



# UNCAS HEALTH DISTRICT COMMUNITY HEALTH ASSESSMENT

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Health Resources in Action  
*Advancing Public Health and Medical Research*

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## EXECUTIVE SUMMARY

### Introduction

The Uncas Health District is a non-profit organization that provides local public health services to the municipalities of Bozrah, Griswold, Lebanon, Lisbon, Montville, Norwich, Salem, Sprague, and Voluntown in New London County, Connecticut. Based in Norwich, Connecticut, primary activities of the Uncas Health District include regulatory responsibilities such as monitoring and enforcing public health codes and infectious disease review and follow-up, health outreach and education, and public health emergency preparedness.

The Uncas Health District is undertaking a community health assessment (CHA) to enhance understanding of the health of residents in the communities served by the Uncas Health District and to gain insight regarding how identified health needs are currently being addressed. The overarching goal of the CHA process is to provide a broad portrait of the health of the communities served by Uncas Health District. The CHA will provide a foundation for data-driven community health improvement planning (CHIP) efforts to inform a strategic plan to promote and improve community health.

The community served by Uncas Health District was defined as the towns of Bozrah, Griswold, Lebanon, Lisbon, Montville, Norwich, Salem, Sprague, and Voluntown. This report provides an overview of key findings from Uncas Health District's community health assessment.

### Community Health Assessment Methods

The Uncas Health District CHA is part of a larger focus on assessment and data-driven processes across the state, many in which Uncas Health District leadership and staff are involved. While Uncas Health District has been engaged in several local hospital CHAs as a strong collaborative partner, these processes did not cover the entirety of the Uncas Health District service area, therefore precipitating the need for Uncas Health District to conduct its own assessment.

Guided by a social determinants of health approach, the Uncas Health District CHA aims to provide a portrait of community health for its specific service area. To develop an Uncas service area-specific CHA, Uncas Health District contracted with Health Resources in Action (HRiA), a non-profit public health consultancy organization, to conduct the CHA. HRiA reviewed existing secondary data from local, state, and national sources. HRiA conducted qualitative data collection with hospital and public health administrators and with focus group participants representing the firefighter/emergency responder and senior communities to understand their perceptions of community strengths and assets, priority health concerns, and suggestions for future programming and services to promote community health. A total of 31 individuals were engaged in key informant interviews (8 people) and focus groups (23 people).

### Key Findings

The following provides a brief overview of key findings that emerged from this assessment.

#### **Community Social and Economic Context**

**Population Size.** Several focus group participants and key informants described the Uncas Health District towns as relatively small and characterized the “small town feel” as an asset. Some described the population as “transient.” The Uncas Health District serves an estimated 96,035 residents or

approximately one-third of New London County (274,071 residents). The largest town served by Uncas Health District, Norwich, comprised 42% of the population served by Uncas Health District. Another 41% of Uncas Health District's residents live in the towns of Montville, Griswold, and Lebanon. The towns of Voluntown, Bozrah, Sprague, Salem, and Lisbon constitute 17% of the Uncas Health District population.

**Age Distribution.** Some key informants and many focus group participants perceived a growing "aging population" in the towns served by Uncas Health District. In 2014 the towns of Salem (26.0%) and Griswold (24.9%) had the largest proportion of residents under 18 years of age, while Lisbon (16.8%), Bozrah (16.4%), and Lebanon (16.3%) had the largest proportion of residents age 65 or older.

**Racial and Ethnic Distribution.** The towns of Norwich and Montville, the largest towns in the Uncas Health District, had a larger share of residents who identified as non-White. For example, 14.1% of Norwich residents identified as Hispanic, followed by Black, non-Hispanic (10.6%), Asian, non-Hispanic (8.1%), and an other racial/ethnic group (5.9%), while 61.4% identified as White, non-Hispanic. In Montville, nearly three-quarters of residents identified as White, non-Hispanic (73.8%). In contrast, at least nine in ten residents identified as White, non-Hispanic in the towns of Lisbon, Lebanon, Voluntown, Bozrah, Sprague, Salem, and Griswold.

**Linguistic Diversity.** Some key informants noted a "growing bilingual population" in the Uncas Health District. The towns of Norwich (24.3%) and Montville (13.7%) had the largest proportion of residents 5 years of age or older who speak a language other than English at home. More than 90% of residents in the other towns served by Uncas Health District did not speak a non-English language at home.

**Income and Poverty.** While some focus group participants described a range of income levels in the region, several key informants and focus group participants observed challenging socioeconomic conditions for lower income residents. The median household income across the towns served by Uncas Health District varied widely from a low of \$49,695 in Norwich, to \$104,583 in Salem. In 2010-2014, 12.8% of New London County residents less than 18 years of age lived in poverty, classified as having incomes at or below 100% of the federal poverty level. Nearly one-quarter of children in Norwich (23.1%) had household incomes below the poverty level, followed by 16.6% of children in Griswold and 11.3% of Children in Sprague.

**Education.** Relative to the other towns in the Uncas Health District, the wealthier towns of Salem (43.1%) and Lebanon (40.0%) had a larger share of residents with a college education or higher, with nearly four in ten residents being college-educated. Similarly, Norwich (13.9%), Griswold (12.3%), and Montville (11.6%) – the towns with the lowest median household incomes – had the largest proportion of residents with less than a high school education.

**Employment.** Several focus group participants described limited employment opportunities in the Uncas Health District towns as attributed to a decline in the industry occupations and economic vibrancy of towns in the region. As one focus group commented, "We used to have a couple mills around here but now employment is poor." In 2010-2014, the towns of Norwich (7.9%), Voluntown (7.9%), Griswold (6.7%), Sprague (6.3%), and Lisbon (6.1%) had unemployment rates that exceeded that for New London County (5.5%).

**Housing.** A few participants noted abandoned houses and transient housing conditions as housing-related concerns in the region. The towns of Norwich (47.8%), Sprague (31.2%), and Griswold (27.0%)

had the largest proportion of housing units occupied by renters. The higher income towns of Salem (5.7%), Lebanon (9.0%), and Lisbon (9.2%) had the lowest percent of housing units occupied by renters.

**Transportation.** A few focus group and interview participants perceived that public transportation was more available in towns outside of the Uncas Health District. The majority of residents across towns served by Uncas Health District drove alone to work: Griswold (90.2%) had the highest proportion of residents who drove alone to work, while Norwich (76.2%) and Voluntown (78.3%) had the smallest percent.

**Crime and Violence.** Some key informants and focus group participants described drug dealing, including the distribution of opioids, as concerns in the region. The crime rate in the Uncas Health District ranged from a high of 3,658.0 per 100,000 population in Lisbon and 2,627.6 per 100,000 population in Norwich, to a low of 494.0 per 100,000 population in Lebanon. In 2015, 16% of Norwich residents reported an experience of vandalization, theft, or a break-in in the past year, compared to 9% of Connecticut residents.

**Social Cohesion.** According to estimates from the DataHaven Survey, only one-third of Norwich residents reported that they thought neighborhood residents could be trusted, compared to nearly half of Connecticut residents (54%).

### **Health Outcomes and Behaviors**

Residents of the Uncas Health District communities experience a broad range of health outcomes and associated risk factors. Many of the social and economic factors described above shape community health. The sections that follow provide an overview of the health of residents in the region served by Uncas.

**Leading Causes of Death.** Over the 2008 to 2012 period, the age-adjusted mortality rate for all causes was highest in the towns of Sprague (884.4 per 100,000 population), Voluntown (827.4 per 100,000 population), and Griswold (806.2 per 100,000 population).

**Healthy Eating and Physical Activity.** Several key informants and focus group participants described food insecurity as a common health concern for low-income residents. As articulated by one focus group participant, “a lot of people use the food pantry.” In 2015, approximately two in ten Norwich residents (22%) reported not having enough money to purchase food that they or their family needed, compared to approximately one in ten Connecticut residents (12%). In 2011-2014, three in ten Uncas Health District (30%) adults reported not engaging in any leisure time physical activity, while 23% of adults across Connecticut reported physical inactivity. Additionally, approximately half (56%) of Norwich residents agreed that their neighborhood had free or low-cost recreation facilities, compared to 71% of Connecticut residents.

**Overweight and Obesity.** Key informants described overweight and obesity as persistent health concerns, which they linked with health behaviors such as physical activity and healthy eating. In 2011-2014, nearly one-third of adults in Uncas Health District (32%) met the criteria for being obese, while one-quarter of adults across Connecticut (25%) were considered obese. More than two-thirds of Norwich residents (69%) were classified as overweight or obese, compared to 62% of Connecticut residents in 2015.

**Self-Rated Health.** Norwich residents reported less favorable self-rated health than Connecticut residents. For example, one-quarter (27%) of Connecticut residents characterized their health as excellent, compared to 20% of Norwich residents.

**Heart Disease and Cardiovascular Risk.** Key informants cited heart disease as a persistent issue in the towns served by the Uncas Health District. However, heart disease did not emerge as a priority health concern among focus group participants. Approximately one-quarter of adults in New London County (26.9%) reported being told by a health care provider that they have high blood pressure, more than one-third (35.6%) reported being diagnosed with high cholesterol, and 3.9% reported being diagnosed with heart disease.

**Diabetes.** In 2011-2014, 12% of Uncas Health District adults reported being diagnosed with diabetes and 10% reported a diagnosis of pre-diabetes, relatively similar to the prevalence of diagnosed diabetes (10%) and pre-diabetes (8%) for adults across Connecticut. The prevalence of diagnosed diabetes declined with increasing educational attainment.

**Cancer.** While focus group participants did not identify cancer as a priority health concern, key informants cited cancer as a persistent community health concern. In New London County in 2008-2011 the cancer incidence rate was highest for cancer of the breast (137.2 per 100,000 population) and prostate (121.2 per 100,000 population).

**Asthma.** The average daily density of fine particulate matter (PM2.5) was similar for New London County (10.3) and Connecticut (10.5). The age-adjusted asthma-related emergency department visit rate was highest in the towns of Norwich (147.1 per 10,000 population) and Sprague (120.7 per 10,000 population) and lowest in the towns of Salem (39.4 per 10,000 population), Bozrah (59.9 per 10,000 population), and Voluntown (60.5 per 10,000 population).

**Childhood Lead Poisoning.** Among towns served by the Uncas Health District, in 2013 Norwich had the highest number of confirmed cases of children with elevated blood lead levels. In 2010-2014, confirmed child lead poisoning cases were primarily located in several neighborhoods in Southeastern Norwich.

**Mental Health.** Mental illness was a concern that was mentioned by a majority of focus group participants and key informants. Residents described mental illness as an issue affecting residents across age groups. Participants observed that dementia and Alzheimer's disease were particular mental health concerns for the growing senior population in the region. In 2014, New London County residents reported 3.5 days of poor mental health in the past 30 days. In 2012, approximately one in five Medicare beneficiaries in New London County (19.0%) were diagnosed with depression.

**Substance Use.** Residents characterized substance use as a priority health issue, noting longstanding health concerns linked with tobacco and alcohol use, as well as a rise in misuse and abuse of opioids in the region. In 2011-2014, 16% of Uncas Health District adults reported smoking and 22% of adults reported engaging in binge drinking. From 2009 to 2014, the rate of deaths due to opioids was highest in Norwich, Salem, and Sprague. In 2011-2013, across Connecticut the rate of heroin overdose deaths was highest in New London County (6.21-7.50 deaths per 100,000 population), an increase over the rate for 2008-2010 (2.31-3.60 deaths per 100,000 population).

**Communicable Diseases.** In 2014, the rate of chlamydia in Norwich (506.0 per 100,000 population) exceeded that for Connecticut (365.2 per 100,000 population). In 2010-2014, persons aged 20 to 29

years (30.5%) and 40 to 49 years (26.3%) represented more than half of the 95 recently diagnosed cases of HIV in New London County. In the 2012-2013 influenza season, there were 638 confirmed cases of influenza in New London County, nearly double the number of confirmed influenza cases in 2013-2014 (296 cases). In 2015, Norwich was among the three towns in Connecticut with more than 60 cases of Lyme disease.

**Reproductive and Maternal Health.** In 2103, 6.9% of births in Norwich were to mothers less than 20 years of age. Similar to Connecticut (4.5%) and New London County (4.4%), in the towns of Griswold (4.3%) and Montville (4.8%), approximately 4% of births were to women less than 20 years of age. The proportion of low birth weight births exceeded that for New London County (7.9%) in the towns of Griswold (12.0%), Lebanon (10.2%), and Norwich (9.2%). In 2013, the percent of births characterized by non-adequate prenatal care ranged from a low of 8.6% in Griswold to a high of 14.3% in Lebanon, below the prevalence of non-adequate prenatal care for Connecticut (22.9%) and similar to the prevalence for New London County (13.8%).

**Oral Health.** Several key informants cited oral health and limited access to oral health care as community health concerns. Lack of dental insurance for adults and limited supply of dental providers were two cited challenges. In 2012, the rate of dentists per capita was lower in New London County (65.7 per 100,000 population) relative to Connecticut (77.8 per 100,000 population), with approximately 66 dentists available per 100,000 New London County residents. In 2006-2010 12.7% of New London County adults reported having six or more teeth removed.

**Health Care Access and Utilization.** While residents described primary health care services as relatively accessible in the region, some residents noted that dentists and specialists were more common in higher-income or more populated towns. Residents cited primary care access as a challenge for vulnerable populations, including low-income and elderly residents. Limited access to behavioral health providers for vulnerable populations was also a community concern. The rate of primary care physicians (62.7 per 100,000 population vs. 84.0 per 100,000 population) and mental health providers (310.5 per 100,000 population vs. 334.7 per 100,000 population) per capita was lower in New London County relative to Connecticut. In 2015, half of Norwich (50%) residents reported delaying medical care in the past year because of costs. Also in 2015, 41% of Norwich residents reported use of the hospital emergency room in the past 12 months, compared to only 27% of Connecticut residents

### **Community Resources and Assets**

Residents cited several community resources and strengths, including the “*small town feel*” and sense of community cohesion among residents in the area. Several participants, particularly senior residents, observed services for the senior population and low-income residents as important community resources. Key informants described the local health department as strong and responsive to community health needs. Informants characterized local health care systems and the State of Connecticut as committed to promoting community health.

### **Community Vision for the Future**

Residents identified several areas of opportunity to promote the health of residents across the Uncas Health District. These include addressing the social and health-related needs of the growing senior population, improving the food and physical activity environment in the region at a systems level, strengthening and expanding strategic collaboration to promote community health, and enhancing access to health care.



## Key Themes and Conclusions

There is variation in demographic factors across the communities served by the Uncas Health District. Though some towns are characterized by high levels of household income and education and low levels of poverty, pockets of vulnerable populations exist within the Uncas Health District and towns served by Uncas.

While health-specific data for chronic diseases, mental health, and substance use were not available for all towns, cardiovascular risk patterns in New London County were similar to that for Connecticut. In contrast, mental health profiles and substance use patterns, particularly opioid use, were more acute in New London County relative to Connecticut.

Obesity, lifestyle factors, and behavioral health were key concerns among focus group participants and informants. Informants stressed a need for systems-level strategies to promote healthy eating and physical activity. Informants and participants cited substance use and associated mental health issues as growing concerns in the region.

Access to behavioral health care services is challenging for some; while limited access to oral health care and medical specialists were described as common for residents across the towns served by Uncas Health District.

The Uncas Health District has many strengths that can be leveraged to address key health concerns. Collaborative partnerships are viewed as promising opportunities for identifying each sectors' unique and collaborative contributions to addressing priority health concerns in the region served by Uncas Health District.

## **Uncas Health District 2016 Community Health Assessment**

### **BACKGROUND**

#### **About Uncas Health District**

The Uncas Health District is a non-profit organization that provides local public health services to the municipalities of Bozrah, Griswold, Lebanon, Lisbon, Montville, Norwich, Salem, Sprague, and Voluntown in New London County, Connecticut. Based in Norwich, Connecticut, primary activities of the Uncas Health District include regulatory responsibilities such as monitoring and enforcing public health codes and infectious disease review and follow-up, health outreach and education, and public health emergency preparedness.

#### **Purpose of Uncas Health District Community Health Assessment**

The Uncas Health District is undertaking a community health assessment (CHA) effort to enhance understanding of the health of residents in the communities served by the Uncas Health District and to gain insight regarding how identified health needs are currently being addressed. The overarching goal of the CHA process is to provide a broad portrait of the health of the communities served by Uncas Health District. The CHA will provide a foundation for data-driven community health improvement planning (CHIP) efforts to inform a strategic plan to promote and improve community health.

The Uncas Health District is in the process of applying for public health department accreditation. The CHA and CHIP are important components of the accreditation process established by the Public Health Accreditation Board, the independent non-profit organization that administers the national public health accreditation program. Health Resources in Action (HRIA), a non-profit public health organization, partnered with the Uncas Health District to develop the CHA.

#### **Healthy Connecticut 2020 and Other Community Health Assessments in the Region**

The Uncas Health District CHA is part of a larger focus on assessment and data-driven processes across the state, many in which Uncas Health District leadership and staff are involved. In March 2014, Connecticut published *Healthy Connecticut 2020*, the State Health Assessment. This health assessment provides an overview of the health of residents across Connecticut as well as the magnitude and severity of health issues among specific population sub-groups, such as racial/ethnic and socioeconomic groups, and within particular geographic regions of Connecticut. The State Health Assessment provides a foundation from which many local health departments and health districts can embed their assessment processes.

Uncas Health District leadership and staff have also been involved in several local hospitals' community health assessment processes. Most recently, Backus Hospital completed a CHA in 2015. In June 2016, Lawrence and Memorial (L&M) Hospital published a draft of their CHA. Uncas Health District was a strong collaborative partner in both of these processes. While both of these hospital CHAs covered some Uncas Health District municipalities, their processes did not cover the entirety of the Uncas Health District service area, therefore precipitating the need for Uncas Health District to conduct its own assessment.

## PROCESS AND METHODS

The following section describes the broader lens that guides the CHA approach and how the CHA data were collected and analyzed.

### Study Approach

#### *Community and Stakeholder Engagement Process*

As part of the assessment process, Uncas Health District engaged a number of community and organizational stakeholders. First, Uncas Health District served as a collaborative partner in local hospital assessment processes (Backus Hospital and L&M Hospital) and leveraged its involvement and partnerships in these processes to inform the Uncas Health District assessment. As the Uncas Health District CHA began, Board of Health members and District staff were involved in a 90-minute kick-off webinar led by HRiA to introduce the assessment and planning process and elicit feedback on the approach and methodology. During the data collection process, 31 individuals were engaged through key informant interviews and focus groups to provide their perspectives on community health needs, strengths, and opportunities for the future.

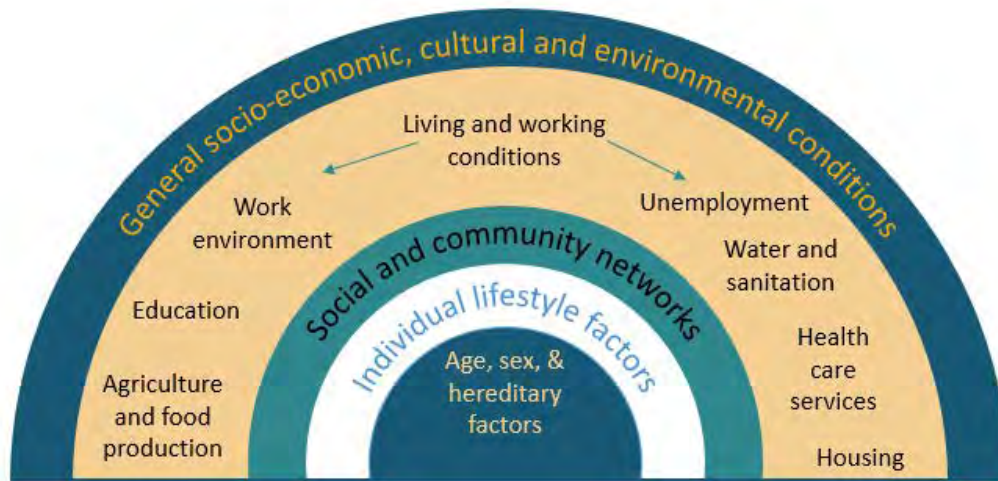
After the CHA preliminary data were collected and analyzed, HRiA presented the findings in June 2016 to a group of 25 stakeholders representing government, public health, health care, social service, and public safety organizations across the region. The stakeholders asked clarifying questions and provided feedback on the CHA findings, which guided the development and revision of the CHA report.

#### *Social Determinants of Health Framework*

The CHA defines health in the broadest terms, recognizing that where we are born, grow, live, work, play, and age, and the connections between these contexts influence health. Numerous factors at multiple intersecting levels shape the health of individuals across the life course and the health of a community. These factors include, for example, lifestyle behaviors (e.g., smoking, diet, and exercise), clinical care (e.g., access to medical services), social and economic factors (e.g., racial/ethnic characteristics, income, unemployment), and the physical environment (e.g., air quality). These factors are, in turn, shaped by upstream factors, such as educational and employment opportunities, economic conditions, quality of the housing stock, and policies and practices that shape each of these contexts. The social determinants of health framework considers both the health of a community overall, as well as the distribution of wellbeing and illness in the community.

Figure 1 provides a visual representation of this framework, illustrating how individual behaviors, which are closest to health outcomes, are shaped by more upstream factors such as housing, employment status, and educational opportunities. While many of the health outcomes data presented in the CHA were not available by sub-group, this CHA is framed by consideration of the social, economic, and environmental contexts that shape the health of communities served by Uncas Health District. As these conditions may change over time, the data in this CHA provide a snapshot of the health of the community.

**Figure 1. Social Determinants of Health Framework**



World Health Organization, Commission on the Social Determinants of Health, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health, 2005. Graphic reformatted by Health Resources in Action.

## Methods

The following section is a brief description of the sources of data used in the CHA.

### Quantitative Methods

Data for the CHA were obtained from several sources. Unless otherwise noted, all data are reported for a calendar year period. The 2010-2014 U.S. Census American Community Survey provided demographic, social, and economic indicators for Connecticut, New London County and the municipalities served by Uncas Health District. Data on deaths, chronic disease risk factors, behavioral health, communicable diseases, reproductive and maternal health, and oral health are from data sources such as the Behavioral Risk Factor Surveillance System (BRFSS) that are managed by the Connecticut Department of Public Health, as well as data managed by the Centers for Disease Control and Prevention and the Department of Health and Human Services. When possible, data were derived directly from these sources. For certain indicators, data from these sources were available through validated databases such as Community Commons and County Health Rankings.

Data regarding the physical (e.g., presence of safe sidewalks and crosswalks) and social (e.g., perceptions of neighborhood safety) contexts of the community are drawn from the DataHaven – Community Wellbeing Survey 2015 (henceforth, *DataHaven Survey*), a telephone survey conducted with a random sample of landlines and cell phones through the state. This survey was administered in April through October 2015. Several communities were oversampled so more granular data could be examined. In Uncas Health District’s service area, the city of Norwich had a robust enough sample size to be reported out specifically. The CHA highlights some key findings from the DataHaven Survey results from Norwich.

### Qualitative Methods

Quantitative data were supplemented by focus groups and interviews. A total of 31 individuals were engaged in key informant interviews (8 people) and focus groups (23 people). Two 90-minute focus groups were conducted with 23 participants overall representing the senior and firefighter/emergency responder populations in the Uncas Health District. Focus group discussions explored perceived health

concerns of the community and those that impacted the participants directly, strengths and assets of the community, barriers to accessing services, gaps that need to be filled, and residents' vision for a healthier community.

Key informant interviews were conducted with eight informants in the communities served by Uncas Health District. The interviews included hospital administrators, local policy makers, and public health administrators, and averaged 40 minutes in length. Key informant discussions explored informants' perspectives on current and emerging health issues in the Uncas Health District, community strengths (including assets and resources), challenges and successes of working in their communities, perceived opportunities to address these needs, and recommendations about important issues to consider in the CHA and CHIP processes.

### *Analysis*

The quantitative data were derived from surveillance data and existing datasets. Due to the small population size for several of the municipalities in the Uncas Health District, several indicators are aggregated over multi-year periods to ensure the calculation of stable estimates and to facilitate a comparison of estimates across geographic jurisdictions (e.g., county-level and city-level). The sponsoring agency of the data (e.g., CT Department of Public Health, U.S. Census) conducted the data analysis of the secondary data.

The qualitative data were coded for main categories and themes that emerged across focus groups and interviews, as well as unique themes that were specific to population subgroups. Selected quotes are presented in the CHA without personal identifying information to illustrate findings within topic areas.

### *Limitations*

As with all data collection processes, there are several limitations related to these assessment indicators that should be noted. Years of the most recent data available differ by data source. For some indicators, 2015 may be the most current year, while 2010 may be the most current year for other indicators. Additionally, indicators are presented for one point in time, so findings should be interpreted as applying to the time point in which the indicators were obtained. Several health indicators were not available at the town level. Health-related data sources that provided local data were not stratified by race/ethnicity, gender, or age due to small sample sizes. Therefore, these data could only be presented for the total population within that geographic region. Finally, survey data based on self-report, such as the DataHaven Survey, should be interpreted with caution. It is possible that some respondents may over- or under-report behaviors and perceptions based on unintended interpretation of the survey question or perceived social stigma. Despite these limitations, most of the self-report indicators for the CHA benefit from the use of validated survey measures.

The focus group and interview data provide valuable insights into residents' and community leaders' perceptions of priority health issues, how social determinants shape community health needs, and opportunities for action to promote community health. However, findings from the qualitative analysis are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Thus, it is possible that these qualitative data offer a limited perspective of the issues discussed.

## COMMUNITY SOCIAL AND ECONOMIC CONTEXT

### Demographic Composition

Several focus group participants and key informants described the Uncas Health District towns as relatively small and characterized the “small town feel” as an asset. Some focus group participants and key informants described the population as “transient.” Participants cited challenging economic conditions, declining employment opportunities, residential instability, and the local casinos as factors that contribute to perceived transience of residents in the region.

The Uncas Health District includes nine towns within New London County, serving an estimated 96,035 residents or approximately one-third of New London County (274,071 residents), based on estimates from the American Community Survey. As shown in Table 1, the largest town served by Uncas Health District, Norwich (40,378 residents), comprised 42% of the population served by Uncas Health District. Another 41% of Uncas Health District’s residents live in the towns of Montville (19,649 residents), Griswold (11,952 residents), and Lebanon (7,314 residents). The towns of Voluntown (2,602 residents), Bozrah (2,631 residents), Sprague (2,993 residents), Salem (4,176 residents), and Lisbon (4,340 residents) constitute 17% of the Uncas Health District population.

*“There are a lot of small towns and everybody knows everybody.” – Focus group participant*

*“The transiency of population in eastern Connecticut seems to be peaking out... We have had casinos that bring people in and out. The socioeconomic conditions of Eastern Connecticut have complicated the lives of people. ... By the time you get people services and referrals, they are moving to a different place because of family situations.” – Key informant*

**Table 1. Population Size, Connecticut, New London County and Towns, 2010-2014**

Geography	Population Size
Connecticut	3,592,053
New London County	274,071
Uncas Health District*	96,035
Bozrah	2,631
Griswold	11,952
Lebanon	7,314
Lisbon	4,340
Montville	19,649
Norwich	40,378
Salem	4,176
Sprague	2,993
Voluntown	2,602

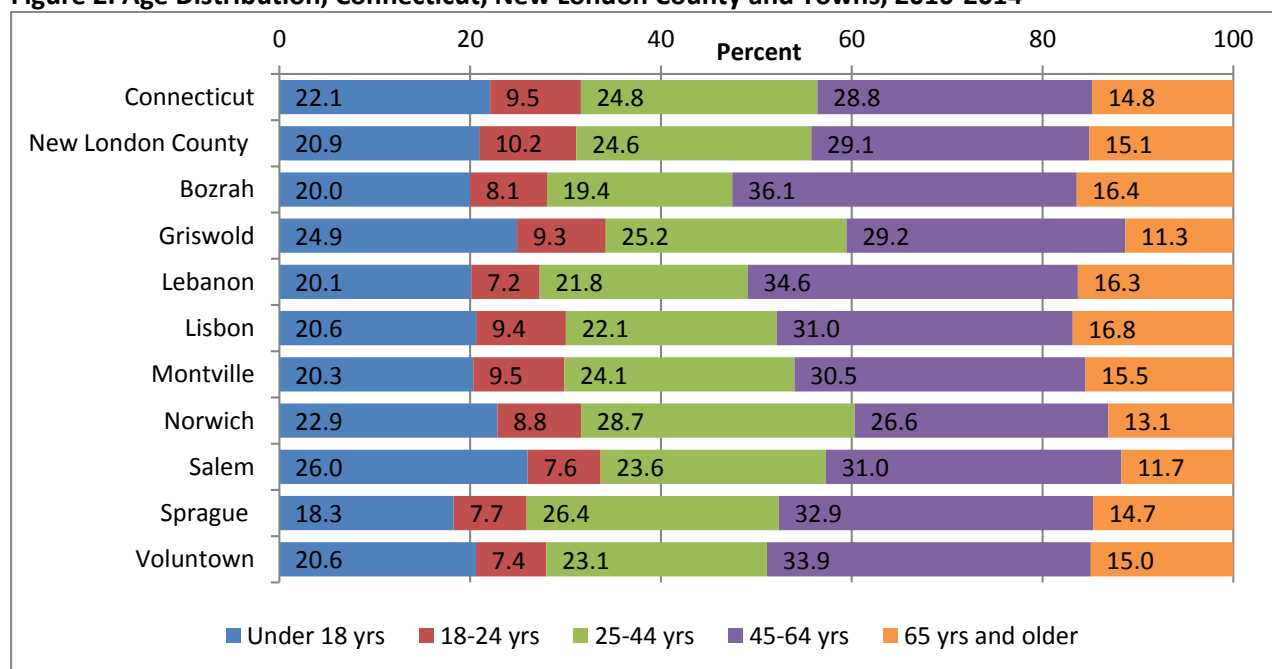
Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Note: \* Indicates population size for entire Uncas Health District community.

Some key informants and many focus group participants perceived a growing “aging population” in the towns served by Uncas Health District. Informants characterized elderly residents as a vulnerable population due to their generally lower incomes and aging-related health concerns. As one key informant remarked, “Many [seniors] are from an economically disadvantaged background that is even more compounded because of issues dealing with elderly health and very low socioeconomic status.” However, senior focus group participants cited community activities and local senior centers as community resources that promote community engagement and senior wellbeing.

As presented in Figure 2, similar to the State of Connecticut, in 2014 across the Uncas Health District approximately two in ten residents were under 18 years of age, nearly one in ten was 18 to 24 years of age, two in ten were aged 25 to 44 years, one in three was aged 45 to 64, and nearly one in seven residents was age 65 or older. The towns of Salem (26.0%) and Griswold (24.9%) had the largest proportion of residents under 18 years of age, while Lisbon (16.8%), Bozrah (16.4%), and Lebanon (16.3%) had the largest proportion of residents age 65 or older.

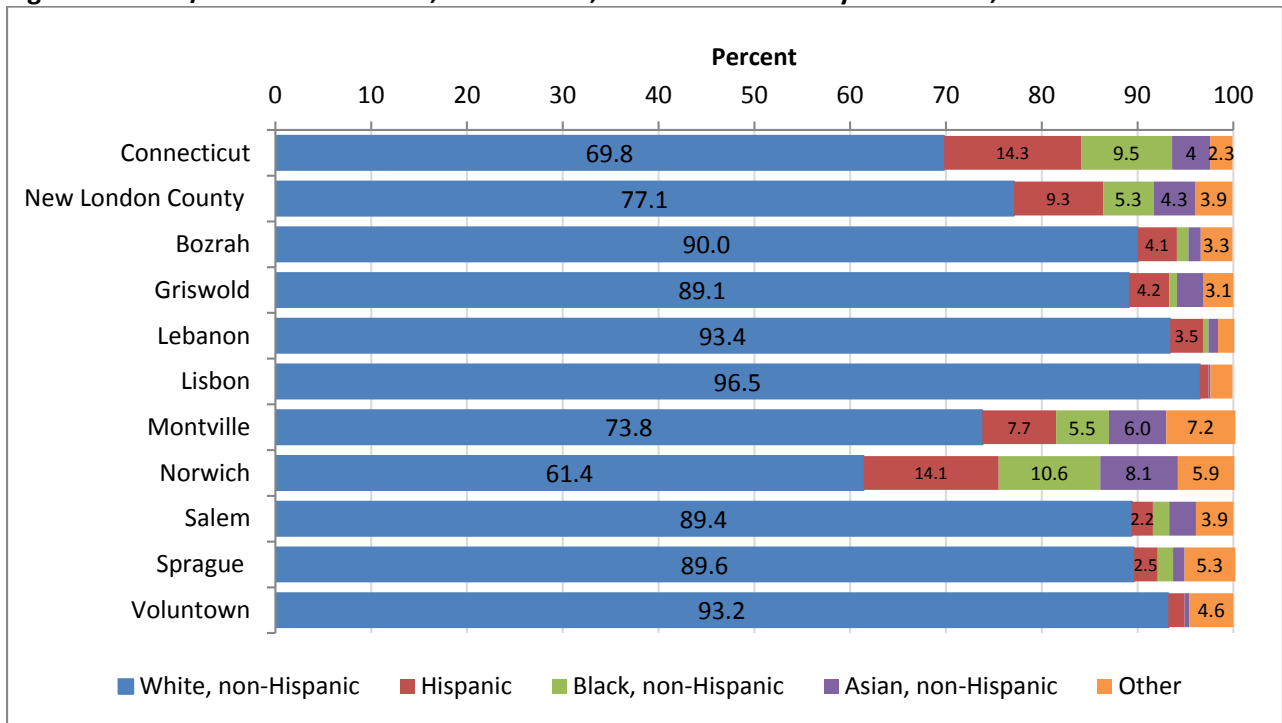
**Figure 2. Age Distribution, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Few key informants and focus group participants described the racial/ethnic composition of the Uncas Health District towns. Overall, the towns served by the Uncas Health District were less racially/ethnically diverse than the State. The towns of Norwich and Montville, the largest towns in the Uncas Health District, had a larger share of residents who identified as non-White (Figure 3). For example, 14.1% of Norwich residents identified as Hispanic, followed by Black, non-Hispanic (10.6%), Asian, non-Hispanic (8.1%), and other racial/ethnic group (5.9%), while 61.4% of Norwich residents identified as White, non-Hispanic. Similarly, in Montville nearly three-quarters of residents identified as White, non-Hispanic (73.8%), while 7.7% self-identified as Hispanic, followed by an Other racial/ethnic group (7.2%), Asian, non-Hispanic (6.0%), and Black, non-Hispanic (5.5%). In contrast, approximately nine in ten residents identified as White, non-Hispanic in the towns of Bozrah, Griswold, Lisbon, Lebanon, Salem, Sprague, and Voluntown.

