee, A., Mainardi, A. S., Lemire, E. R., Venkatesh, A. K., Bernstein, S. L., & Haber, A. L. (2022, August). Mapping emergency department asthma visits to identify poor-quality housing in New Haven, CT, USA: A retrospective cohort study. *Lancet 7*(8), e694–e704. https://doi.org/10.1016/S2468-2667(22)00143-8

<sup>&</sup>lt;sup>37</sup> Colten, H. R., Altevogt, B. M. (Eds.). (2006). *Sleep disorders and sleep deprivation: An unmet public health problem*. Institute of Medicine Committee on Sleep Medicine and Research. hhttps://www.ncbi.nlm.nih.gov/books/NBK19961/

<sup>&</sup>lt;sup>38</sup> Fiscella, K. & Sanders, M. R. (2016, January 28). Racial and ethnic disparities in quality of life care. *Annual Review of Public Health 37*, 375–394. http://doi.org/10.1146/annurev-publhealth-032315-021439

Regionally, the share of the adult population experiencing these risk factors is similar to the state. About a third of adults report poor sleep, and about 30 percent have high blood pressure. Diagnosed heart disease is lower at about 5 percent of adults, and diabetes affects 9 percent of adults. The smoking rate has dropped over time but approximately one in eight adults regionally smoke. Eleven percent report having asthma.

Table 7: The QVHD region has similar health risk factors compared to the state Selected health risk factors, 2021

Area	High Blood Pressure	Heart Disease	Diabetes	Smoking	Asthma	Poor Sleep
Connecticut	30%	5%	9%	14%	11%	34%
QVHD	30%	5%	9%	12%	11%	34%
Bethany	30%	5%	9%	12%	N/A	33%
Hamden	29%	5%	9%	12%	11%	35%
North Haven	32%	6%	9%	12%	10%	33%
Woodbridge	31%	5%	9%	9%	9%	30%

Self-rated health assessments vary by race and ethnicity within the region. Sixty-two percent of white adults compared to 54 percent of Black adults and 53 percent of Latino adults report being in very good or excellent health. These disparities can be attributed to varying healthcare quality and access.<sup>39</sup> These disparities are also reflected in health outcomes: 26 percent of white adults compared to 40 percent of Black adults and 37 percent of Latino adults have a body mass index (BMI) that qualifies them as obese. While BMI alone does not indicate whether a person is healthy or unhealthy, obesity is often associated with health problems, especially relating to the heart and kidneys.<sup>40,41</sup>

<sup>40</sup> Held, C., Hadziosmanovic, N. Aylward, P. E., Hagström, E., Hochman, J. S., Stewart, R. A. H., White, H. D., & Wallentin, L. (2022, January 21). Body mass index and association with cardiovascular outcomes in patients with stable coronary heart disease: A STABILITY substudy. *Journal of the American Heart Association 11*. https://do.orgi/10.1161/JAHA.121.023667

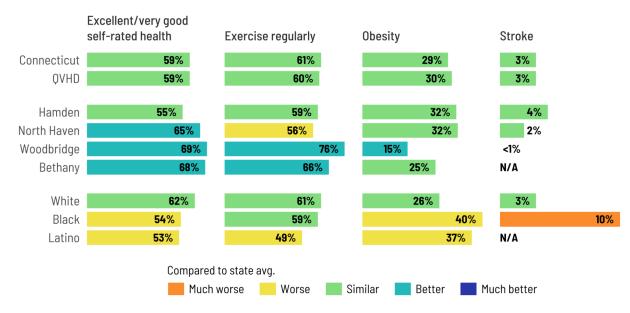
<sup>39</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> Herrington, W. G., Smith, M., Bankhead, C., Matsushita, K., Stevens, S., Holt, T., Hobbs, F. D. R., Coresh, J., & Woodward, M. (2017, March 8). Body-mass index and risk of advanced chronic kidney disease: Prospective analyses from a primary care cohort of 1.4 million adults in England. *PLOS ONE*. https://doi.org/10.1371/journal.pone.0173515

Just 3 percent of white adults compared to 10 percent of Black adults report having had a stroke. Stroke is one of the leading causes of death in the United States, but is easily preventable with good health behaviors. After one stroke, it is much more likely an individual will suffer another, with risk of mortality increasing as well.<sup>42</sup>

Racial disparities in many health outcomes are even larger among people ages 65 and older. In Connecticut, 57 percent of white adults 65 and up suffer from hypertension, compared to 73 percent of Black seniors. In the same age group, 19 percent of white people compared to 35 percent of Black people and 32 percent of Latino people have been diagnosed with diabetes.

Figure 13: Black and Latino adults face heavier burdens of some health risks Share of adults by area, with QVHD adults by race/ethnicity, pooled 2015–2021 data



35

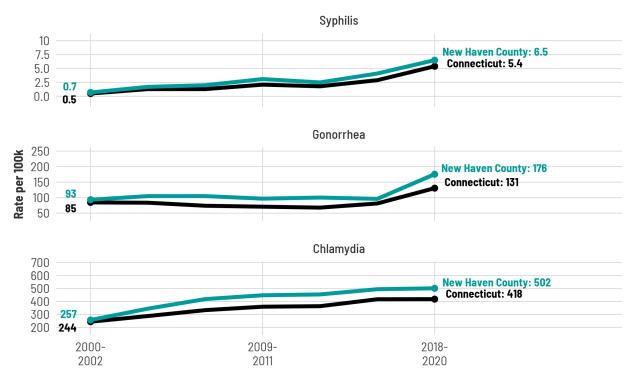
<sup>&</sup>lt;sup>42</sup> Stroke. (2023, September 5). Centers for Disease Control and Prevention. https://www.cdc.gov/stroke/index.htm

# **Sexually Transmitted Infections**

The prevalence of many sexually transmitted infections has increased over the past two decades. Under-screening and less robust contact tracing for individuals with a diagnosed STI may be responsible in part for the increase. In New Haven County (the smallest area for which these data are available), rates of syphilis, chlamydia, and gonorrhea have increased substantially. Nationally there has been an uptick in congenital syphilis, also due to a lack of STI screening among pregnant people. Unfortunately, individuals without health insurance or a medical home are at risk of forgoing STI screenings. <sup>43</sup>

Figure 14: Sexually transmitted diseases have become far more common in recent years

Cases of sexually transmitted diseases per 100,000 residents, annualized averages, 2000–2021



https://www.pbs.org/newshour/show/u-s-sees-concerning-rise-in-stis-congenital-syphilis-with-no-signs-of-slowing

<sup>&</sup>lt;sup>43</sup> Rogin, A. & Mufson, C. (2023, April 15). U.S. sees concerning rise in STIs, congenital syphilis with no signs of slowing. PBS News.

Transmission of HIV, on the other hand, has trended downward from 15 to 9 cases per 100,000 people between 2008 and 2021, due in part to increasing knowledge of HIV and the rapid expansion of treatments such as pre-exposure prophylaxis (PreP). 44, 45

<sup>&</sup>lt;sup>44</sup> DataHaven analysis (2023) of data from the Centers for Disease Control and Prevention, retrieved from https://gis.cdc.gov/grasp/nchhstpatlas/tables.html

<sup>&</sup>lt;sup>45</sup> HIV declines among young people and drives overall decrease in new HIV infections. (2023, May 23). CDC News Room.

https://www.cdc.gov/media/releases/2023/p0523-hiv-declines-among-young-people.html

### Access to Healthcare

Access to healthcare is associated with a lower likelihood of serious illness and a greater life expectancy. Health insurance is also an important determinant of healthcare access. The QVHD area has a lower share of uninsured residents than the state overall (3 versus 5 percent). Shares of uninsured residents vary by age group. In QVHD, only 1 percent of children under age 19 are without health insurance, compared to 5 percent of adults ages 19 to 64 and less than 1 percent of seniors.

