Analysis of Health Indicators for Connecticut Health Districts and Departments

Results from the Connecticut Behavioral Risk Factor Surveillance Survey

Connecticut Department of Public Health

March, 2019

Raul Pino, MD, MPH
Commissioner

Connecticut Department of Public Health
410 Capitol Avenue,
PO Box 340308, Hartford, CT 06134
www.ct.gov/dph/BRFSS

Additional Resources

Paul Pino, MD, MPH
Commissioner
Connecticut Department of Public Health

Celeste Jorge, MPH
CT BRFSS Coordinator
Health Statistics and Surveillance Section
Connecticut Department of Public Health

This report was prepared by:
Xi Zheng, MPH, MS
Epidemiologist
Health Statistics and Surveillance Section
Connecticut Department of Public Health

The CT BRFSS Team acknowledges with gratitude the time contributed by over 47,000 citizen volunteers within the State of Connecticut who respond ended anonymously to the survey during the 2012-2015 calendar years.

Work on this project by Ms. Xi Zheng and the publication were supported by Grant Number CMS 1G1CMS331404 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services, and Grant Number 1-NB01OT009128, Preventive Health & Health Services Block Grant from the Centers for Disease Control and Prevention. Work by Ms. Celeste Jorge was supported by Grant Number CDC 5U58SO000003, Connecticut Behavioral Risk Factor Surveillance System from the Centers for Disease Control and Prevention. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services, or any of its agencies.

Additional Resources

For questions or comments about this report or the CT BRFSS, please contact:

Celeste Jorge, MPH
CT BRFSS Coordinator
Health Statistics and Surveillance Section
Connecticut Department of Public Health
Hartford, Connecticut, 06106

Celeste.Jorge@ct.gov (860-509-7695)

Find more BRFSS factsheets, reports and publications at the Connecticut Department of Public Health BRFSS website: *http://www.ct.gov/dph/BRFSS.*

Suggested citation:

Zheng X., Jorge C. (2019) Analysis of Health Indicators for Connecticut Health Districts and Departments: Results of Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS), Connecticut Department of Public Health, Hartford, Connecticut (*http://www.ct.gov/dph/BRFSS*).

Health Statistics and Surveillance Section, Connecticut Behavioral Risk Factor Surveillance System, March, 2019

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Introduction and Methods

The Connecticut Behavioral Risk Factor Surveillance System (CT BRFSS) is an ongoing statewide voluntary phone survey of Connecticut adult citizen volunteers aged 18 and over. It is funded by the Centers of Disease Control and Prevention (CDC) in 50 states, and has been offered within Connecticut since 1989. Households are randomly selected and contacted by a contractor who conducts most interviews in the evenings and on weekends. The CT BRFSS questionnaire changes somewhat from year to year to provide information on emerging health issues in the state and to address state-specific priorities. CT BRFSS questionnaires and content can be viewed at http://www.ct.gov/dph/BRFSS.

The survey is voluntary and relies on citizen volunteers. From calendar years 2012 through 2016, combined, the CT BRFSS collected 33,312 landline interviews and 14,069 cell phone interviews, totaling 47,381 anonymous interviews. Of these, town of residence was available for 44,271 interviews. The population for the CT BRFSS consists of the total non-institutionalized English and Spanish-speaking adult population residing in telephone-equipped dwelling units. The landline sample was a disproportionate stratified random digit dial (RDD) sample, stratified by geography and listed status. Listed phone numbers were oversampled relative to unlisted numbers at a rate of 1.5 to 1. Within each contacted household, one adult was selected at random to be interviewed. The cell phone sample was an un-stratified RDD sample drawn from dedicated cellular telephone banks with equal probability. An adult contacted by cell phone was eligible to complete the survey if he or she lived in a private residence or college housing either without a landline present, or with a landline but with at least 90 percent of all calls received by cell phone.

Landline and cell phone data from each annual survey year from 2012 through 2016 were combined and weighted by CDC to adjust for differential selection probabilities. The weighted data were then adjusted to the distribution of the Connecticut adult population using iterative proportional fitting, or raking (*https://www.cdc.gov/brfss/ annual_data/2015/pdf/weighting_the-data_webpage_content.pdf*). Raking adjustments were made by telephone type, race/ethnicity, education, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status. This weighting methodology was adopted by CDC in 2011 to accommodate the inclusion of cell phone interviews and to allow for adjustments to more demographics. As a result of these methodological changes, BRFSS data for 2011 and forward are not comparable to BRFSS data prior to 2011.

In response to requests by local health districts in previous years, the CT BRFSS oversampled in selected areas of the state and produced factsheets based on the state weights provided by CDC. These factsheets were produced using weights for state demographic characteristics, as described

above. Factsheets using this methodology were produced for the following health districts: Northeast,[1] Eastern Highlands,[2] North Central,[3] Ledge Light,[4] Naugatuck Valley,[5] and Torrington Area.[6] This methodology made the best use of the data available for a survey of modest sample size but produced biased estimates when the local demographics differed significantly from that of the state.

The sample size for the CT BRFSS was increased starting in the 2015 survey year because of increased funding from two grant sources. The Preventive Health and Health Services Block Grant (https://www.cdc.gov/phhsblockgrant/index.htm) and Connecticut State Innovations Model grant (SIM; http://healthreform.ct.gov/ohri/site/default.asp), both partially funded by the Affordable Care Act (https://www.hhs.gov/sites/default/files/ ppacacon.pdf), allowed for an increased CT BRFSS sample size from an anticipated 6,700 interviews to over 10,000 interviews. It was determined that this methodology would work best with a sample size of responses for each local areas that numbered at least 500 interviews. The increased sample size for the CT BRFSS made possible for the first time development of a methodology for the survey that reweights the data specifically to the demographic characteristics of each local area. It was determined that this methodology would work best in a sample size of responses for each local area that numbered at least 500 interview. In 2017, the first local health report [7] was prepared using CT BRFSS by adopting this reweighting methodology. However, there are couple towns were not contiguous, and the reweighting strategies was not designed for getting direct estimates for local health departments in Connecticut. According to recent release Connecticut local health districts map (Map2), there are 20 local health districts and two types of local health departments: full time and part time municipal local health department. This report describes the results of a reweighting methodology described above on a combined dataset of CT BRFSS data from years 2012 through 2016 to generate local area estimates for all towns or town groupings in Connecticut. The results provide valuable information for local health districts as they prepare community needs assessments and work toward public health accreditation (http://www.phaboard.org). The results will also inform public health interventions from state programs within the Connecticut Department of Public Health, and will inform activities of the Connecticut SIM grant.