**Figure 3. Racial/Ethnic Distribution, Connecticut, New London County and Towns, 2010-2014**

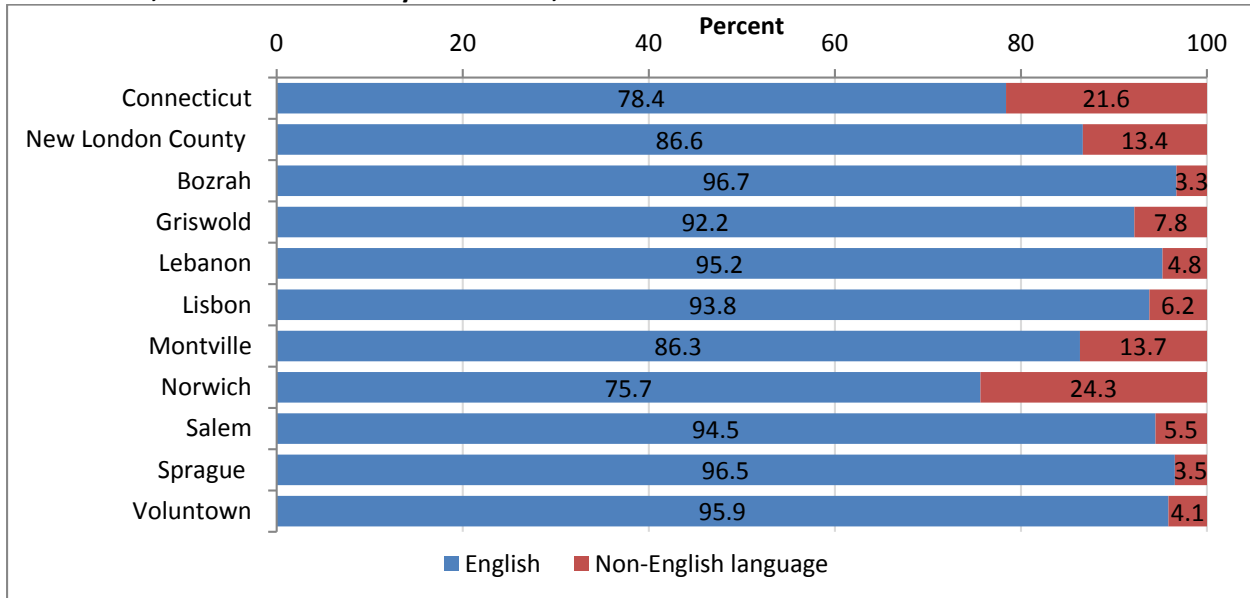


Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Some key informants noted a “growing bilingual population” in the Uncas Health District, with one focus group participant citing that “[there are] so many different languages in our school systems.” Some key informants identified populations for whom English is a second language as a group that may experience barriers to health care. According to the American Community Survey, nearly one in four Norwich (24.3%) residents 5 years of age or older speak a language other than English at home, a proportion that is larger than that for the State (21.6%) (Figure 4). In Montville (13.7%), more than one in ten residents speak a non-English language at home. In contrast, more than 90% of residents in the other towns served by Uncas Health District did not speak a non-English language at home.



**Figure 4. Percent of Population Over 5 Years Who Speak Language Other Than English at Home, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

### Income and Poverty

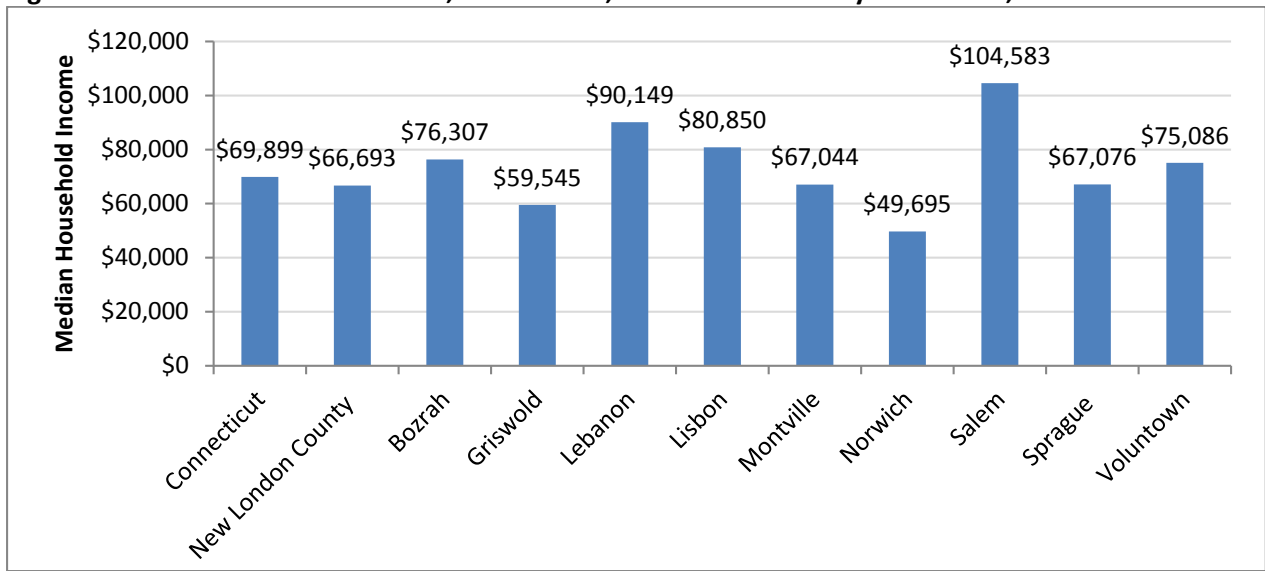
While some focus group participants described a range of income levels in the region, several key informants and focus group participants observed challenging socioeconomic conditions for sizable populations of lower income residents and seniors with fixed incomes. Participants described lower income as contributing to food insecurity and housing instability for residents in the region. Several participants observed few social and economic supports available to lower-income residents of smaller towns in the region.

As shown in Figure 5, the median household income in New London County (\$66,693) was slightly lower than that for Connecticut (\$69,899). The median household income across the towns served by Uncas Health District varied widely from a low of \$49,695 in Norwich, the largest town in the Health District, to \$104,583 in Salem, one of the smallest towns in the Uncas Health District. The towns of Norwich (\$49,695) and Griswold (\$59,545) had median household incomes below that for New London County (\$66,693).

*“As for this community, there’s a lot of people with different ranges of income. There’s wealthy, poor, and homeless [populations].” – Focus group participant*

*“I have to go outside the city to get stuff. I have to leave town to get gas. They moved the soup kitchen out from the center of downtown.” – Focus group participant*

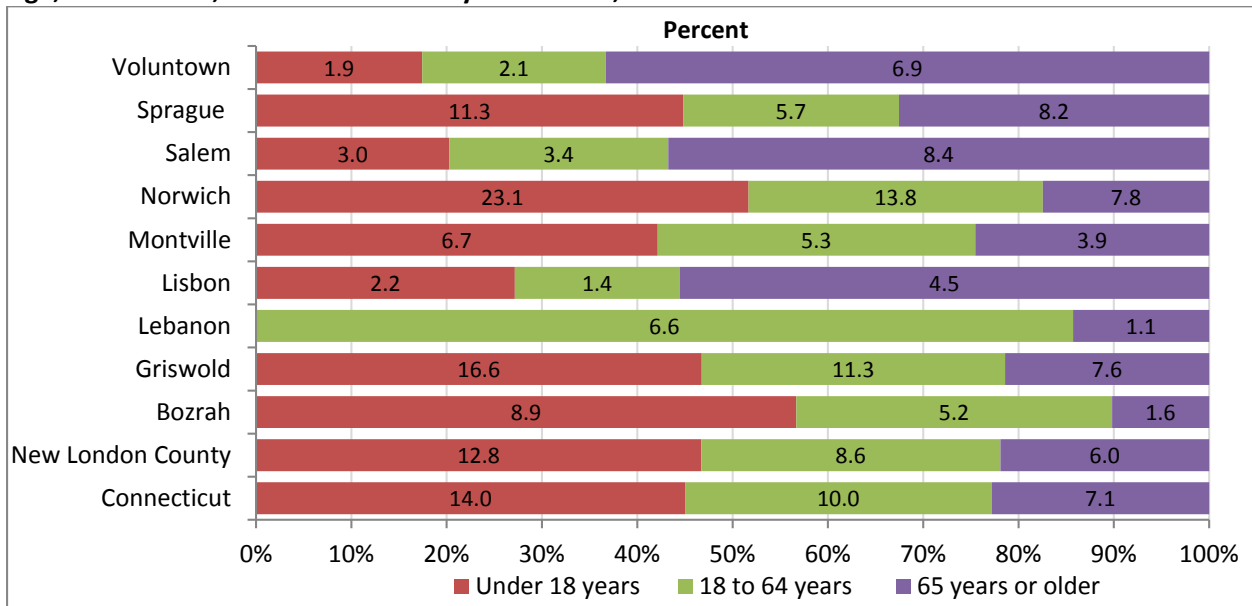
**Figure 5. Median Household Income, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

In 2010-2014, 12.8% of New London County residents less than 18 years of age lived in poverty, classified as having incomes at or below 100% of the federal poverty level (Figure 6), a proportion that was slightly lower than the State (14.0%). Nearly one-quarter of children in Norwich (23.1%) had household incomes below the poverty level, followed by 16.6% of children in Griswold and 11.3% of children in Sprague. The towns of Norwich (13.8%), Griswold (11.3%), and Lebanon (6.6%) had the highest percent of residents aged 18 to 64 with incomes at or below the federal poverty level. The towns of Salem (8.4%), Sprague (8.2%), Norwich (7.8%), and Griswold (7.6%) had the largest share of residents age 65 or older with incomes below the poverty level.

**Figure 6. Percent of Individuals Whose Income in the Past 12 Months is Below the Poverty Level, By Age, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Note: The U.S. Census reports that in Lebanon in 2010-2014, 0% of persons under 18 years of age had incomes below poverty.

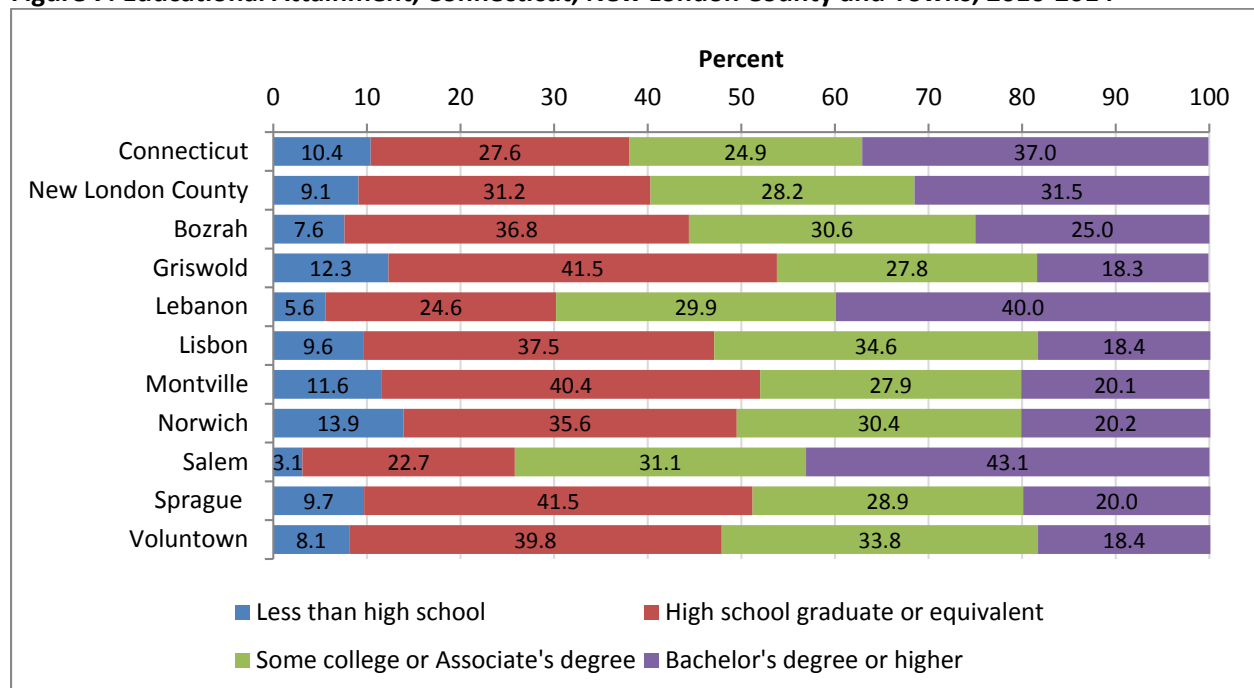
### Educational Attainment and Employment

As shown in Figure 7, in 2010-2014 9.1% of New London County residents had less than a high school education, while approximately three in ten residents had a high school education (31.2%), some college or an Associate’s degree (28.2%), or a college education or higher (31.5%). Relative to the other towns in the Uncas Health District and Connecticut (37.0%), the wealthier towns of Salem (43.1%) and Lebanon (40.0%) had a larger share of residents with a college education or higher, with approximately four in ten residents being college-educated. Similarly, Norwich (13.9%), Griswold (12.3%), and Montville (11.6%) – the towns with the lowest median household incomes – had the largest proportion of residents with less than a high school education.

*“I think people have to travel much farther to work because you have to look farther to look for something in your field. It makes your days longer.”  
– Focus group participant*

*“You wish you had an answer to make the community thrive and it’s not really here.” – Focus group participant*

**Figure 7. Educational Attainment, Connecticut, New London County and Towns, 2010-2014**

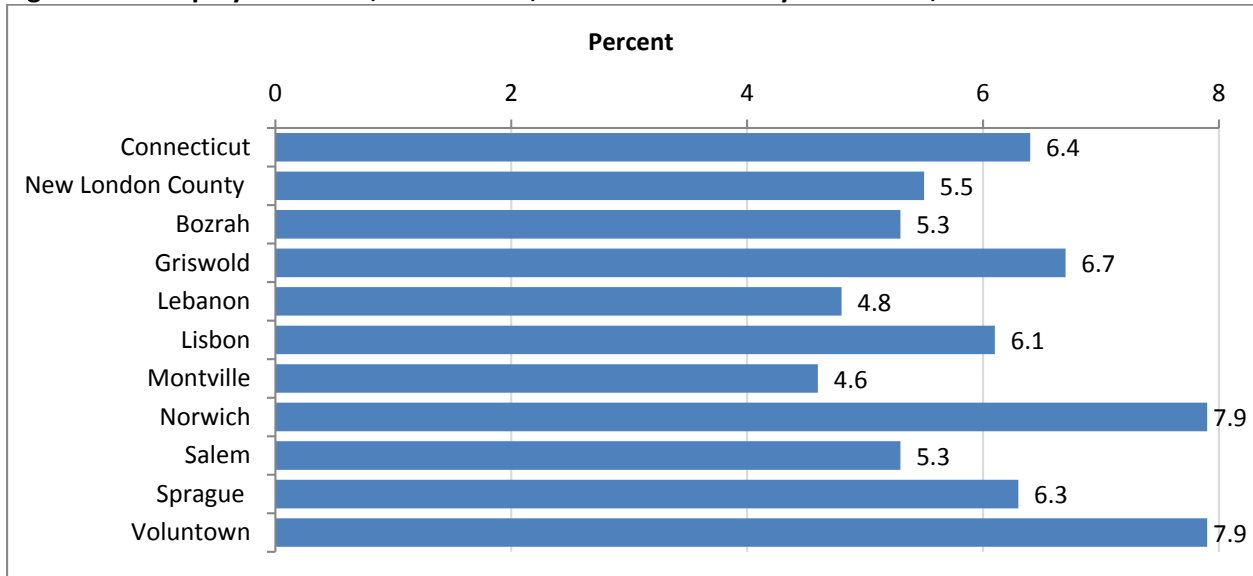


Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Several focus group participants described limited employment opportunities in the Uncas Health District towns as symptomatic of a decline in industry occupations and economic vibrancy of towns in the region. As one focus group commented, *“We used to have a couple mills around here but now employment is poor.”* Some residents’ outlook on the economic opportunity in the area, particularly those in Norwich, was not optimistic. Some participants linked the “transiency” of the population with variable employment opportunities in the region.

As shown in Figure 8, in 2010-2014 the unemployment rate among persons 16 years of age and older ranged from a low of 4.6% in Montville to a high of 7.9% in Norwich and Voluntown. The towns of Norwich, (7.9%), Voluntown (7.9%), and Griswold (6.7%) had unemployment rates that exceeded that for New London County (5.5%) and Connecticut (6.4%). The towns of Sprague (6.3%) and Lisbon (6.1%) had unemployment rates between that for New London County (5.5%) and Connecticut (6.4%).

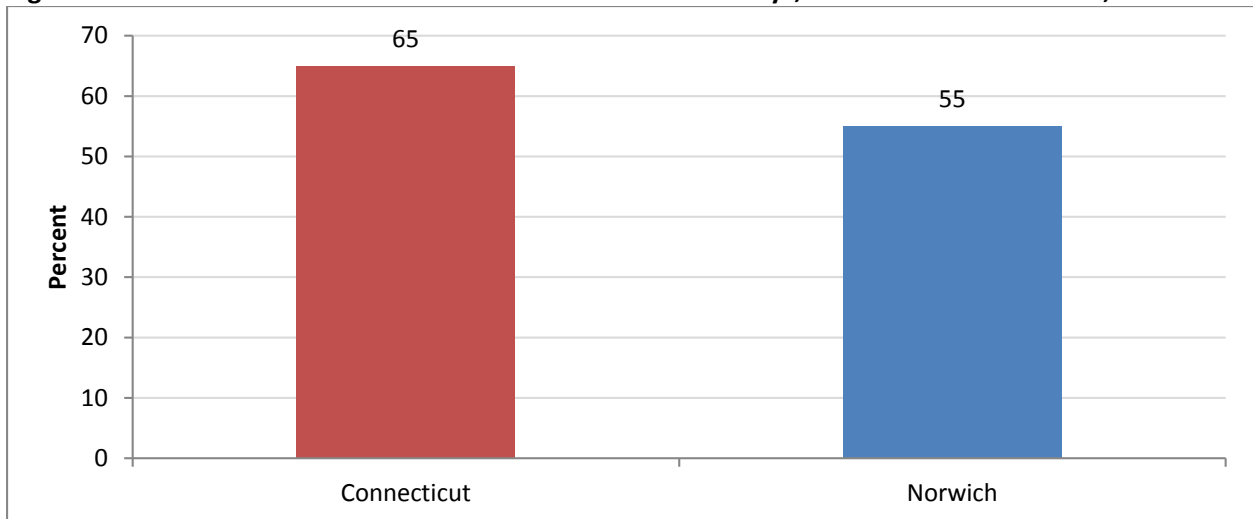
**Figure 8. Unemployment Rate, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

According to the DataHaven Survey, in 2015 slightly over half of Norwich residents (55%) reported having a job in the past thirty days, compared to nearly three-quarters of Connecticut residents (65%) (Figure 9).

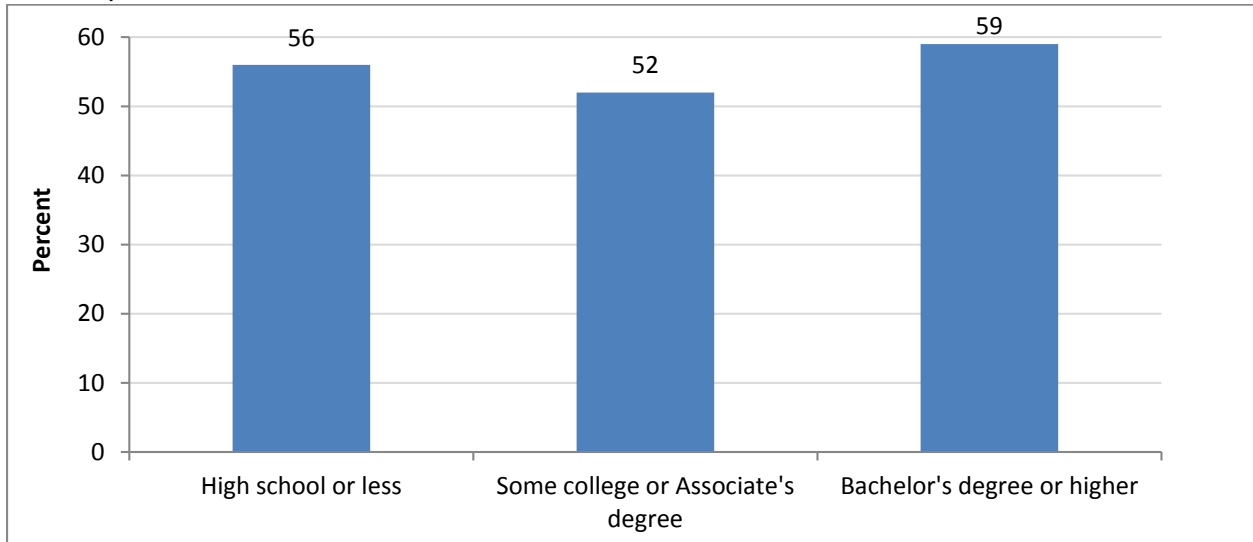
**Figure 9. Percent of Residents Who Had a Job in the Past 30 Days, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As shown in Figure 10, the DataHaven Survey indicates that in Norwich current employment ranged from 52% among residents with some college education to a high of 59% among residents with at least a college degree.

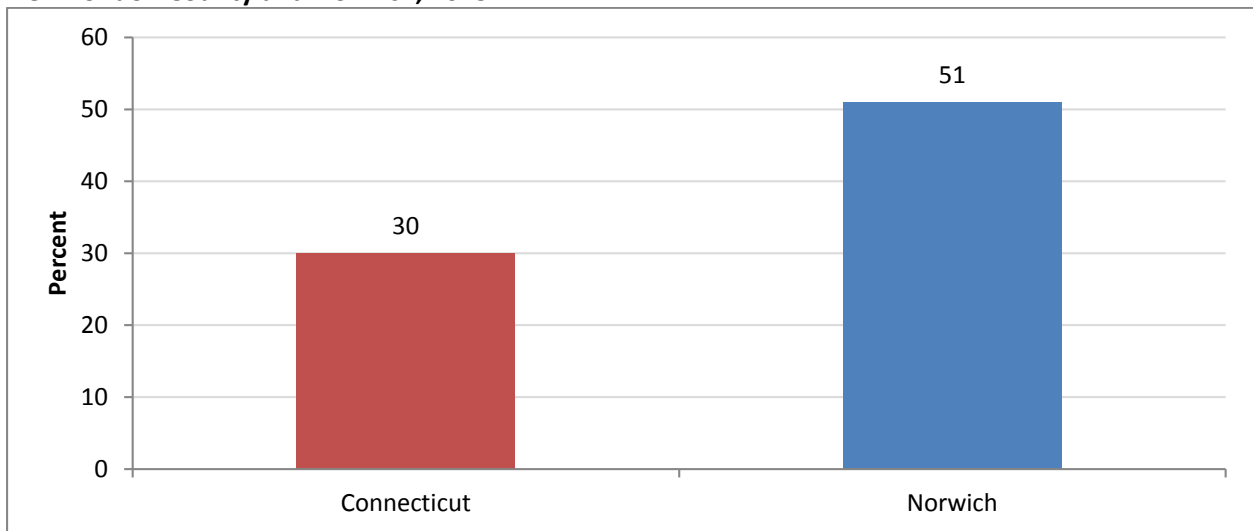
**Figure 10. Percent of Residents Who Had a Job in the Past 30 Days, by Educational Attainment, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

According to the DataHaven Survey, in 2015 approximately half of Norwich (51%) residents who were employed part-time indicated an interest in full-time employment, compared to 30% of Connecticut residents who were working part-time (Figure 11).

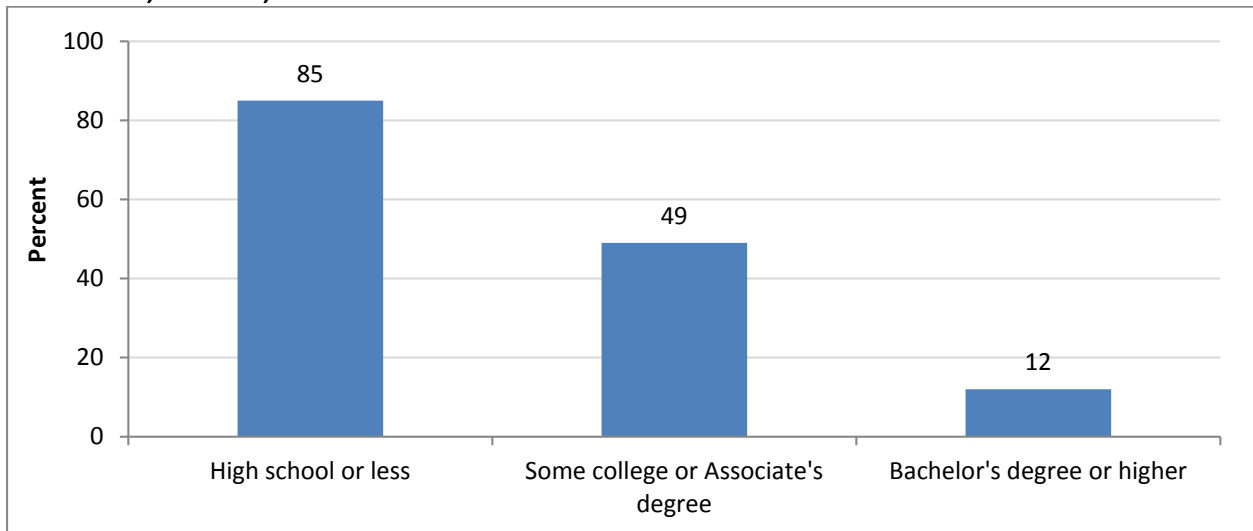
**Figure 11. Percent of Part-Time Employed Residents Wanting Full-Time Employment, Connecticut, New London County and Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In 2015 there was an educational gradient in the percent of Norwich residents who worked part-time and desired full-time employment: 85% of those with a high school education or less preferred full-time employment, followed by 49% of residents with some college education, and only 12% of those with a college education (Figure 12).

**Figure 12. Percent of Part-Time Employed Residents Wanting Full-Time Employment, by Educational Attainment, Norwich, 2015**



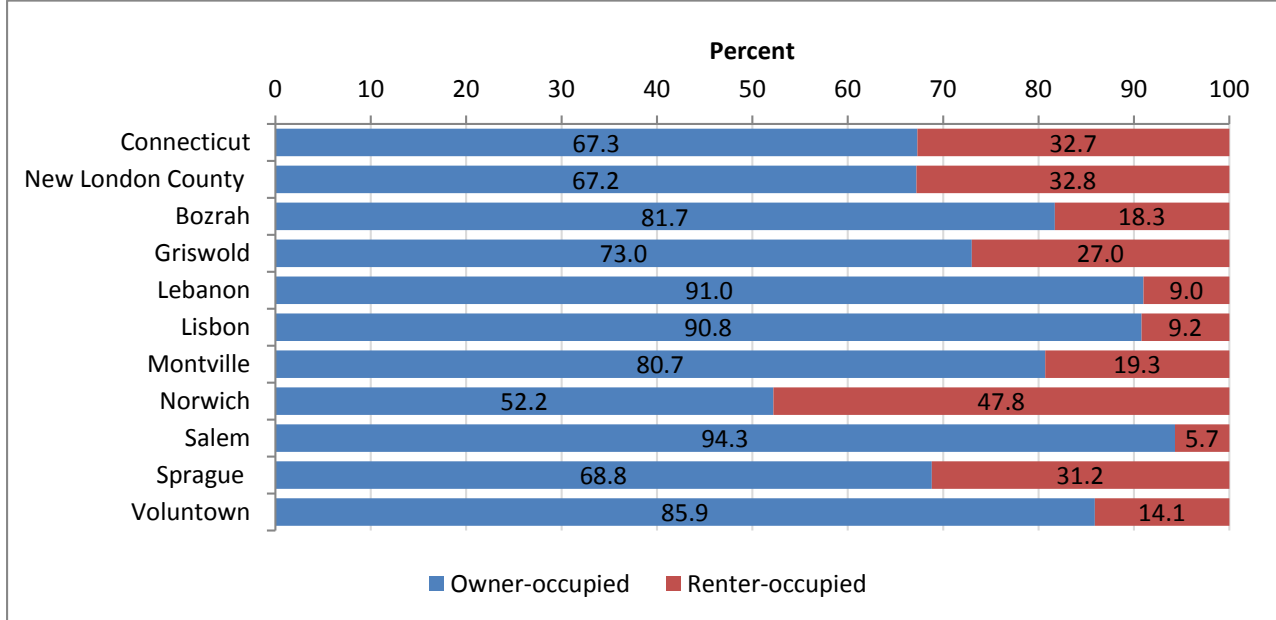
Data Source: DataHaven - Community Wellbeing Survey, 2015.

## Housing

A few participants in discussions noted abandoned houses and transient housing conditions as housing-related concerns in the region. *"Homes are getting abandoned. It deters businesses and families from moving here,"* as one focus group participant noted, connecting the issue of housing and economic viability.

With homeownership being an indicator of economic stability, data indicate that the distribution of owner-occupied vs. renter-occupied units varies across the region. As shown in Figure 13, similar to Connecticut (67.3%), approximately two-thirds of New London County (67.2%) housing units were owner-occupied. The towns of Norwich (47.8%), Sprague (31.2%), and Griswold (27.0%) – towns in the Uncas Health District with the lowest median household incomes – had the largest proportion of housing units occupied by renters. The higher income towns of Salem (5.7%), Lebanon (9.0%), and Lisbon (9.2%) had the lowest percent of housing units occupied by renters.

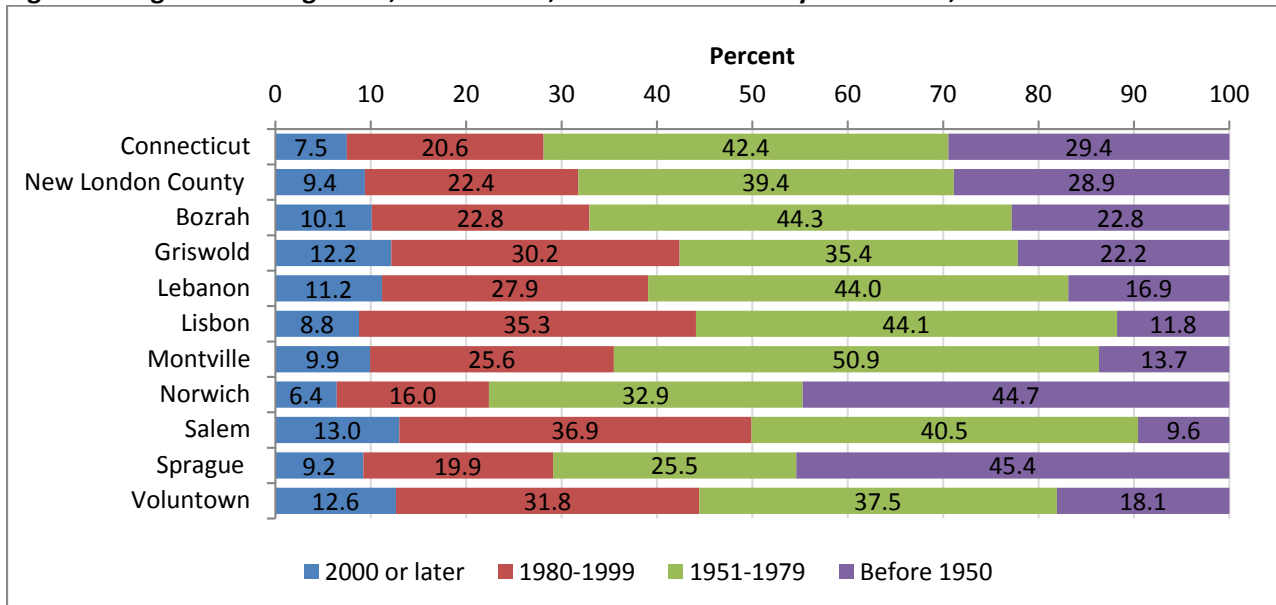
**Figure 13. Percent of Housing Units Occupied by Homeowners and Renters, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

Another indicator of economic development is the age of housing stock. In 2010-2014, 28.9% of housing units in New London County were constructed before 1950, while only 9.4% were constructed in 2000 or later, similar to the age of the housing stock for Connecticut overall (Figure 14). Approximately four in ten houses in Sprague (45.4%) and Norwich (44.7%) were constructed before 1950 – the largest proportion for the towns served by Uncas Health District.

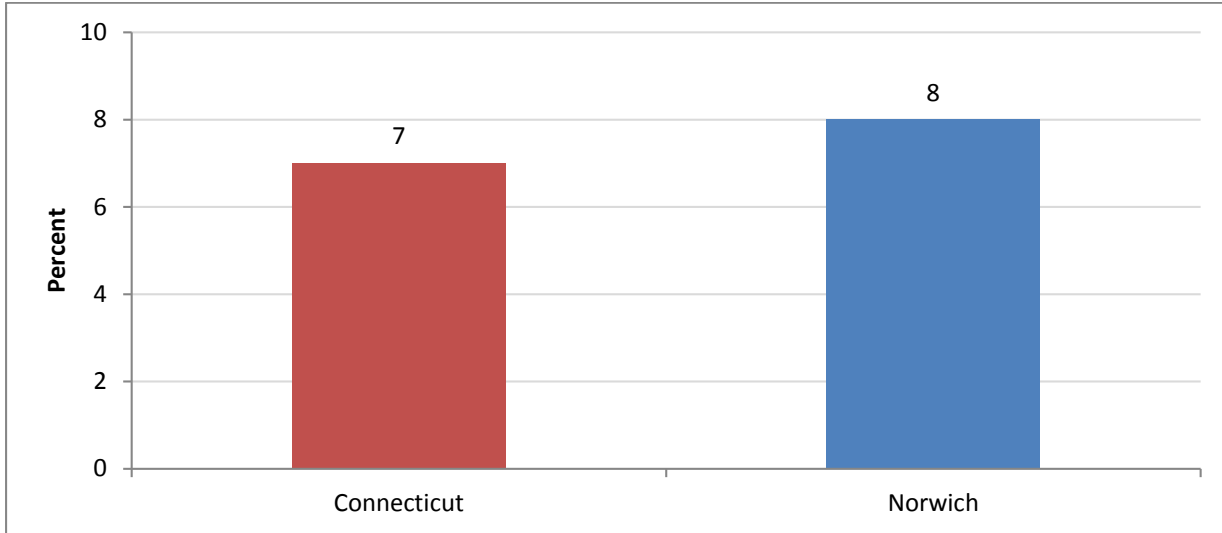
**Figure 14. Age of Housing Stock, Connecticut, New London County and Towns, 2010-2014**



Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

As shown in Figure 15, according to the DataHaven Survey a similar proportion of Norwich residents (8%) as Connecticut residents (7%) reported living at their residence for less than one year.