In the QVHD region, the uninsured rate for adults ages 19 to 64 varies widely by race. Ten percent of Latinos in this age group lack health insurance compared to 5 percent of Black adults and 3 percent of white adults.

Table 8: Latinos in the region, especially between the ages of 19 and 64, are much more likely to be uninsured

Share of uninsured by race/ethnicity and age, 2021

Area	Race/ethnicity	Total	Ages 0-18	Ages 19-64	Ages 65+
Connecticut	Total	5%	2%	7%	1%
QVHD	Total	3%	1%	5%	<1%
QVHD	White	2%	<1%	3%	<1%
QVHD	Black	3%	1%	5%	<1%
QVHD	Latino	7%	<1%	10%	2%

One reason for these differences in coverage is that seniors and children have greater access to public insurance through Medicare and CHIP (also known as HUSKY B). While 94 percent of people 65 and over and 25 percent of children under age 19 in the QVHD region have public insurance, only 16 percent of people ages 19 to 64 do.

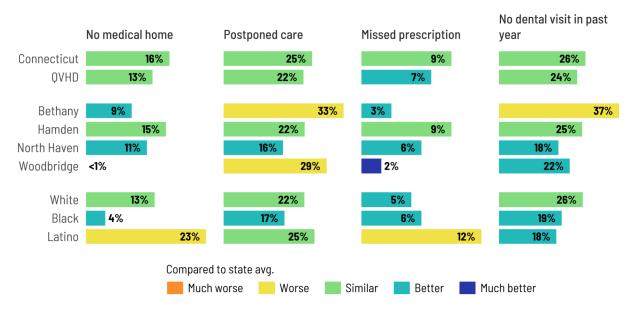
Table 9: Higher shares of seniors and children are enrolled in public health insurance plans

Share on public insurance by age, 2021

Area	Total	Ages 0-18	Ages 19-64	Ages 65+
Connecticut	36%	36%	20%	95%
QVHD	32%	25%	16%	94%

Due to the high number of physicians and clinics in Greater New Haven, people in the region have generally good access to healthcare and lower shares of QVHD residents report common barriers to healthcare than adults statewide. But racial and ethnic disparities persist. Latino adults are less likely to have a medical home, and are more likely to skip a prescription due to the cost. A new program called ArrayRx launched in October 2023 to offset the cash price of numerous medications by providing discounts that can be used at local pharmacies.<sup>46</sup>

Figure 15: Latino adults face barriers in access to health care Share of adults by area, with QVHD residents by race/ethnicity, pooled 2015–2021 data



\_

<sup>&</sup>lt;sup>46</sup> Governor Lamont and Comptroller Scanlon announce Connecticut prescription drug discount card. Program launches on October 2. (2023, September 14). Connecticut Office of the Governor. https://portal.ct.gov/Office-of-the-Governor/News/Press-Releases/2023/09-2023/Governor-Lamont-and-Comptroller-Scanlon-Announce-Connecticut-Prescription-Drug-Discount-Card-Program

### **Preventive Care**

Receiving core preventive services is important for reducing health risks and the costs of treating chronic illness. Compared to Connecticut, slightly higher shares of residents in the QVHD region received many of these services. For instance, while 56 percent of men aged 65 and over in the region received core preventive services, which include immunizations and screenings, only 50 percent of the same group statewide did.

However, the share of women in this age group who received core preventive services was lower in QVHD (39 percent) than it was in Connecticut (42 percent). A recent survey discovered that the reason women frequently skipped preventive care services included high out-of-pocket costs and difficulty in getting an appointment.<sup>47</sup>

Table 10: For many measures, slightly higher shares of QVHD residents use preventive care measures compared to Connecticut

Selected preventive care measures 2019-2020

Area	Cervical Cancer Scrn. (Women 65+)	Cholest- erol Check (Adults 18+)	Colono- scopy (Adults 50-75)	Core preventive (Men 65+)	Core preventive (Women 65+)	Mamm- ography (Women 50-74)	Annual check-up
Connecticut	86%	88%	76%	50%	42%	80%	75%
QVHD	87%	90%	78%	56%	39%	79%	76%
Bethany	89%	92%	78%	57%	42%	79%	76%
Hamden	87%	88%	78%	55%	38%	80%	76%
North Haven	88%	91%	78%	57%	40%	78%	77%
Woodbridge	90%	93%	79%	59%	42%	80%	78%

40

<sup>&</sup>lt;sup>47</sup> Survey finds many women go without preventive care. (2023, February 8). American Academy of Family Physicians. https://www.aafp.org/news/health-of-the-public/ipsos-women-preventive-care.html

### COVID-19

COVID-19 has been one of the leading causes of death since 2020, and being vaccinated greatly reduces the likelihood of getting severely ill or dying from the disease. While most people in Connecticut and the QVHD region have received a first full course of vaccinations for COVID, vaccine uptake rates vary by age. Almost everyone 65 and over in the region has been vaccinated, but only 50 percent of children under 18 and 79 percent of adults 18–64 have. Compared to Connecticut, a higher share of children in the QVHD area have been vaccinated (46 percent versus 50 percent). Everyone ages 6 months and older are eligible to receive a COVID vaccination and boosters are available yearly.<sup>48</sup>

Table 11: COVID vaccine uptake is highest for seniors and lowest for children COVID vaccination rate by age, 2023

Area	Total	Ages 0-17	Ages 18-64	Ages 65+
Connecticut	75%	46%	78%	>99%
QVHD	78%	50%	79%	>99%
Bethany	78%	55%	77%	>99%
Hamden	72%	44%	74%	>99%
North Haven	88%	57%	92%	>99%
Woodbridge	88%	73%	88%	>99%

<sup>&</sup>lt;sup>48</sup> Stay up to date with COVID-19 vaccines. (2023, October 4). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html

### Maternal Health and Birth Outcomes

Prenatal, infant, and maternal health represent important indicators of and precursors to overall community health. Between 2017 and 2021, Connecticut averaged 4.51 infant deaths per 1,000 live births. Over this period, the infant mortality rate for Black babies was nearly three times that of white babies. Among the average 856 babies born in the QVHD region each year, the infant mortality rate was 5.14 per 1,000 live births. Statewide, Black and Latina parents are more likely to have had late or no prenatal care and to give birth to babies with low weight at birth (under 2.5 kilograms or roughly 5.5 pounds). Between 2016 and 2020, the state's maternal mortality rate was 15.5 per 100,000 live births, lower than the national average of 19.3 but still well above other high-income countries.