A set of 62 local area designations were produced from the 169 towns in Connecticut (Table 1 and Map1). The grouping process for reweighting five year CT BRFSS data (2012-2016) was similar to previous grouping method in our previous local health report[7], but more emphasize on ensuring those local area designations are contiguous and able to regrouped together to generate estimates for local health districts in Connecticut. Three part-time municipal local health departments, Somers, Sharon, and Preston, were joined their surrounding local health districts because of their small sample size. For

those towns with municipal local health department, If the town sample size for the combined CT BRFSS dataset from 2012 through 2016 was at least 500 (n=500), the town alone represented its own local area. Towns with a sample size less than 500 were combined in according to which was in collaboration with local health directors so that town groupings were roughly similar in demographic characteristics, and, to the degree possible, contiguous. Although the towns of Middletown and Wallingford had a sample size less than 500, there were no comparable surrounding towns to which the towns could be combined, and they were maintained as separate local areas. For the same reason, several other local area contain towns with sample size less than 500, towns were grouped into local areas of similar economic and demographic development in the state, and based on their geographic contiguous.

The combined dataset for 2012 through 2016 was reweighted to the adult population of each local area as described, and more details about the reweighting methodology was detailed described in our previous local health report [7]. 31 selected health indicators were discussed in this report, with 22 indicators offered annually in the 2011 through 2016 BRFSS surveys, and 9 non-annual indicators, were analyzed for a set of 20 local health districts and 18 selected full time municipal local health departments. Any responses of "Not Known/Not sure" or "Refused" were classified as missing.

A prevalence estimate in the population, shown as a percent (%), is a measure of the risk or protection that exists in the population. A high prevalence for negative health indicators, such as risk behaviors and chronic conditions, indicates that the risk is high in the population. A high prevalence for positive health indicators, such as health status and clinical protective behaviors, is indicative of good health. This report shows percent prevalence estimates for each health districts within Connecticut (N=20) and selected full time municipal local health department (N=18), and is a measure in the population, regardless of the population's demographics, such as age, sex, race/ethnicity. For instance, towns in Connecticut with a high concentration of older residents will tend to have a higher risk of cancer or arthritis, and areas with a high concentration of younger residents will tend to have a high prevalence of risk behaviors, such as cigarette smoking and a low prevalence of having had a medical well-visit in the past year. Prevalence estimates, with 95% confidence intervals, are shown in this report, and were computed using SAS PROC SURVEYFREQ, which can properly compute variances for complex sampling plans. Some prevalence estimates are reported as positive indicators (Health Status and Health Protective Behaviors), while other prevalence estimates are reported as negative indicators (Health Risk Behaviors and Chronic Conditions). An approximate number of affected adults

in each local area can be calculated by multiplying the prevalence estimate by the weighted population in that local area (Table 1).

The coefficient of variation (CV) for a prevalence estimate is computed as the standard error of the estimate divided by the estimate, and provides a measure of the degree of strength to a prevalence estimate. If the sample size for a prevalence estimate is very low, or if there is a lot of variation in responses that generate the prevalence estimate, then the CV will be high and we will be cautious about the estimate. Conversely, if the sample size for generating a prevalence estimate is high, or if there is little variation in responses, then the CV will be low, indicating that the estimate has high validity and is, therefore, an estimate about which we can be very confident. Generally, reports produced for the CT BRFSS suppress prevalence estimates if the CV is at least 0.15 so that only estimates with the strongest validity are reported.

In this report, we made every effort to produce a prevalence estimate for all local areas, even if the CV was higher than the traditional cut-off. Prevalence estimates with a CV of between 0.15 and 0.20, inclusive, are higher than that generally shown in CT BRFSS reports, and are marked in this report with a single asterisk (*). Prevalence estimates with a CV between 20.1% and 30%, inclusive, are marked with two asterisks (**) to indicate that caution should be exercised when interpreting these estimates. Prevalence estimates with a CV greater than 30% are suppressed in this report due to poor validity (no estimates will show in the figures).

Discussion in this report of significance reflects statistically significant increases or decreases. All significance testing was conducted using a one-tailed, two-population binomial test for significantly better or worse risk/protection or prevalence ($p < .05$). Statistical significant testing only conduct among prevalence estimates with a CV less than 0.15. State maps were created to reflect the percent prevalence of all selected health indicators, in quartiles for health districts and selected full time municipal health departments. There are two color schemes, protective health indicators are colored in blue, and risk health indicators are colored in orange. The intensity of the color reflects the amount of prevalence.

In addition, an appendix section was prepared for selected health indicators as an example to provide more detailed data for eight local health districts and three full time municipal local health departments with a sample size of at least 1,500, included Farmington Valley Health District, Ledge Light Health District, Naugatuck Valley Health District, North Central District Health Department, Northeast District Department of Health, Quinnipiac Valley Health District, Torrington Area Health District, Uncas Health

District, and cities of Hartford, Bridgeport, and New Haven. For each of the health district, percent prevalence values were estimated by three age groups (18-34 years old, 35-54 years old, and 55 years old and older), and by four race/ethnic group (non-Hispanic White, non-Hispanic Black, Hispanic, and non-Hispanic Other/Multiple), annual household incomes (less than $35,000, $35,000~$74,999, $75,000 and more) and education levels (High school or less and More than a high school education). Percent prevalence estimates for the non-Hispanic Other/Multiple race/ethnic group were inconsistent due to a small sample size and were, therefore, not reported in this document.

For more information about the CT BRFSS, please go to http://www.ct.gov/dph/BRFSS.