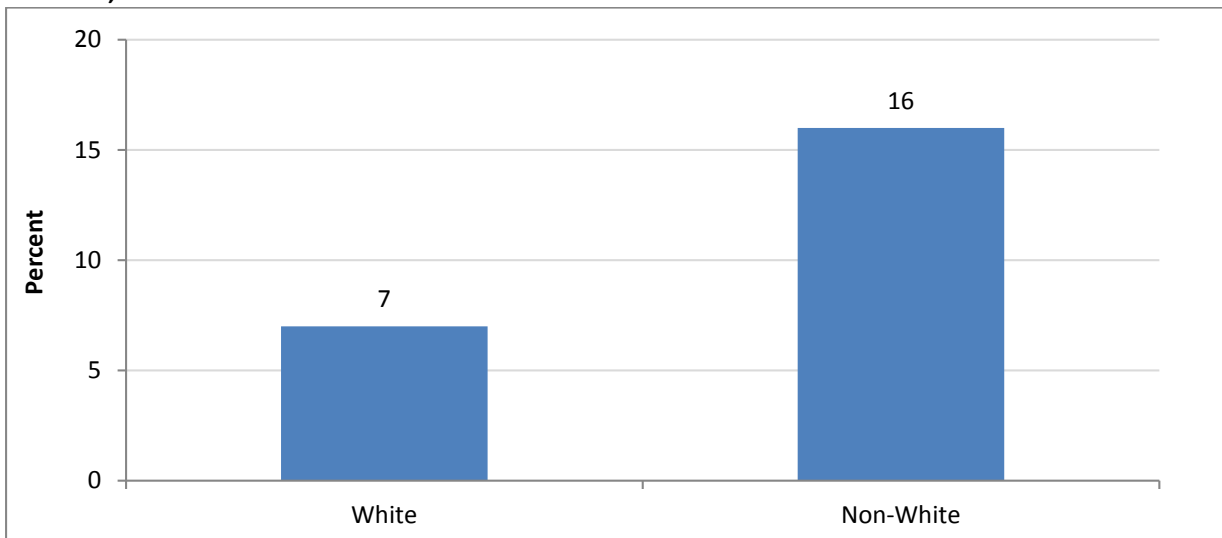
**Figure 15. Percent of Residents Who Lived at Their Residence for Less than One Year, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In 2015, in Norwich a smaller proportion of White residents (7%) compared to non-White residents (16%) reported living at their residence for less than one year (Figure 16).

**Figure 16. Percent of Residents Who Lived at Their Residence for Less than One Year, by Race, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.



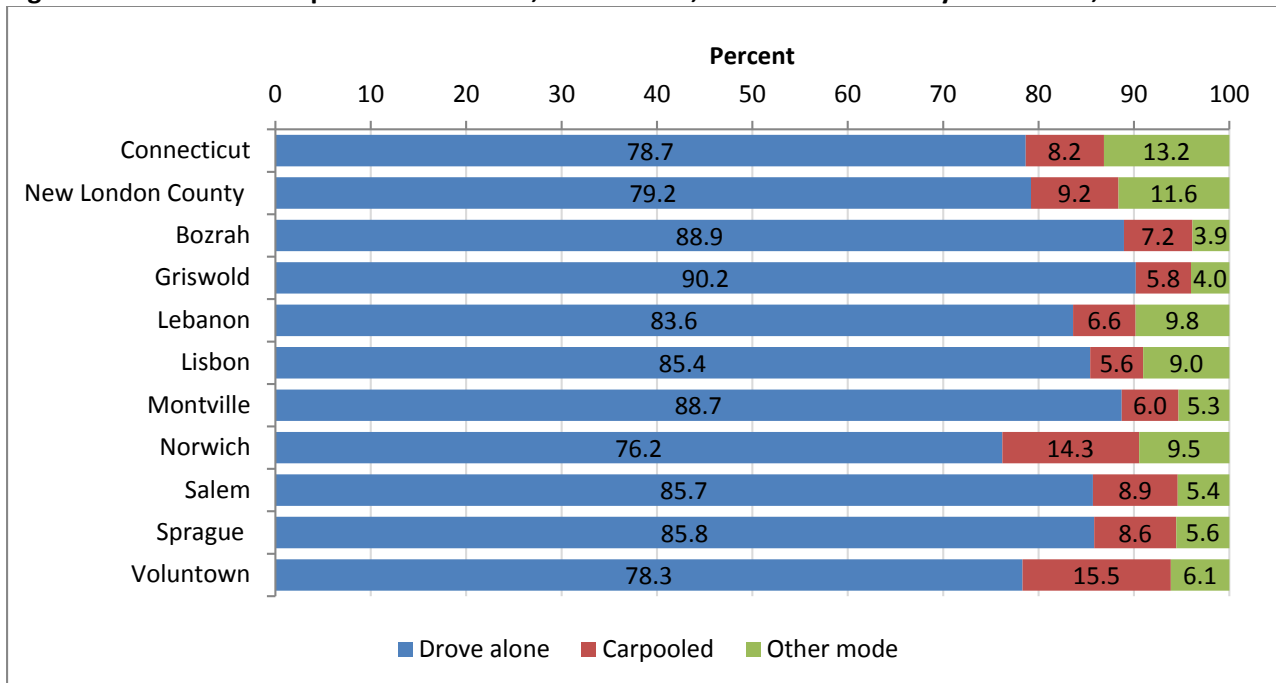
## Transportation

A few of the focus group and interview participants noted that public transportation seemed to be more available in towns outside of the Uncas Health District, while few noted alternative transportation options in the towns served by the Uncas Health District, particularly for vulnerable populations such as senior and low-income residents. For example, one key informant remarked, “[The] elderly who are part of the senior center and live in Norwich have access to transportation, but it’s specific to elderly and they have to live in Norwich. What about those in other communities?”

“Many people need to travel out of town for provider services and people who don’t have cars experience a big challenge. Many elderly don’t have family around to help them with transportation and they have a real challenge getting around.” – Key informant

The majority of residents across towns served by Uncas Health District drove alone or carpooled to work (Figure 17). Griswold (90.2%) had the highest proportion of residents who drove alone to work, while Norwich (76.2%) and Voluntown (78.3%) had the smallest percent. The towns of Voluntown (15.5%) and Norwich (14.3%) had the largest percent of residents who carpooled to work. Lebanon (9.8%), Norwich (9.5%), and Lisbon (9.0%) had the largest proportion of residents who used another mode of transportation to work, such as public transportation, walking, taking a cab or cycling, or working from home.

**Figure 17. Mode of Transportation to Work, Connecticut, New London County and Towns, 2010-2014**

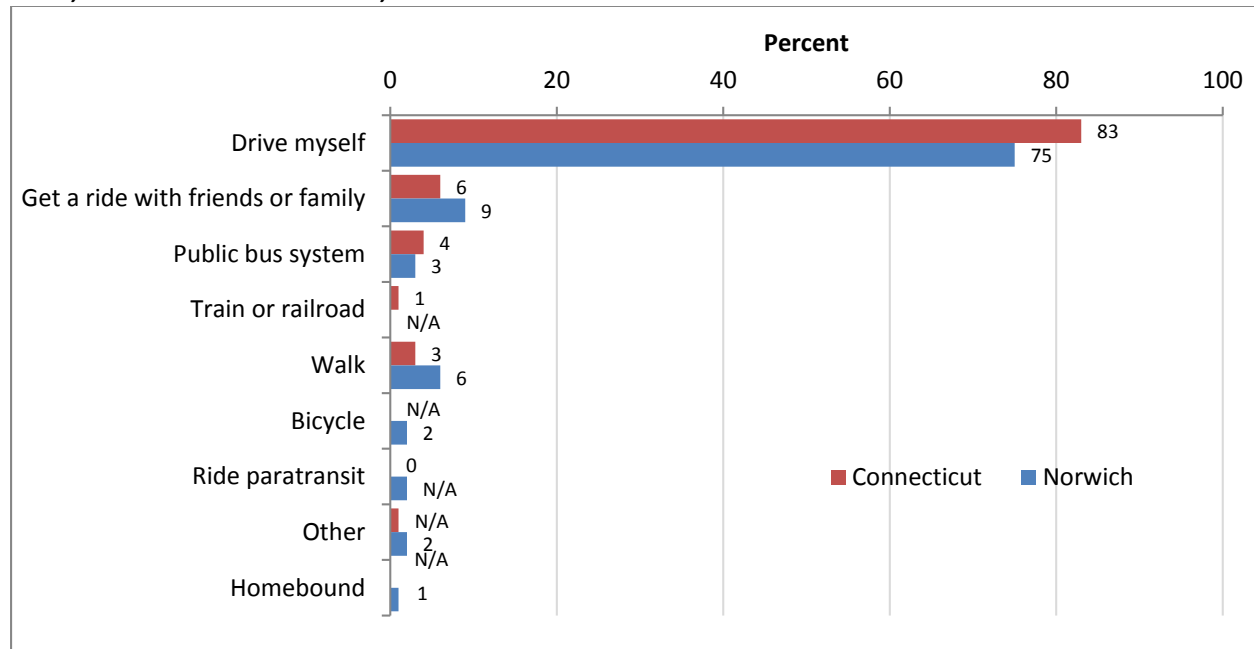


Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014.

As illustrated in Figure 18, according to the DataHaven Survey, similar to American Community Survey estimates, three-quarters of Norwich residents reported driving themselves as the primary means of transportation to work, school, or another location where they spent most of their time. This was slightly lower than the prevalence of driving one’s self as reported among Connecticut residents (83%).

Getting a ride with friends or family (9%), and walking (6%) were the second and third most common means of transportation, respectively, for Norwich residents.

**Figure 18. Primary Means of Transportation to Work, School, or Other Place Where Spend Most of Time, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

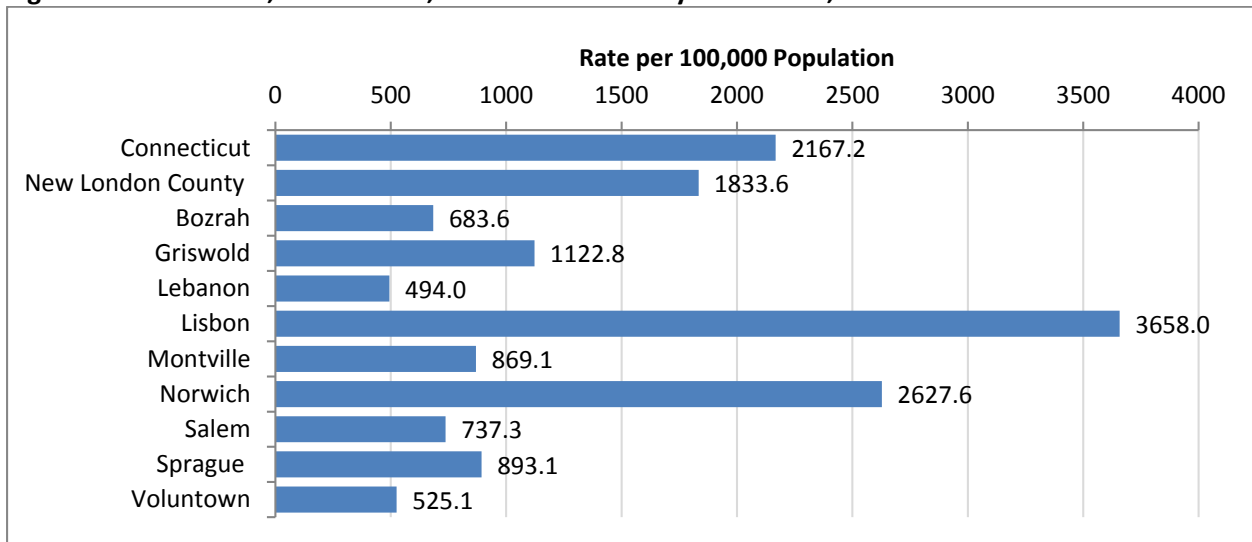
Note: N/A indicates does not apply due to limited responses in the category.

## Crime and Violence

Some key informants and focus group participants described drug dealing, including the distribution of opioids, as concerns in the region. A few participants also discussed a connection between mental illness and crime in the area, which they attributed to gaps in mental health services in the region. In 2014, the crime rate in the towns of Lisbon (3,658.0 per 100,000 population) and Norwich (2,627.6 per 100,000 population) exceeded that for Connecticut (2,167.2 per 100,000 population). The crime rate in the Uncas Health District towns ranged from a high of 3,658.0 per 100,000 population in Lisbon<sup>1</sup> and 2,627.6 per 100,000 population in Norwich, to a low of 494.0 per 100,000 population in Lebanon (Figure 19).

<sup>1</sup> Note: In 2014, 88% of reported offenses in Lisbon were attributed to larceny.

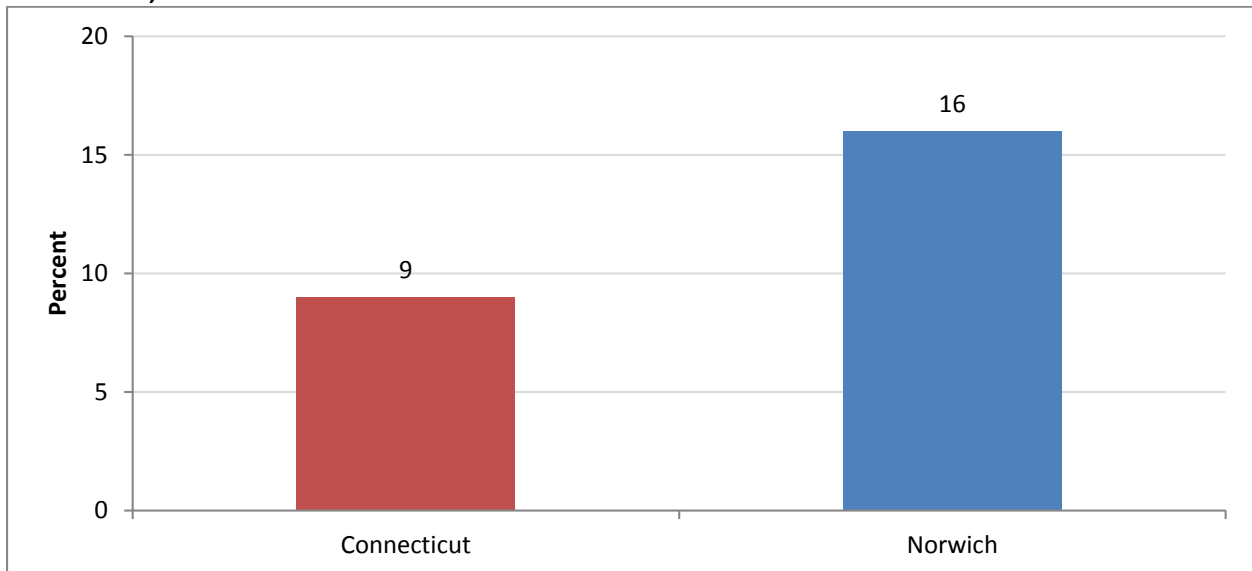
**Figure 19. Crime Rate, Connecticut, New London County and Towns, 2014**



Data Source: Connecticut Uniform Crime Report, 2014.

In 2015 16% of Norwich residents reported an experience of vandalization, theft, or a break-in in the past year, compared to 9% of Connecticut residents, as reported in the DataHaven Survey (Figure 20).

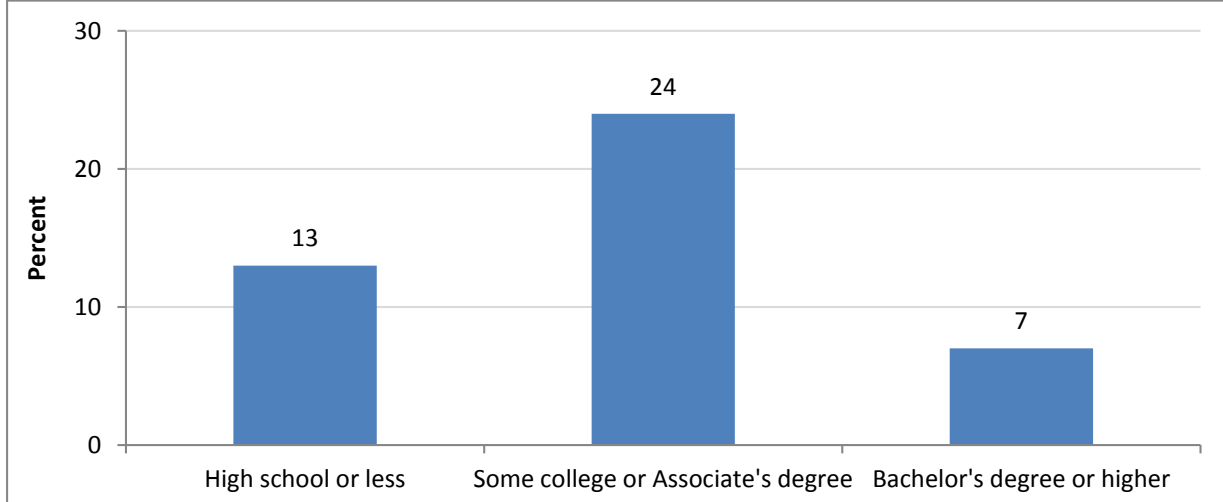
**Figure 20. Percent of Residents Reporting a Vandalization, Theft, or Break-In in Past Year, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As shown in Figure 21, in Norwich approximately one-quarter of residents with some college education (24%) reported a vandalization, theft or break-in compared, followed by 13% of residents with a high school education or less and 7% of residents with a college education or higher.

**Figure 21. Percent of Residents Reporting a Vandalization, Theft, or Break-In in Past Year, by Educational Attainment, Norwich, 2015**

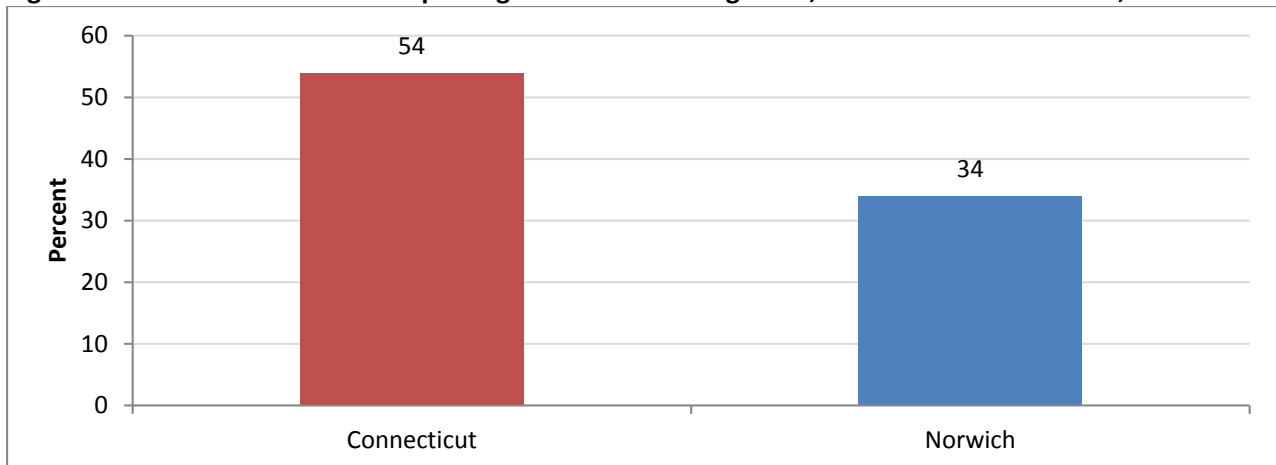


Data Source: DataHaven - Community Wellbeing Survey, 2015.

### *Social Cohesion*

As shown in Figure 22, approximately one-third of Norwich (34%) residents strongly agreed that they could trust their neighbors, compared to nearly half of Connecticut residents (54%).

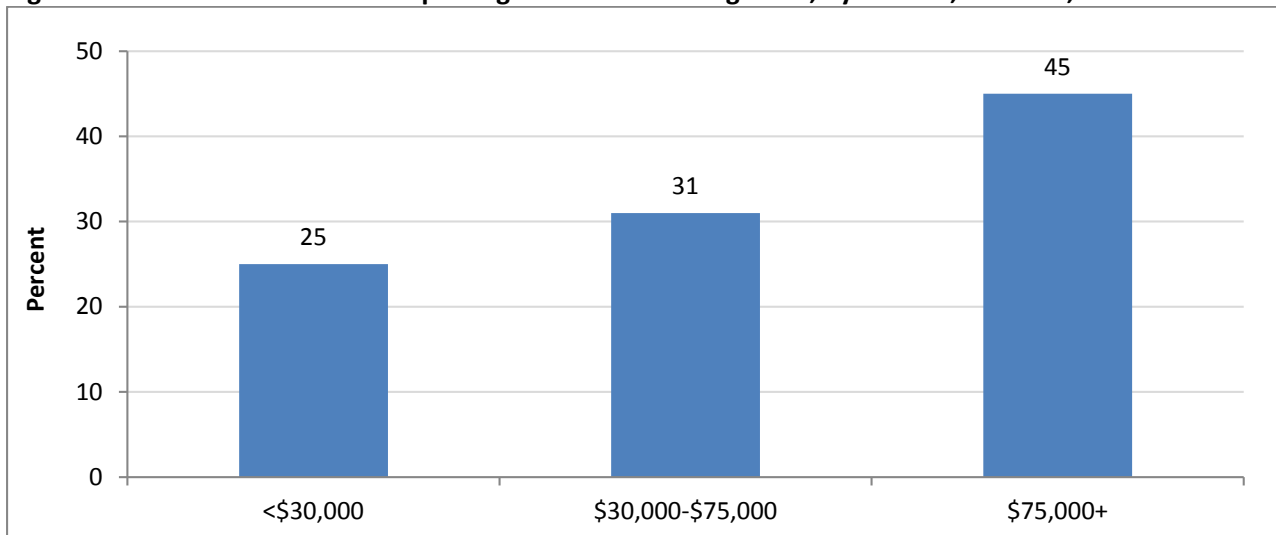
**Figure 22. Percent of Residents Reporting Trust in Their Neighbors, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In Norwich, the percent of residents reporting that they trusted their neighbors increased with income (Figure 23). In 2015 one-quarter of residents with incomes below \$30,000 (25%) strongly agreed that they trusted their neighbors, followed by 31% of residents with incomes between \$30,000-\$75,000, and 45% of residents with incomes above \$75,000.

**Figure 23. Percent of Residents Reporting Trust in Their Neighbors, by Income, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

## HEALTH OUTCOMES AND BEHAVIORS

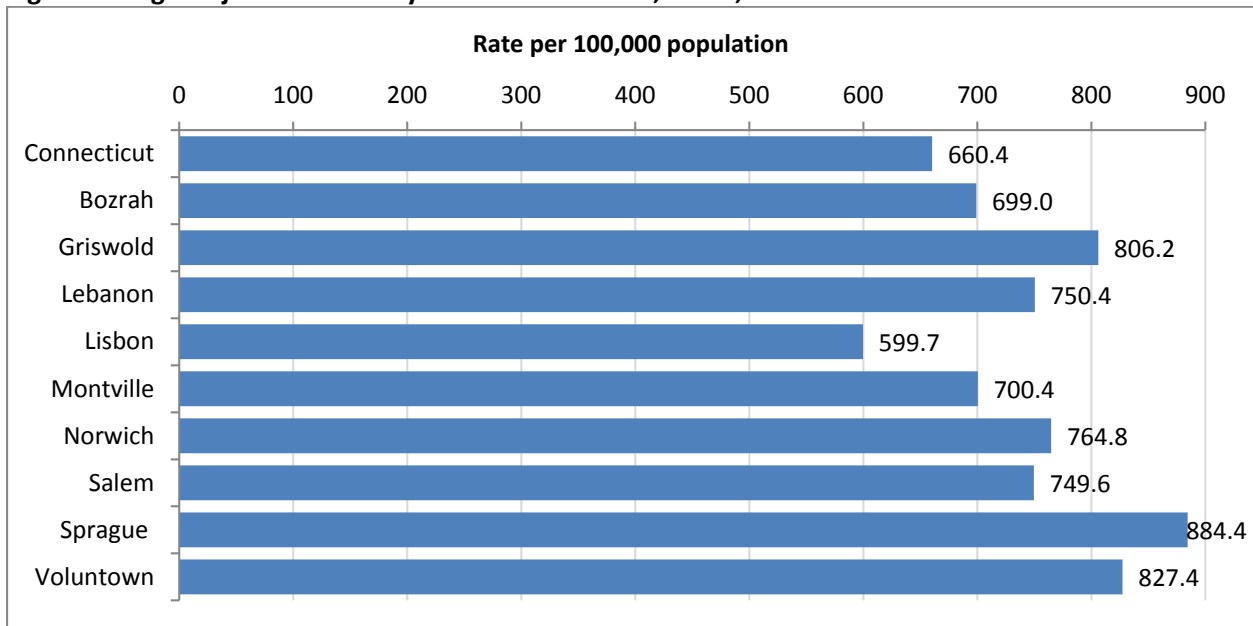
### Overview of Community Health Status

Residents of the Uncas Health District communities experience a broad range of health outcomes and associated risk factors. Many of the demographic factors described earlier such as income, mode of transportation, and crime each shape community health, including mortality, chronic disease, behavioral health, communicable disease, maternal and child health, and oral health.

### Overall Leading Causes of Death

Over the 2008 to 2012 period, the age-adjusted mortality rate for all causes was highest in the towns of Sprague (884.4 per 100,000 population), Voluntown (827.4 per 100,000 population), and Griswold (806.2 per 100,000 population) (Figure 24). The all-cause mortality rate was lowest in Lisbon (599.7 per 100,000 population), a rate that was 28% lower than that for Sprague. Lisbon was the only town served by the Uncas Health District with an age-adjusted all-cause mortality rate that was below that for Connecticut (660.4 per 100,000 population).

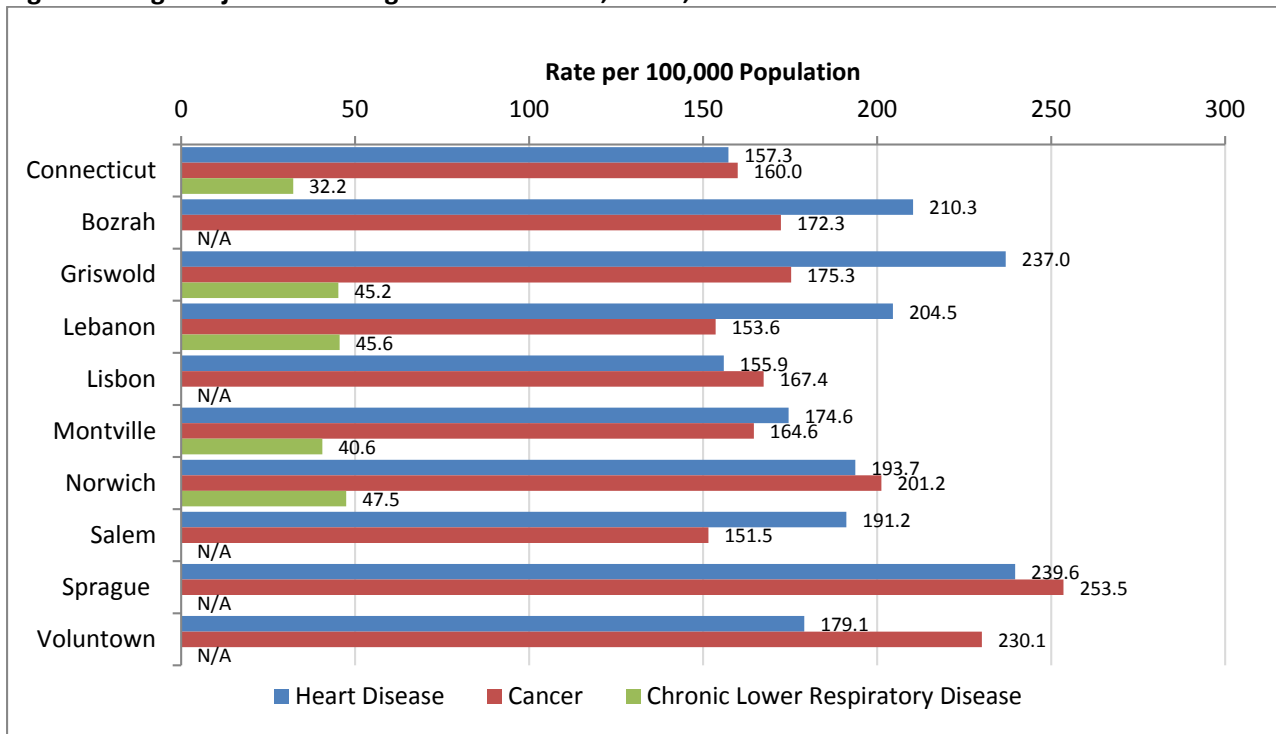
**Figure 24. Age-Adjusted Mortality Rate for All Causes, Town, 2008-2012**



Data Source: Connecticut DPH, Age-Adjusted Mortality Rate Report, By Town, 2008-2012.

Figure 25 presents the age-adjusted mortality rates for cancer, heart disease, and chronic lower respiratory disease, the leading causes of death across the Uncas Health District towns. Lebanon (153.6 per 100,000 population) and Salem (151.5 per 100,000 population) were the only towns in the Uncas Health District with a cancer mortality rate that was below that for Connecticut (160.0 per 100,000 population). The towns of Sprague (253.5 per 100,000 population), Voluntown (230.1 per 100,000 population), and Norwich (201.2 per 100,000 population) had the highest rates of death attributed to cancer. With the exception of the town of Lisbon (155.9 per 100,000) the towns served by the Uncas Health District had heart disease mortality rates that exceeded that for Connecticut (157.3 per 100,000 population) in 2008-2012. The rate of death due to heart disease was highest in the towns of Sprague (239.6 per 100,000 population), Griswold (237.0 per 100,000 population), and Bozrah (210.3 per 100,000 population). Among towns for which the rate of death due to chronic lower respiratory disease was available, the chronic lower respiratory disease mortality rate ranged from a low of 40.6 per 100,000 population in Montville to a high of 47.5 per 100,000 population in Norwich, rates that exceeded that for Connecticut (32.2 per 100,000 population).

**Figure 25. Age-Adjusted Leading Causes of Death, Town, 2008-2012**



Data Source: Connecticut DPH, Age-Adjusted Mortality Rate Report, By Town, 2008-2012.

Note: N/A indicates data not available.

## Chronic Diseases and Related Risk Factors

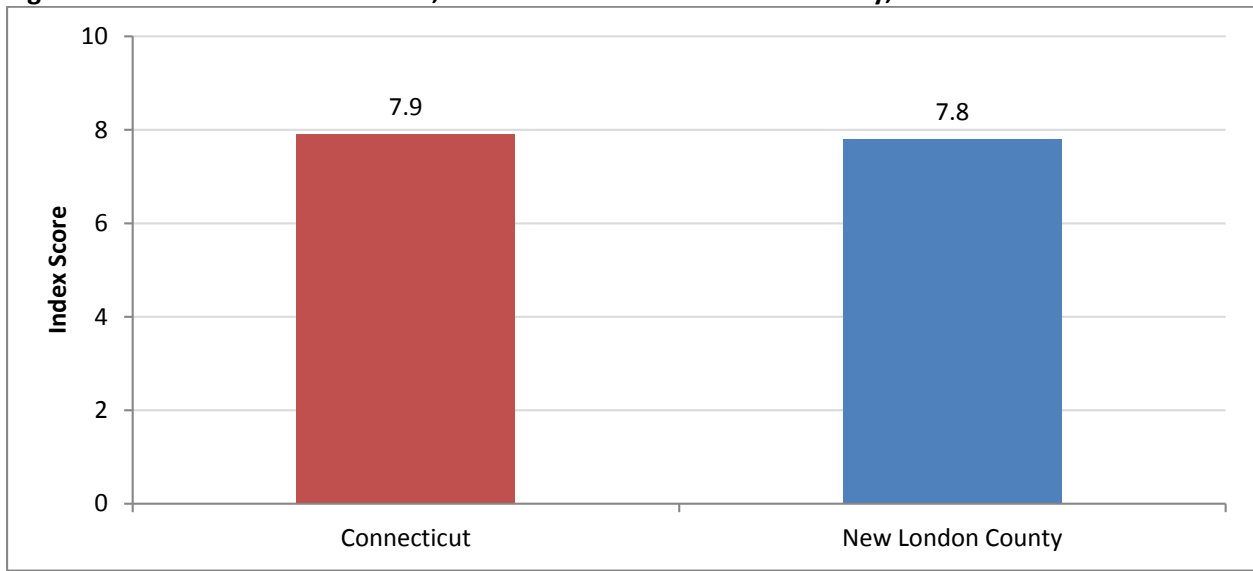
### Healthy Eating and Physical Activity

Residents described a need to improve the healthy food environment in the towns served by Uncas Health District. Several informants and focus group participants described food insecurity as a common health concern for low-income residents. Some focus group participants described frequent use of food pantries among residents: *“A lot of people use the food pantry.”* Focus group participants also cited a desire for more grocery stores and access to healthy, locally sourced foods.

*“Healthy food means more health and [fewer] trips to the emergency room.”*  
 – Focus group participant

The food environment index measures several aspects of the healthy food environment, including estimates of the proportion of the population who did not have access to a reliable source of food during the past year and the percent of the low-income population who does not live close to a grocery store. As shown in Figure 26, in 2012-2014 the food environment index score in New London County (7.8) was similar to the index score for Connecticut (7.9), indicating a moderately favorable context of access to healthy food for residents of New London County.

**Figure 26. Food Environment Index, Connecticut vs. New London County, 2012-2014**

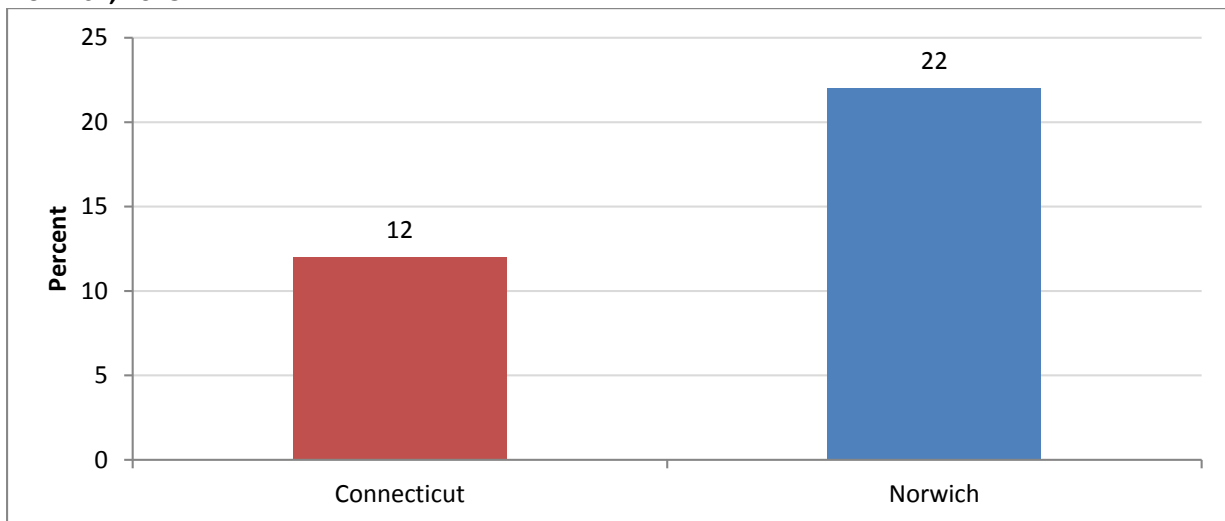


Data Source: U.S. Department of Agriculture, 2012 & 2014; As reported in County Health Rankings.