Table 12: Statewide and regionally, birth outcomes are worse for Black parents and babies than white parents and babies

Birth outcomes by race/ethnicity, annualized averages, 2017–2021

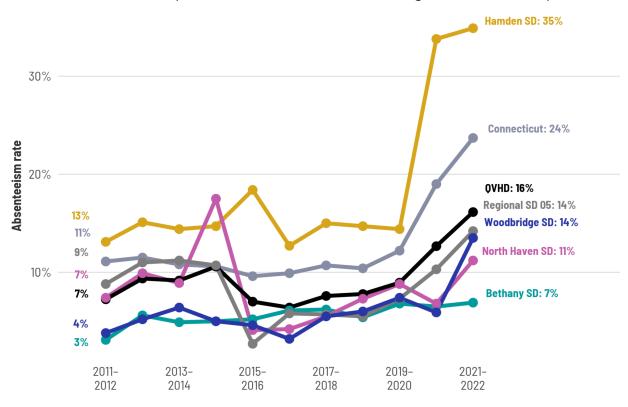
Area	Race/Ethnicity	Annual live births	Late or no prenatal care	Low birthweight	Infant mortality per 1k live births
Connecticut	Total	34,526	3.4%	7.9%	4.51
	White	18,580	2.5%	6.4%	3.05
	Black	4,402	5.2%	12.4%	9.09
	Latino/a	8,905	4.4%	8.4%	5.39
	Puerto Rican	4,113	3.0%	10.0%	N/A
	Other Latino/a	4,792	5.6%	7.0%	N/A
	Asian	2,202	3.4%	9.0%	N/A
Greater New	Total	7,321	3.9%	7.3%	6.42
Haven	White	3,490	3.2%	4.7%	4.11
	Black	1,431	4.2%	11.2%	12.11
	Latino/a	1,795	4.2%	5.7%	5.94
	Puerto Rican	858	2.7%	5.6%	N/A
	Other Latino/a	937	5.2%	5.1%	N/A
	Asian	503	3.2%	2.3%	N/A
QVHD	Total	856	3.0%	6.6%	5.14
	White	475	2.7%	2.9%	N/A
	Black	165	3.9%	10.2%	N/A
	Latino/a	123	N/A	N/A	N/A
	Puerto Rican	61	N/A	N/A	N/A
	Other Latino/a	62	N/A	N/A	N/A
	Asian	81	N/A	N/A	N/A
Hamden	Total	545	3.1%	7.7%	6.61
North Haven	Total	206	3.6%	5.8%	N/A

### Youth and Adolescent Health and Wellbeing

While COVID-19 lockdowns affected many facets of daily life, some of the heaviest impacts were felt by K-12 students, nearly all of whom spent at least several months in virtual classrooms and away from their peers. With students disconnected from physical classrooms, rates of chronic absenteeism—missing at least 10 percent of the school days for which a student is enrolled—skyrocketed and have continued to rise even after schools reopened. In particular, Black and Latino students and students eligible for free or reduced price meals (FRPM) still had chronic absenteeism rates far higher than their peers as of June 2023, both statewide and within the QVHD school districts. Hissing significant amounts of classroom time not only puts students at risk of falling behind academically and failing to graduate on time, but can also mean a lack of access to school-based resources such as food and social-emotional supports.

Figure 16: Chronic absenteeism skyrocketed during lockdown and has remained high since

Chronic absenteeism rate, public K-12 districts, 2011-12 through 2021-22 school years



<sup>&</sup>lt;sup>49</sup> DataHaven analysis (2023) of Connecticut State Department of Education. (2023) retrieved from https://public-edsight.ct.gov/

44

Table 13: Chronic absenteeism is highest among Black, Latino, and low-income students

Chronic absenteeism rate by demographic, 2022–23 school year as of June 2023

Location	Total	White	Black	Latino	FRPM-eligible	Not FRPM-eligible
Connecticut	21%	14%	28%	30%	32%	14%
QVHD	18%	13%	28%	27%	29%	14%
Bethany School District	8%	8%	N/A	N/A	N/A	7%
Hamden School District	28%	22%	31%	31%	36%	23%
North Haven School District	11%	10%	11%	17%	21%	9%
Regional School District 05	9%	9%	14%	15%	22%	7%
Woodbridge School District	11%	11%	N/A	N/A	23%	9%

While COVID-19 death rates for children have consistently been much lower than those of adults, the impacts of the pandemic on children's general well-being and mental health are yet to be seen. With the shift to remote or hybrid learning, students became far more reliant on computers and smartphones. In the latest Connecticut School Health Survey (CSHS), almost 77 percent of high school students reported spending at least 3 hours in front of an electronic screen on an average school day for uses other than schoolwork. The share of high school students who have been bullied online decreased somewhat from 2011 to 2021, but remains much higher for girls (18 percent) than for boys (9 percent), and is relatively high for white students (16 percent).<sup>50</sup>

At the same time as students were forced to be more isolated due to online schooling, rates of high schoolers reporting feeling sad or hopeless increased to 36 percent in 2021 from 2011; this rate was elevated for Latino students and upperclassmen, and twice as high for girls (48 percent) as for boys (24 percent). Self-reported poor mental health followed similar patterns, with high rates for white students as well. Startlingly, among students who report depression and anxiety, students in 2021 were half as likely to say they generally get the help they need

45

<sup>&</sup>lt;sup>50</sup> 2021 Connecticut School Health Survey (CSHS) summary graphs. (n.d.). Connecticut Department of Public Health. https://portal.ct.gov/-/media/DPH/CSHS/2021/2021\_CSHS\_Graphs\_Trends\_web.pdf

(22 percent) as in 2009 (44 percent). Only about one in five high school students reported getting eight or more hours of sleep on an average school night, with younger students more likely to get enough sleep than older ones.<sup>51</sup>

Cigarette use among high schoolers has declined dramatically, from 21 percent in 2007 to only 1 percent in 2021. Use of electronic vaping products also appears to be down, with 45 percent of students saying they had ever used a vape in 2019 versus 25 percent in 2021. Use of alcohol and other drugs are declining as well: the percentage of students who currently use alcohol (17 percent), currently use marijuana (11 percent), or have ever used cocaine (1 percent) all represent significant declines over the past decade. Rates of using prescription pain medication not according to a prescription were consistent between 2017 and 2021, with 9 percent of students having done this at least once.<sup>52</sup>

<sup>51</sup> Ibid.

<sup>&</sup>lt;sup>52</sup> Ibid.

### **Mental Health**

Mental health was the most commonly mentioned public health concern among key informants interviewed for this report. Poor mental health conditions, particularly when unaddressed, can ripple through to other aspects of a person's physical health and well-being. Conditions such as anxiety and depression are linked to other chronic physical conditions such as heart disease, which can reduce life expectancy greatly.<sup>53</sup> Continuously experiencing depression and anxiety can also make it difficult to access and maintain medical care and social support, and can be compounded by other stressors like housing instability and financial hardship. Adults who struggle with these stressors report much lower levels of personal well-being compared to adults who do not.<sup>54</sup>

Between 2015 and 2021, 69 percent of adults in QVHD towns felt satisfied with their life, and rates of reporting struggles with anxiety (13 percent) and depression (6 percent) were similar to rates statewide. Black and Latino adults were more likely to report having experienced depression—9 percent and 16 percent, respectively—than white adults.<sup>55</sup>

Table 14: Black and Latino adults are more likely to have been bothered by depression and anxiety than white adults

Indicators of mental health, share of adults, 2015–2021

Area	Race/Ethnicity	Satisfied with life	Anxiety	Depression
Connecticut	Total	68%	13%	9%
QVHD	Total	69%	13%	6%
QVHD	White	69%	11%	5%
QVHD	Black	73%	13%	9%
QVHD	Latino	63%	16%	16%
Bethany	Total	75%	10%	<1%
Hamden	Total	68%	14%	9%
North Haven	Total	64%	13%	<1%
Woodbridge	Total	84%	6%	5%

<sup>&</sup>lt;sup>53</sup> Momen, N. C., Plana-Ripoll, O., & Agerbo, E. (2022, March 30). Mortality associated with mental disorders and comorbid general medical conditions. *JAMA Psychiatry* 79(5), 443–453. https://doi.org/doi:10.1001/jamapsychiatry.2022.0347

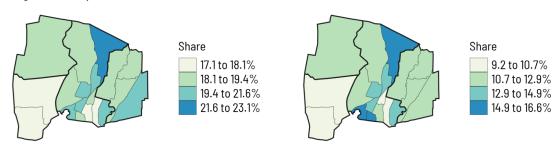
<sup>&</sup>lt;sup>54</sup> Abraham, A., Seaberry, C., Davila, K., & Carr, A. (2023). *Greater New Haven Community Wellbeing Index* 2023. https://ctdatahaven.org/reports/greater-new-haven-community-wellbeing-index

<sup>&</sup>lt;sup>55</sup> DataHaven analysis (2023) of data from the DataHaven Community Wellbeing Survey, 2015–2022.