Table 1: Local Area Designations, Connecticut, 2012-2016, combined

Local Area	Towns	sample size (n)	Adult Weighted Population Size (N)
1	Bristol, Burlington	745	54,547
2	Newington, Wethersfield	653	45,626
3	Berlin, Rocky Hill	432	31,718
4	Colchester, East Haddam, East Hampton, Hebron, Marlborough, Portland	751	48,454
5	Cheshire, Prospect, Wolcott	596	41,491
6	Clinton, Deep River, Haddam, Old Saybrook	438	28,625
7	Branford, East Haven, North Branford	824	57,951
8	Ashford, Chaplin, Mansfield, Scotland, Willington	539	22,401
9	Andover, Bolton, Columbia, Coventry, Tolland	687	31,720
10	Barkhamsted, Canton, Colebrook, East Granby, Granby, Hartland, New Hartford	748	31,338
11	Avon, Simsbury	577	31,487
12	Farmington	429	19,856
13	Groton, New London	876	46,651
14	East Lyme, Old Lyme	461	19,841
15	Ledyard, North Stonington, Stonington, Waterford	876	45,845
16	Beacon Falls, Naugatuck, Seymour	631	41,452
17	Ansonia, Derby, Shelton	990	57,026
18	Bridgewater, Newtown, Roxbury	389	23,643
19	Windham	280	16,648
20	Stafford	377	9,167
21	East Windsor, Ellington, Enfield, Somers, Suffield, Vernon, Windsor Locks	1670	105,065
22	Killingly, Plainfield, Putnam, Sterling, Thompson	902	42,304
23	Brooklyn, Canterbury, Eastford, Hampton, Pomfret, Union, Woodstock	588	22,681

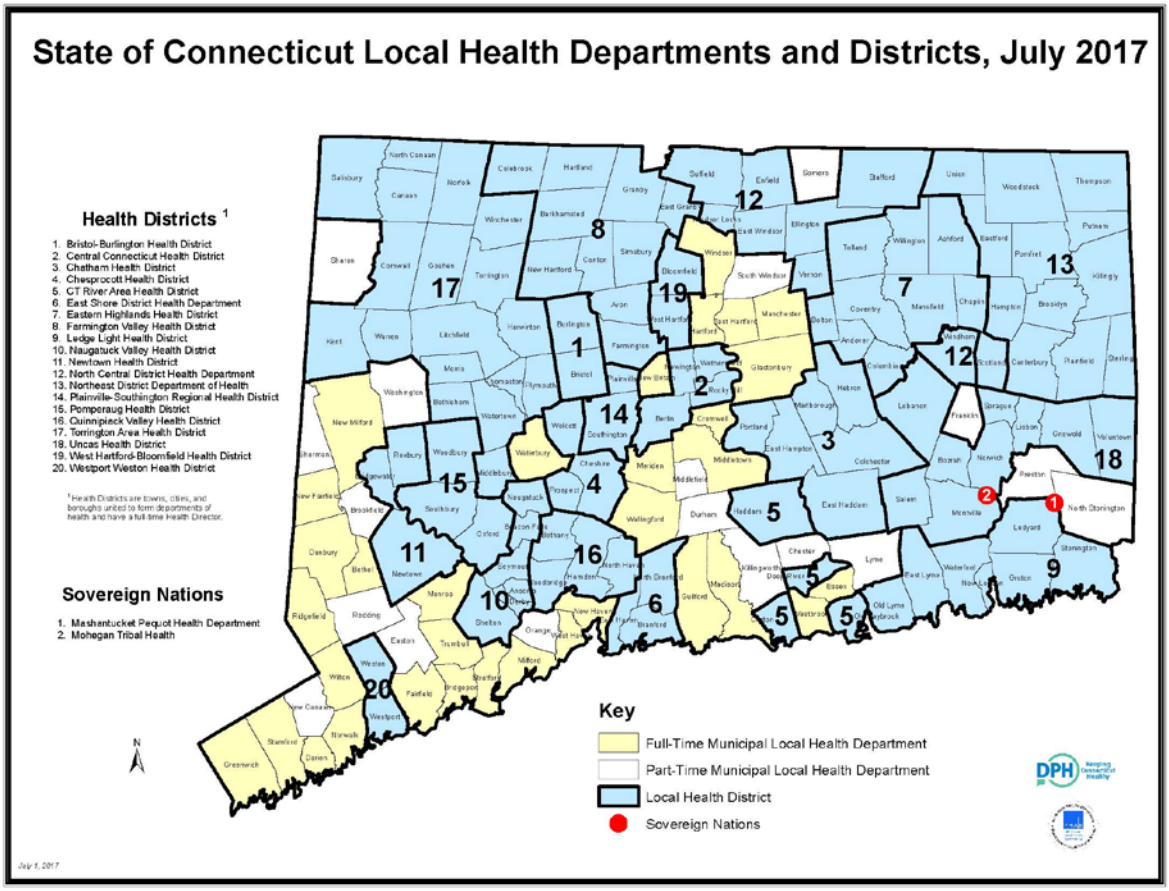
Local Area	Towns	sample size (n)	Adult Weighted Population Size (N)
24	Plainville, Southington	661	48,218
25	Oxford, Southbury, Woodbury	509	32,034
26	Hamden	911	44,994
27	North Haven	460	18,887
28	Bethany, Woodbridge	266	10,931
29	Torrington, Winchester	615	36,605
30	Middlebury, Plymouth, Thomaston, Watertown	580	38,605
31	Bozrah, Lebanon, Montville, Salem	555	25,142
32	Norwich	599	30,616
33	Franklin, Griswold, Lisbon, Preston, Sprague, Voluntown	452	22,302
34	Bloomfield, West Hartford	1014	64,289
35	Weston, Westport	470	26,653
36	Hartford	1524	85,809
37	New Britain	504	53,103
38	New Haven	1824	92,221
39	Waterbury	766	79,174
40	Bethel, Danbury	837	77,652
41	Milford	675	43,140
42	Stratford	634	42,129
43	Fairfield	1241	41,558
44	Bridgeport	2455	1065,55
45	Stamford	1078	99,160
46	Norwalk	834	69,237
47	Greenwich	539	45,840
48	Manchester	679	44,366
49	Brookfield, New Fairfield, New Milford, Sherman, Washington	726	50,889
50	Meriden	552	47,868
51	Middletown	469	34,291
52	Darien, New Canaan, Wilton	553	41,118
53	Easton, Monroe, Redding, Ridgefield, Trumbull	1165	72,122
54	Wallingford	479	36,158
55	East Hartford, South Windsor	737	58,843
56	Cromwell, Glastonbury	571	36,738
57	Orange, West Haven	656	51,832
58	Essex, Lyme, Westbrook	226	13,208
59	Guilford, Madison	564	30,490
60	Chester, Durham, Killingworth, Middlefield	269	17,686
61	Windsor	374	22,519

Local Area	Towns	sample size (n)	Adult Weighted Population Size (N)
62	Bethlehem, Canaan, Cornwall, Goshen, Harwinton, Kent, Litchfield, Morris, Norfolk, North Canaan, Salisbury, Sharon, Warren	789	32,144