Note: Index based on limited access to healthy food & food insecurity estimates; Range: 0 (worst) to 10 (best).

DataHaven Survey estimates indicate that in 2015 approximately two in ten Norwich (22%) residents reported not having enough money to purchase food that they or their family needed, compared to one in ten Connecticut residents (12%) (Figure 27).

**Figure 27. Percent Reporting Did Not Have Enough Money for Food in Past Year, Connecticut vs. Norwich, 2015**

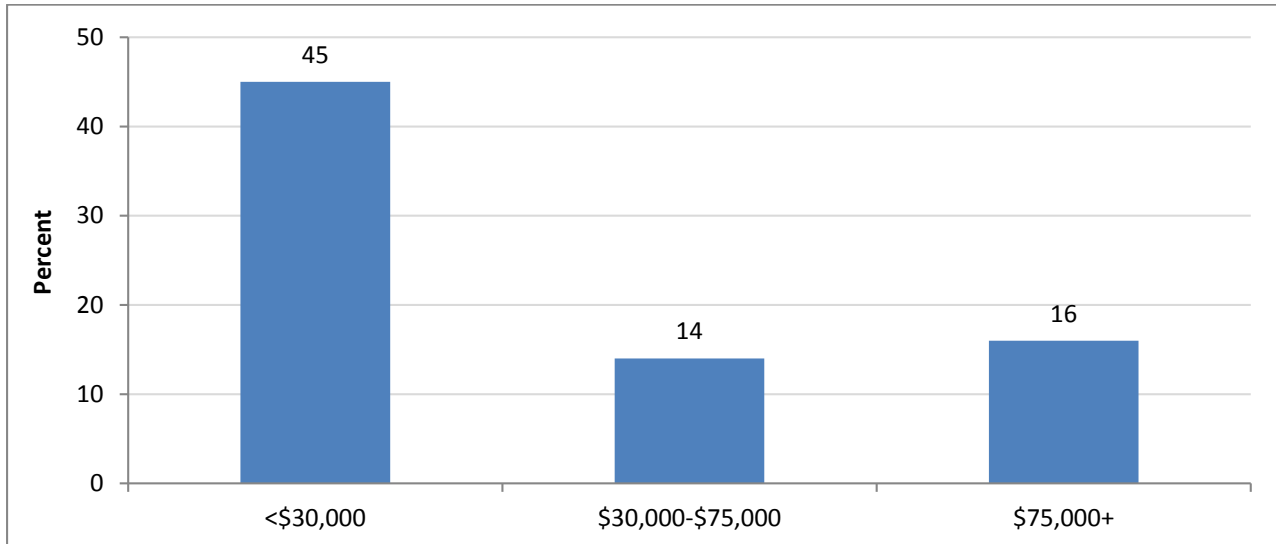


Data Source: DataHaven - Community Wellbeing Survey, 2015.



As shown in Figure 28, in 2015 45% of Norwich residents with incomes below \$30,000 reported that they did not have enough money for food in the past year. A smaller proportion of residents with incomes between \$30,000-\$75,000 (14%) and incomes above \$75,000 (16%) reported having insufficient money for food in the past year.

**Figure 28. Percent Reporting Did Not Have Enough Money for Food in Past Year, by Income, Norwich, 2015**

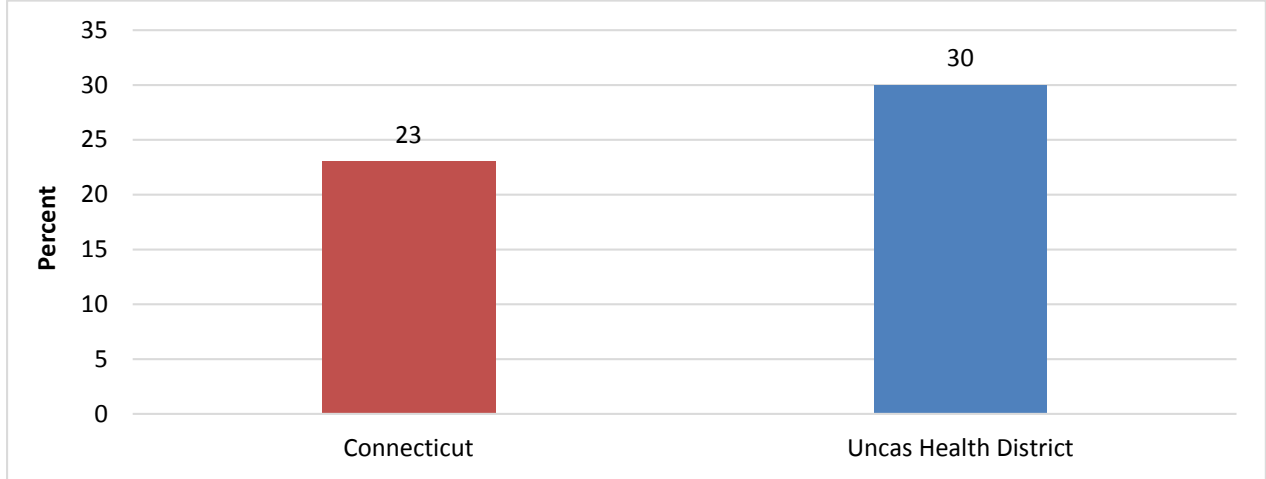


Data Source: DataHaven - Community Wellbeing Survey, 2015.

The majority of key informants identified the improvement of physical activity as a priority in the Uncas Health District, while few focus group participants identified physical activity as a health-related concern. A few focus group participants cited existing community parks, such as baseball fields, as resources to promote physical activity, while a couple of participants noted a need to promote physical activity among residents.

As presented in Figure 29, according to the Behavioral Risk Factor Surveillance Survey (BRFSS) in 2011-2014 three in ten adults in Uncas Health District (30%) reported not engaging in any leisure time physical activity in the past month, while approximately two in ten adults across Connecticut reported physical inactivity (23.0%).

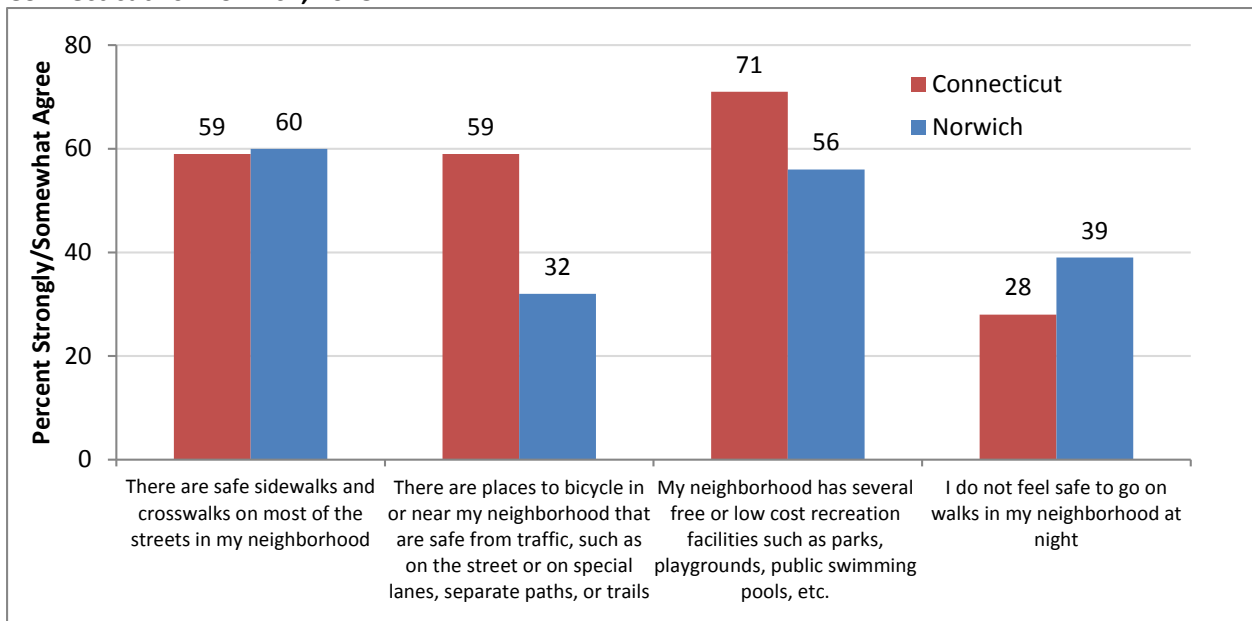
**Figure 29. Percent of Adults Reporting No Leisure Time Physical Activity in Past Month, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

Figure 30 presents residents’ perceptions of opportunities for physical activity in their neighborhood, as reported in the DataHaven Survey. Three in five Norwich residents (60%) characterized the sidewalks and crosswalks in their neighborhood as safe, similar to that reported amongst Connecticut residents (59%). Relative to Connecticut residents (59%), a smaller proportion of Norwich residents (32%) agreed that there were safe places to bicycle. Similarly, slightly over half (56%) of Norwich residents agreed that their neighborhood had free or low-cost recreation facilities, compared to 71% of Connecticut residents. Compared to reports among Connecticut residents overall (28%), a larger proportion of Norwich residents (39%) reported that they did not feel safe to walk in their neighborhood at night.

**Figure 30. Residents’ Perceptions of Neighborhood Safety and Opportunities for Active Living, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

Note: Percent represents participants who strongly agree or somewhat agree with statement.

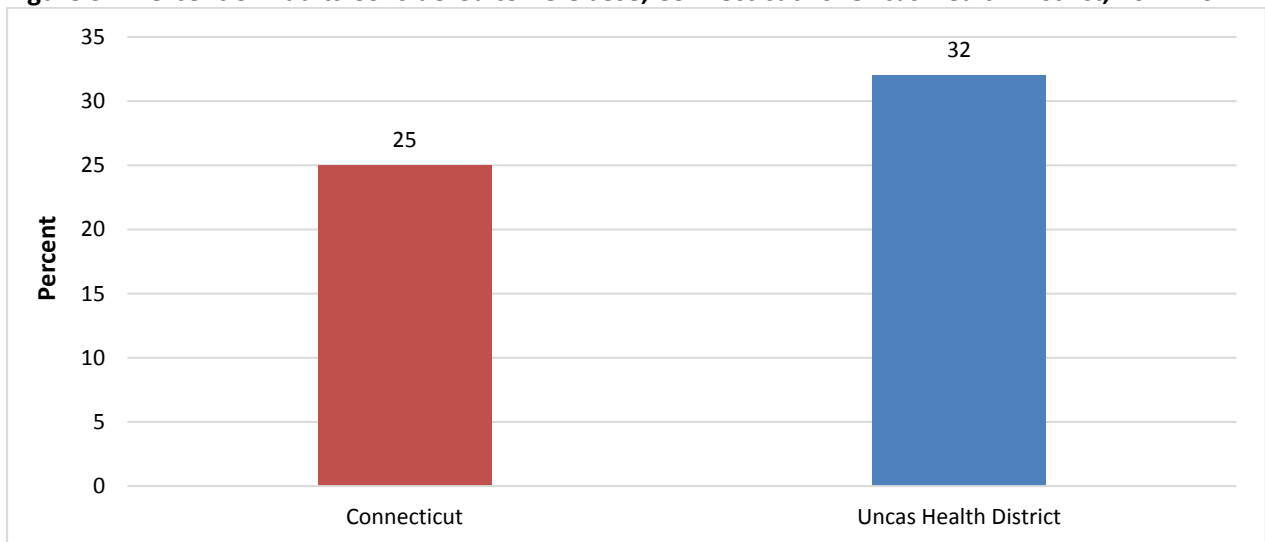
## Overweight and Obesity

*“We continue to have some of the most overweight and obese communities in the state, no matter what dataset that I look at.” – Key informant*

*“We’re gonna have to do something dramatically different to move the needle on [obesity].” – Key informant*

Key informants described overweight and obesity as persistent health concerns for the Uncas Health District, which they linked with health behaviors such as low physical activity and unhealthy eating. While focus group participants did not cite overweight and obesity as specific health concerns, across focus groups, residents identified a need for improved access to healthy food and opportunities for physical activity to promote health. Behavioral Risk Factor Surveillance Survey estimates indicate that in 2011-2014, nearly one-third of Uncas Health District (32.0%) adults reported that they were obese, compared to one-quarter of Connecticut adults (25.0%) (Figure 31).

**Figure 31. Percent of Adults Considered to Be Obese, Connecticut vs. Uncas Health District, 2011-2014**

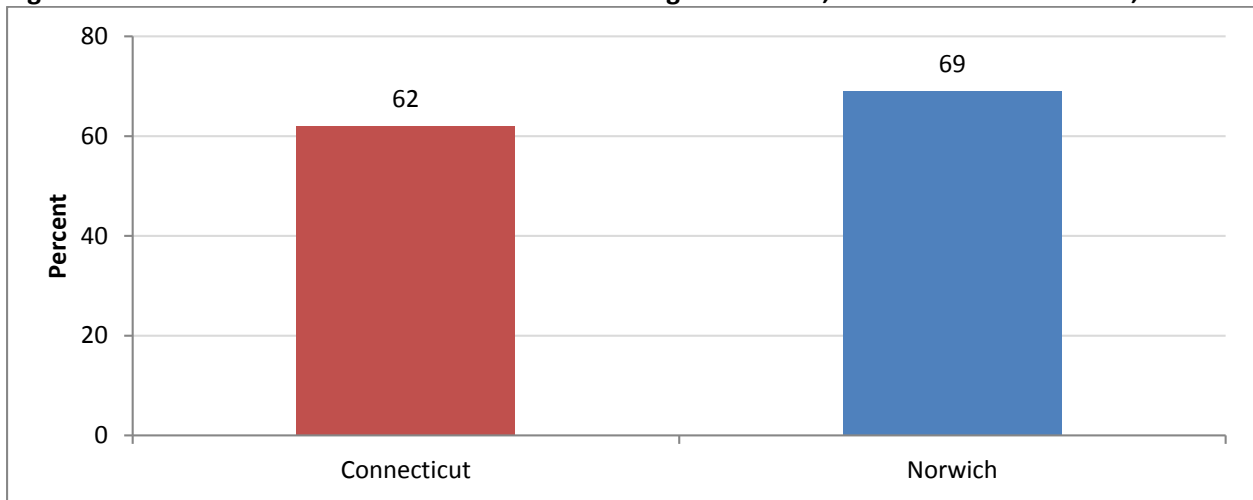


Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

Note: Obesity classified as BMI of 30 kg/m<sup>2</sup> or higher.

As shown in Figure 32, according to the 2015 DataHaven Survey, approximately seven in ten Norwich residents (69%) were classified as overweight or obese, compared to 62% of Connecticut residents.

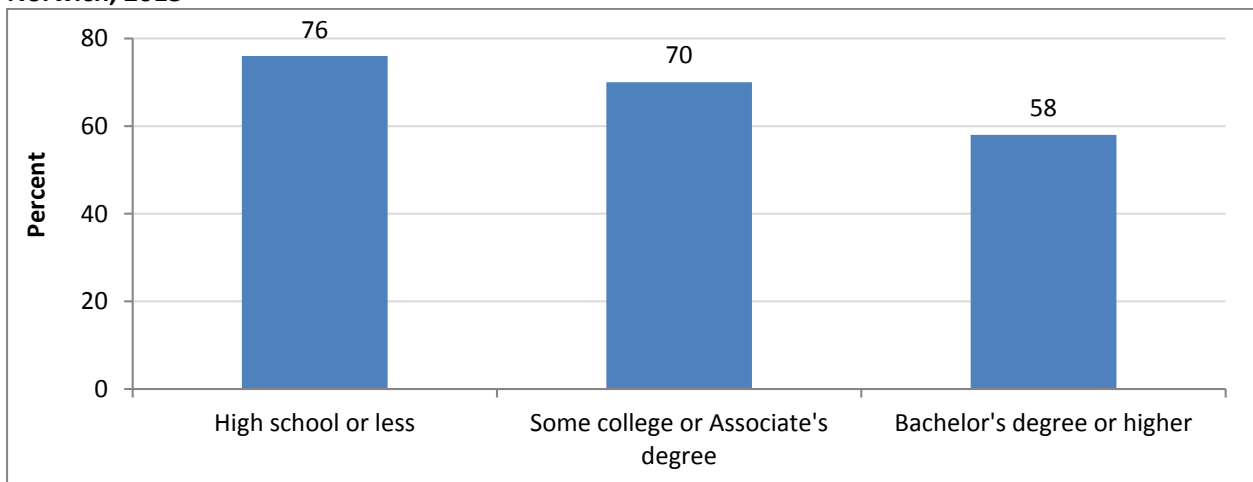
**Figure 32. Percent of Adults Considered to be Overweight or Obese, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In Norwich, the proportion of residents who were considered overweight or obese declined with increasing educational attainment (Figure 33). In 2015, 76% of Norwich residents with a high school education or less were considered overweight or obese, followed by 70% of residents with some college education and 58% of residents with a college education or higher.

**Figure 33. Percent of Adults Considered to be Overweight or Obese, by Educational Attainment, Norwich, 2015**

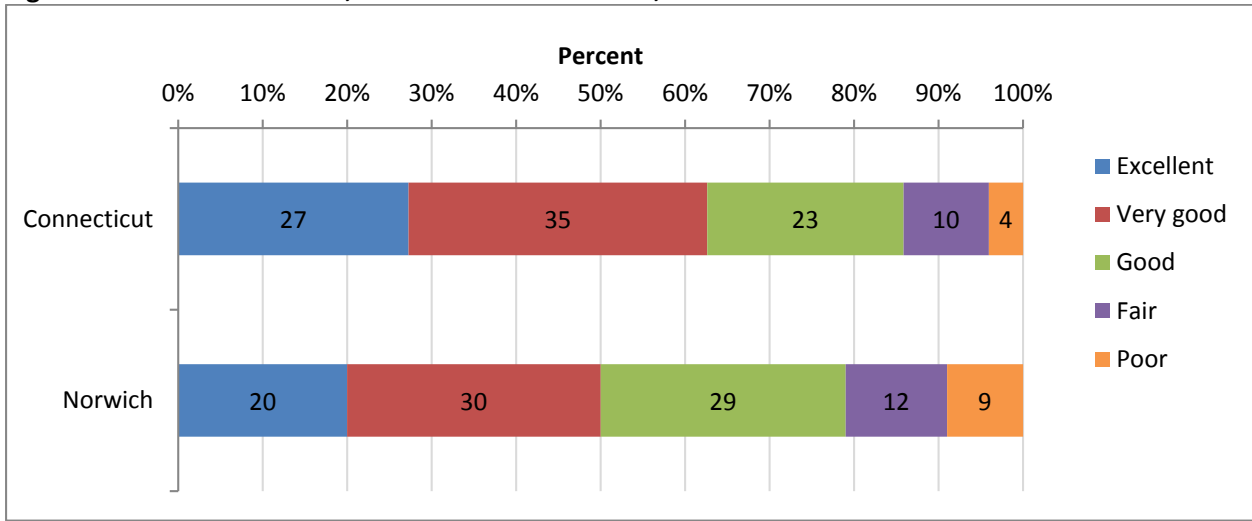


Data Source: DataHaven - Community Wellbeing Survey, 2015.

### **Self-Rated Health**

As shown in Figure 34, Norwich residents reported less favorable self-rated health than Connecticut residents. For example, 27% of Connecticut residents characterized their health as excellent, compared to 20% of Norwich residents. In contrast, 9% of Norwich residents described their health as poor, double the proportion of Connecticut (4%) residents who reported poor health.

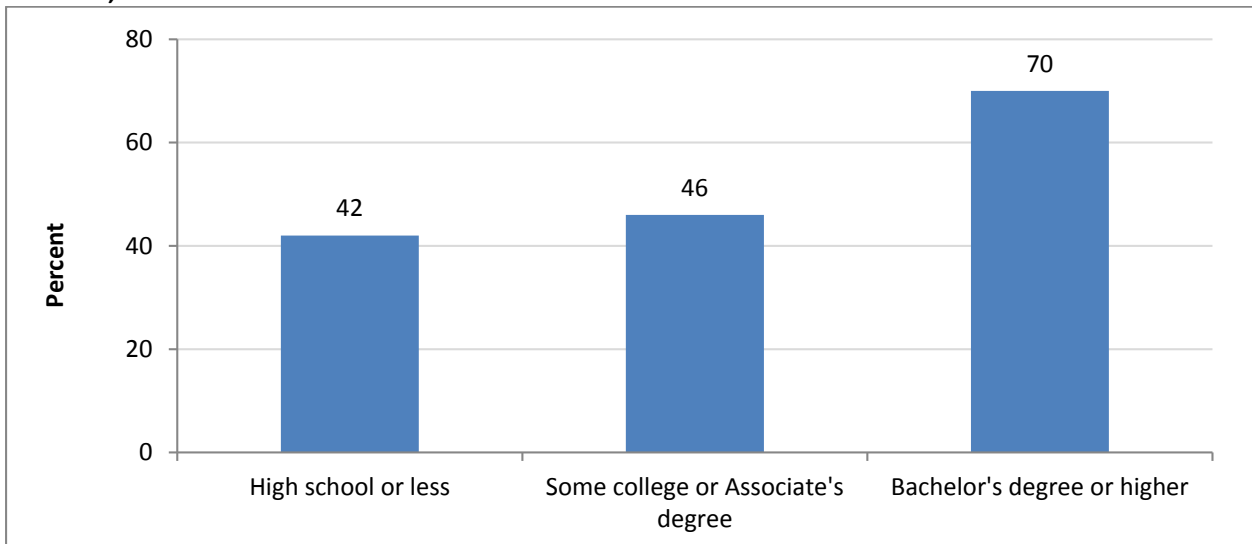
**Figure 34. Self-Rated Health, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In 2015, seven in ten college educated (70%) Norwich residents self-reported excellent or very good health, compared to approximately two in five residents with a high school education or less (42%) or some college education (46%) (Figure 35).

**Figure 35. Percent Reporting Excellent or Very Good Self-Rated Health, by Educational Attainment, Norwich, 2015**



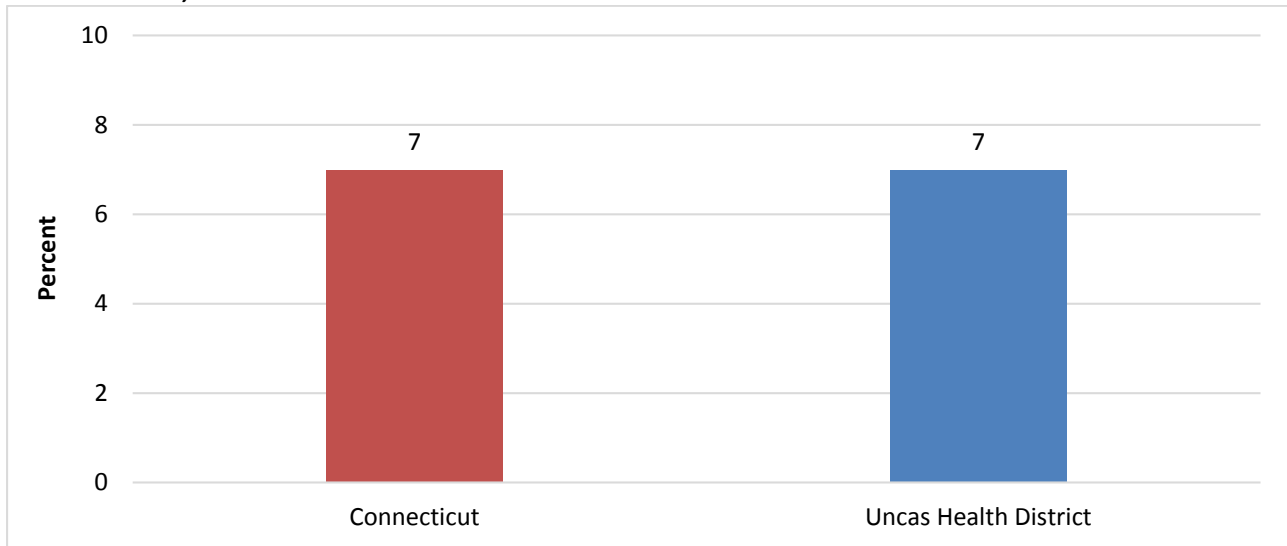
Data Source: DataHaven - Community Wellbeing Survey, 2015.

### Heart Disease and Cardiovascular Risk

Key informants cited heart disease as a persistent issue in the towns served by the Uncas Health District. However, heart disease did not emerge as a priority health concern among focus group participants.

As illustrated in Figure 36, according to the BRFSS, in 2011-2014 7% of adults in the Uncas Health District and Connecticut, respectively, reported that they had ever been told by a provider that they had cardiovascular disease.

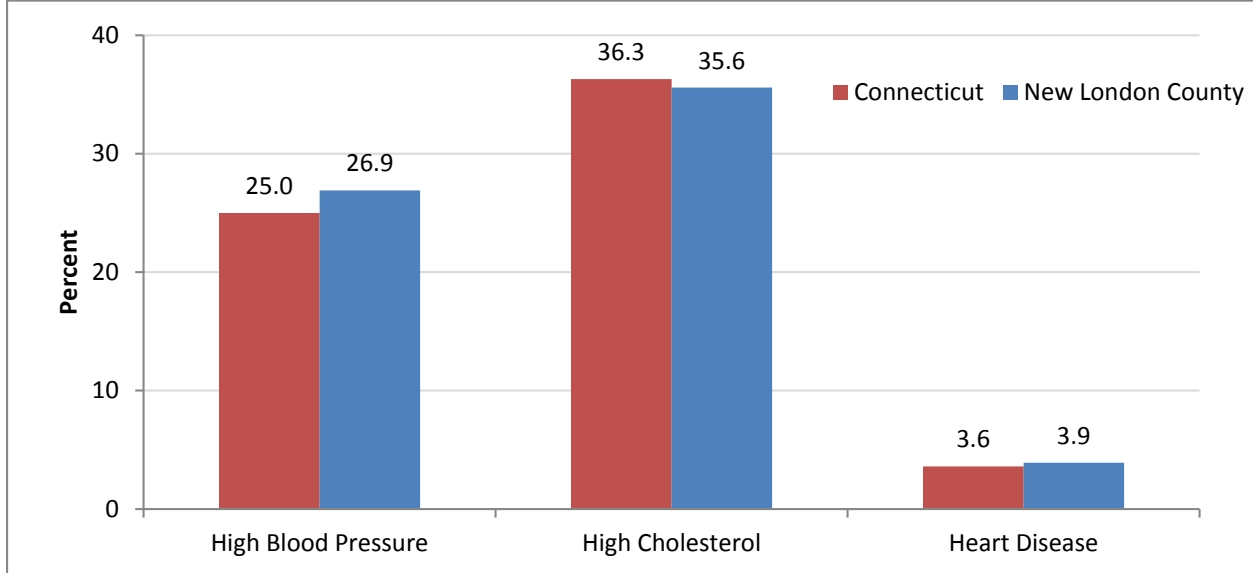
**Figure 36. Percent of Adults Reporting a Cardiovascular Disease Diagnosis, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

As shown in Figure 37, approximately one-quarter of adults in New London County (26.9%) and Connecticut (25.0%) residents reported being told by a health care provider that they have high blood pressure. In 2011-2012, 35.6% of New London County adults and 36.3% of Connecticut adults reported being diagnosed by a health care provider with high cholesterol. A similar proportion of New London County (3.9%) and Connecticut (3.6%) adults reported being diagnosed with heart disease.

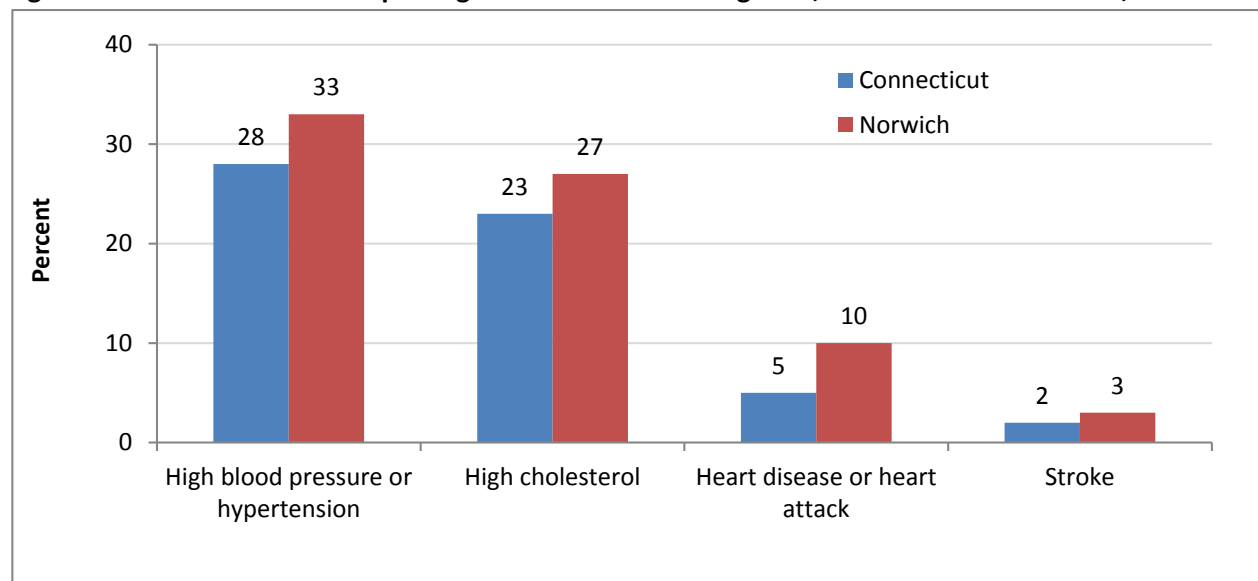
**Figure 37. Percent of Adults Reporting a Diagnosis of High Blood Pressure, High Cholesterol, or Heart Disease, Connecticut vs. New London County, 2006-2012 and 2011-2012**



Data Source: Behavioral Risk Factor Surveillance System, 2006-2012 (high blood pressure); 2011-2012 (high cholesterol & heart disease); As reported in Community Commons.

According to the DataHaven Survey, a slightly higher proportion of Norwich (33%) residents than Connecticut (28%) residents reported a diagnosis of hypertension (Figure 38). More than one-quarter of Norwich residents (27%) reported a diagnosis of high cholesterol, compared to 23% of Connecticut residents. Similarly, a slightly higher proportion of Norwich residents (10%) reported a diagnosis of heart disease or a heart attack than residents of Connecticut (5%). A similar proportion of Norwich (3%) and Connecticut (2%) residents reported being diagnosed with a stroke.

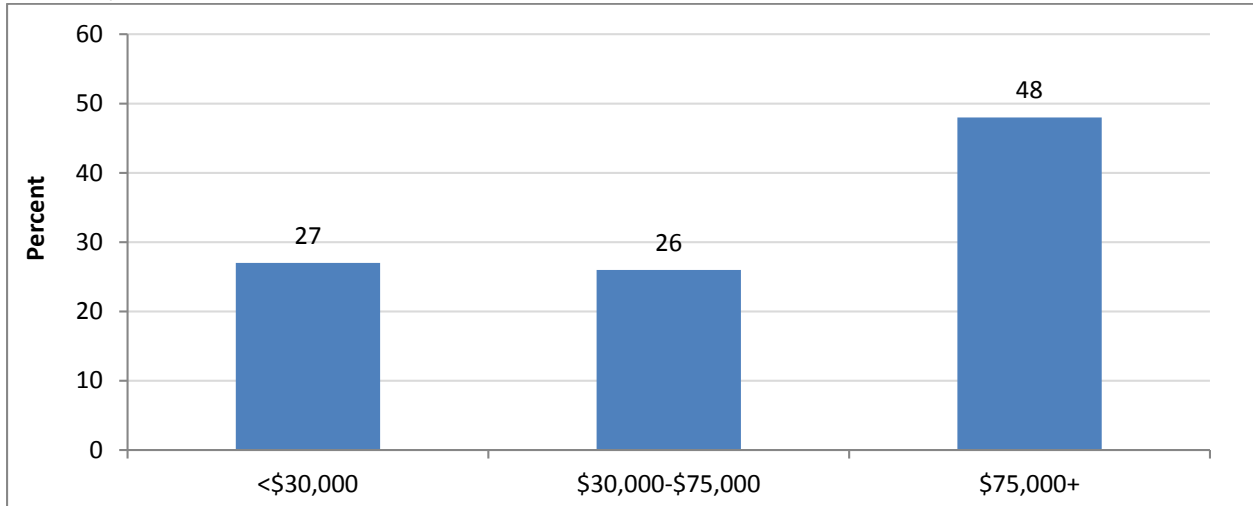
**Figure 38. Percent of Adults Reporting a Chronic Disease Diagnosis, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As shown in Figure 39, approximately one-quarter of Norwich residents with incomes below \$30,000 (27%) and between \$30,000-\$75,000 (26%) reported a diagnosis of high blood pressure or hypertension, compared to nearly half (48%) of residents with incomes above \$75,000.

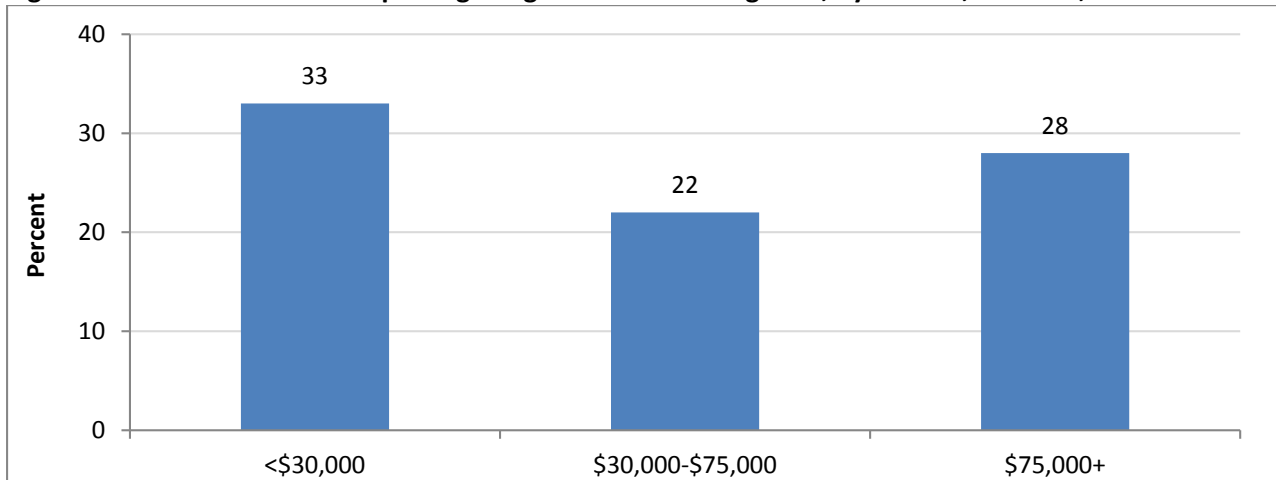
**Figure 39. Percent of Adults Reporting a High Blood Pressure or Hypertension Diagnosis, by Income, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In 2015 in Norwich, one-third of residents with incomes below \$30,000 (33%) reported a high cholesterol diagnosis, followed by 28% of residents with incomes above \$75,000 and 22% of those with incomes between \$30,000-\$75,000 (Figure 40).