As of 2021, about 19 percent of adults in the QVHD region had been diagnosed with depression at some point in their life; variation by Census tract within the region is fairly minimal. About 13 percent of the region's adults described their current overall mental health as poor. In some parts of Hamden, this share is 15 percent or more.<sup>56</sup>

Figure 17: Hamden residents report higher rates of common mental health problems

Diagnosed depression, share of adults, 2021 Poor mental health, share of adults, 2021



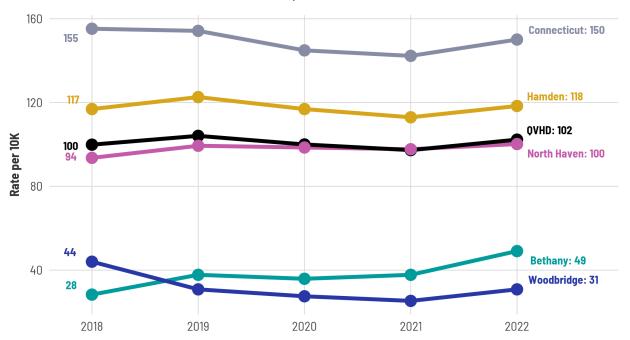
56

 $<sup>^{56}</sup>$  See notes for Figure 17.

The Department of Mental Health and Addiction Services (DMHAS) provide unduplicated counts of patients who are admitted into various treatment services each fiscal year. While the admission rate per 10,000 residents is lower in the region than the statewide average, Hamden has a slightly elevated rate compared to the other QVHD towns.

Figure 18: Hamden has an elevated rate of mental health treatment admissions, but the regional average is lower than the state's

Annual mental health treatment admissions per 10,000 residents, 2018–2022

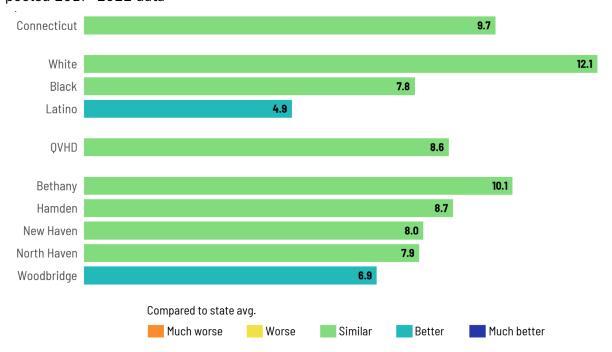


### Suicide

Suicide is a public health issue that is frequently under-discussed due to social stigma. Depression and anxiety, when untreated, are major risk factors for suicide. In Connecticut and nationwide, most suicides occur among white men, and more than half involve firearms. The pandemic may have had a disproportionate impact on the rate of suicides for non-white populations. While age-adjusted suicide rates slightly fell for white Americans in 2020, they rose for Black and Latino populations. Age-adjusting helps to standardize rates so communities with different age compositions can be compared. In the QVHD region, age-adjusted rates of suicide (8.6 per 100,000) are slightly lower than the state average (9.7), but statewide, rates for white populations are 1.6 times higher than for Black populations.

Figure 19: Statewide suicide rates are elevated for white populations

Age-adjusted mortality due to suicide per 100,000 residents, with race/ethnicity statewide, pooled 2017–2022 data



Rates for groups with low counts are suppressed. Latino/Hispanic ethnicity is often under-reported in mortality records.

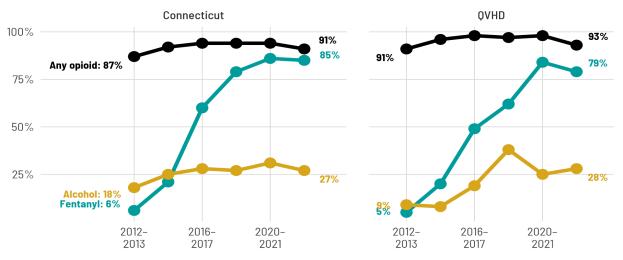
<sup>&</sup>lt;sup>57</sup> Curtin, S. C., Brown, K. A., & Jordan, M. E. (2022, November). Suicide rates for the three leading methods by race and ethnicity: United States, 2000–2020. NCHS Data Brief No. 450. https://doi.org/10.15620/cdc:121798

### **Overdose**

Nationwide and in Connecticut, fatal overdoses peaked to an all-time high in 2021,<sup>58</sup> due in part to the social isolation, economic stress, and reduced access to treatment as a result of the pandemic. Opioids continue to be the primary substance found in fatal overdoses in Connecticut, with fentanyl found in 79 percent of overdose fatalities in the region, although alcohol fatalities are also on the rise. Public safety and emergency services personnel interviewed for this report noted rising concerns related to overdose in all towns in the area.

Figure 20: Polysubstance overdoses are common, with opioids found in nearly all overdose deaths. Fentanyl is increasingly prevalent.

Share of overdose deaths by substance, 2012-May 2023



2022--2023 ranges from January 1, 2022 through June 30, 2023. Totals exceed 100% because multiple substances are involved in most overdoses.

On August 31, 2023, staff from QVHD and DataHaven conducted brief intercept surveys at Overdose Prevention Awareness Day on the New Haven Green. During these conversations, trends emerged that suggested people were very concerned about fentanyl in the area because of how prevalent it is in the local drug supply and its high chance of fatal overdose.

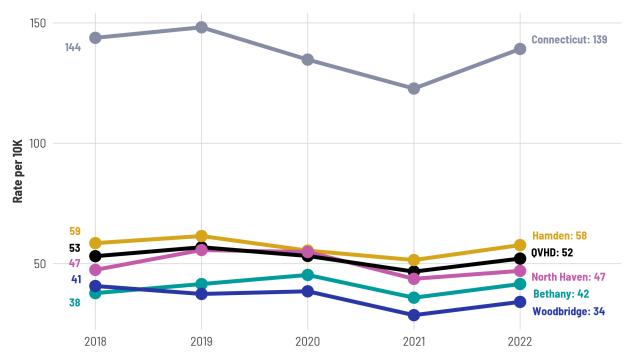
\_

<sup>&</sup>lt;sup>58</sup> See notes for Figure 20.

The rate of fatal overdoses in the QVHD region—23.5 per million—is similar to the state average of 24.2 (see Figure 22), but the rate of DMHAS treatment admissions for substance use in the state is 2.6 times higher than in the QVHD area. This may reflect a lack of treatment options in the region or an unwillingness or inability to obtain treatment. As with mental health treatment admissions discussed in the previous chapter, the rate of admissions for substance use in Hamden is slightly higher than the regional average.