Table 2. Local Health Districts, Connecticut, 2012-2016, combined

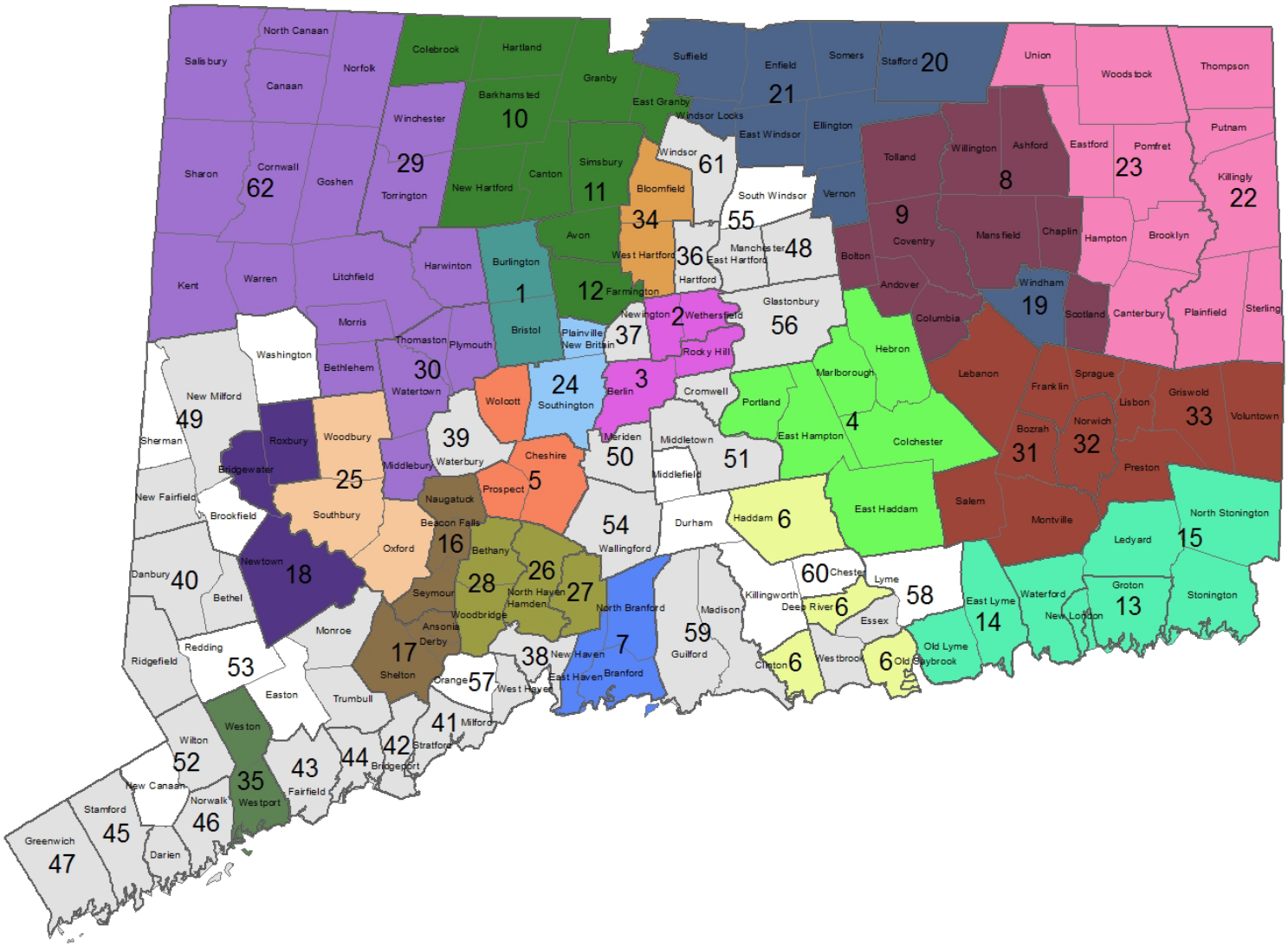
Health Districts	Sample Size (n)	Adult Weighted Population Size (N)
1. Bristol-Burlington Health District	745	54,547
2. Central Connecticut Health District	1085	77,344
3. Chatham Health District	751	48,454
4. Chesprocott Health District	596	41,491
5. CT River Area Health District	438	28,625
6. East Shore District Health Department	824	57,951
7. Eastern Highlands Health District	1226	54,121
8. Farmington Valley Health District	1754	82,681
9. Ledge Light Health District	2213	112,337
10. Naugatuck Valley Health District	1621	98,478
11. Newtown Health District	389	23,643
12. North Central District Health Department+ Somers	2327	130,880
13. Northeast District Department of Health	1490	64,985
14. Plainville-Southington Regional Health District	661	48,218
15. Pomperaug Health District	509	32,034
16. Quinnipiack Valley Health District	1637	74,812
17. Torrington Area Health District+ Sharon	1984	107,354
18. Uncas Health District+ Preston	1606	78,060
19. West Hartford-Bloomfield Health District	1014	64,289
20. Westport Weston Health District	470	26,653

Map 1: Connecticut Local Health Departments and Districts, July 2017.



Introduction and Methods

Map 2: Local Area Designations, Connecticut CT, BRFSS, 2012-2016, combined.



- Bristol-Burlington Health District
- Central Connecticut Health District
- Chatham Health District
- Chesprocott Health District
- CT River Area Health District
- East Shore District Health Department
- Eastern Highlands Health District
- Farmington Valley Health District
- Ledge Light Health District
- Naugatuck Valley Health District
- Newtown Health District
- North Central District Health Department+ *Somers*
- Northeast District Department of Health
- Plainville-Southington Regional Health District
- Pomperaug Health District
- Quinnipiack Valley Health District
- Torrington Area Health District+ *Sharon*
- Uncas Health District+ *Preston*
- West Hartford-Bloomfield Health District
- Westport Weston Health District
- Full-time Municipal Local Health Department
- Other Part-time Municipal Local Health Department

References

[1] Connecticut Department of Public Health (2015) Behavioral health risks among Northeast District (NDDH) adults (2011-2013), Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/nddh_brfss_factsheet_2011-2013.pdf, accessed on March 9, 2017.

[2] Connecticut Department of Public Health (2015) Behavioral health risks among Eastern Highlands Health District adults (2011-2013), Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/ehhd_brfss_factsheet_2011-2013.pdf, accessed on March 9, 2017.