**Figure 40. Percent of Adults Reporting a High Cholesterol Diagnosis, by Income, Norwich, 2015**



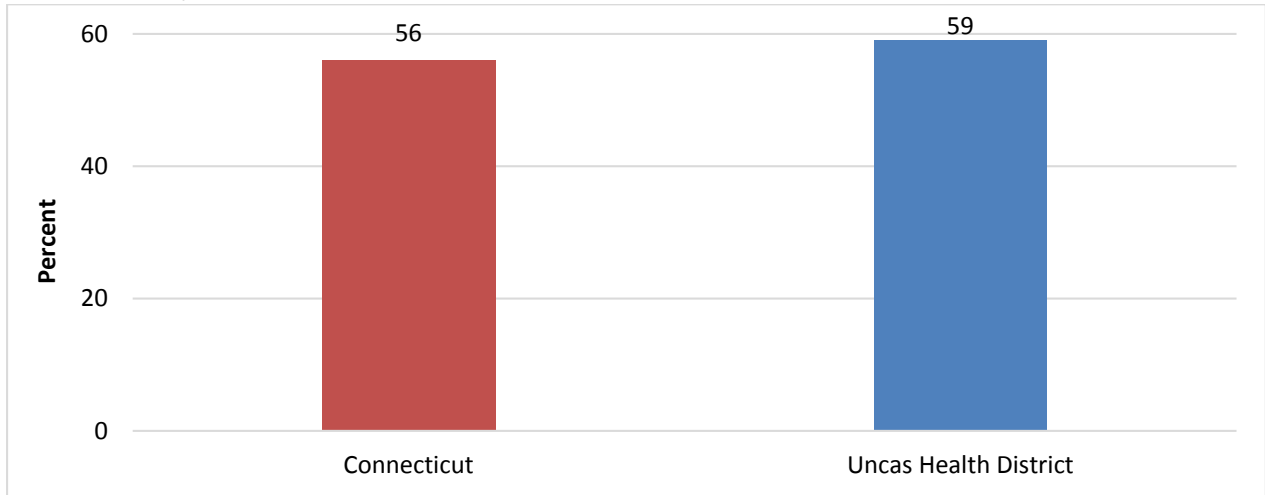
Data Source: DataHaven - Community Wellbeing Survey, 2015.



## Diabetes

Several key informants identified diabetes as a persistent and common community health concern and they linked that concern with unhealthy eating habits and a rise in obesity. In 2011-2014, nearly three in five Uncas Health District adults (59%) reported having a blood glucose test in the past 3 years, and 56% of Connecticut adults reported a blood glucose test (Figure 41).

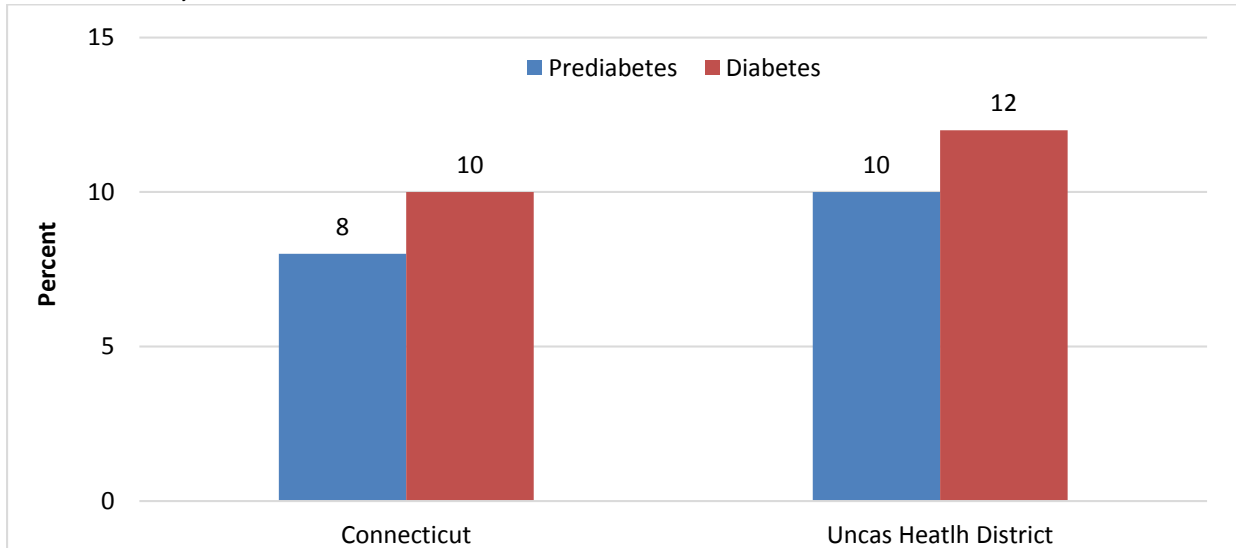
**Figure 41. Percent of Adults Reporting a Blood Glucose Test in Past Three Years, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

According to the BRFSS, in 2011-2014, 10% of Uncas Health District residents reported being told by a healthcare provider that they have pre-diabetes, similar to the proportion of Connecticut adults (8%) reporting a diagnosis of pre-diabetes (Figure 42). Similarly, 12% of Uncas Health District residents and 10% of Connecticut residents reported being told by a provider that they had diabetes.

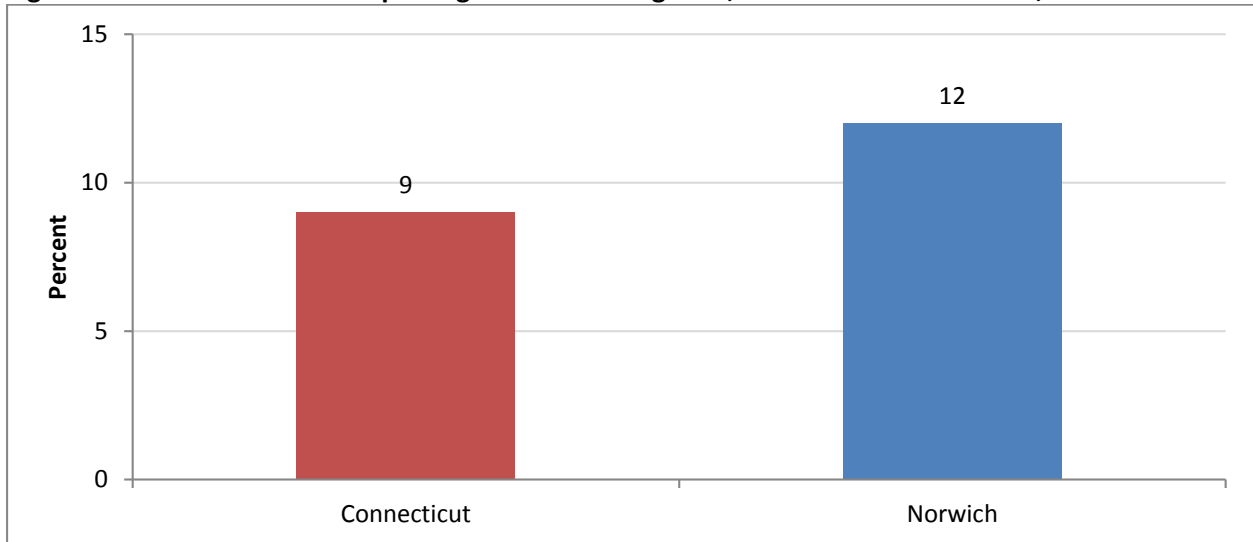
**Figure 42. Percent of Adults Reporting a Pre-Diabetes or Diabetes Diagnosis, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

As shown in Figure 43, as reported by the DataHaven Survey, in 2015 12% of Norwich residents reported a diabetes diagnosis, compared to 9% of Connecticut residents. This pattern was similar to residents' reports of diagnosed diabetes as indicated by the BRFSS for Uncas Health District and Connecticut residents from 2011-2014.

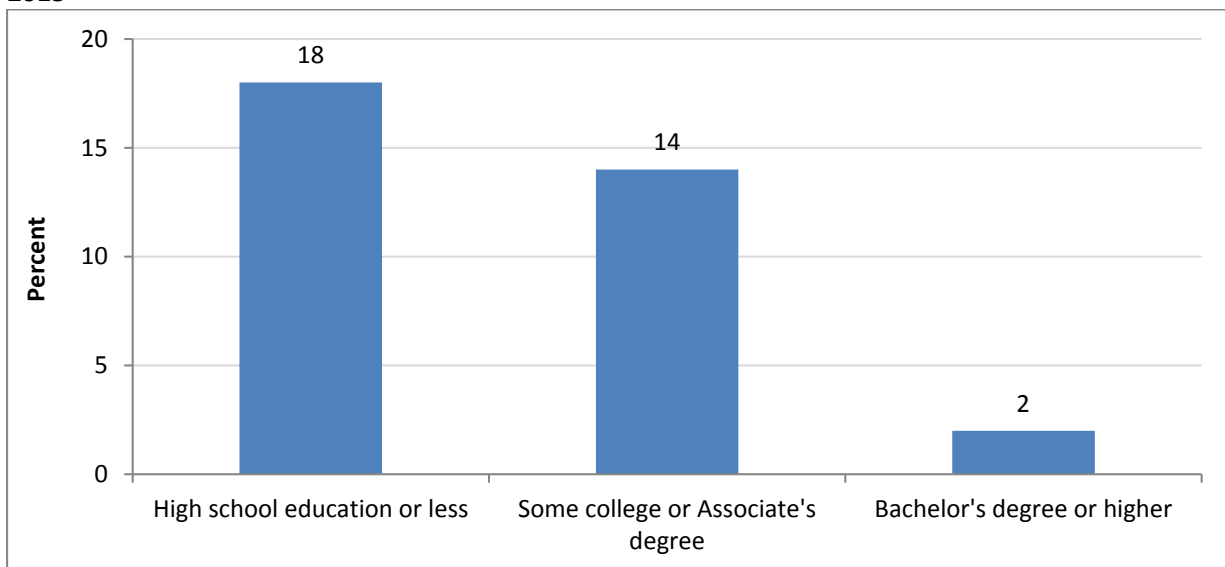
**Figure 43. Percent of Adults Reporting a Diabetes Diagnosis, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In Norwich, the prevalence of reported diagnoses of diabetes among adults declined with increasing educational attainment (Figure 44). In 2015, 18% of residents with a high school education or less reported a diabetes diagnosis, followed by 14% of residents with some college education and only 2% of residents with a college education or higher.

**Figure 44. Percent of Adults Reporting a Diabetes Diagnosis, by Educational Attainment, Norwich, 2015**

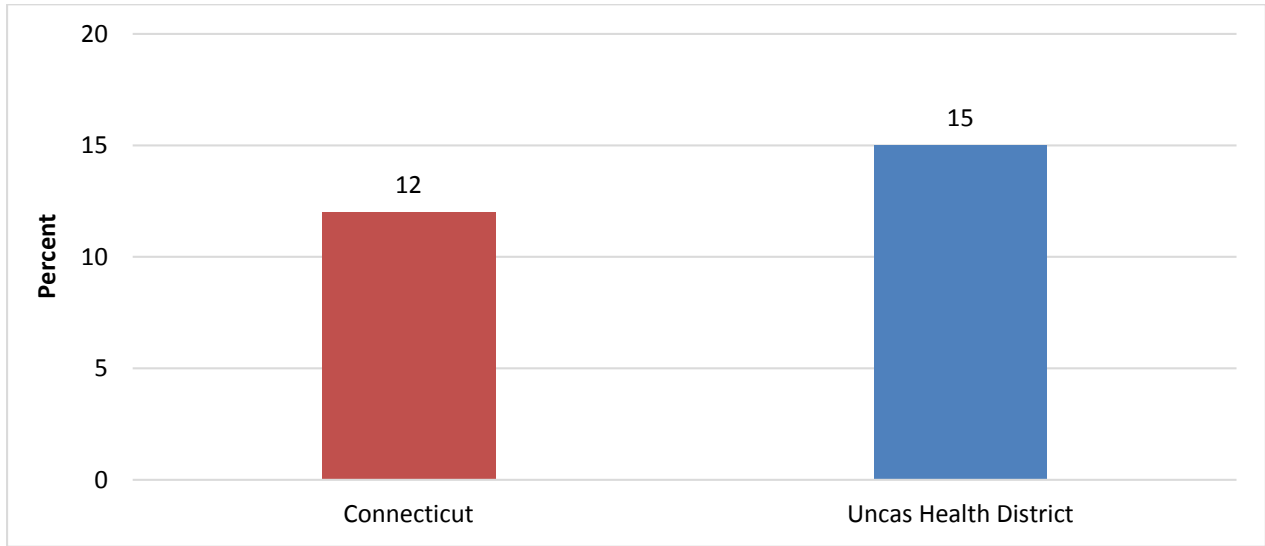


Data Source: DataHaven - Community Wellbeing Survey, 2015.

## Cancer

While focus group participants did not identify cancer as a priority health concern, key informants cited cancer as a persistent community health concern. According to the BRFSS, in 2011-2014 a similar proportion of Uncas Health District residents (15%) and Connecticut residents (12%) self-reported a diagnosis of cancer (Figure 45).

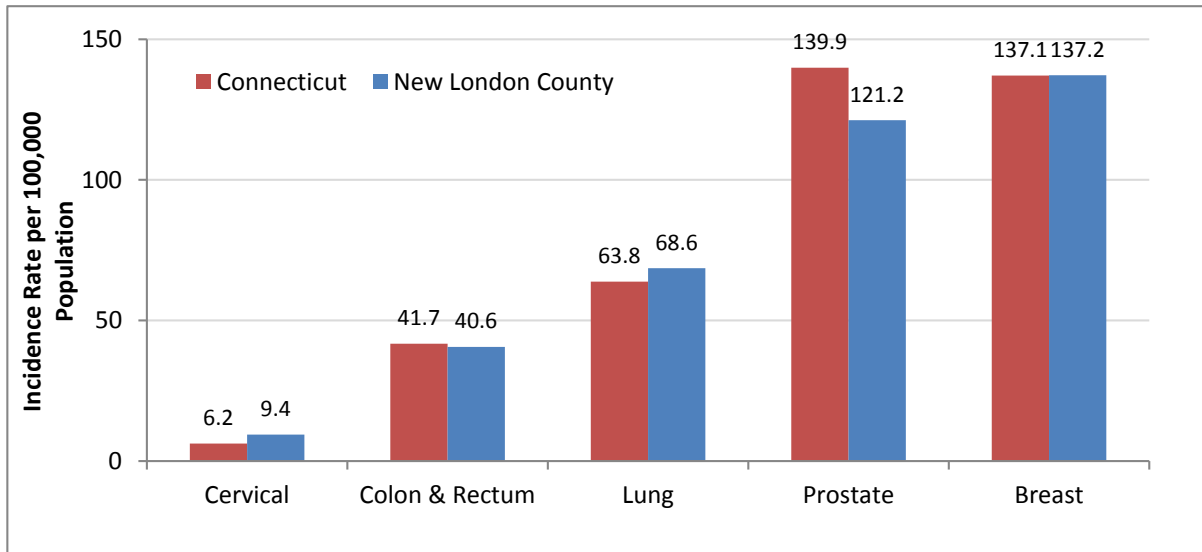
**Figure 45. Percent of Adults Reporting a Cancer Diagnosis, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

As shown in Figure 46, in New London County in 2008-2011 the cancer incidence rate was highest for cancer of the breast (137.2 per 100,000 population) and prostate (121.2 per 100,000 population). The cancer incidence rate was higher in New London County than Connecticut for cancer of the cervix (9.4 per 100,000 population vs. 6.2 per 100,000 population) and lung (68.6 per 100,000 population vs. 63.8 per 100,000 population). The incidence rate for cancer of the prostate was lower in New London County (121.2 per 100,000 population) than Connecticut (139.9 per 100,000 population), while rates were similar for the County and State for cancer of the colon and rectum and breast.

**Figure 46. Cancer Incidence Rate, by Cancer Site, Connecticut vs. New London County, 2008-2011**

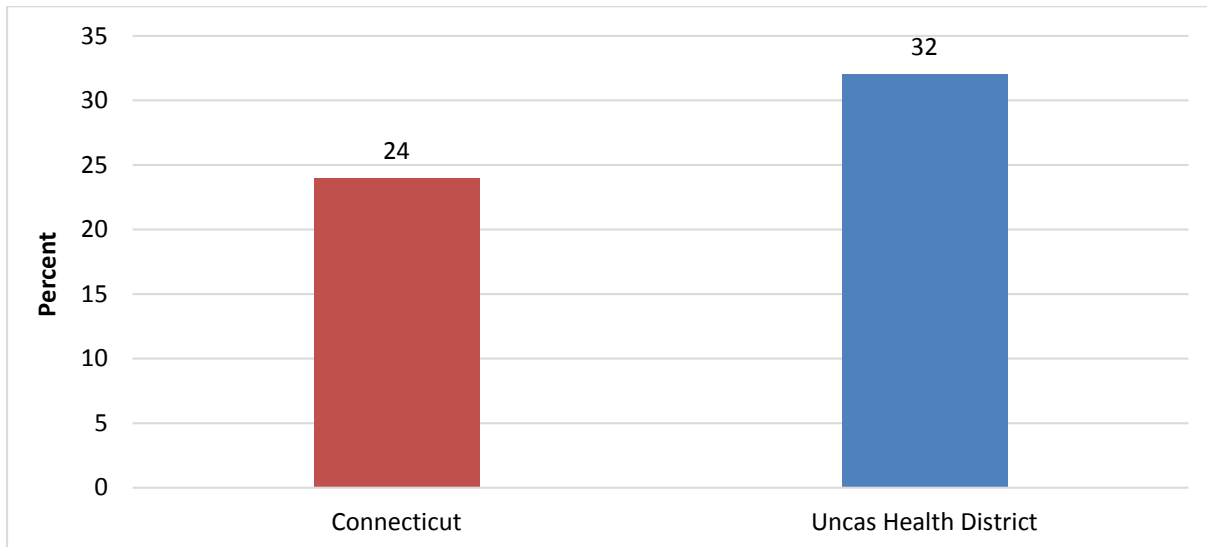


Data Source: National Cancer Institute Surveillance, Epidemiology, and End Results Program (SEER), 2008-2011; As reported in Community Commons.

### Arthritis

According to the Behavioral Risk Factor Surveillance Survey, in 2011-2014 nearly one-third of Uncas Health District residents (32%) reported being told by a provider that they have ever had arthritis, compared to approximately one-quarter of Connecticut residents (24%) (Figure 47).

**Figure 47. Percent of Adults Reporting an Arthritis Diagnosis, Connecticut vs. Uncas Health District, 2011-2014**

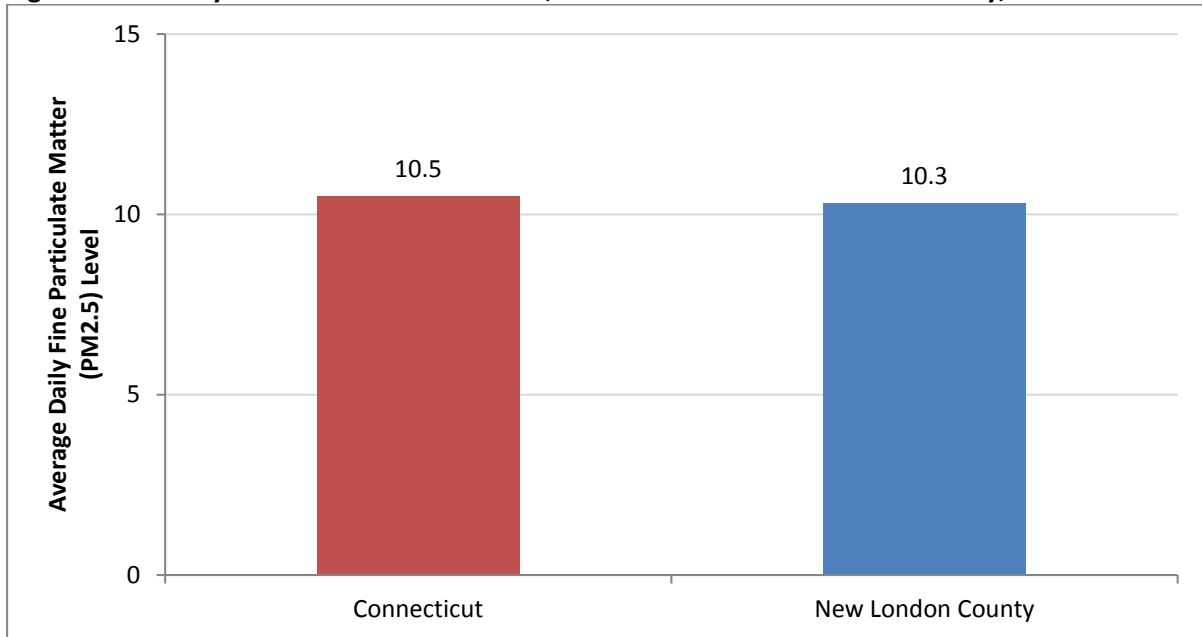


Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

## Asthma

A couple of key informants cited asthma as a persistent health issue in the area. One key informant linked the prevalence of asthma in the region with environmental risk factors such as air pollution. As presented in Figure 48, the average daily density of fine particulate matter (PM2.5) was similar for New London County (10.3) and Connecticut (10.5).

**Figure 48. Density of Fine Particulate Matter, Connecticut vs. New London County, 2003-2008**

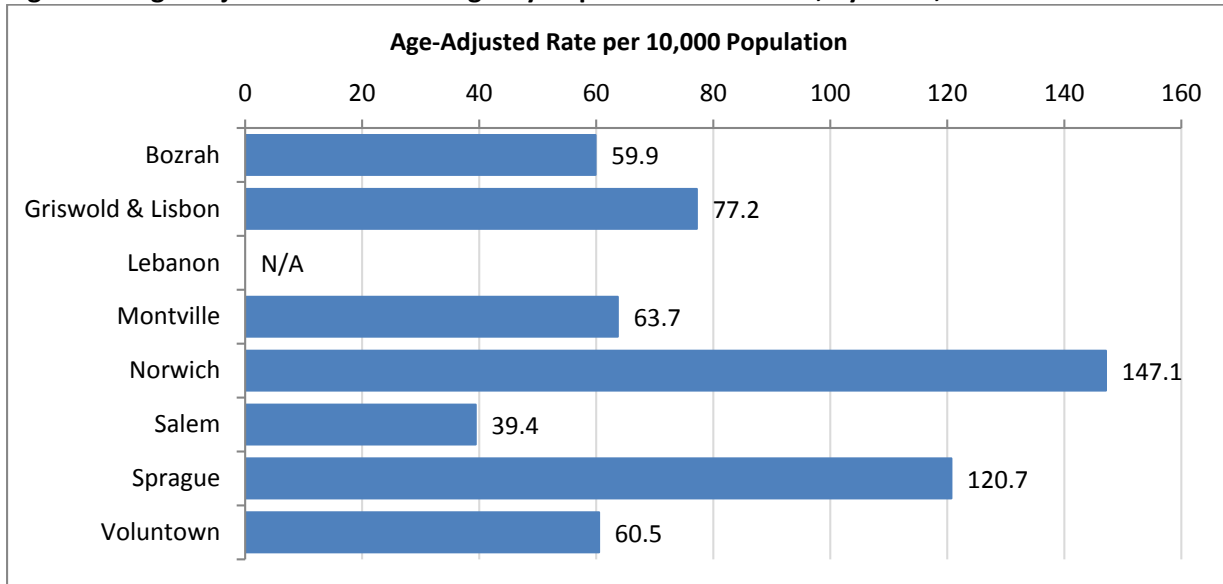


Data Source: CDC Wonder 2003-2008; As reported in County Health Rankings.

*“[Asthma] puts a lot of stress on ER services. It has to do with environmental issues and the issues revolving around social aspects of asthma. Asthma keeps children from participating in active living and physical activity.” – Key informant*

The age-adjusted asthma-related emergency department visit rate was highest in the towns of Norwich (147.1 per 10,000 population) and Sprague (120.7 per 10,000 population) and lowest in the towns of Salem (39.4 per 10,000 population), Bozrah (59.9 per 10,000 population), and Voluntown (60.5 per 10,000 population) (Figure 49).

**Figure 49. Age-Adjusted Asthma Emergency Department Visit Rate, by Town, 2010-2014**

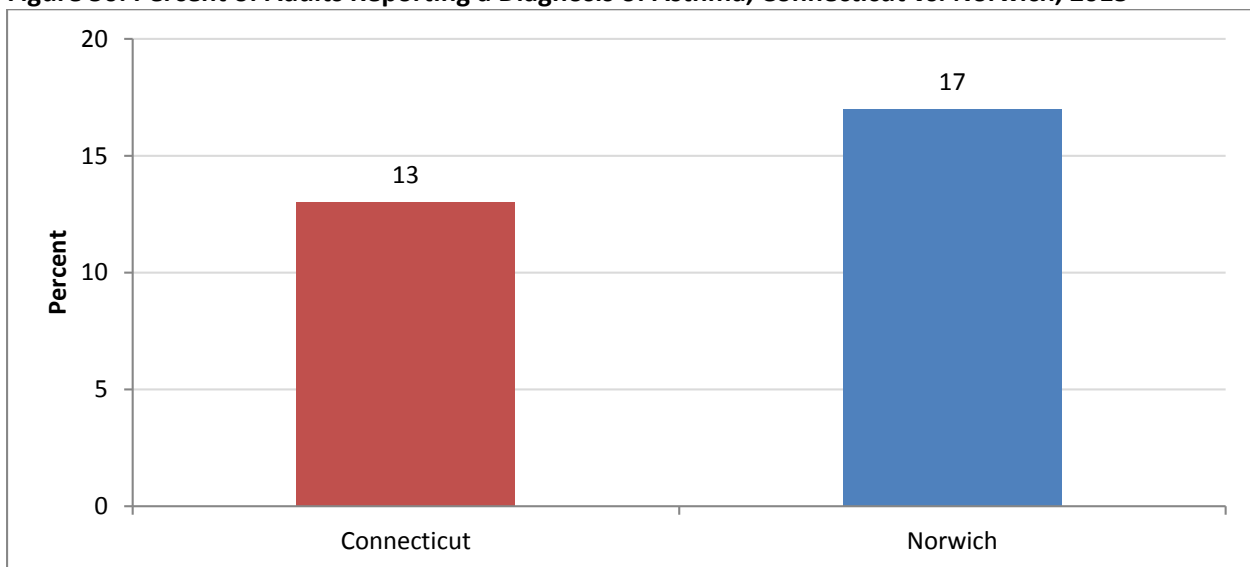


Data Source: Connecticut DPH, Table H-1, Asthma ED Visit Rates by Town, Primary Diagnosis, Connecticut, 2010-2014.

Note: N/A indicates data not available.

In 2015, 17% of Norwich residents reported a diagnosis of asthma, compared to 13% of Connecticut residents (Figure 50).

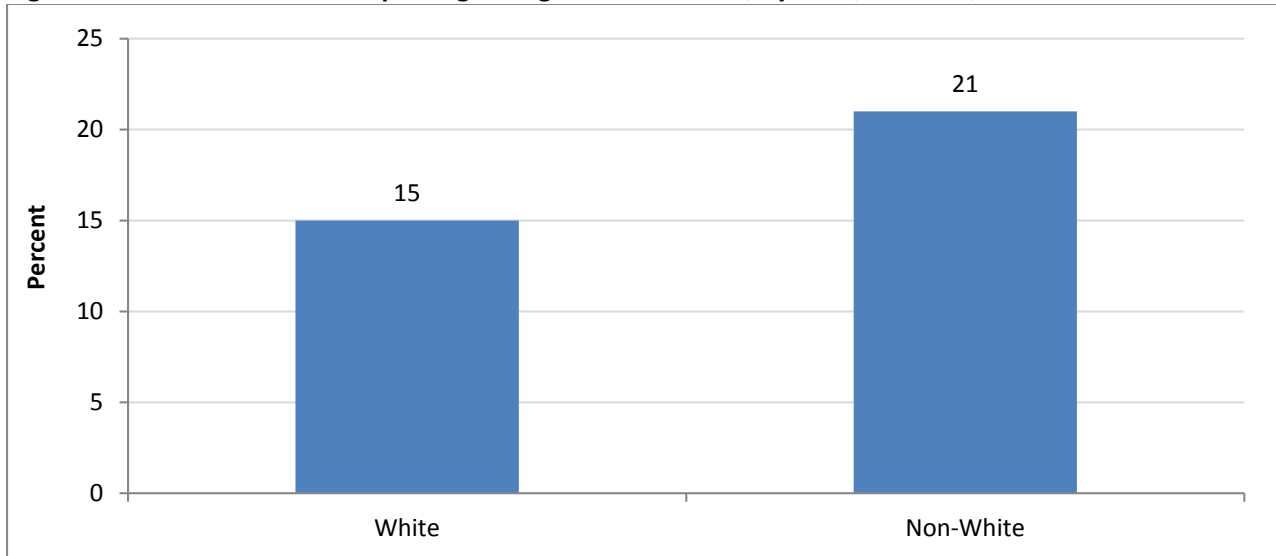
**Figure 50. Percent of Adults Reporting a Diagnosis of Asthma, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As shown in Figure 51, in Norwich, 21% of non-White residents reported a diagnosis of asthma, compared to 15% of White residents.

**Figure 51. Percent of Adults Reporting a Diagnosis of Asthma, by Race, Norwich, 2015**

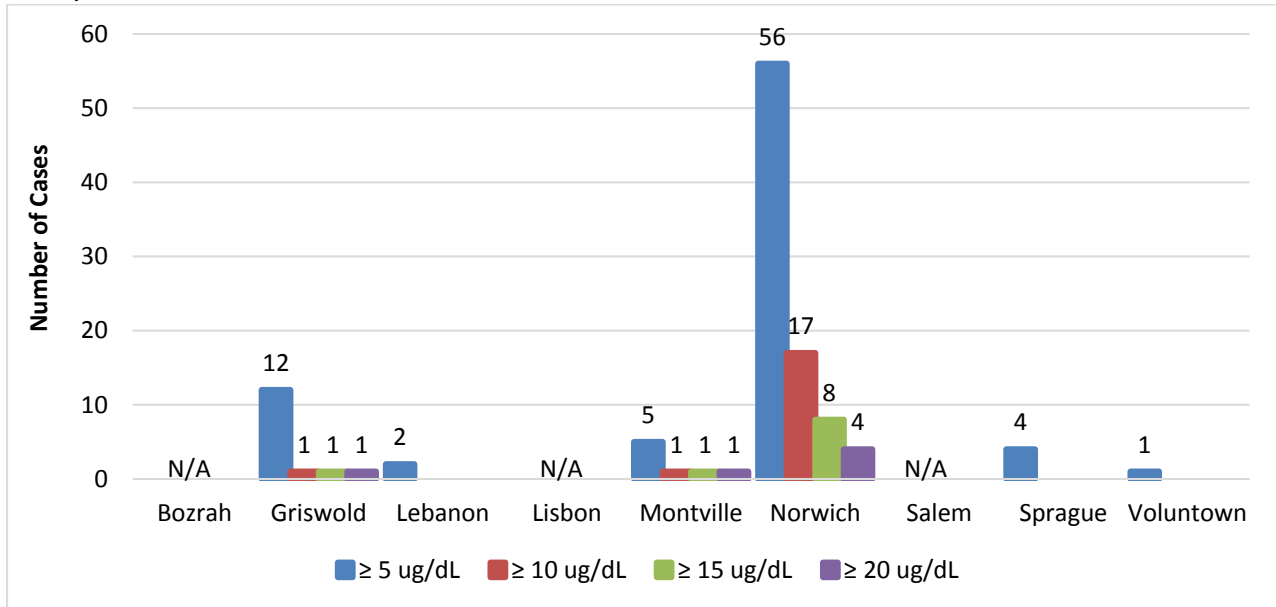


Data Source: DataHaven - Community Wellbeing Survey, 2015.

### *Childhood Lead Poisoning*

Among towns served by the Uncas Health District, in 2013 Norwich had the highest number of confirmed cases of children with elevated blood lead levels (Figure 52). For example, the town of Norwich had 56 children less than 6 years of age with confirmed blood lead levels  $\geq 5$   $\mu\text{g}/\text{dL}$ , 17 children with blood lead levels  $\geq 10$   $\mu\text{g}/\text{dL}$ , 8 children with  $\geq 15$   $\mu\text{g}/\text{dL}$ , and 4 children with  $\geq 20$   $\mu\text{g}/\text{dL}$ . The towns of Griswold and Montville each reported at least 5 cases of children with blood lead levels  $\geq 5$   $\mu\text{g}/\text{dL}$ , while no cases were reported for the towns of Bozrah, Lisbon, and Salem. Of note, while the lead poisoning level continues to be lowered, for example from  $\geq 10$   $\mu\text{g}/\text{dL}$  to  $\geq 5$   $\mu\text{g}/\text{dL}$ , the number of cases of childhood lead poisoning has not drastically increased.