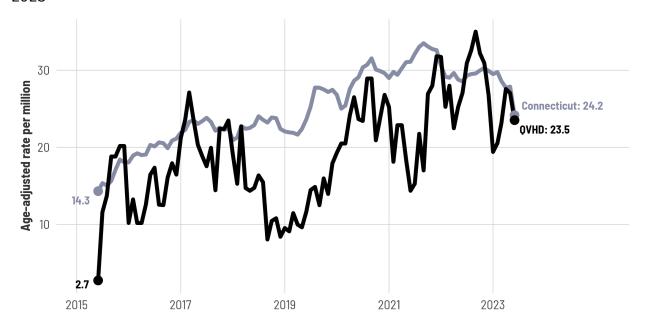
Figure 21: The regional rate of substance use treatment admissions is much lower than the state's





Overdose rates have steadily increased over time in the region. While the region and the state have similar rates, counts are too low in the individual towns to provide disaggregated totals, but all four towns' rates are reflected in the regional average in Figure 22.

**Figure 22: Overdose death rates have steadily increased over time**Age-adjusted six-month rolling average overdose deaths per million residents, 2015–May 2023



Overdose rates in the QVHD region are too low to disaggregate by race, but statewide data suggests that fatal overdose rates for Black and Latino people in Connecticut are now higher than the rate for white people after converging until about 2020. This suggests that pandemic related increases in overdose rates may be disproportionately concentrated among non-white populations in the state.

Figure 23: After converging, statewide overdose death rates for Black and Latino people now outpace those for white people

Age-adjusted six-month rolling average overdose deaths per million residents, Connecticut, by race/ethnicity



For a more comprehensive exploration of overdose data in the QVHD region, refer to the 2021 publication Overdose Data to Action: Trends in Substance Use, Overdose, and Treatment in the Quinnipiack Valley Health District and New Haven and the forthcoming 2023 update to that document.<sup>59</sup>

<sup>&</sup>lt;sup>59</sup> Davila, K. (2021, August 8). Overdose Data to Action: Trends in Substance Use, Overdose, and Treatment in the Quinnipiack Valley Health District and New Haven. https://ctdatahaven.org/sites/ctdatahaven/files/OD2A\_final.pdf

### **Mortality**

Mortality rates measure the relative number of deaths, by cause or overall, across a given population, either by geography or demographic. Several of the major causes of death are largely preventable. This section summarizes some of the major causes of death in the region.

It is important to note that while Latino populations are included in the discussions below, it is well documented that Latino ethnicity is often underreported in death records. <sup>60</sup> Given the wide disparities in socioeconomic resources and outcomes between Latinos and non-Hispanic white populations, one would expect that mortality rates for Latinos are higher than they appear.

Heart disease and cancer are the two leading causes of death regionally, statewide, and nationally. However, statewide and regionally, rates of heart disease deaths are highest in the Black population. Black residents of Hamden die of heart disease at 1.3 times the rate of the regional average.

Heart disease is related to unhealthy behaviors such as lack of exercise, poor diet or nutrition, smoking, and drinking alcohol. It also often co-occurs with diabetes—which itself is a component of another major cause of death, chronic kidney disease. Diabetes is also related to the unhealthy behaviors listed above, and disproportionately affects the Black population. Mortality due to chronic kidney disease is more than twice as high in the Black population than the white population or regional average.

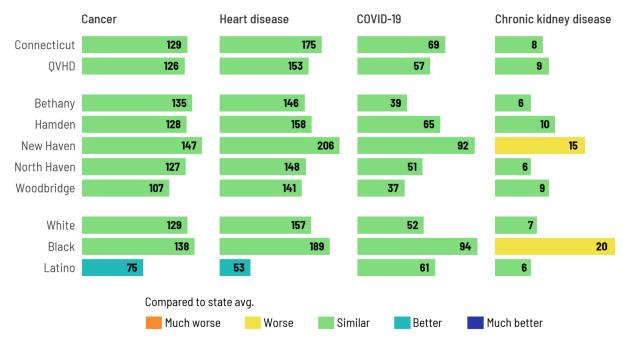
Cancer is a chronic condition with a high mortality rate. While behaviors such as a nutritious diet, maintaining a healthy weight, using sun protection, not smoking, and abstaining from alcohol help to greatly reduce the likelihood of developing certain cancers, not all cancers are completely avoidable by behaviors alone. Exposure to environmental contaminants, infections, and even genetic predisposition play a role in the development of certain cancers. Preventive care is one of the most important medical services that can help identify cancers and cancer risk factors early, and while many adults receive screenings, only approximately 40 percent of women over 65 receive preventive services annually (see Table 10).

<sup>&</sup>lt;sup>60</sup> Unreported deaths affect the 'Hispanic paradox' and the 'Black-white mortality crossover'. (2017, December). National Bureau of Economic Research Bulletin on Aging & Health. https://www.nber.org/bah/2017no4/unreported-deaths-affect-hispanic-paradox-and-black-white-mortality-crossover

<sup>&</sup>lt;sup>61</sup> Leading causes of death. (2023, January 18). Centers for Disease Control and Prevention. https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

Figure 24: Black residents in the QVHD region suffer higher mortality rates among many of the top causes of death

Age-adjusted mortality rates per 100,000, by cause, with QVHD by race/ethnicity, pooled 2017–2022 data



Rates for groups with low counts are suppressed. Latino/Hispanic ethnicity is often under-reported in mortality records.

COVID-19 also had a disproportionate impact on communities of color, particularly in the time before the development of vaccines. In the QVHD region, COVID-related mortality was almost twice as high in the Black population as the white population. While the rate of vaccine uptake is generally high in the region (about 78 percent of the total population has received two doses of the vaccine), crude death rates in the region range from a low of 9.4 per 10,000 in Bethany to a high of 56 per 10,000 in Woodbridge.

Table 15: Bethany has the lowest rate of COVID deaths in the region, while Woodbridge has the highest

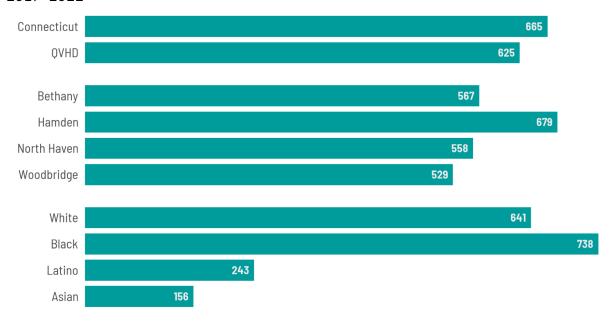
Share of the population fully vaccinated (two doses), February 2023; Residents COVID deaths, crude rate per 10,000 population, June 2023; All Connecticut towns

Area	Percent fully vaccinated (2 doses)	Resident COVID-19 deaths per 10,000 (crude)
Connecticut	75%	34.2
QVHD	78%	38.9
Bethany	82%	9.4
Hamden	73%	41.2
North Haven	87%	33.0
Woodbridge	86%	56.1

The cumulative effects of having the assets and resources to live a healthy life begin before birth and are often reflected in death. In the region, the state, and the nation, Black populations have an overall (all-cause) mortality rate that eclipses the white population, meaning more life-years are lost relative to white populations.

Figure 25: All-cause mortality is elevated for Black residents of the QVHD region as well as residents of Hamden

Age-adjusted all-cause mortality per 100,000 residents, with QVHD by race/ethnicity, 2017–2022



Rates for groups with low counts are suppressed. Latino/Hispanic ethnicity is often under-reported in mortality records.

### Conclusion

The root causes of excess mortality are largely preventable, from equal access to education and employment; stable, affordable housing; the ability to afford nutritious food; the means and time to exercise; the ability to seek medical care when needed, with respect, and at an affordable cost; and access to public health resources like vaccines. These are not individual accommodations, but public resources that should be accessible to all. In order to promote a healthy community, these amenities must continually improve, especially for those who have been historically denied their benefits: namely Black populations, but also other racial and ethnic minorities, women, older adults, and queer and transgender populations, among others, for whom data is not always available but whose communities continue to speak to their needs.