[3] Connecticut Department of Public Health (2015) Behavioral health risks among North Central Health District adults (2011-2013), Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/nchd_brfss_factsheet_2011-2013.pdf, access on March 9, 2017.

[4] Connecticut Department of Public Health (2014) Behavioral health risks among Ledge Light Health District adults in 2012, Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/LLHD_BRFSS_factsheet2013.pdf, accessed on March 9, 2017.

[5] Connecticut Department of Public Health (2014) Behavioral health risks among Naugatuck Valley Health District adults in 2012, Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/NVHD_BRFSS_factsheet2013.pdf, accessed on March 9, 2017.

[6] Connecticut Department of Public Health (2014) Behavioral health risks among Torrington Area Health District adults in 2012, Connecticut Department of Public Health, Hartford, Connecticut. http://www.ct.gov/dph/lib/dph/hisr/pdf/TAHD_BRFSS_factsheet2013.pdf, accessed on March 9, 2017.

[7] Stone, CL, ZuWallack, R, Archambault, G, Zheng, X, (2017) Local Analysis of Selected Health Indicators: Results of the 2011-2015 Behavioral Risk Factor Survey (http://www.ct.gov/dph/BRFSS), accessed on April 24, 2018.

Below is the list of health indicators that were analyzed for local areas of the state, and that appear within this report.

Health Status

Good or Better General Health - Responses of "Good," "Very Good," or "Excellent" to the question, "Would you say that in general your health is (Excellent, Very Good, Good, Fair, Poor)."

Good Mental Health - Responses of less than 14 days to the question, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your physical health not good?"

Good Physical Health - Responses of less than 14 days to the question, "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Healthy Weight - Responses of height and weight that, when body-mass index (BMI) is calculated, is at least 18.5 but less than 25.0 kg/m^2.

Health Care Coverage - Positive responses to the question, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Service?"

At Least One Personal Doctor - Responses of "Yes, only one" or "More than one" to the question, "Do you have one person you think of as your personal doctor or health care provider?"

Housing Security-Responses of “Rarely” or “Never” to the question, “How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent/mortgage?

Food Security- Responses of “Rarely” or “Never” to the question, “How often in the past 12 months would you say you were worried or stressed about having enough money to buy nutritious meals?

Adequate Sleep-Responses of 8 hours or more to the question, “On average, how many hours of sleep do you get in a 24-hour period?”

Aerobic and Strengthening Guidelines-aerobic and strengthening exercise volume was calculated based on a series questions regarding muscle strengthening exercise and aerobic exercises.

Fruit Consumption-fruit intake is calculated based on a series of questions regarding fruit consumption.

Vegetable Consumption- vegetables intake is calculated based on a series of questions regarding vegetable consumption.

Health Risk Behaviors

No Leisurely Physical Activity in Past Month - Negative responses for the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Current Cigarette Smoking - Responses of smoking cigarettes every day or some days (in the past 30 days), among those who have smoked at least 100 cigarettes in their life.

Ever Used Hookah - Positive responses to the question, "A water pipe is called a hookah. Have you ever tried smoking tobacco from a hookah in your entire life, even one or two puffs."

Ever Used Electronic Cigarette-Positive responses to the question, "Have you ever used an e-cigarette or other electronic "vaping" product, even just one time, in your entire life?"

Excessive Alcohol Consumption in Past Month - Responses that classify as either heavy drinking or binge drinking. Heavy drinking is defined as at least three drinks daily for men or at least two drinks daily for women. Binge drinking is defined as six or more drinks during one occasion or five or more drinks per occasion for women.

Health Preventive Behaviors

Routine Check-up in the Past Year - Responses of "Within the past year" or "within the past 2 years" when asked, "About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition."

Influenza Vaccination in the Past Year - Positive responses to the question, "During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?"

Ever Had Pneumococcal Vaccination (65 years and older) - Positive responses to the question, "A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?"

Ever Had Human Immunodeficiency Virus (HIV) Test (18 to 64 years old) - Positive responses to the question, "Not counting tests you may have had as part of blood donation, have you ever been tested for HIV? Include testing fluid from your mouth."

Prostate Cancer Screening-Positive responses to the question, "Have you ever had a PSA test?"

Breast Cancer Screening-Positive responses to the question, "Have you ever had a mammogram?"

Dentist visit-Reponses of "Within the past year" to the question, "How long has it been since you last visited a dentist or a dental clinic for any reason?"

Chronic Conditions

Current Asthma - Positive responses to the questions, "Has a doctor, nurse, or other health professional EVER told you that you had asthma?", and "Do you still have asthma?"

Ever Diagnosed with Arthritis - Positive responses to the question, "Has a doctor, nurse, or other health professional EVER told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?"

Ever Diagnosed with Diabetes - Positive responses to the question, "Has a doctor, nurse, or other health professional EVER told you that have diabetes?"

Ever Diagnosed with Depression - Positive response to the question, "Has a doctor, nurse, or other health professional EVER told you that have a depressive disorder (including depression, major depression, dysthymia, or minor depression?"