**Figure 52. Confirmed Cases of Elevated Blood Lead Levels among Children Less than 6 Years Old, by Town, 2013**



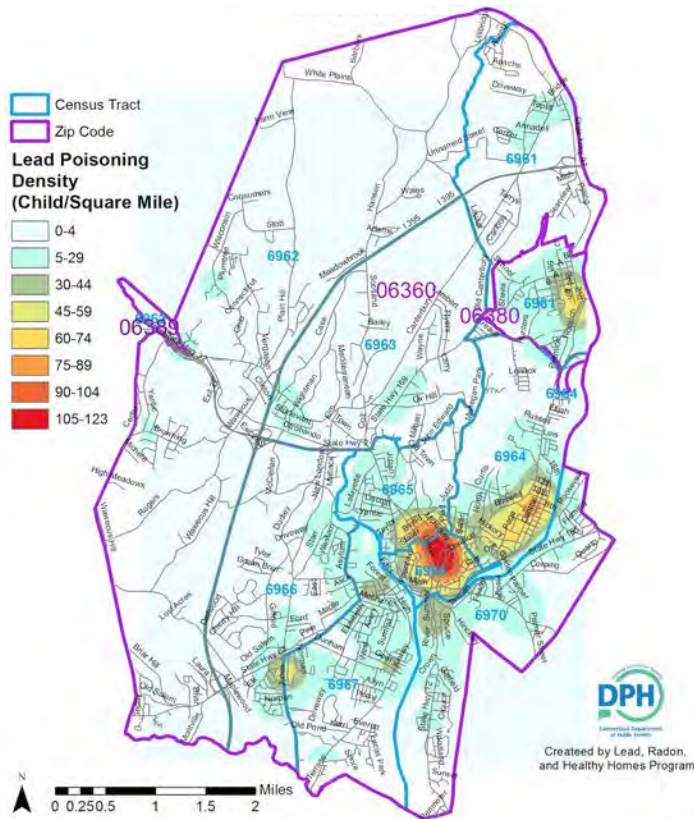
Data Source: Uncas Health District, Lead Data 2013.

Note: No cases of elevated blood levels reported for the towns of Bozrah, Lisbon, and Salem. The towns of Lebanon, Sprague and Voluntown did not have reported cases with blood lead levels  $\geq 10 \mu\text{g/dL}$ .

As indicated in Figure 53, in 2010-2014 confirmed child lead poisoning cases were primarily located in several neighborhoods in Southeastern Norwich, specifically the 06360 and 06380 Zip Codes. The 6968 Census Tract had the highest number of children with lead poisoning (105 to 123 children).



**Figure 53. Childhood Lead Poisoning in Norwich Neighborhoods, Among Children Less than 6 Years Old, 2010-2014**



Data Source: Connecticut DPH, Lead, Radon, and Healthy Homes Program.

Note: Kernel density analysis included 172 children tested with a venous blood concentration of  $\geq 5$   $\mu\text{g}/\text{dL}$ .

### Behavioral Health

Key informants and focus group participants cited mental health and substance use as priority health issues in the area that affect residents across age groups and economic statuses. Residents described access to behavioral health treatment as more limited among vulnerable populations.

## Mental Health

Mental illness was a concern that was mentioned by a majority of focus group participants and key informants. Residents described mental illness an issue affecting residents across age groups. Participants observed that dementia and Alzheimer’s disease were particular mental health concerns for the growing senior population in the region. Additionally, senior focus group participants cited a need for mental health support for caregivers of seniors with mental health issues. Residents also observed that substance use was common among residents with mental health issues.

Perceptions regarding the availability of mental health services and supports varied across focus group participants and informants. Several residents identified mental health care as an area of need, particularly following the closure of the state hospital. Some emergency responders observed that residents needing treatment obtained emergency care, but not longer-term mental health treatment. Several residents noted that stigma around mental health presented a barrier to treatment and support. Focus group participants and informants also perceived that vulnerable populations, such as lower income residents or those with more limited health care coverage, experienced greater challenges in accessing behavioral health services.

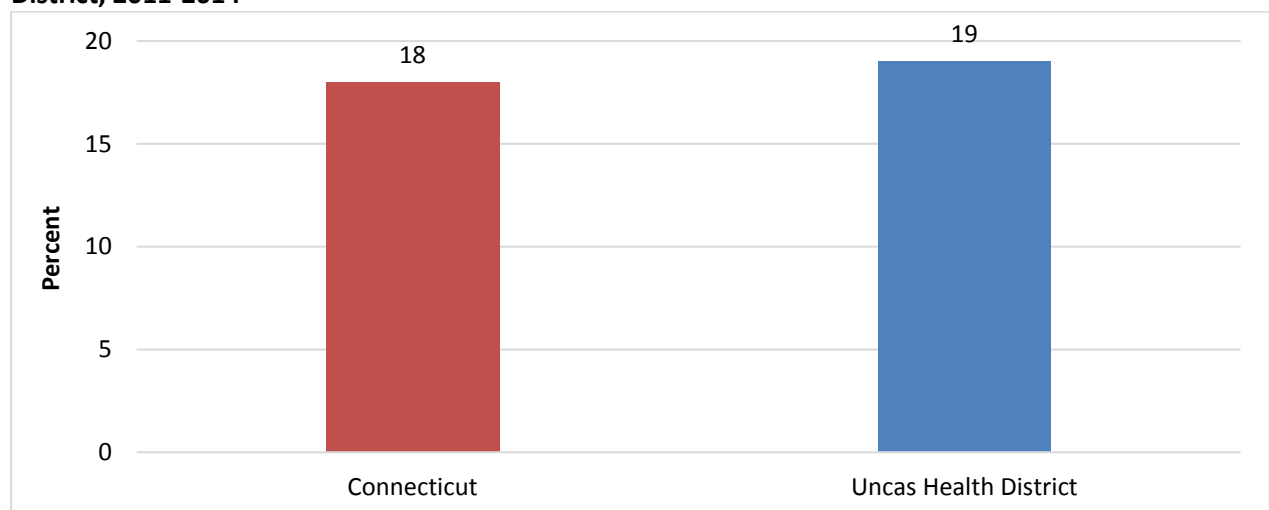
*“Mental health is huge, especially among the elderly. Addressing mental health issues among K-12 grades is [also] really important.” – Key informant*

*“[Mental health] seems to be a tough area to crack because people do not want to talk about it until it’s late stage.” – Focus group participant*

*“[There are] not enough [mental health] services in the community or state and that dramatically impacts family integrity. [There are] no real resources put into dealing with this.” – Key informant*

BRFSS estimates from 2011-2014 indicate that nearly one in five residents of Uncas Health District (19%) and Connecticut (18%) report a diagnosis of depression (Figure 54).

**Figure 54. Percent of Adults Reporting a Diagnosis of Depression, Connecticut vs. Uncas Health District, 2011-2014**

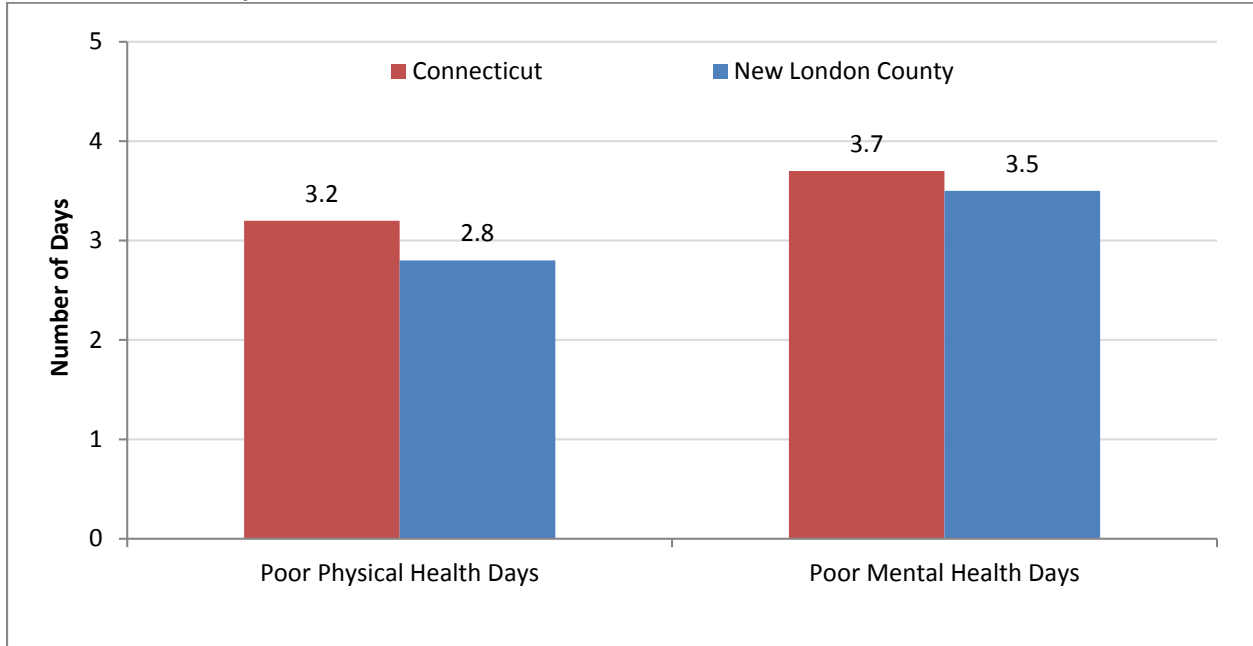


Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

In 2014, New London County residents reported 2.8 days of poor physical health over the past 30 days, compared to 3.2 days over the same time period for Connecticut residents (Figure 55). New London

County residents reported 3.5 days of poor mental health in the past 30 days, compared to 3.7 days for Connecticut adults.

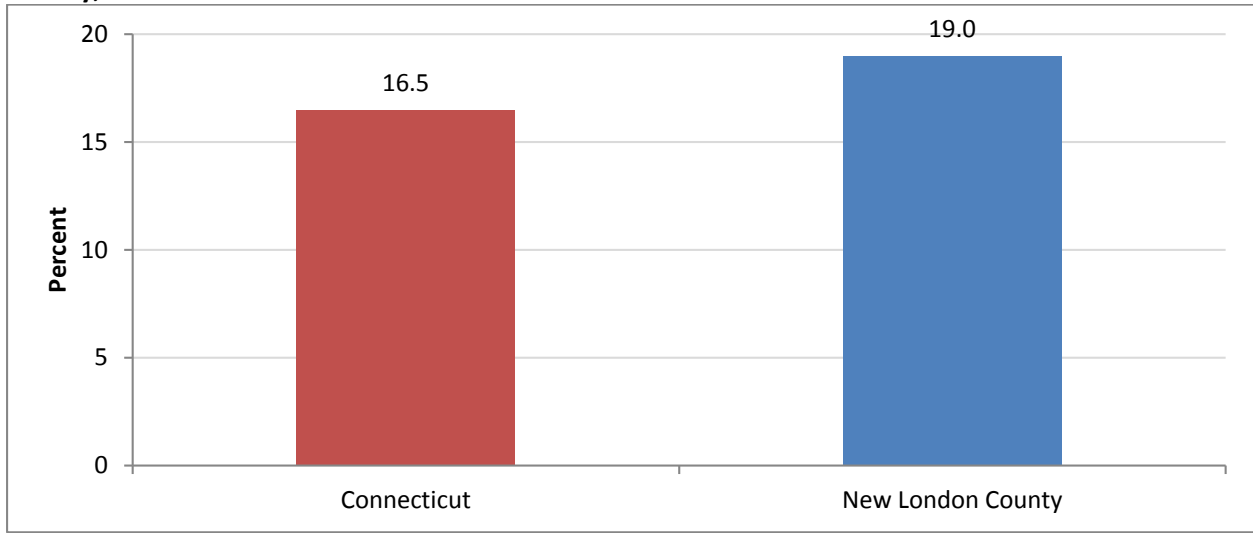
**Figure 55. Number of Reported Poor Physical and Mental Health Days among Adults, Connecticut vs. New London County, 2014**



Data Source: Behavioral Risk Factor Surveillance System, 2014; As reported in County Health Rankings.

As presented in Figure 56, in 2012 approximately one in five Medicare beneficiaries in New London County (19.0%) were diagnosed with depression, compared to 16.5% of Connecticut Medicare beneficiaries. This prevalence of diagnosed depression among Medicare beneficiaries in New London County and Connecticut is similar to that reported in the BRFSS for adults in the Uncas Health District and Connecticut, respectively.

**Figure 56. Percent of Medicare Beneficiaries with Diagnosed Depression, Connecticut vs. New London County, 2012**



Data Source: Centers for Medicare and Medicaid Services 2012; As reported in Community Commons.

### *Substance Use*

Residents characterized substance use as a priority health issue in the towns served by Uncas Health District, noting longstanding health issues linked with tobacco and alcohol use, as well as a rise in misuse and abuse of opioids in the region.

#### *Tobacco and Alcohol Use*

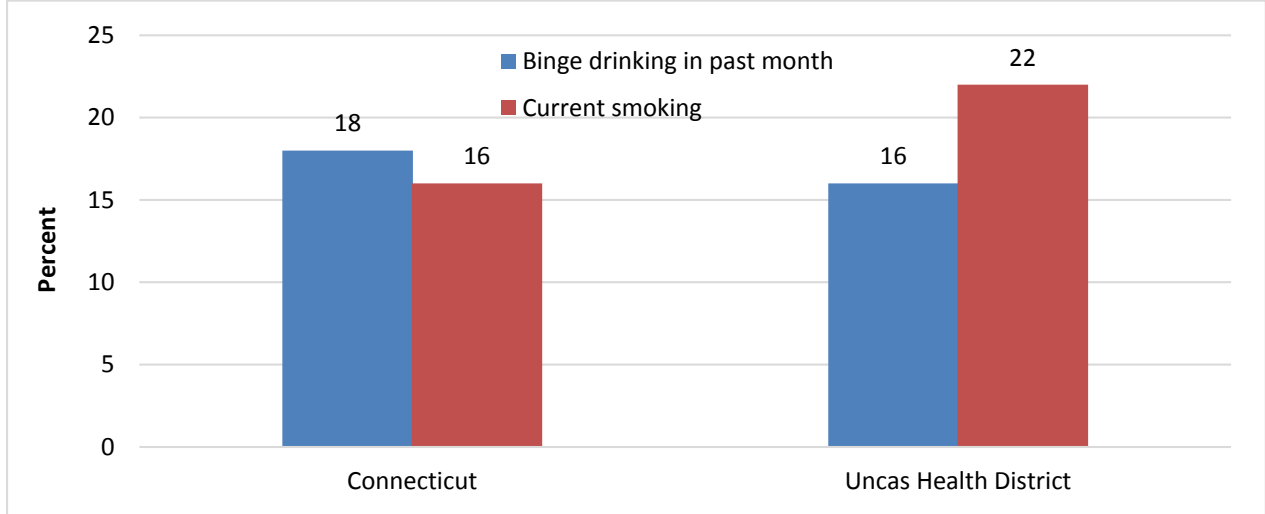
Tobacco use and abuse of alcohol were concerns that some focus group participants and key informants described, issues they described as being longstanding health issues in the region. A few participants commented that they believed that tobacco and alcohol abuse, although more common, were not getting the attention of efforts given the increase in concern around opioid use in the region.

According to the BRFSS, in 2011-2014 16% of Uncas Health District adults and 18% of Connecticut adults reported engaging in binge drinking (Figure 57). During the same time period, approximately one in five Uncas Health District adults (22%) reported smoking, a prevalence that exceeded that for the State (16%).

*“In health care, we see many health concerns that are tobacco-related.” – Key informant*

*“With alcohol, you go in the store and drink it at home where with drugs... It’s on the street, you see it more. No one talks about it. They are ashamed.” – Focus group participant*

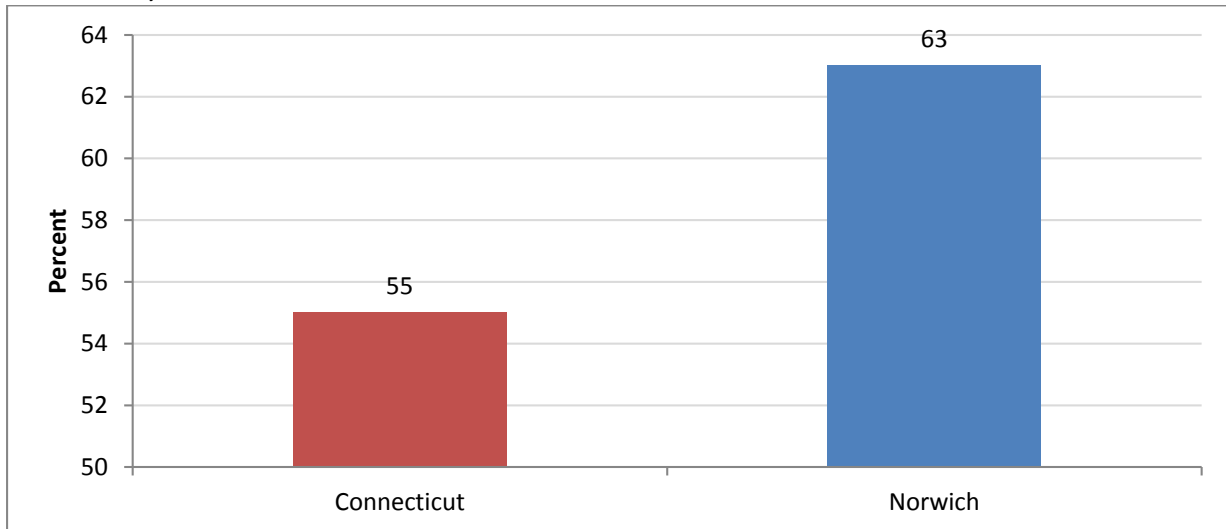
**Figure 57. Percent of Adults Who Smoked or Engaged in Binge Drinking, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

As presented in Figure 58, 63% of current smokers in Norwich reported at least one attempt to quit smoking in the past year, compared to 55% of Connecticut residents.

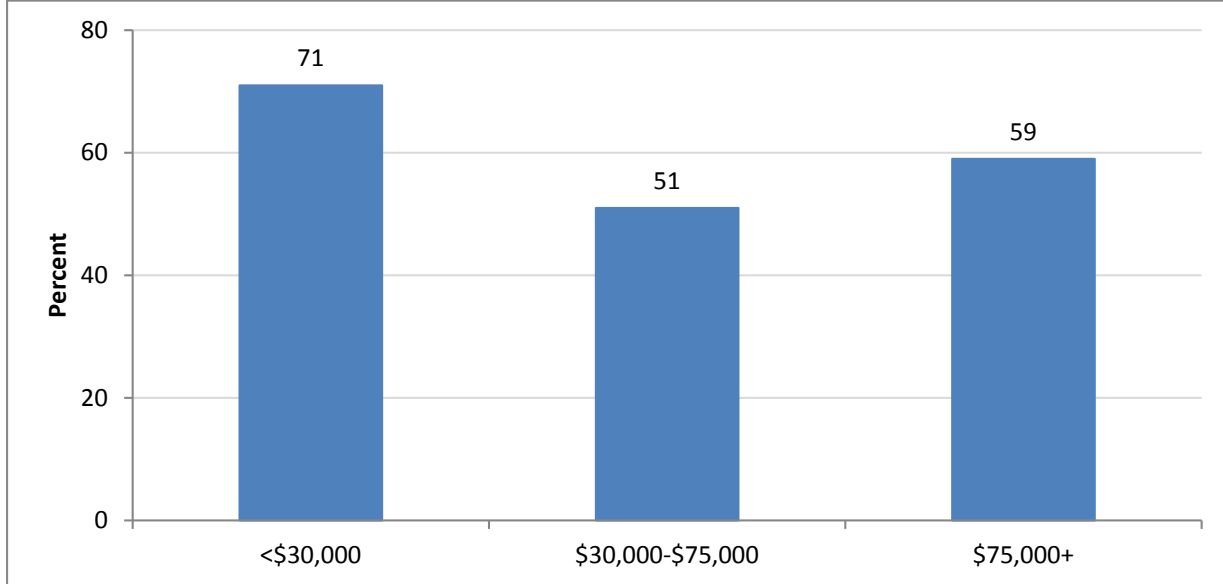
**Figure 58. Percent of Current Smokers Who Attempted to Quit Smoking in the Past Year, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

Among current smokers in Norwich, 71% of those with incomes below \$30,000 reported an attempt to quit smoking in the past year, followed by 59% of those with incomes above \$75,000 and 51% of those with incomes between \$30,000-\$75,000 (Figure 59).

**Figure 59. Percent of Current Smokers Who Attempted to Quit Smoking in the Past Year, by Income, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

### Opiod Use

Several focus group participants and key informants noted rising misuse and abuse of opioids in the region across age groups. Perceptions varied regarding the geographic distribution of opioid issues in the Uncas Health District. Although a few informants characterized opioid use as a greater concern in particular regions, such as along the coast, several residents characterized this as an issue that affected the region “regardless of geography or town” and one that was particularly acute in New London County. Reports of opioid misuse and abuse included both prescription opioids and heroin. Residents attributed substance use to stress and untreated mental health issues.

As with mental health services, residents had varied perceptions of the availability of substance use services, with descriptions of substance use treatment availability ranging from “plenty” to “there are not enough providers.” Several key informants cited inadequate substance use treatment as an issue affecting the health care system across the State. Several focus group participants and key informants observed that accessing substance use treatment was a challenge for more vulnerable populations. While perceptions of the availability of longer-term substance use treatment services varied, one

*“Drugs are pretty much [an issue in] every community, but it’s really hitting home around here because you often know somebody who’s lost somebody, whether it’s alcohol or heroin.” – Focus group participant*

*“We have a more recent issue around heroin and opioids that seems to be becoming more pronounced.” – Key informant*

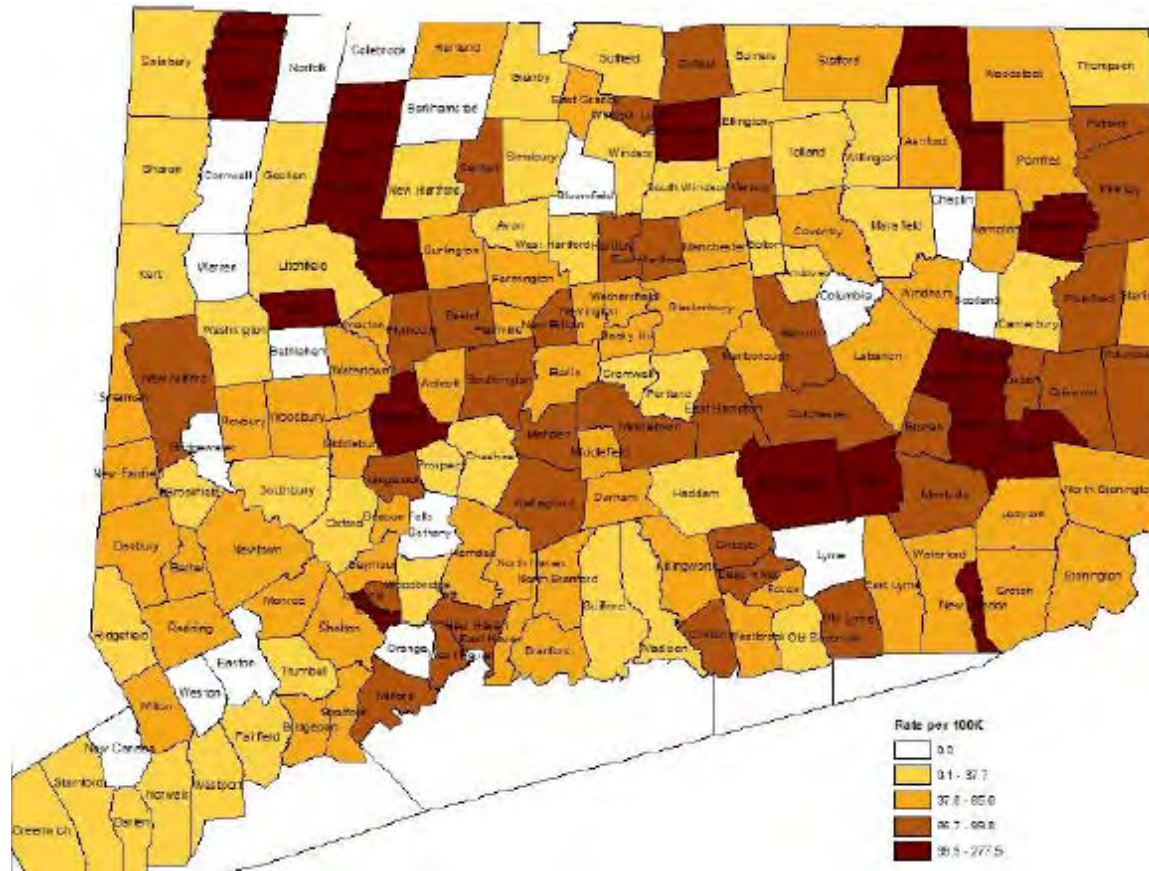
*“Opioid [use] is a tremendous concern in our region. New London County has made national news with the number of deaths that they have had.” – Key informant*

*“There are too many needing [substance use treatment] and not enough providing [care].” – Focus group participant*

key informant noted that many emergency responders were equipped with Narcan to respond to opioid overdoses.

From 2009 to 2014, the number of unintentional opioid-related deaths increased across Connecticut. In the five-year period of 2009-2014, each town in the Uncas Health District experienced at least one opioid-related death (Figure 60). The rate of deaths due to opioids was highest in Norwich, Salem, and Sprague.

**Figure 60. Opioid-Related Deaths, by Town, 2009-2014**

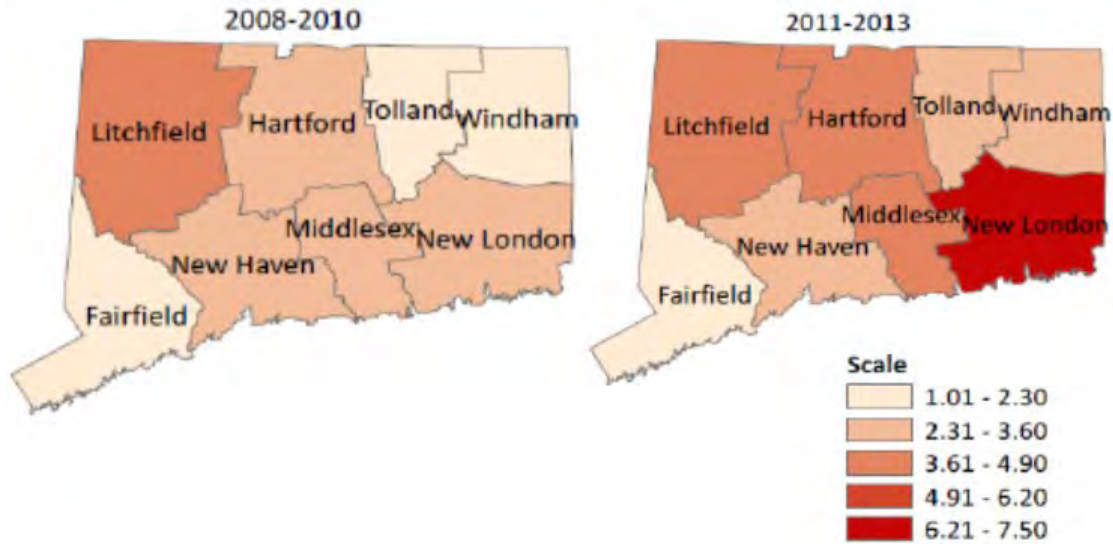


Data Source: Connecticut Medical Examiners Office, “OD Brief Presentation January 2016 – AIDS CT”, as reported in “Prescription Opioid and Heroin Drug Overdoses in Connecticut Residents: Epidemiology and Trends” presentation by the Office of Injury Prevention, Connecticut DPH.

Note: Rate is per 100,000 population; 2009-2014.

The rate of heroin overdose deaths has increased across the State in recent years (Figure 61). In 2011-2013, the rate of heroin overdose deaths was highest in New London County (6.21-7.50 deaths per 100,000 population), an increase over the rate for 2008-2010 (2.31-3.60 deaths per 100,000 population)

**Figure 61. Rate of Deaths due to Heroin Overdose, by County, 2008-2010 and 2011-2013**

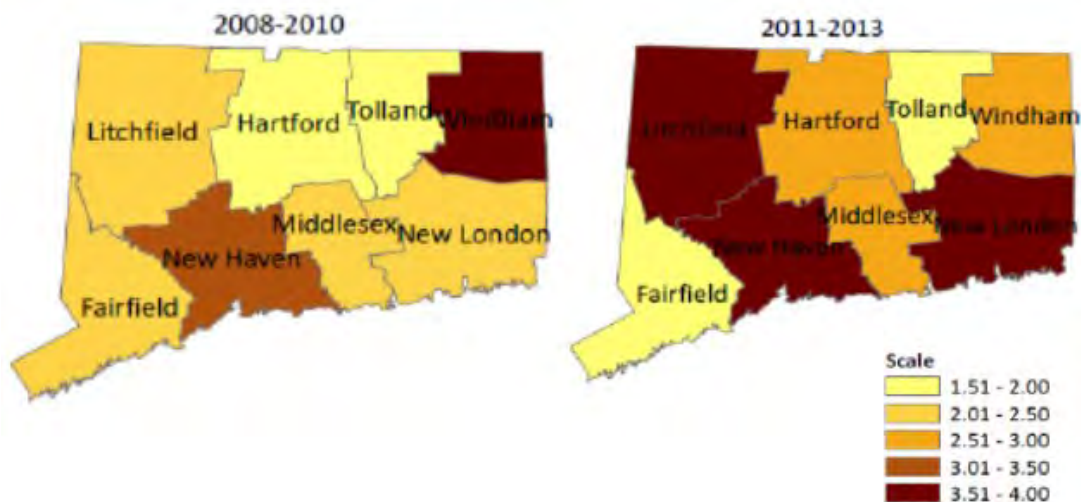


Data Source: Mortality Data – DPH State Office of Vital Statistics, as reported in “Prescription Opioid and Heroin Drug Overdoses in Connecticut Residents: Epidemiology and Trends” presentation by the Office of Injury Prevention, Connecticut DPH.

Note: Rate is per 100,000 population.

The rate of deaths due to prescription drug overdose in New London County increased from 2.01-2.50 deaths per 100,000 population in 2008-2010 to 3.51-4.00 deaths per 100,000 population in 2011-2013 (Figure 62). In 2011-2013, New London County was among the three Connecticut counties with the highest rate of deaths due to prescription drug overdose (3.51-4.00 deaths per 100,000 population).

**Figure 62. Rate of Deaths Due to Prescription Drug Overdose, by County, 2008-2010 and 2011-2013**



Data Source: Mortality Data – DPH State Office of Vital Statistics, as reported in “Prescription Opioid and Heroin Drug Overdoses in Connecticut Residents: Epidemiology and Trends” presentation by the Office of Injury Prevention, Connecticut DPH.

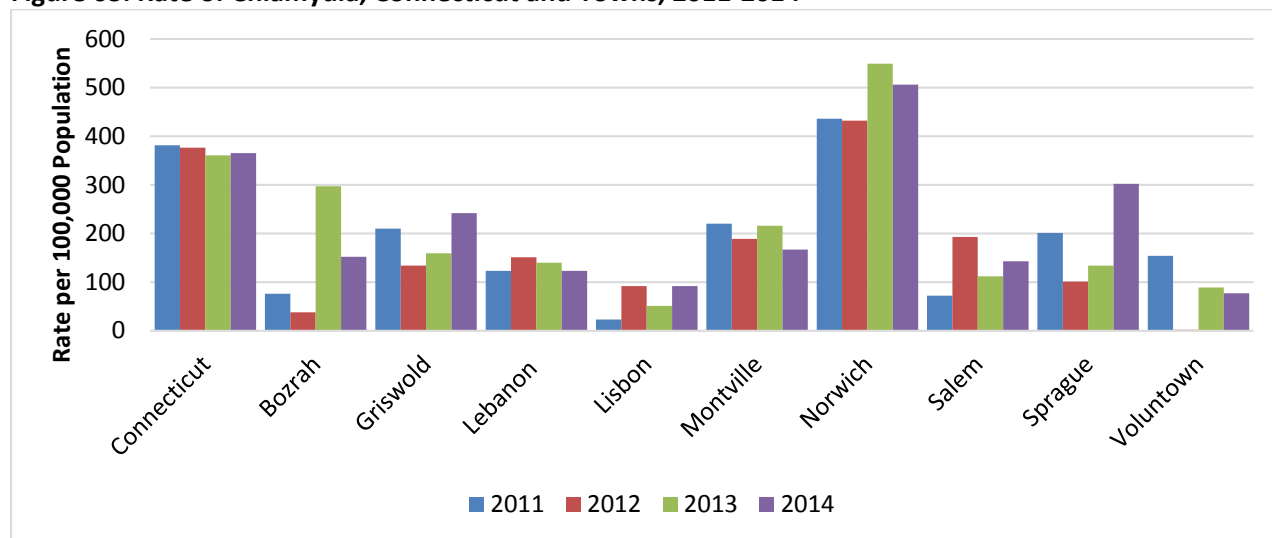
Note: Rate is per 100,000 population.



## Communicable Diseases

Some key informants cited sexually transmitted infections as persistent health issues in the Uncas Health District region. From 2011 to 2014, the rate of chlamydia in Norwich exceeded that for Connecticut (Figure 63). In 2014, the towns of Norwich (506.0 per 100,000 population), Sprague (302.0 per 100,000 population) and Griswold (242.0 per 100,000 population) had the highest rates of chlamydia, while Voluntown (77.0 per 100,000 population) and Lisbon (92.0 per 100,000 population) had the lowest rate of chlamydia.

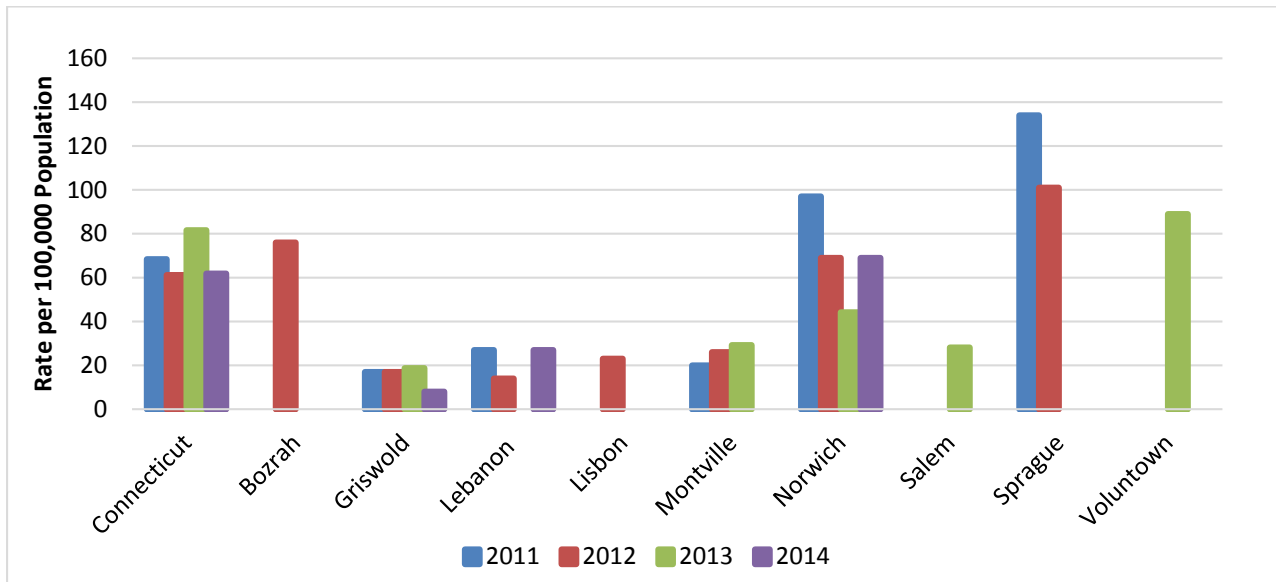
**Figure 63. Rate of Chlamydia, Connecticut and Towns, 2011-2014**



Data Source: CT STD Control Program, STD MIS Data, analysis by STD Surveillance Network

As illustrated in Figure 64, in 2011 and 2012 the rate of gonorrhea in the towns of Sprague (134.0 per 100,000 population and 101.0 per 100,000 population, respectively) and Norwich (97.0 per 100,000 population and 69.0 per 100,000 population, respectively) was greater than that for Connecticut (68.4 per 100,000 population and 61.2 per 100,000 population, respectively) in the same years. In 2014, Norwich had 69.0 cases of gonorrhea per 100,000 population, slightly higher than the rate of 61.8 cases per 100,000 population for Connecticut.