### Recommendations

#### Adopt

• A racial-equity-first framework in designing public health programming (pp. 35, 39, 42–43, 47, 54, 55–56, 58)

#### Advocate for

- Expanded, sustainable funding for public health programming and additional personnel (p. 69)
- More housing supply and additional affordable housing to reduce housing cost-burden (p. 16)
- More reliably frequent transit access in Hamden and North Haven (pp. 21–22)
- More affordable childcare options (pp. 22–23)
- More funds for lead remediation (p. 30)
- Environmental clean up, especially along the I-91, I-95, and Merritt Parkway corridors (pp. 30–31)
- Mental health supports tailored to teens and K–12 students (pp. 45–46)
- Community mental health and substance use resources (pp. 47–49, 50, 51–54)
- More covid boosters and other vaccine clinics (pp. 41, 57)
- Lower cost prescription drugs (p. 39)
- More funds for utility assistance programs, including air conditioner distribution as the region's climate warms (p. 28)

#### **Provide**

- Improved response times for housing inspections and rehabilitation (p. 30)
- Easy-to-use resource maps or listings for food assistance, housing assistance, senior services, transportation services, libraries, and low-cost recreation (pp. 70–71)
- Educational literature on chronic illnesses and ways to combat them through nutrition, mental wellbeing, sleep, and exercise. Additionally, focus distribution tailored to Black and low income populations who experience higher rates of chronic illness (pp. 33–37)
- Preventive care literature and schedules of core preventive services, especially for women who are less likely to be up-to-date on those services (p. 40)
- Sexually transmitted infection (STI) awareness and prevention information
- Free or low-cost, anonymous STI testing in combination with substance use harm reduction programming where possible (pp. 36–37)
- Targeted awareness campaigns for prescription cost capping services and new programs like ArrayRx (p. 39)

#### Track

- Incidences of heat related illnesses (p. 28)
- Incidences of mosquito or tick borne illnesses, which are likely to increase as the region's climate warms (p. 29–30)
- Working with schools, track mental health issues such as depression, anxiety, and loneliness among K–12 students (pp. 45–46)
- Continue to monitor overdose trends, work with local partners on sharing data, and advocate for harm reduction programs (pp. 51–54)
- Incidences of STIs in the community (pp. 36–37)

# Appendix A: Key Informant Interview and Survey Response Summaries

Primary data collection consisted of three main efforts. The first was an online survey, available in English and Spanish, that included several dozen questions about personal and community health. In all, 480 responses were collected between August and November, 2023. The survey is a convenience sample—meaning the respondents were easiest to reach and are not necessarily representative of the community at large. As a result, the respondent pool is heavily skewed towards white, wealthy residents, as well as residents of North Haven.

The second was a series of key informant interviews conducted between September and October, 2023. Key informant interviews are structured, one-on-one conversations using a protocol that was designed to identify perceived public health issues or challenges in a person's community or area of expertise (e.g., in community schools). In all, 20 residents and leaders of the four-town area were interviewed.

The third was a series of intercept surveys conducted over two evenings at a local food pantry distribution event. Intercept surveys are qualitative surveys designed to be quick and informal, to collect as much data as possible in a short time. Questions asked included what could be done to improve the individual's health and the health of their community.

A fourth effort, focus groups, were ultimately dropped due to lack of attendance at two separate events (one in-person and one virtual event). A later virtual event proved promising but ended in a spam attack that ultimately resulted in its cancellation.

### **Key Informant Interviews**

A total of 20 key informants from each of the four towns were interviewed between September and October, 2023. Most were town employees, elected officials, or affiliates. In addition, a few residents were interviewed as a follow-up to their survey participation. The protocol used for key informant interviews was structured around what the interviewee saw as the most important health issue in their community, why, and who is most affected. At QVHD's request, a question about District per capita funding was added to assess residents' understanding of its adequacy to fulfill the breadth of QVHD obligations.

Mental health in general emerged as the key concern and a common theme, particularly as it impacted seniors and children. Hoarding among seniors is an issue, which leads to safety concerns such as fires or mold exposure. Additionally, as many seniors eschew assistance and continue to live on their own, their ability to handle tasks necessary for daily life is limited. Transportation was mentioned several times as an issue, particularly as it pertains to getting groceries or food. Ensuring that homebound seniors receive necessary vaccinations was mentioned, despite a high vaccine uptake rate according to the state Department of Health.

School superintendents remarked that school clinics are increasingly providing mental health and primary care for children, due in part to the trust built between school staff and students. Some parents simply lack health care or the ability to pay for services, but some superintendents mentioned that stigma against mental health concerns makes some parents less likely to provide those supports for their children. Chronic absenteeism and an over-reliance on social media for social interaction was described as contributing to general feelings of depression and isolation among youth. Coupled with some diminishing academic outcomes, interviewees associated with schools are concerned about the well-being of children and their prospects as young adults.

Population-wide mental health issues, and a notable increase in substance use, was noteworthy among public safety and emergency services personnel. Other behavioral issues like reckless driving were also discussed. In general, police and EMS are seeing many more situations where an individual may be having a mental health crisis and are left only with the option to call 9-1-1. Emergency departments may not be the best place to seek care, and many people are discharged only to repeat the cycle.

### **Intercept Surveys**

On October 11 and October 25, 2023, staff from DataHaven and QVHD collected 69 responses at a mobile food pantry distribution event in Hamden. Given the location, nearly all respondents were Hamden residents, but a handful of respondents were from New Haven or Meriden.

Intercept surveys are designed to be short and informal. As such, two questions were asked:

- What could be done to improve your health?
- What could be done to improve the health of your community?

In general, respondents mentioned the affordability and accessibility to a number of resources—especially food, mental and physical health care, prescription medicines, and free recreation opportunities. The cost of health care was a top concern, as was the ability to get a timely appointment with a doctor. Mental health supports were also mentioned often, particularly counseling/talk therapy options.

A handful of respondents also mentioned the quality of sidewalks and other aspects of the built environment that are barriers to low cost recreation like walking. Some mentioned that their perception of crime in the area prevented them from doing daily tasks and errands.

Overall, respondents had a good awareness of what to do to improve personal and community wellbeing. Offering free clinics and advocating for towns to build free or low cost recreation options are two things QVHD can do to assist residents. On a larger scale, more doctors and policies that bring down health care costs and other barriers to obtaining health care should also be an advocacy priority.

### **Online Survey Responses**

Survey responses were collected from August 4, 2023 through November 8, 2023. After removing respondents who do not live in the region, as well as what were determined to be spam, there were a total of 480 responses. It is important to note that this is a convenience sample, not a probabilistic sample, so results are not representative of the population. Women, people ages 30–49, and white people in Hamden, and women in North Haven are also over-represented.

Since the data in the survey summaries reflect the sample population that is skewed to the demographics above, in order to prevent users from considering this a reliable source of information about the region, values in this section have been removed or compared to more reliable sources. A separate document was provided to QVHD that summarizes the survey results in more detail.

Major differences between the survey population and the actual population include an over-reporting of financial difficulty and over-reporting of gender-based discrimination while accessing health care. Income data was not collected so it is difficult to determine why the survey respondent pool, which on the surface appears to be of generally high socioeconomic status, reported struggling more financially. Similarly, race is usually the most commonly given reason for discrimination in accessing health care, along with insurance status or income, but in this pool, those reasons were among the least commonly reported.