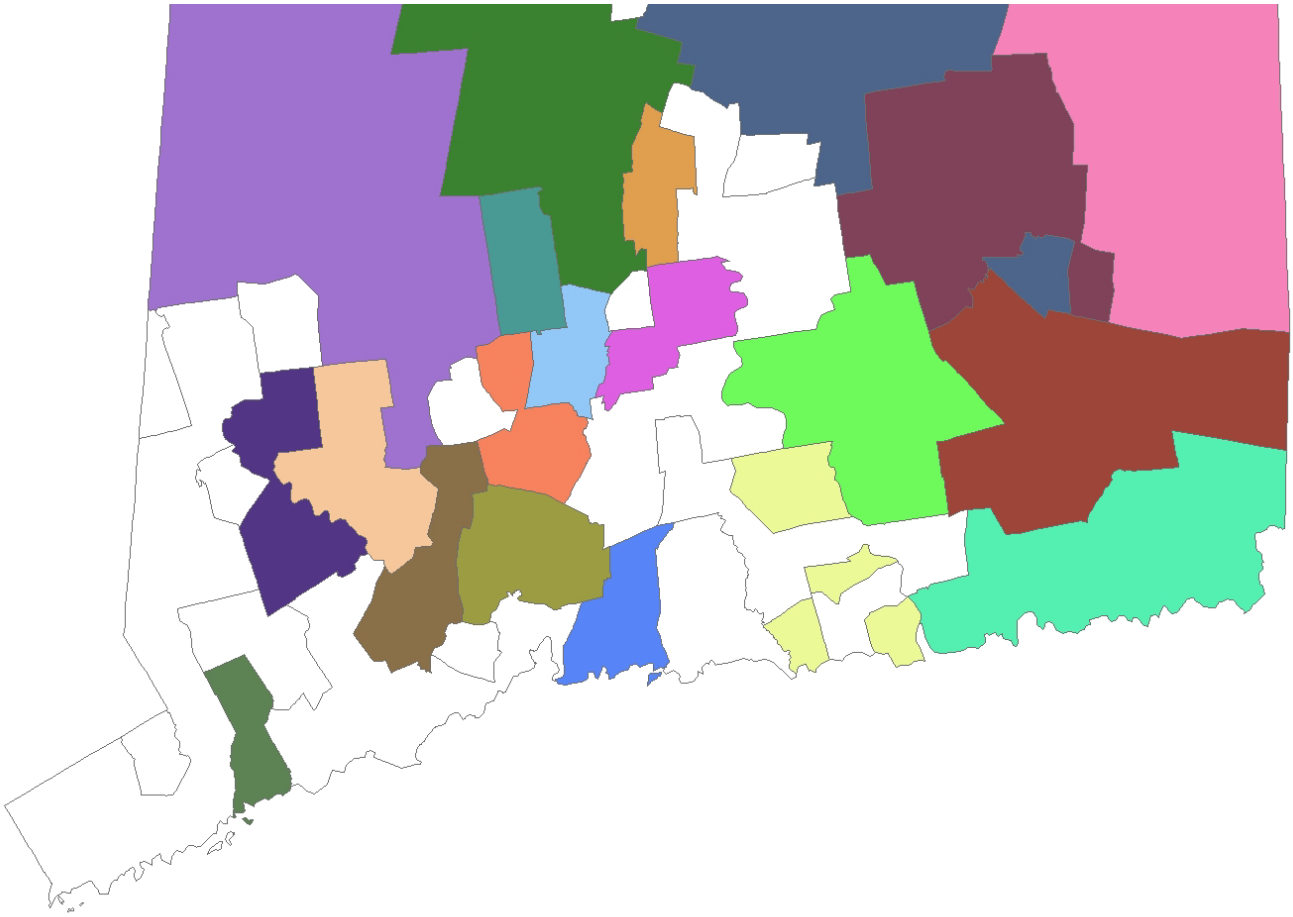
Ever Diagnosed with Chronic Obstructive Pulmonary Disease (COPD) - Positive responses to the question, "Has a doctor, nurse, or other health professional EVER told you that you have COPD, emphysema, or chronic bronchitis?"

Ever Diagnosed with Cancer - Positive responses to the questions, "Has a doctor, nurse, or other health professional ever told you that had skin cancer?" or "Has a doctor, nurse, or other health professional ever told you that you had other types of cancer?"

Ever Diagnosed with Cardiovascular Disease (CVD) – Positive responses to any of these three questions: "Has a doctor, nurse, or other health profession ever told you that you had a heart attack, also called a myocardial infarction?"; "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?"; or "Has a doctor, nurse, or other health professional ever told you that you had a stroke?"

Health in Local Health Districts

In the following section, data is presented for Connecticut local health districts as indicated in the map and list below.



- Bristol-Burlington Health District
- Central Connecticut Health District
- Chatham Health District
- Chesprocott Health District
- CT River Area Health District
- East Shore District Health Department
- Eastern Highlands Health District
- Farmington Valley Health District
- Ledge Light Health District
- Naugatuck Valley Health District
- Newtown Health District
- North Central District Health Department
- Northeast District Department of Health
- Plainville-Southington Regional Health District
- Pomperaug Health District
- Quinnipiack Valley Health District
- Torrington Area Health District
- Uncas Health District
- West Hartford-Bloomfield Health District
- Westport Weston Health District

Health in Local Health Districts

General Health Status

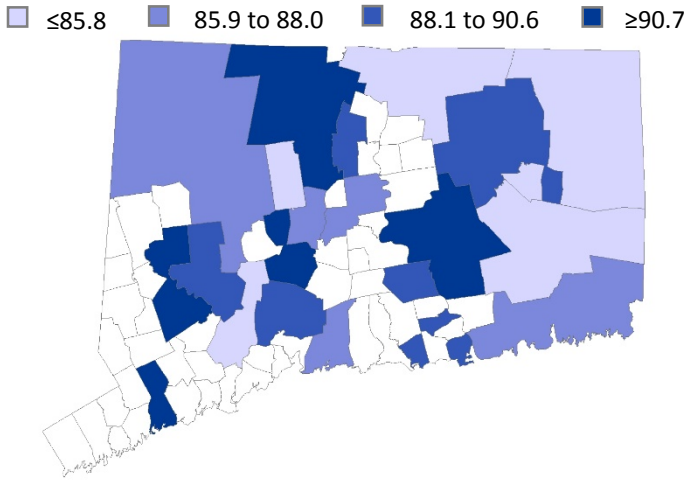
General self-rated health status is a valuable measure to collect alongside more objective health measures as there are strong predictive properties for health outcomes; specifically, self-reports of poor health are strongly associated with mortality.[1]

CT BRFSS respondents were asked to rate their general health as excellent, very good, good, fair or poor.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