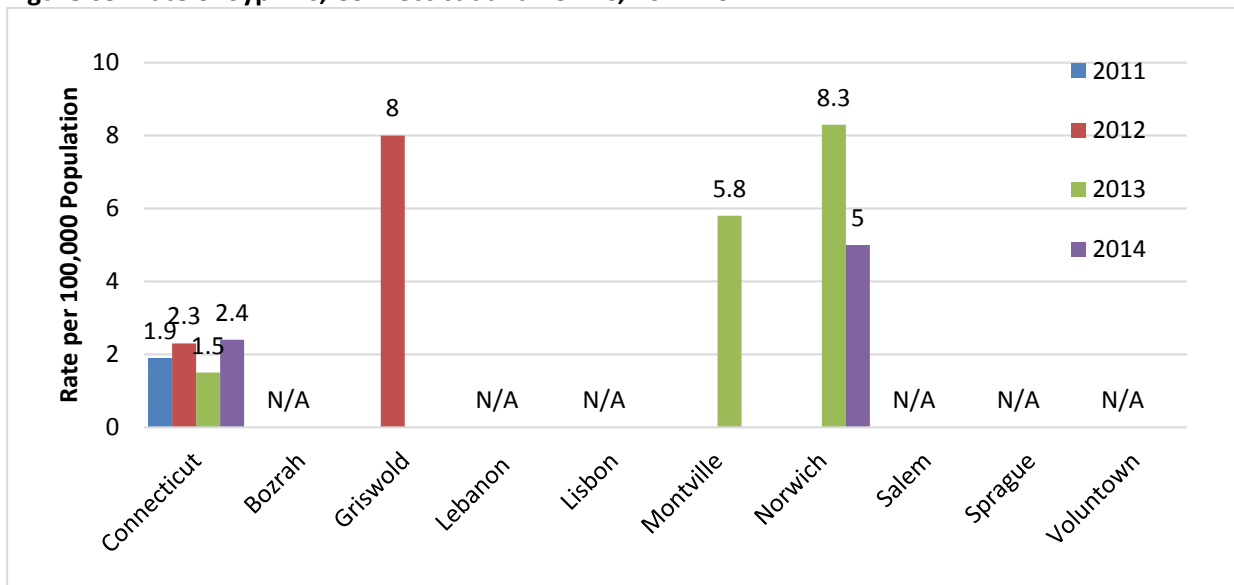
**Figure 64. Rate of Gonorrhea, Connecticut and Towns, 2011-2014**



Data Source: CT STD Control Program, STD MIS Data, analysis by STD Surveillance Network

As illustrated in Figure 65, the rate of syphilis was highest in Griswold in 2012 (8.0 per 100,000 population) and Norwich in 2013 (8.3 per 100,000 population). Over the 2011 to 2014 period, the rate of syphilis in the towns of Griswold, Montville, and Norwich – the towns for which a syphilis rate was available – exceeded that for Connecticut.

**Figure 65. Rate of Syphilis, Connecticut and Towns, 2011-2014**

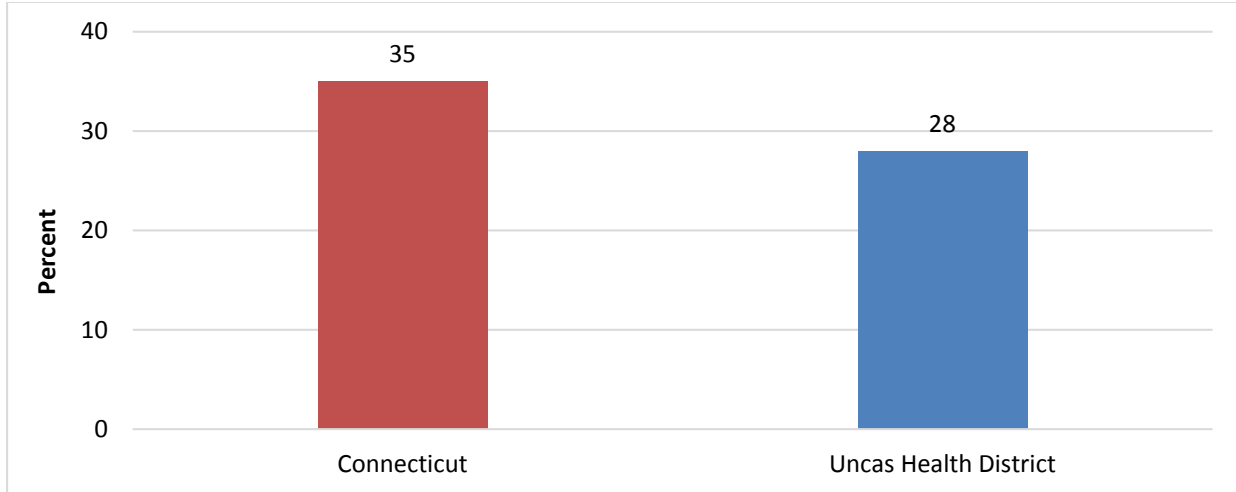


Data Source: CT STD Control Program, STD MIS Data, analysis by STD Surveillance Network

Note: For 2011-2014, the rate is not available for the towns of Bozrah, Lebanon, Lisbon, Salem, Sprague and Voluntown. For the towns of Griswold, Montville, and Norwich, rates are reported for years for which reported rates are available.

According to the BRFSS, in 2011-2014 28% of adults in Uncas Health District reported that they ever got tested for HIV, a prevalence that is below that for adults across Connecticut (35%) (Figure 66).

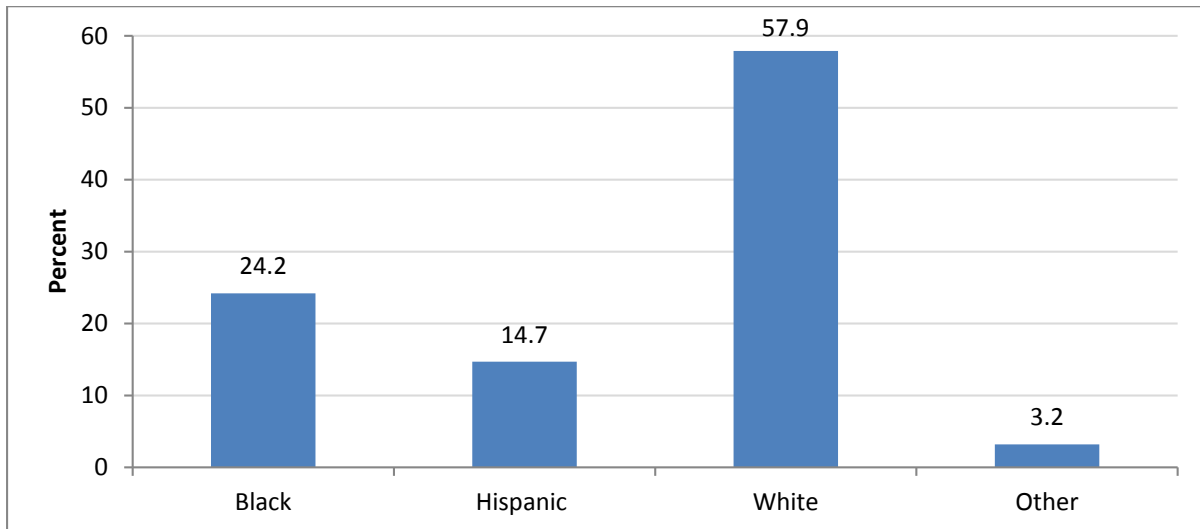
**Figure 66. Percent of Adults Reporting That They Ever Obtained an HIV Test, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

As presented in Figure 67, of the 95 recently diagnosed HIV cases in New London County from 2010 to 2014, White residents (57.9%) represented approximately half of these cases, approximately one-quarter identified as Black (24.2%), 14.7% were Hispanic, and 3.2% were of an Other racial/ethnic group.

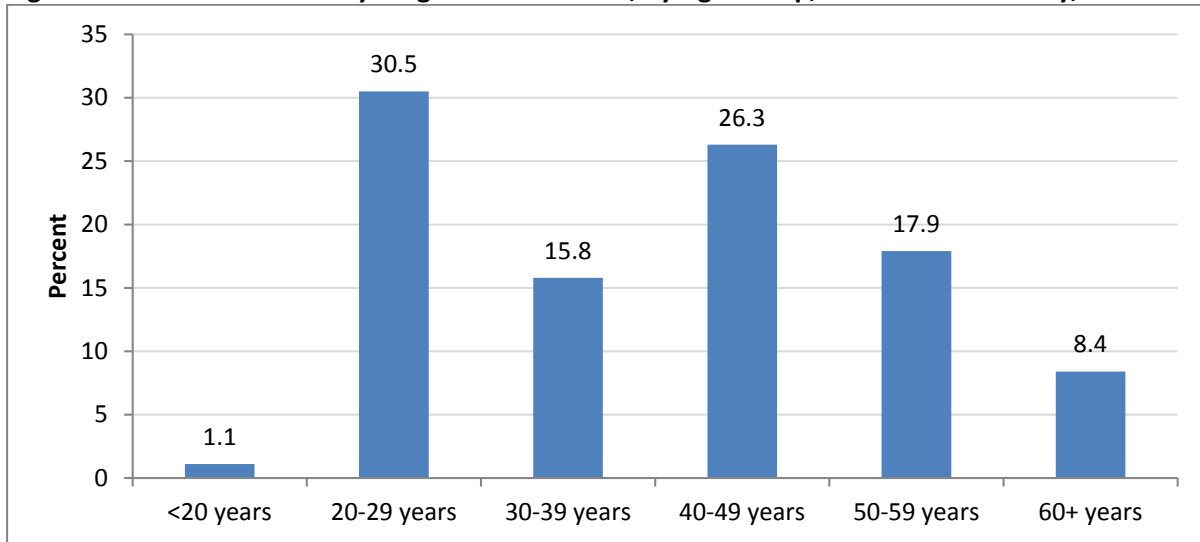
**Figure 67. Percent of Recently Diagnosed HIV Cases, by Race/Ethnicity, New London County, 2010-2014**



Data Source: Connecticut DPH, HIV Surveillance Program, 2015, "New London County Recently Diagnosed HIV Cases by Sex, Race, Age, and Risk (2010-2014)."

In 2010-2014, persons aged 20 to 29 years (30.5%) and 40 to 49 years (26.3%) represented more than half of the recently diagnosed cases of HIV in New London County (Figure 68). Nearly one-third of recently diagnosed HIV cases were of persons aged 30 to 39 years (15.8%) or 50 to 59 years (17.9%).

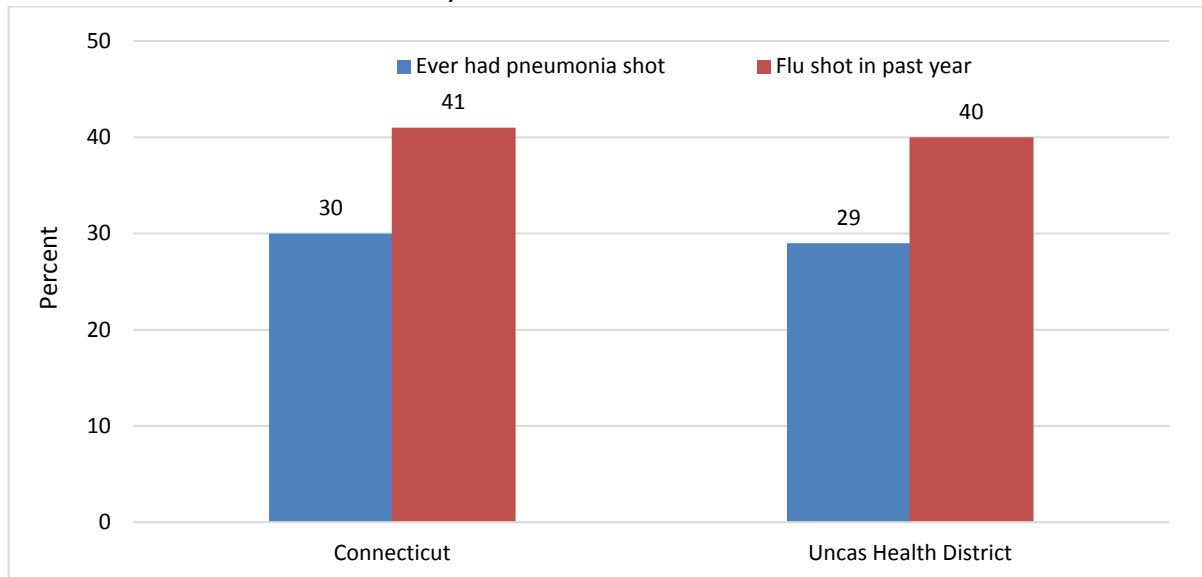
**Figure 68. Percent of Recently Diagnosed HIV Cases, by Age Group, New London County, 2010-2014**



Data Source: Connecticut DPH, HIV Surveillance Program, 2015, "New London County Recently Diagnosed HIV Cases by Sex, Race, Age, and Risk (2010-2014)."

As shown in Figure 69, in 2011-2014 approximately three in ten adults in Uncas Health District (29%) and Connecticut (30%) reported ever having a pneumonia shot. Approximately two in five adults in Uncas Health District (40%) and Connecticut (41%) reported having a flu shot in the past year.

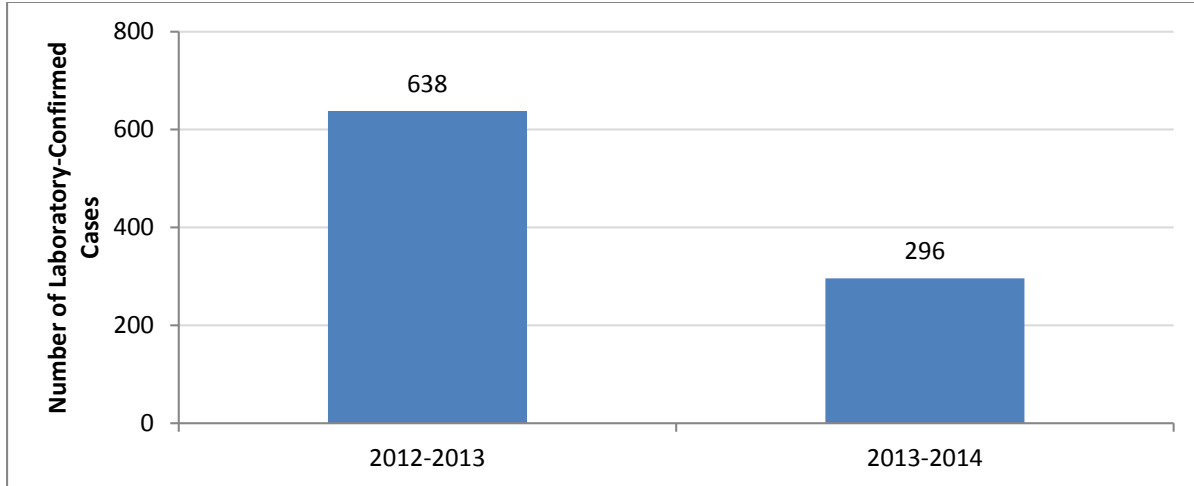
**Figure 69. Percent of Adults Reporting Ever Obtaining a Pneumonia Shot or a Flu Shot in the Past Year, Connecticut vs. Uncas Health District, 2011-2014**



Data Source: Behavioral Risk Factor Surveillance System 2011-2014, as reported by CT DPH.

In the 2012-2013 influenza season, there were 638 confirmed cases of influenza in New London County, nearly double the number of confirmed influenza cases in 2013-2014 (296 confirmed cases) (Figure 70).

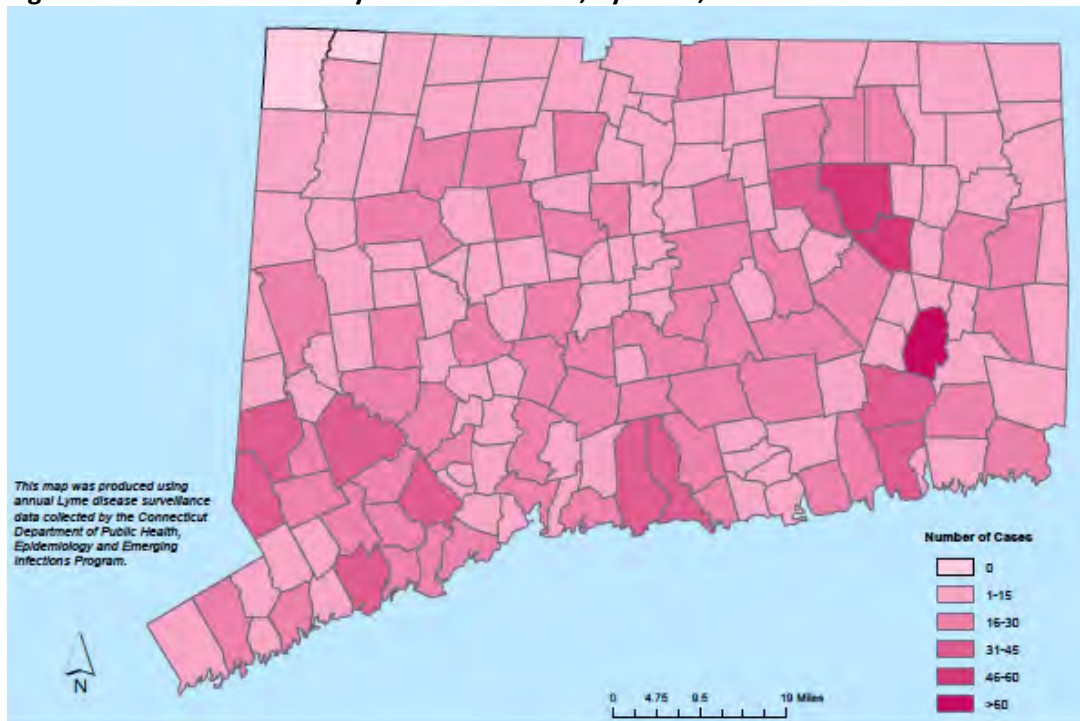
**Figure 70. Number of Laboratory-Confirmed Cases of Influenza, New London County, 2012-2013 and 2013-2014 Flu Seasons**



Data Source: Connecticut DPH, "Influenza Final Surveillance Summary for 2013-2014 Influenza Season" and "Influenza Final Surveillance Summary for 2012-2013 Influenza Season."

In 2015, Norwich was among the three towns in Connecticut with more than 60 cases of Lyme disease (Figure 71). The town of Montville had the second highest number of Lyme disease cases in the Uncas Health District.

**Figure 71. Total Number of Lyme Disease Cases, by Town, 2015**

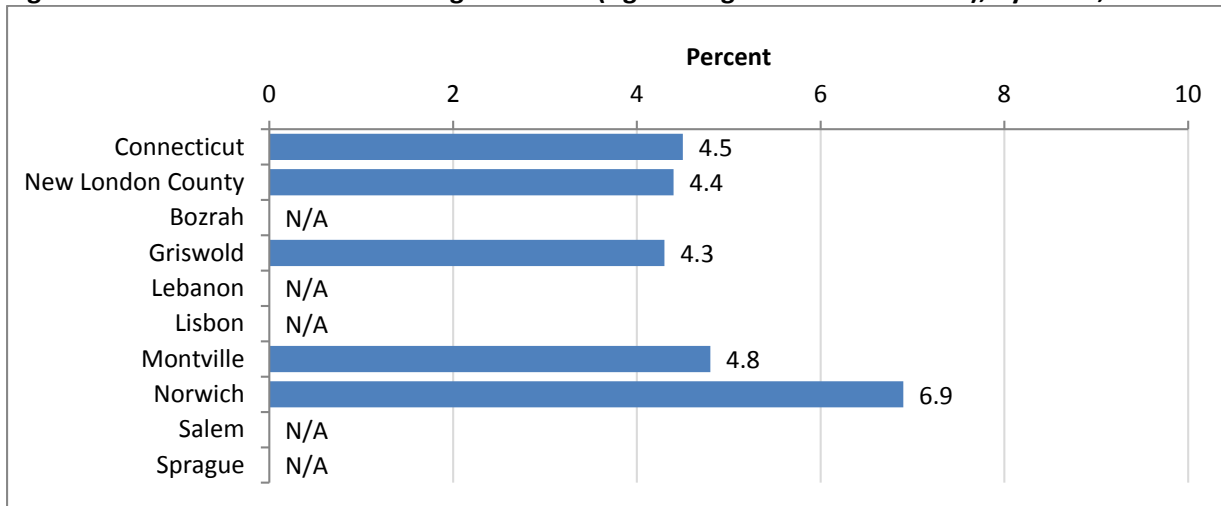


DATA SOURCE: Connecticut DPH, Epidemiology and Emerging Infections Program, May 24, 2015

## Reproductive and Maternal Health

As shown in Figure 72, 6.9% of births in Norwich in 2013 were to teenage mothers. Similar to Connecticut (4.5%) and New London County (4.4%), in the towns of Griswold (4.3%) and Montville (4.8%), approximately 4% of births were to women less than 20 years of age.

**Figure 72. Percent of Births to Teenage Mothers (Age Younger than 20 Year Old), by Town, 2013**

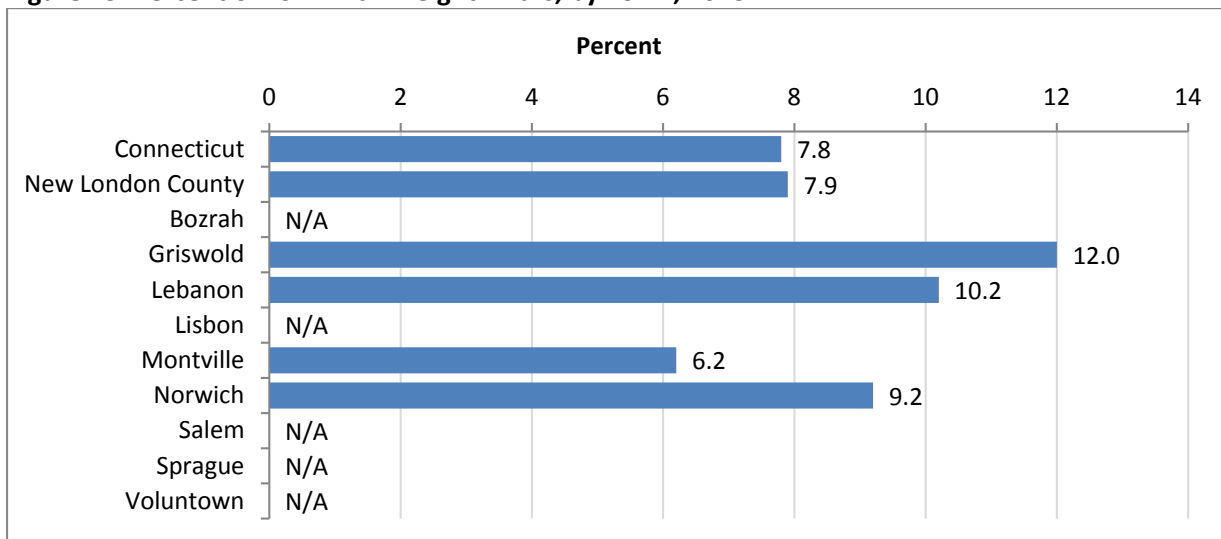


Data Source: Connecticut DPH, Table 4, Connecticut Resident Births, 2013

Notes: N/A indicates percentages not calculated for less than 5 events because of the high degree of variability associated with small numbers.

In 2013, the prevalence of low birth weight births in New London County (7.9%) was similar to that for Connecticut (7.8%) (Figure 73). The proportion of low birth weight births exceeded that for New London County in the towns of Griswold (12.0%), Lebanon (10.2%), and Norwich (9.2%). Among towns for which low birth weight data were available, the prevalence of low birth weight was lowest in Montville (6.2%).

**Figure 73. Percent of Low Birth Weight Births, by Town, 2013**

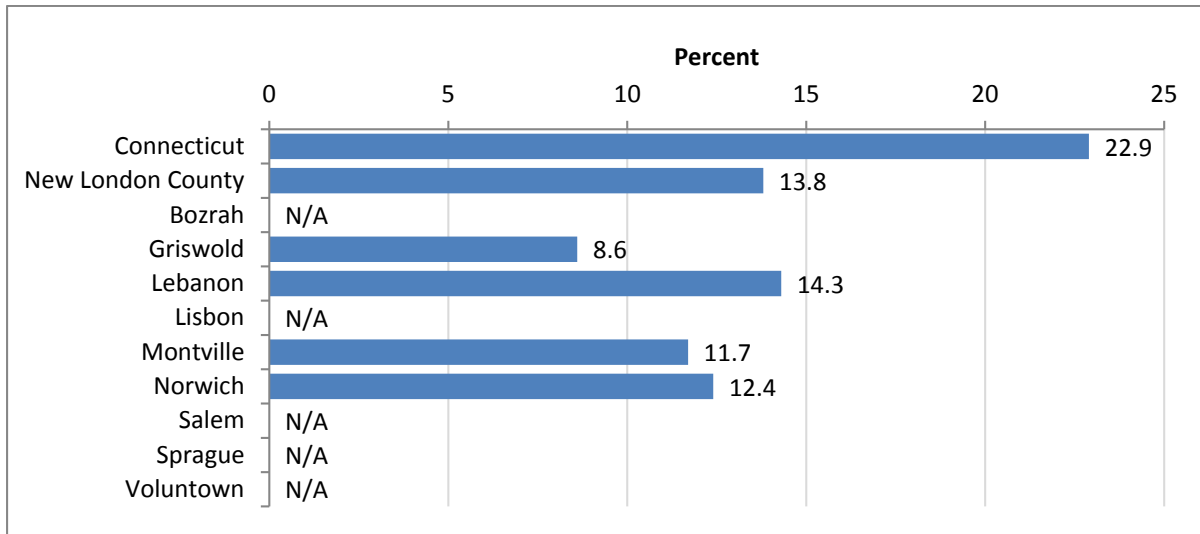


Data Source: Connecticut DPH, Table 4, Connecticut Resident Births, 2013

Notes: Low birth weight defined as <2,500 grams. N/A indicates percentages not calculated for less than 5 events because of the high degree of variability associated with small numbers.

In 2013, the percent of births characterized by non-adequate prenatal care ranged from a low of 8.6% in Griswold to a high of 14.3% in Lebanon. The prevalence of non-adequate prenatal care in each of the towns served by Uncas was below the prevalence for Connecticut (22.9%) and generally similar to the prevalence for New London County (13.8%) (Figure 74).

**Figure 74. Percent of Births with Non-Adequate Prenatal Care, by Town, 2013**



Data Source: Connecticut DPH, Table 4, Connecticut Resident Births, 2013

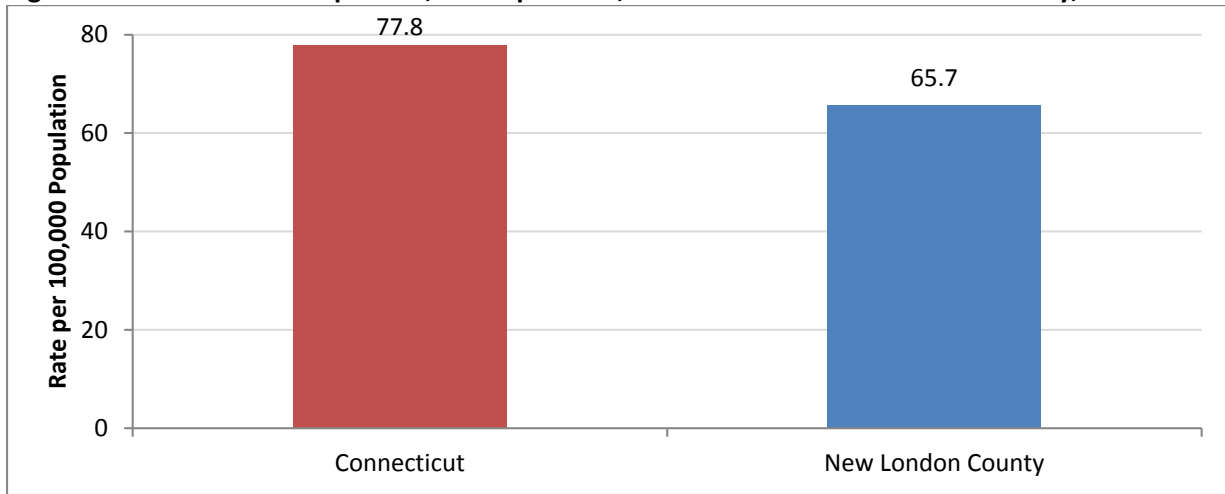
Notes: Non-adequate prenatal care comprises intermediate and inadequate prenatal care based on the Adequacy of Prenatal Care Utilization (APNCU) Index. N/A indicates percentages not calculated for less than 5 events because of the high degree of variability associated with small numbers.

## Oral Health

Several key informants cited oral health and limited access to oral health care as community health concerns. Lack of dental insurance for adults and limited supply of dental providers were two cited challenges.

As shown in Figure 75, in 2012 the rate of dentists per capita was lower in New London County (65.7 per 100,000 population) relative to Connecticut (77.8 per 100,000 population), with approximately 66 dentists available per 100,000 New London County residents.

**Figure 75. Rate of Dentists per 100,000 Population, Connecticut vs. New London County, 2012**

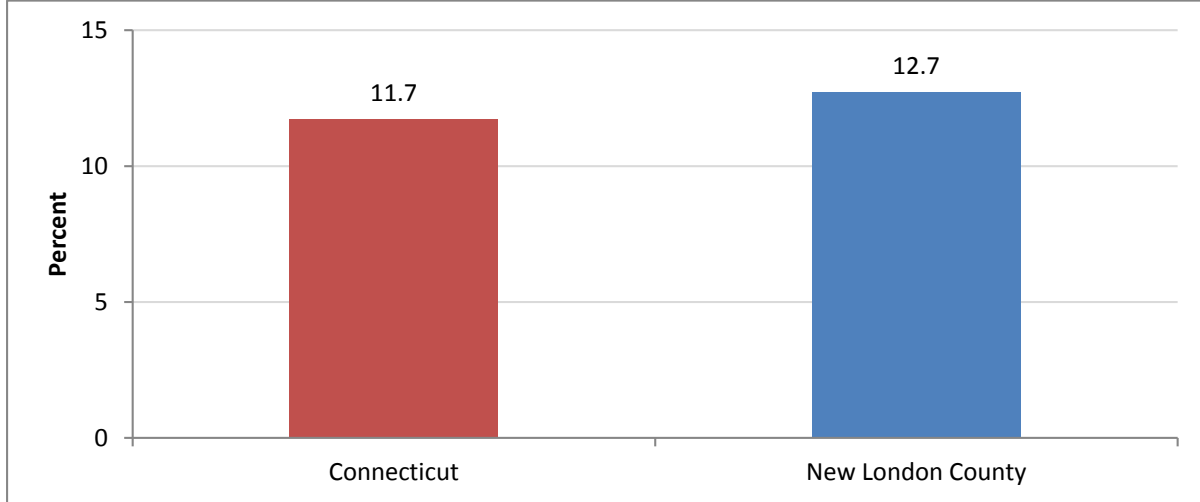


Data Source: Rate of primary care providers and dentists obtained from U.S. Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File, 2012; rate of mental health providers obtained from University of Wisconsin Population Health Institute, "County Health Rankings," 2016; As reported in Community Commons.

As shown in Figure 76, in 2006-2010 12.7% of New London County adults reported having six or more teeth removed, followed by 11.7% of Connecticut adults.



**Figure 76. Percent of Adults with 6 or More Teeth Removed, Connecticut vs. New London County, 2006-2010**



Data Source: Behavioral Risk Factor Surveillance System, 2006-2010, as reported in Community Commons.

## HEALTH CARE ACCESS AND UTILIZATION

### Resources and Use of Health Care Services

Residents characterized the health department and existing health care services as strengths in the region. Residents viewed local general health care services as available and of high quality. Informants described the local health department as “innovative” and sensitive to the health needs of the community. A strong commitment among the health care systems in the area to improving access to health care was cited as a strength of health care resources.

### Access and Challenges to Health Care

While residents described primary health care services as relatively accessible in the region, some residents noted that specialists were more common in higher income or more populated towns. Residents cited primary care access as a challenge for vulnerable populations, including low-income and elderly residents. Limited access to behavioral health providers was also a community concern. Informants and focus group participants noted that transportation was a barrier to accessing needed health care for vulnerable populations. Key informants identified the health insurance expansion in Connecticut and other recent or pending state-level policies to improve health care access as promising opportunities to improve access to health care.

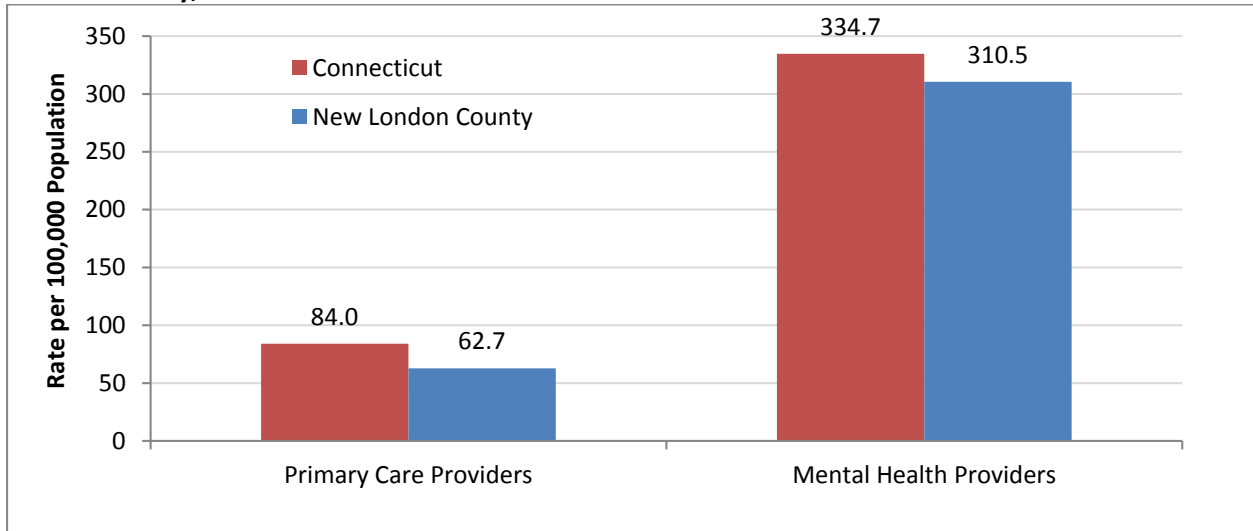
*“The health district is engaged, responsive, and open to new ideas.” – Key informant*

*“Historically as a community we’ve done a good job at ensuring that people have access to health care.” – Key informant*

*“We can go see the doctor, but other people call 911 for health care and that uses resources and tax dollars.” – Focus group participant*

Presented in Figure 77 is the rate of health care providers per 100,000 population, by specialty. The rate of primary care physicians (62.7 per 100,000 population vs. 84.0 per 100,000 population) and mental health providers (310.5 per 100,000 population vs. 334.7 per 100,000 population) per capita was lower in New London County relative to Connecticut.