Table 16: Demographic summary of survey responses

Indicator	Bethany	Hamden	North Haven	Woodbridge	Total
Resident responses	24	156	246	54	480
Percent Man	25%	20%	23%	32%	23%
Percent Woman	75%	79%	76%	68%	76%
Percent Transgender	0%	1%	<1%	0%	1%
Percent Other gender identity	0%	0%	1%	0%	<1%
Percent White	78%	72%	79%	71%	76%
Percent Black	13%	13%	8%	6%	9%
Percent Latino	4%	10%	9%	10%	9%
Percent Other race/ethnicity	4%	5%	5%	14%	6%
Percent Under age 18	4%	0%	<1%	2%	1%
Percent Ages 18–29	12%	16%	8%	4%	10%
Percent Ages 30–49	42%	23%	64%	49%	48%
Percent Ages 50–64	29%	26%	15%	40%	22%
Percent Ages 65+	12%	35%	13%	6%	19%
Percent Straight	88%	86%	94%	94%	92%
Percent Gay/Lesbian	4%	3%	2%	0%	2%
Percent Bisexual/ Pansexual	8%	9%	4%	6%	6%
Percent Other sexual orientation	0%	1%	0%	0%	<1%

### Language and Technology Availability

Nearly all respondents had access to a computer or tablet with internet access or a smartphone, which is not surprising given the fact the survey was conducted online. The survey results were also skewed towards English-speakers.

### **Disability and Insurance Status**

A total of 8 percent of respondents reported having any disability, slightly lower than American Community Survey (ACS)<sup>62</sup> estimates. A total of 3 percent of respondents said they were uninsured, similar to ACS estimates. Ten percent said they had no medical home, which is lower than the DataHaven Community Wellbeing Survey (DCWS)<sup>63</sup> estimate of 13 percent. Having a medical home did not influence how often people visited the emergency department: roughly half of all respondents with a medical home and about half of those without had gone to the emergency room at least once in the past year.

#### **Personal Health**

Respondents were asked to self-assess their overall health on a scale from Poor to Excellent. About two-thirds regionally said their health was very good or excellent, but these values were lower in Hamden and North Haven. When asked how their overall health this year compared to last year, about 1 in 8 regionally said their health was worse or much worse than last year. Nine percent said their mental or physical health interfered with aspects of their daily life quite a bit. Higher shares of respondents in Hamden report being anxious, depressed, or having had little interest in doing things more than half the time in the past month compared to the regional average.

#### COVID-19

More than 90 percent of respondents reported having been vaccinated for COVID-19. About 60 percent had ever tested positive and 9 percent reported lingering symptoms.

<sup>&</sup>lt;sup>62</sup> The American Community Survey (ACS) is an ongoing survey, conducted by the U.S. Census Bureau, that provides highly reliable data about people and households in the United States.

<sup>&</sup>lt;sup>63</sup> The DataHaven Community Wellbeing Survey uses probability sampling to create highly-reliable local information that is not available from any other public data source. More than 40,000 adults from every town in Connecticut have been interviewed between 2015 and 2022.

### **Opioid Use**

Regionally, 39 percent of respondents knew someone who had misused opioids. Less than 5 percent said it was themself, while about 20 percent each said it was a close friend or family member or someone else.

### **Experiences with Health Care Providers**

One in five respondents have not seen a dentist in a year or more, and 30 percent have skipped a doctor visit at some point in the past year. These values are similar to DCWS estimates. The most commonly given reasons for skipping doctor visits were cost and being too busy.

Forty percent of respondents had a telehealth appointment in the past year, and more than two-thirds of those said the quality of the visit was as good or better than a traditional, in-person visit.

At their last doctor visit, one in eight respondents said their doctor involved them less than they wanted in decisions about their health care or treatment. Many reported getting treated with less respect or getting worse treatment than others while accessing health care. The most commonly given reason for this was the respondent's gender. These values vary significantly from DCWS estimates.

#### **Financial Health**

About one-third of respondents regionally said they were just getting by or finding it difficult, higher than the DCWS estimate of 27 percent. Similarly elevated shares reported being unable to pay for food or housing at some point in the past year, or skipping a prescription because of the cost. People with one difficulty often have many. Rates were elevated in Hamden and North Haven.

### **Community Assets**

Neighborhood amenities contribute to overall good health by providing opportunities for recreation, exercise, and good nutrition. While residents of Bethany were less likely to say they had affordable recreation options nearby, residents of other towns agreed they had those options. Regionwide, residents rated the availability of affordable, high quality vegetables highly, though rates were slightly lower in Hamden. Fewer than half of Woodbridge residents said sidewalks were in good repair, and in all areas except Hamden, respondents were unlikely to say they felt safe walking alone at night.

#### Perceived Value of Health District Services

Respondents were asked to estimate what the current per-capita rate for district services was in their area, then were asked to assess what they would personally value those services at. The current per-capita rate in QVHD is \$7.20 compared to the state average of \$9.91.

The majority of respondents in each town estimated the per capita rate at less than \$10. However, in all towns, a plurality of respondents values services at \$20 or higher.

QVHD ranks in the bottom third of Connecticut health departments and districts in terms of per-capita rates. Cost of living adjustments have not kept the pace with inflation, especially since the pandemic placed a greater burden of service on local health departments.

Figure 26: Perceived value of health district services



### **Appendix B: Community Resources**

Resources listed below are located in the towns where they appear, but many serve residents of Greater New Haven regardless of where they are located. If a resource is not listed in a given category or town, contact QVHD or local town halls to inquire about resources that may be available to residents.

For additional information, dial 2-1-1 at any time to speak with a trained resource specialist, or visit 211ct.org.

### **Community Centers**

#### Bethany

Bethany Town Hall, 40 Peck Road, 06524

#### Hamden

- Keefe Community Center, 11 Pine Street, 06518
- Miller Central Library and Cultural Complex Senior Center, 2901 Dixwell Avenue, 06518
- Whitneyville Cultural Commons, 1253 Whitney Avenue, 06517

#### North Haven

- North Haven Recreational Center, 7 Linsley Street, 06473
- North Haven Senior Center, 100 Pool Road, 06473

#### Woodbridge

• The Center, 4 Meetinghouse Lane, 06525

#### Libraries

#### Bethanv

Clark Memorial Library, 538 Amity Road, 06524

#### Hamden

- Miller Memorial Library, 2901 Dixwell Avenue, 06518
- Brundage Branch Library, 91 Circular Avenue, 06514
- Whitneyville Branch Library, 125 Carleton Street, 06517

#### North Haven

North Haven Memorial Library, 17 Elm Street, 06473

#### Woodbridge

Woodbridge Town Library, 10 Newton Road, 06525

#### **Food Assistance**

#### Hamden

- Breakthrough Church, 481 Shelton Avenue, 06517
- Faith Temple Revival, 834 Dixwell Avenue, 06514
- Keefe Community Center, 11 Pine Street, 06518
- Ministry of Helps Foundation, 330 Morse Street, 06517
- Mount Zion Seventh Day Adventist Church, 335 Putnam Avenue, 06517

#### North Haven

- North Haven Food Pantry, 30 Church Street, 06473
- Nutrition Security Solutions, 7 Corporate Drive, 06473

### **Housing Assistance**

#### Hamden

 Community Partners in Action REGIONS Center for Boys, 995 Sherman Avenue, 06514

#### **Senior Services**

#### **Bethany**

Bethany Town Hall Senior Room, 40 Peck Road, 06524

#### Hamden

- Miller Central Library and Cultural Complex Senior Center, 2901 Dixwell Avenue, 06518
- Interfaith Volunteer Caregivers, 30 Gillies Road, 06517

#### North Haven

• North Haven Senior Center, 189 Pool Road, 06473

#### Woodbridge

• The Center, 4 Meetinghouse Lane, 06525

### **Transportation Services**

#### Hamden

- Greater New Haven Transit District, 840 Sherman Avenue, 06514
- Interfaith Volunteer Caregivers, 30 Gillies Road, 06517

### Figure and Table Notes

### **Figures**

Figure 1: Map of the QVHD region within Greater New Haven and Connecticut (p. 10) TIGER/Line shapefiles from the U.S. Census Bureau.