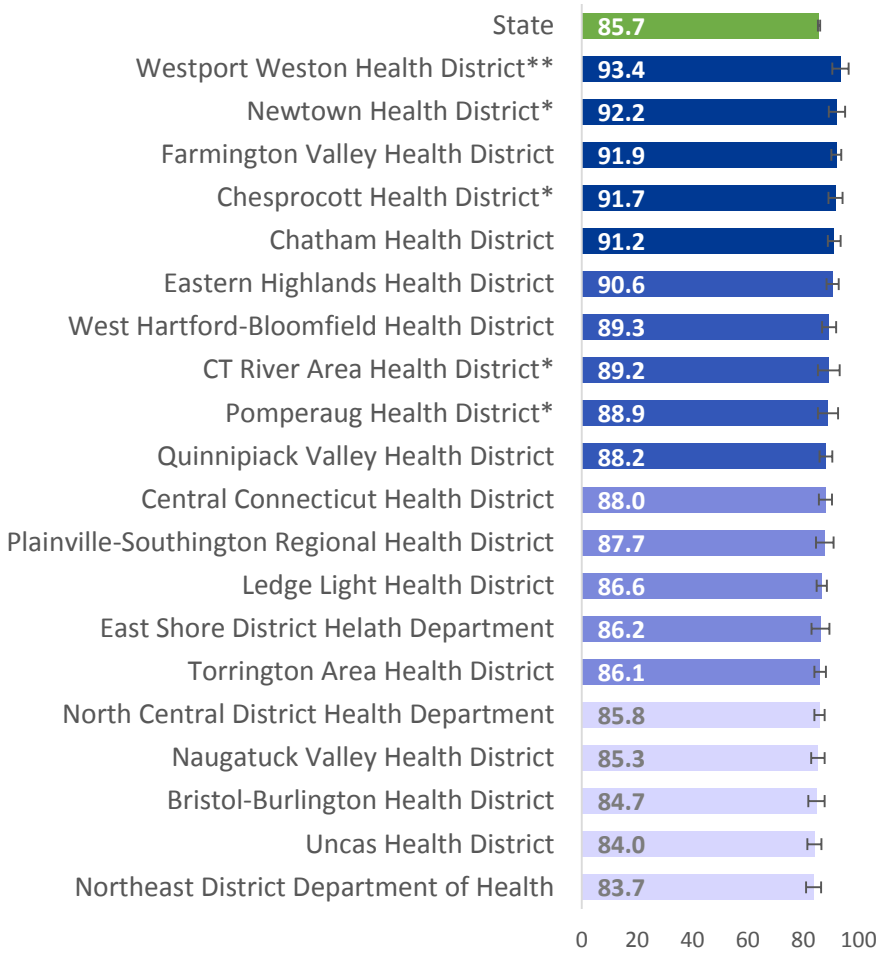
Good or Better General Health by Health District

Percentage of adults who reported good, very good, or excellent health, in quartiles



Health District Ranking

Good General Health, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 85.7% of adult residents reported being in good or better general health. In Connecticut during 2016, the prevalence was greatest among younger adults, non-Hispanic White adults, adults with higher income and educational levels, and adults with insurance.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Chatham Health District
- Eastern Highlands Health District
- Farmington Valley Health District
- West Hartford-Bloomfield Health District

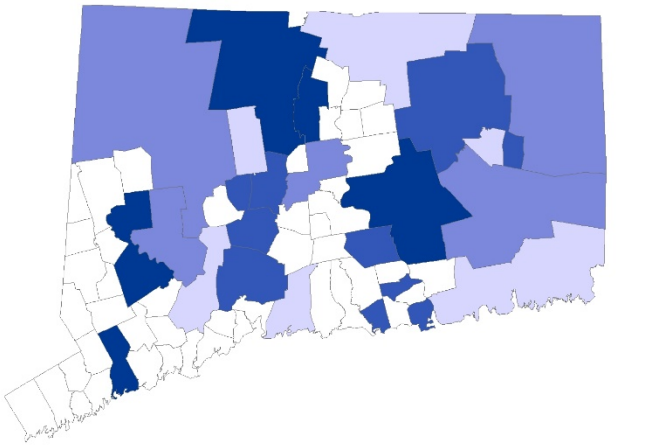
Mental Health

The BRFSS uses the "Healthy Days Measure" to assess health-related quality of life. The Healthy Days Measure has been useful for identifying health disparities and tracking population trends.[2] This measure defines adults in poor physical or mental health if they reported 14 or more days (within the past 30 days) for which their mental health was "not good".

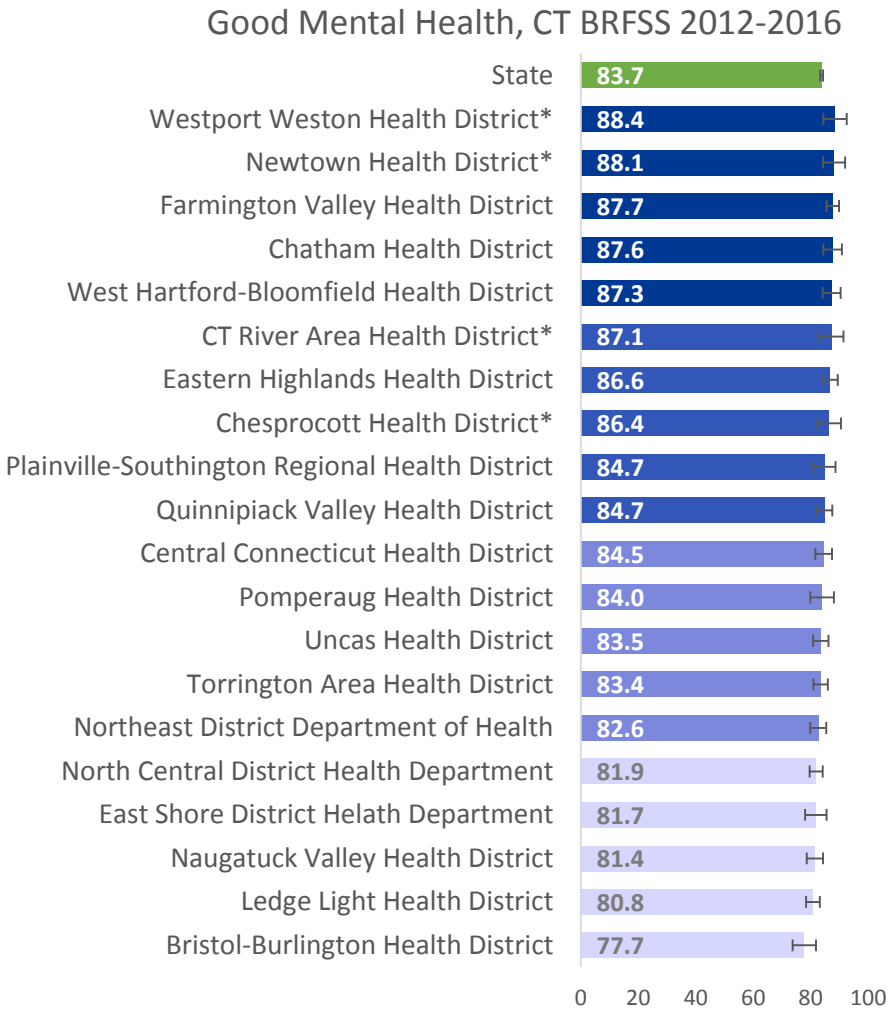
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Good Mental Health by Health District