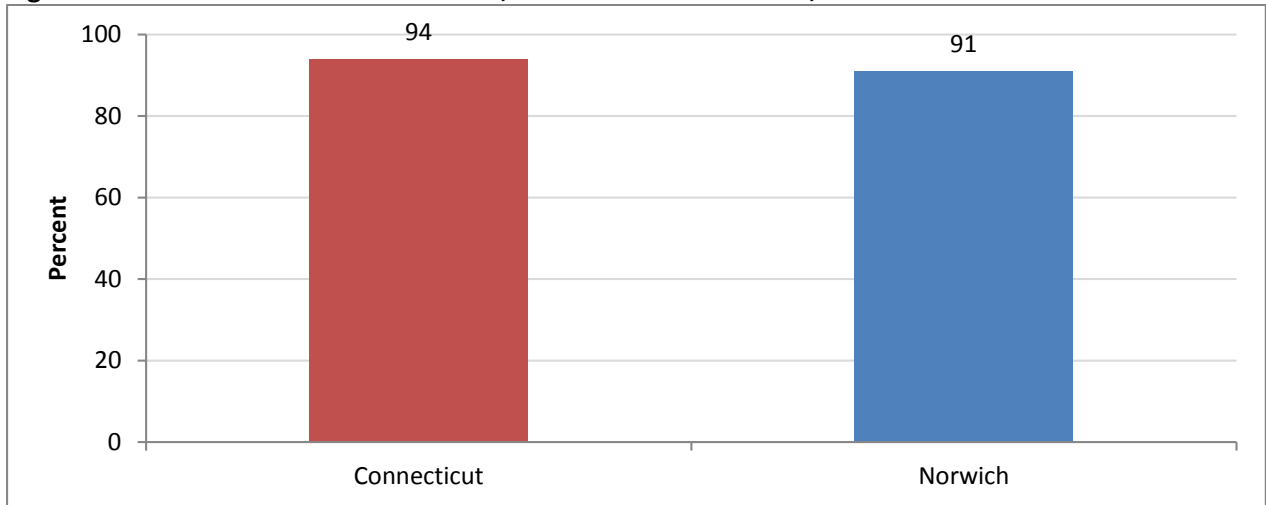
**Figure 77. Rate of Health Care Providers Per 100,000 Population, by Specialty, Connecticut vs. New London County, 2012 and 2016**



Data Source: Rate of primary care providers and dentists obtained from U.S. Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File, 2012; rate of mental health providers obtained from University of Wisconsin Population Health Institute, "County Health Rankings," 2016; As reported in Community Commons.

In 2015, 91% of Norwich residents, and 94% of Connecticut residents had health insurance (Figure 78).

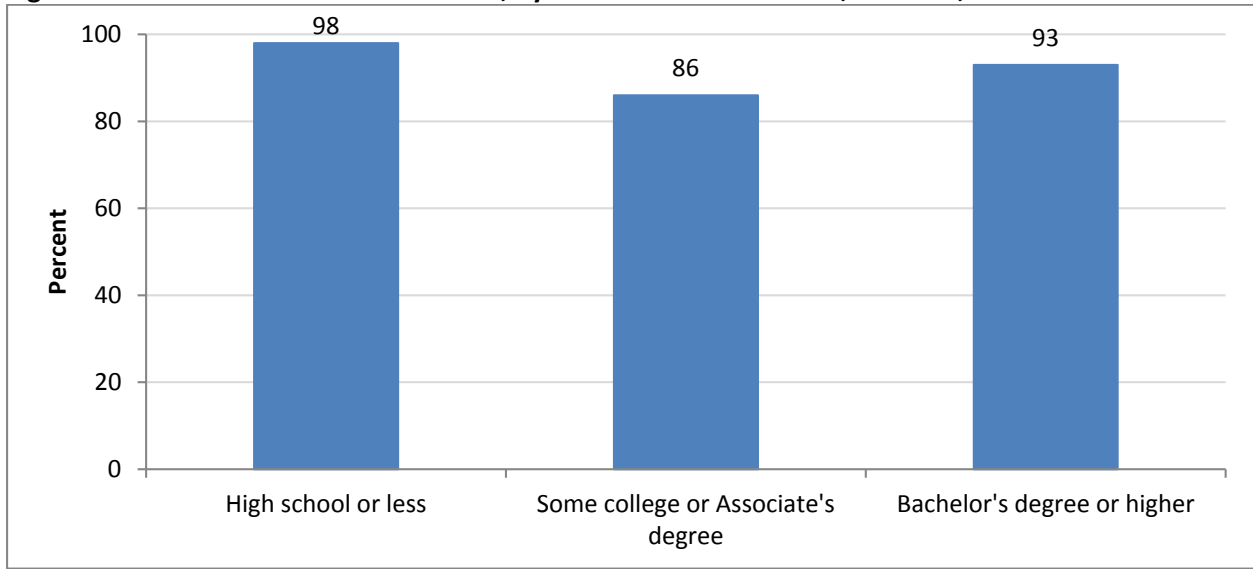
**Figure 78. Percent with Health Insurance, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As presented in Figure 79, 86% of Norwich residents with some college education reported having health insurance, followed by 93% of residents with at least a college education and 98% of residents with a high school education or less.

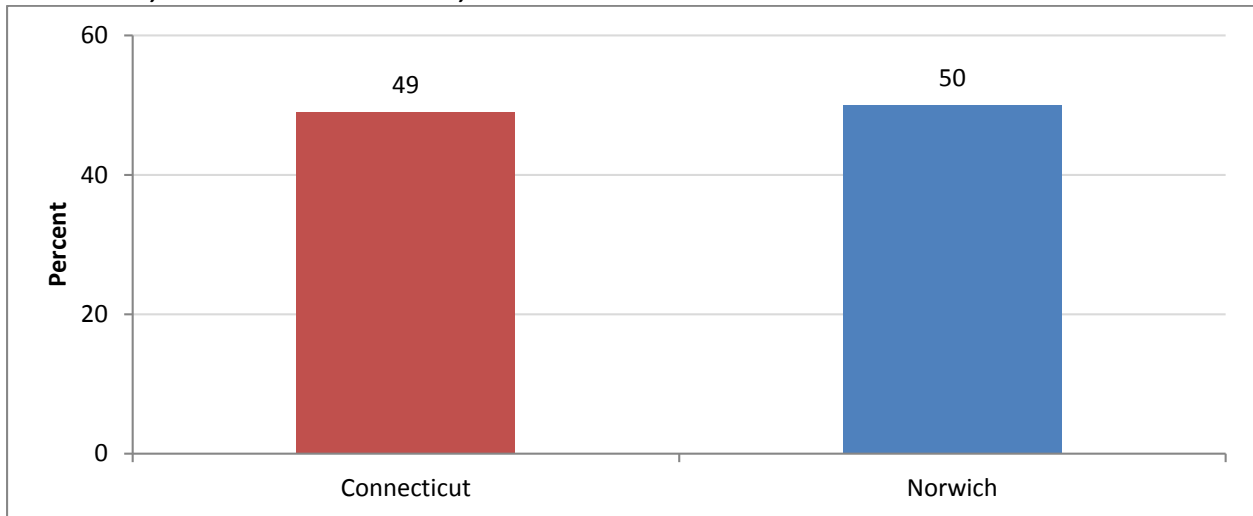
**Figure 79. Percent with Health Insurance, by Educational Attainment, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As shown in Figure 80, among residents who reported delaying medical care, approximately half of Norwich (50%) and Connecticut residents (49%) reported delaying medical care because of costs.

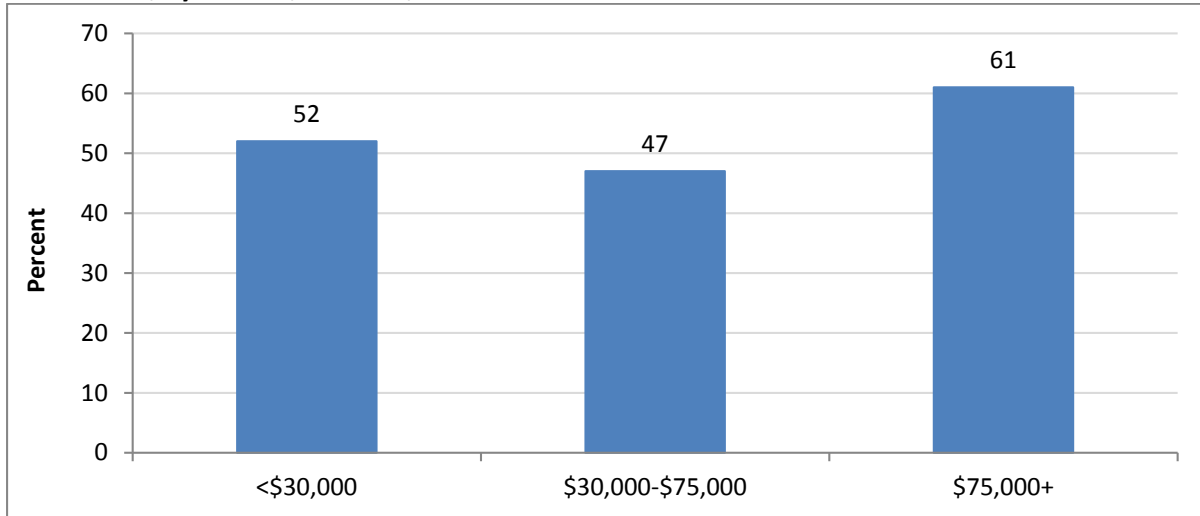
**Figure 80. Percent Who Delayed Medical Care Due to Cost, Among Persons Who Delayed Medical Care in Past Year, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In Norwich, among respondents who reported delaying medical care, 61% of those with incomes above \$75,000 reported delaying care due costs, followed by 52% of respondents with incomes below \$30,000 and 47% of respondents with incomes between \$30,000-\$75,000 (Figure 81).

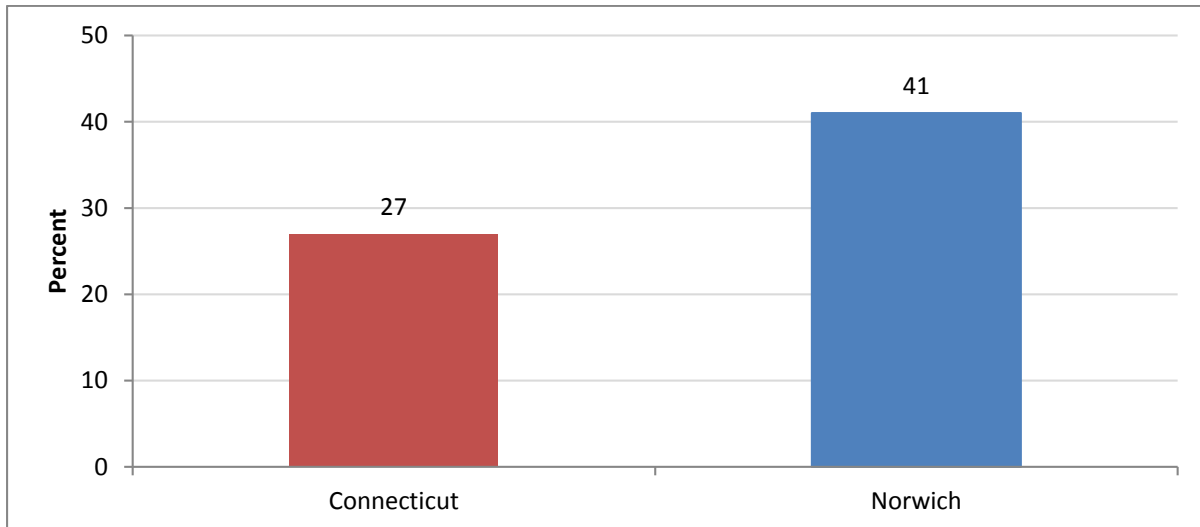
**Figure 81. Percent Who Delayed Medical Care Due to Cost, Among Persons Who Delayed Medical Care in Past Year, by Income, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

In 2015, 41% of Norwich residents reported use of the hospital emergency room in the past year, compared to only 27% of Connecticut residents (Figure 82).

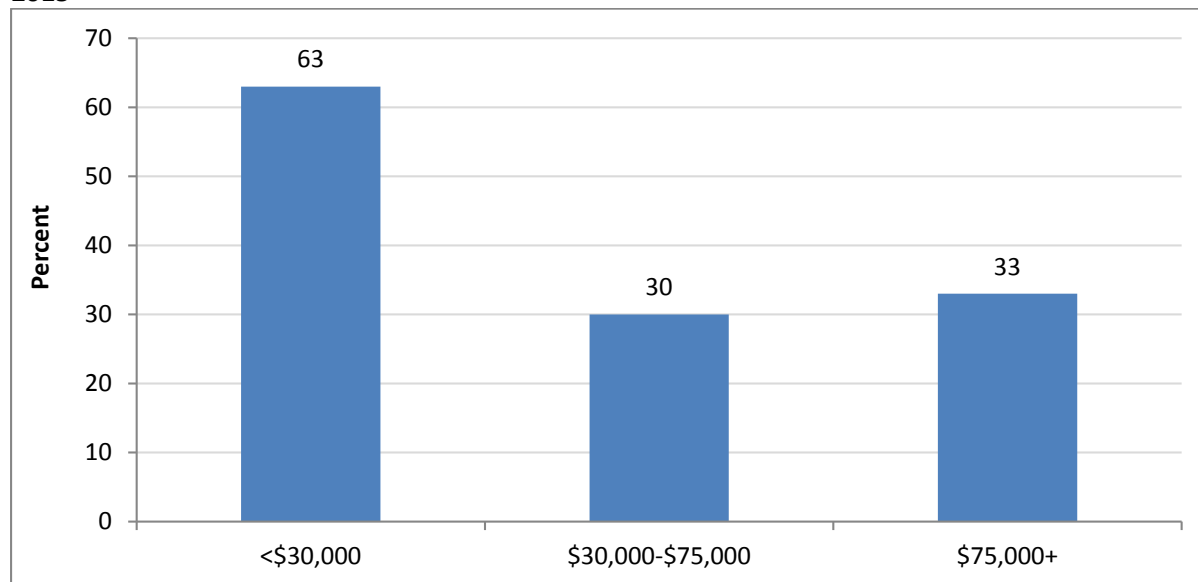
**Figure 82. Percent Reporting Hospital Emergency Room Use in the Past Year, Connecticut vs. Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

As illustrated in Figure 83, approximately three in five Norwich residents with incomes below \$30,000 (63%) reported using a hospital emergency room in the past year, compared to approximately three in ten Norwich residents with incomes between \$30,000-\$75,000 (30%) and those with incomes above \$75,000 (33%).

**Figure 83. Percent Reporting Hospital Emergency Room Use in the Past Year, by Income, Norwich, 2015**



Data Source: DataHaven - Community Wellbeing Survey, 2015.

## COMMUNITY RESOURCES AND ASSETS

Residents cited several community resources and strengths, including the “small town feel” and sense of community cohesion among residents in the area. Several participants, particularly senior residents, observed services for the senior population, such as meal programs at senior centers and Meals on Wheels and organized social activities, as important community resources for this perceived growing population. Residents also identified food pantries as important food resources for low-income residents experiencing food insecurity.

Key informants described the local health department as strong and responsive to community health needs. Additionally, informants characterized local health care systems and the state of Connecticut as committed to promoting community health through health insurance expansions and hospital-specific efforts to provide health care access to populations who experience barriers to care.

*“I like the small town feel. I wouldn’t want to live anywhere else.” – Focus group participant*

*“[Seniors] get a lot of services, more than probably a lot of other people do. We are very lucky. We often have a lot of people coming in and giving a lot of information.” – Focus group participant*

*“Uncas Health District has been an asset. [Uncas] has taken on roles [regarding] at risk people in the town and their living environments that impact their day-to-day lives.” – Key informant*

## COMMUNITY VISION FOR THE FUTURE

Residents identified several areas of opportunity to promote the health of residents across the Uncas Health District. These include addressing the social and health-related needs of the growing senior population, improving the food and physical activity environment in the region at a systems level, strengthening and expanding strategic collaboration to promote community health, and enhancing access to health care.

Addressing the needs of the growing senior population emerged as a vision for the future expressed by several participants and informants. Residents cited a need to enhance care for and reduce stigma around health issues affecting senior residents such as dementia and Alzheimer’s disease. Expanding transportation options for elderly and low-income populations was a related opportunity for improvement.

Citing histories of siloed approaches to promoting healthy eating, key informants and focus group participants observed a need for systems-level strategies to improve access to healthy, affordable foods, particularly for low-income residents in the region. Several key informants also identified a need to improve physical activity across the Uncas Health District by promoting a “culture of wellness” in the region.

Key informants and focus group participants identified an opportunity for enhanced strategic collaboration to promote community health. This may include partnerships between health care systems, the Health District, and existing community organizations and collaborations to identify effective policy and programmatic areas. This strategic partnership may identify collaborative opportunities for intervention, as well as strategies that each institution can engage to promote community health, particularly regarding healthy lifestyles.

Improved access to health care for lower-income residents and other vulnerable populations with limited health care access was also an area for improvement. Informants expressed a commitment among health care systems in the area to address gaps in care through their institutions, as well as promising health care policy reforms at the State level. The incorporation of community health workers into initiatives to improve access to primary care was cited as a promising evidence-based opportunity.

*“I would like to see a really broad range of stakeholders working together to improve the health of our region. By health I’m not just thinking about health care or the absence of disease. I’m thinking about a broad definition of health – adequate housing, reduction of poverty, improved overall nutrition – big issues that can be tackled a little bit at a time.” – Key informant*

*“We need to band together as a community and community agencies to solve [the prevalence of overweight and obesity]. It’s not a condition that develops overnight and it’s not a condition that will be solved overnight. Working alone is like throwing a sandbag in the ocean. When you work together, it’s like turning the tide. Everyone works on a piece of it, towards a common goal.” – Key informant*

*“We’ve been nibbling around the edges of things, but there hasn’t been much of an organized effort to change the findings. Take obesity – we’re gonna have to do something dramatically different to move the needle on that.” – Key informant*

*“My goal would be to create a culture of wellness in Uncas region. All the initial screenings that people do are important.” – Key informant*

## KEY THEMES AND CONCLUSIONS

There is variation in income, poverty, and demographics across the communities served by the Uncas Health District. Though some towns are characterized by high levels of household income and education and low levels of poverty, pockets of vulnerable populations exist within the Uncas Health District and towns served by Uncas.

While health-specific data for chronic diseases, mental health, and substance use were not available at the town level, cardiovascular risk patterns in New London County were similar to that for Connecticut. In contrast, mental health profiles among older residents and substance use patterns, particularly opioid use, were more acute in New London County relative to Connecticut overall.

Obesity, lifestyle factors, and behavioral health were key concerns among focus group participants and informants. Informants stressed a need for systems-level strategies to promote healthy eating and physical activity to reduce chronic illness in the community. Key informants and focus group participants cited substance use and associated mental health issues as growing concerns in the region.

Access to behavioral health care services is challenging for some; while limited access to oral health care and medical specialists were described as common for residents across the towns served by Uncas Health District.

As with all assessments, this CHA is characterized by several limitations of the data, including limited health-specific data for each of the towns served by Uncas Health District and relatively small sample sizes at the town level that often precluded the examination of patterns by important social groups, such as race/ethnicity, gender, and socioeconomic position. However, the integration of several validated surveillance measures with the perspectives of key informants and focus group participants provides a foundation for monitoring and addressing the social determinants of health and health outcomes of residents in the towns served by Uncas Health District.

The Uncas Health District has many strengths that can be leveraged to address key health concerns. Collaborative partnerships are viewed as promising opportunities for identifying each sectors' unique and collaborative contributions to addressing priority health concerns in the region served by Uncas Health District.

## APPENDIX A: KEY INFORMANT INTERVIEW GUIDE

### Uncas Health District Community Health Needs Assessment Key Informant Interview Guide

#### Goals of the Key Informant Interview

- To determine perceptions of the health strengths and needs of communities within the Uncas Health District
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively
- To understand perceptions of the role and vision for Uncas Health District

[NOTE: QUESTIONS FOR THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]

#### I. **BACKGROUND (5 minutes)**

- Hi, my name is \_\_\_\_\_ and I am with Health Resources in Action, a non-profit public health organization. Thank you for taking the time to speak with me today.
- The Uncas Health District is undertaking a comprehensive community health assessment effort to gain a greater understanding of the health of residents within the Health District and how health needs are currently being addressed. The Uncas Health District serves the communities of Norwich, Bozrah, Montville, Salem, Sprague, Griswold, Lebanon, Lisbon, and Voluntown.
- As part of this process, we are conducting interviews with leaders in the community and focus groups with residents to understand different people's perspectives on the community health strengths and needs and strengths and weaknesses of the public health system in the communities served by the Uncas Health District, and suggestions for the future. We greatly appreciate your feedback, insight, and honesty.
- Our interview will last about 45-60 minutes. After all of the interview and focus group discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not include any names or identifying information in that report. All names and responses will remain confidential. Nothing sensitive that you say here will be connected to directly to you in our report.
- Do you have any questions for me before we begin?

#### II. **THEIR AGENCY/ORGANIZATION (5 minutes)**

1. Can you tell me a bit about your organization/agency? [TAILOR PROBES DEPENDING ON AGENCY]

[PROBE ON ORGANIZATION: What is your organization's mission/services? What communities do you work in? Who are the main clients/audiences?]

What are some of the biggest challenges your organization faces in conducting your work in the community?

- a. Do you currently partner with any other organizations or institutions in any of your work?



### III. COMMUNITY ISSUES (5 minutes)

2. What do you think are the most pressing health concerns in the community? Why? [PROBE ON SPECIFICS]

[INTERVIEWER INSTRUCTIONS: AFTER KEY INFORMANT TALKS ABOUT DIFFERENT HEALTH ISSUES, SELECT THE TOP 3 AND ASK THE FOLLOWING SERIES OF QUESTIONS FOR EACH ISSUE.]

- a. How has [HEALTH ISSUE] affected your community? [PROBE FOR DETAILS: IN WHAT WAY? CAN YOU PROVIDE SOME EXAMPLES?]
  - b. Who do you consider to be the populations in the community most vulnerable or at risk for [THIS CONDITION / ISSUE]?
  - c. From your experience, what are peoples' biggest challenges to addressing [THIS ISSUE]?
    - i. [PROBE ON RANGE OF CHALLENGES: E.g., Various barriers to accessing to medical and/or preventive care and services, socioeconomic factors, lack of community resources, social/community norms, etc.]
  - d. What do you see as happening in the region (policies, programs, services, etc.) to address the issue of [NAME ISSUE BEING DISCUSSED]?
    - i. How well do you think that they are addressing this issue?
3. Thinking about the overall environment in the region, what is occurring or has recently occurred that affects the health of the community served by the Uncas Health District? [PROBE ON EXTERNAL FACTORS: Built environment, physical environment (air pollution, drinking water quality, etc.), economy, political environment, resources, organizational structures, etc.]
    - a. What are some factors that make it easier to be healthy in your community?
    - b. What are some factors that make it harder to be healthy in your community?
  4. What are current or emerging trends that could have an impact on the public health system or the Uncas Health District region?

### IV. UNCAS HEALTH DISTRICT OVERALL PERCEPTIONS (10 MINUTES)

As I mentioned earlier, the Uncas Health District is conducting this community health assessment in order to learn more about the health issues of residents in the Health District, how those needs are currently being addressed, and where there are gaps and opportunities to address these issues in the future. I'm now going to ask you some specific questions about the Uncas Health District and its role in the community.

5. I'd like you to think about the health care and public health system in the region – how do you view the health care system in the region? [PROBE: quality, accessibility, role, etc.] Why?
  - a. How do you think the community at large perceives the health care system in the region? Why?

6. How do you view the public health system in the region? [PROBE: quality, accessibility, role, etc.] Why?

a. How do you think the community at large perceives the public health system in the region? Why?

7. What role does the Uncas Health District currently play in addressing community health?

a. When you think about the Uncas Health District, what services that the Uncas Health District provides come to mind?

b. If you had to pick a few words to describe your perception of Uncas Health District, what would you say?

8. Has your organization ever partnered with the Uncas Health District?

[PROBE: EXAMPLES OF PARTNERSHIPS BETWEEN KEY INFORMANT'S ORGANIZATION & UNCAS HEALTH DISTRICT. WHAT HAVE BEEN SOME SUCCESSES FROM THIS/THESE PARTNERSHIPS WITH THE UNCAS HEALTH DISTRICT? WHAT HAVE BEEN SOME CHALLENGES IN THIS/THESE PARTNERSHIPS WITH THE UNCAS HEALTH DISTRICT?]

**V. UNCAS HEALTH DISTRICT: STRENGTHS AND WEAKNESSES (10 minutes)**

9. Let's talk about a few of the health issues you mentioned previously. For example, you mentioned [SELECT HEALTH ISSUE]. What Uncas Health District programs, services, or policies are you aware of in the community that address [THIS HEALTH ISSUE]? [PROBE FOR SPECIFICS: IN WHAT WAY? CAN YOU PROVIDE SOME EXAMPLES?]

a. In your opinion, how effective have these Uncas Health District programs, services, or policies been at addressing this issue? Why? [PROBE: WHAT IS WORKING WELL FROM YOUR PERSPECTIVE?]

b. What are barriers or challenges in the work and services provided by the Uncas Health District around this issue? [PROBE: WHAT ARE THE GAPS? WHAT IS NOT WORKING WELL FROM YOUR PERSPECTIVE?]

**VI. UNCAS HEALTH DISTRICT: PRIORITIES (10 minutes)**

As a local health agency, the Uncas Health District has certain regulatory responsibilities, including monitoring and enforcing public health code violations and managing license permits for food services establishments, private wells, septic systems, campgrounds, group daycare, hair/nail salons, swimming pools, and tattoo parlors.

10. Other than these activities, where do you believe Uncas Health District should concentrate its efforts? [PROBE: SPECIFIC ISSUE, GEOGRAPHIC AREA, POPULATION GROUP, SERVICES]

a. Given the funding environment, what are the top 3 priorities or services that you believe that Uncas Health District should address through their delivery of public health services?

- b. Thinking about [SELECT HEALTH ISSUE] and challenges you mentioned earlier, what do you think the Uncas Health District could be doing at the community level to address these needs?

11. What do you see as the Uncas Health District's role in building or supporting organizational partnerships in the area?

12. The Uncas Health District currently serves 8 communities, and will add one more community to its service region in the Spring. From your perspective, how helpful do you think this greater regionalization of services is for the community?

- a. What works well? What doesn't work as well?

**VII. VISION OF COMMUNITY AND UNCAS HEALTH DISTRICT ENVIRONMENT (5 minutes)**

13. I'd like you to think ahead about the future of your community. When you think about the community 3 years from now, what would you like to see? What is your vision?

- a. What do you think needs to happen to make this vision a reality?

- b. What do you envision as the role of the Uncas Health District in making this vision a reality?

**VIII. CLOSING (2 minutes)**

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today? Thank you again. Have a good afternoon.

## APPENDIX B: FOCUS GROUP DISCUSSION GUIDE

### Uncas Health District Community Health Needs Assessment Focus Group Guide

#### Goals of the Focus Groups

- To determine perceptions of the health strengths and needs of communities within the Uncas Health District
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

**[NOTE: QUESTIONS FOR THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]**

#### **I. BACKGROUND (5 minutes)**

- Hi, my name is \_\_\_\_\_ and I am with Health Resources in Action, a non-profit public health organization. Thank you for taking the time to speak with me today.
- We're going to be having a focus group today. Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. We want to know your opinions, and those opinions might differ. This is fine. Please feel free to share your opinions, both positive and negative.
- The Uncas Health District is undertaking a comprehensive community health assessment effort to gain a greater understanding of the health of residents within the Health District and how health needs are currently being addressed. The Uncas Health District serves the communities of Norwich, Bozrah, Montville, Salem, Sprague, Griswold, Lebanon, Lisbon, and Voluntown.
- As part of this process, we are having discussions like these throughout the area with community members, government officials, public health and health care leaders, and staff from a range of community organizations. We are interested in hearing people's feedback on the strengths and needs of the community and suggestions for the future.
- We will be conducting several of these discussion groups around the area. After all of the groups are done, we will be writing a summary report of the general opinions that have come up. In that report, we might provide some general information on what we discussed tonight, but I will not include any names or identifying information. Your responses will be strictly confidential. In the report, nothing you say here will be connected to your name.
- Lastly, please turn off your cell phones, beepers, or pagers or at least put them on vibrate mode. The group will last only about 80-90 minutes. If you need to go to the restroom during the discussion, please feel free to leave, but we'd appreciate it if you would go one at a time.
- Do you have any questions for me before we begin?

#### **II. INTRODUCTIONS (10 minutes)**

Now, first let's spend a little time getting to know one another. Let's go around the table and introduce ourselves. Please tell me: 1) Your first name; 2) what city or town you live in; and 3) something about

yourself you'd like to share— such as about your family or what activities you like to do in your spare time. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

### III. COMMUNITY AND HEALTH ISSUES (30 minutes)

1. Tonight, we're going to be talking a lot about the community that you live in. How would you describe your community?
  - a. When I say the words, "your community" – what comes to mind? How do you define your community?
2. If someone was thinking about moving into your community, what would you say are some of its biggest strengths or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]
  - a. What are some of the biggest problems or concerns in your community? [PROBE ON ISSUES IF NEEDED – Transportation; housing; cost of living; safety; social support; etc.]
3. Just thinking about day-to-day life –working, getting your kids to school, things like that – what are some of the challenges or struggles you deal with on a day-to-day basis?
  - c. How do you deal with these challenges?
4. What do you think are the most pressing health concerns in your community? [PROBE FOR SPECIFICS.]

[MODERATOR INSTRUCTIONS: AFTER PARTICIPANTS TALK ABOUT DIFFERENT HEALTH ISSUES, SELECT THE TOP 3 AND ASK THE FOLLOWING SERIES OF QUESTIONS FOR EACH ISSUE.]

- a. How has [HEALTH ISSUE] affected your community? [PROBE FOR DETAILS: IN WHAT WAY? CAN YOU PROVIDE SOME EXAMPLES?]
  - i. What specific population groups are most at-risk for this [HEALTH ISSUE]?
  - ii. Have you noticed any changes in [HEALTH ISSUE] in the past few years? What specifically?
  - iii. From your experience or what you heard from the people you know, what are peoples' biggest challenges to dealing with [THIS ISSUE]?
    1. [PROBE ON RANGE OF CHALLENGES: E.g., Various barriers to accessing to medical and/or preventive care and services, socioeconomic factors, lack of community resources, social/community norms, etc.]
  - iv. What programs, services or policies in your community do you know of that focus on [SELECT HEALTH ISSUE]?

1. What kinds of programs, services or policies would you want to see in your community for [HEALTH ISSUE]?
2. What do they look like? Who would sponsor them? [PROBE FOR SPECIFICS]
3. Would these be totally new programs/services or policies, or would they be building off of something that already exists in the community? [IF LATTER, WHICH PROGRAMS?]

[REPEAT QUESTIONS FOR AT LEAST 2-3 ISSUES]

5. In general, what is happening around the community that affects the health of its residents? [PROBE ON EXTERNAL FACTORS: Built environment, physical environment, economy, political environment, resources, organizational structures, etc.]
  - a. What are some factors that make it easier to be healthy in your community?
  - b. What are some factors that make it harder to be healthy in your community?
    - a. What do you think needs to happen in your community to help residents overcome these challenges?

**IV. PERCEPTIONS OF HEALTH CARE AND PUBLIC HEALTH/PREVENTION SERVICES AND UNCAS HEALTH DISTRICT (20 minutes)**

6. I'd like to ask specifically about health care in your community. If you or your family had a general health issue that needed a doctor's care or prescription medicine – such as the flu or a child's ear infection– where would you go for this type of health care? [PROBE IF THEY GO TO PRIVATE PRACTICE, URGENT CARE CENTER, COMMUNITY HEALTH CLINIC, E/R, ETC]
  - a. If you wanted to go somewhere for information or services to stay well or prevent a condition, where would you go? [such as where to go for a flu shot or services/information on healthier eating or stress management]
  - b. What do you think of the health care system in the region? [PROBE: quality, accessibility, role, etc.] Why?
7. In addition to the health care institutions in the region, there are also public health organizations and agencies in the region like the health department, which is the Uncas Health District. When I use the term “public health”, what does that mean to you?
  - a. What do you think of the public health system in the region? [PROBE: quality, accessibility, role, etc.] Why?
8. As I mentioned, Uncas Health District is the health department for many communities in the region including yours. From what you know or have heard, what do you think Uncas Health District does? What services does it provide?

- a. Have you ever used any of these services?
    - i. Which ones? How did you hear about these services? How was your experience?
  - b. How well do you think Uncas Health District is providing these services? What is working well? What could be improved?
9. What role do you think Uncas Health District has in addressing the community's health needs?
- a. As a local health agency, the Uncas Health District has certain regulatory responsibilities, including monitoring and enforcing public health code violations and managing license permits for food services establishments, private wells, septic systems, campgrounds, group daycare, hair/nail salons, swimming pools, and tattoo parlors. Other than these activities, how should focus Uncas Health District focus future efforts? What services should it provide or topics should it focus on? [PROBE FOR: SPECIFIC ISSUE, GEOGRAPHIC AREA, POPULATION GROUP, SERVICES]
  - b. What do you see as the top 3 priorities or services that you believe that Uncas Health District should address through their delivery of public health services?
    - i. What would these look like?

**V. VISION OF COMMUNITY AND UNCAS HEALTH DISTRICT ENVIRONMENT (5 minutes)**

10. I'd like you to think ahead about the future of your community and residents' health. When you think about the community in relation to health three years from now, what would you like to see? What is your vision?
- a. What do you think needs to happen to make this vision a reality?
  - b. What do you envision as the role of the Uncas Health District in making this vision a reality?

**VI. CLOSING (2 minutes)**

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today? Thank you again. Have a good afternoon.