## Figure 2: The region's population distribution by race and age looks similar to the state's (p. 12)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 3: Asian and Latino residents in the region are more likely to be linguistically isolated (p. 13)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 4: Renters across the region are more likely to be housing cost-burdened than homeowners (p. 16)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 5: Asian adults in the QVHD region and adults in Woodbridge are more likely to have college degrees (p. 17)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 6: Adjusting for inflation, median household incomes in Hamden and statewide fell by about 2 percent (p.18)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates, adjusted for inflation based on the Bureau of Labor Statistics' Consumer Price Index.

# Figure 7: Higher shares of Black and Latino households receive SNAP benefits (p. 20) DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 8: Nearly a third of Latino residents in the region face food insecurity, while nearly one in seven Black households lack a vehicle (p. 21)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey and U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Figure 9: Latino adults in the QVHD region report worse-than-average produce availability in their area, while Woodbridge residents lack safe sidewalks (p. 25)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey.

# Figure 10: Adults in the region have similar satisfaction with their area compared to adults statewide (p. 26)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey.

# Figure 11: High shares of adults in Bethany, North Haven, and Woodbridge think their town is a good place to raise kids, and more than three-quarters of North Haveners feel their local government is responsive (p. 27)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey.

# Figure 12: Neighborhoods exposed to one kind of contaminant are often exposed to many (p. 32)

DataHaven analysis (2023) of data from the United States Environmental Protection Agency EJSCREEN, 2022 version.

#### Figure 13: Black and Latino adults face heavier burdens of some health risks (p. 35)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey.

## Figure 14: Sexually transmitted diseases have become far more common in recent years (p. 36)

Data from the Centers for Disease Control and Prevention NCHHSTP AtlasPlus, 2019 version.

#### Figure 15: Latino adults face barriers in access to health care (p. 39)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey.

## Figure 16: Chronic absenteeism skyrocketed during lockdown and has remained high since (p. 44)

DataHaven analysis (2023) of data from the Connecticut State Department of Education (CTSDE), accessed via EdSight at http://edsight.ct.gov. A student is considered chronically absent if they miss at least 10 percent of the school days for which they were enrolled in a year for any reason; the chronic absenteeism rate is then the percentage of enrolled students who are chronically absent in a year. For this figure, regional districts were included.

Figure 17: Hamden residents report higher rates of common mental health problems (p. 48)

Data from Centers for Disease Control and Prevention PLACES project.

# Figure 18: Hamden has an elevated rate of mental health treatment admissions, but the regional average is lower than the state's (p. 49)

DataHaven analysis (2023) of data from the Connecticut Department of Mental Health and Addiction Services.

#### Figure 19: Statewide suicide rates are elevated for white populations (p. 50)

DataHaven analysis (2023) of data from the Connecticut Department of Public Health mortality records.

## Figure 20: Polysubstance overdoses are common, with opioids found in nearly all overdose deaths. Fentanyl is increasingly prevalent. (p. 51)

DataHaven analysis (2023) of data from the Connecticut Office of the Medical Examiner.

# Figure 21: The regional rate of substance use treatment admissions is much lower than the state's (p. 52)

See notes for Figure 18.

#### Figure 22: Overdose death rates have steadily increased over time (p. 53)

See notes for Figure 20.

# Figure 23: After converging, statewide overdose death rates for Black and Latino people now outpace those for white people (p. 54)

See notes for Figure 20.

# Figure 24: Black residents in the QVHD region suffer higher mortality rates among many of the top causes of death (p. 56)

See notes for Figure 19.

# Figure 25: All-cause mortality is elevated for Black residents of the QVHD region as well as residents of Hamden (p. 58)

See notes for Figure 19.

#### Figure 26: Perceived value of health district services (p. 69)

DataHaven analysis (2023) of data collected from surveys conducted on behalf of QVHD for the purposes of the CHA. See the Methods subsection in the Introduction for more details. The survey data is a convenience sample and is therefore not representative of the population. Therefore, few values are provided in this document. A supplemental document summarizing survey responses was provided to QVHD.

### **Tables**

# Table 1: The region is similar in racial/ethnic composition to the state, but Hamden is most diverse among the four towns (p. 11)

See notes for Figure 2.

# Table 2: Difficulty walking and climbing stairs (ambulatory difficulties) are among the most common disabilities in the region (p. 14)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

#### Table 3: Homeownership is generally high in the region (p.15)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Table 4: Poverty rates are higher for Black and Latino residents and children in the region (p. 19)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Table 5: Nearly 40 percent of households in Hamden may be struggling to make ends meet (p. 22)

Data from Connecticut United Ways ALICE 2023.

Table 6: No town in the region has a high enough median income to meet the HHS "7 percent" affordability threshold for childcare (p. 23)

DataHaven analysis (2023) of data from the U.S. Census Bureau American Community Survey 2021 5-year estimates compared against childcare cost estimates from the National Database of Childcare Prices 2018 estimates, adjusted for inflation using data from the Bureau of Labor Statistics.

Table 7: The QVHD region has similar health risk factors compared to the state (p. 34) Data from Centers for Disease Control and Prevention PLACES project.

# Table 8: Latinos in the region, especially between the ages of 19 and 64, are much more likely to be uninsured (p. 38)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Table 9: Higher shares of seniors and children are enrolled in public health insurance plans (p. 38)

DataHaven analysis (2023) of U.S. Census Bureau American Community Survey 2021 5-year estimates.

# Table 10: For many measures, slightly higher shares of QVHD residents use preventive care measures compared to Connecticut (p. 40)

Data from Centers for Disease Control and Prevention PLACES project.

#### Table 11: COVID vaccine uptake is highest for seniors and lowest for children (p. 41)

DataHaven analysis (2023) of data from the Connecticut Department of Public Health. Vaccine data is current as of February 2023 while mortality data is current as of June 2023. Rates are calculated against 2020 Decennial Census population counts and may not match estimates provided by DPH.

# Table 12: Statewide and regionally, birth outcomes are worse for Black parents and babies than white parents and babies (p. 43)

DataHaven analysis (2023) of data from the Connecticut Department of Public Health vitals data. "Late" prenatal care is defined as starting in the third trimester. Low weight births are defined as births where the infant weighs less than 2,500g (about 5.5 pounds).

## Table 13: Chronic absenteeism is highest among Black, Latino, and low-income students (p. 45)

See notes for Figure 16.

# Table 14: Black and Latino adults are more likely to have been bothered by depression and anxiety than white adults (p. 47)

DataHaven analysis (2023) of 2015, 2018, and 2021 DataHaven Community Wellbeing Survey

# Table 15: Bethany has the lowest rate of COVID deaths in the region, while Woodbridge has the highest (p. 57)

See notes for Table 11.

#### Table 16: Demographic summary of survey responses (p. 66)

See notes for Figure 26.