Percentage of adults with good mental health, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 83.7% of adult residents reported being in good mental health. In Connecticut during 2016, the prevalence was greatest among younger adults, men, Hispanic adults, adults with higher income and educational levels, and adults without disability.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Chatham Health District
- Farmington Valley Health District

Lower:

- Bristol-Burlington Health District

Health Status

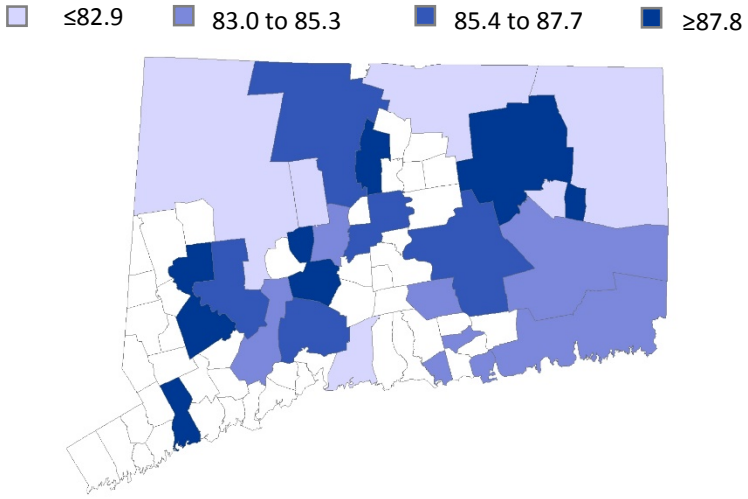
Physical Health

The BRFSS uses the "Healthy Days Measure" to assess health-related quality of life. The Healthy Days Measure has been useful for identifying health disparities and tracking population trends. [2] This measure defines adults in poor physical or mental health if they reported 14 or more days (within the past 30 days) for which their physical health was "not good".

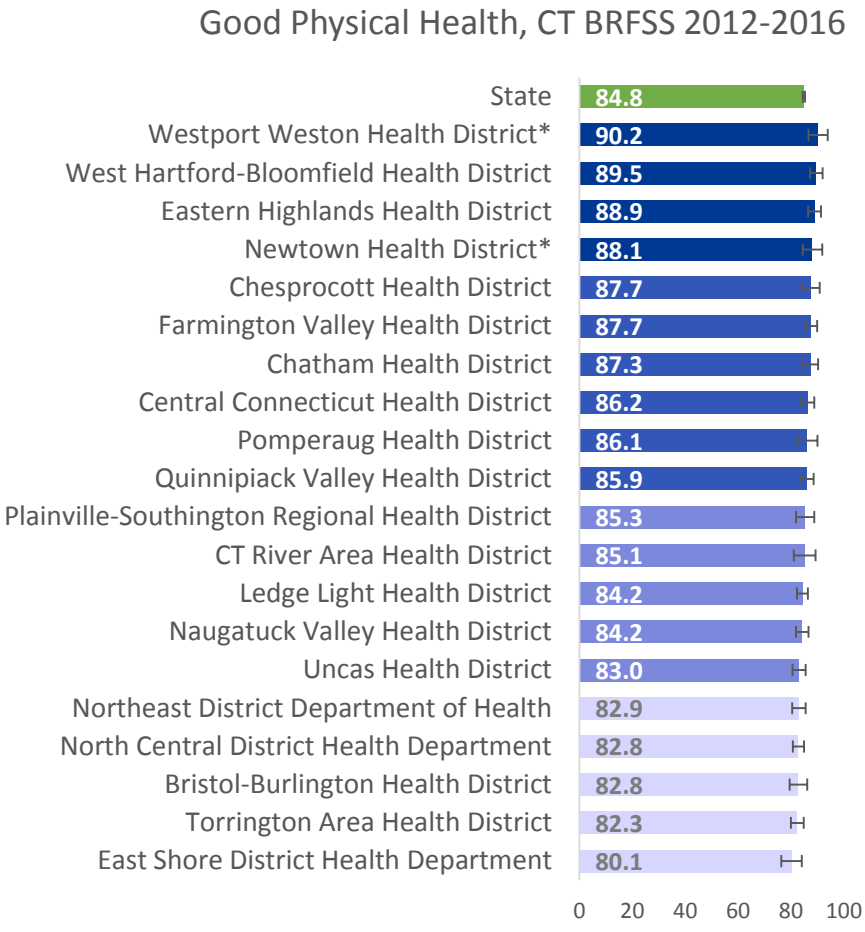
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Good Physical Health by Health District

Percentage of adults in good physical health, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 84.8% of adult residents reported being in good physical health. In Connecticut during 2016, the prevalence was significantly elevated among younger adults, Hispanic adults, adults with higher income and educational levels, and adults without disability.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Chatham Health District
- Eastern Highlands Health District
- West Hartford-Bloomfield Health District
- Farmington Valley Health District

Lower:

- East Shore District Health Department

Healthy Weight

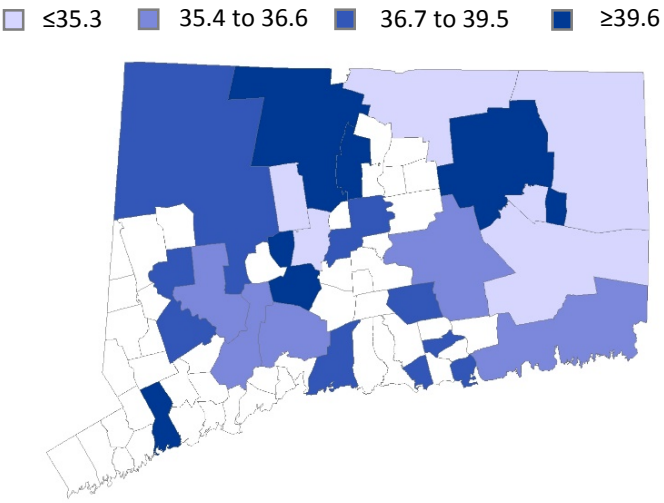
Overweight and obese adults are at risk of developing a wide range of health problems, including high blood pressure, type 2 diabetes, coronary heart disease, certain cancers, stroke and other diseases.[3]

CT BRFSS respondents were asked to provide their height and weight. A body mass index (BMI) was calculated.

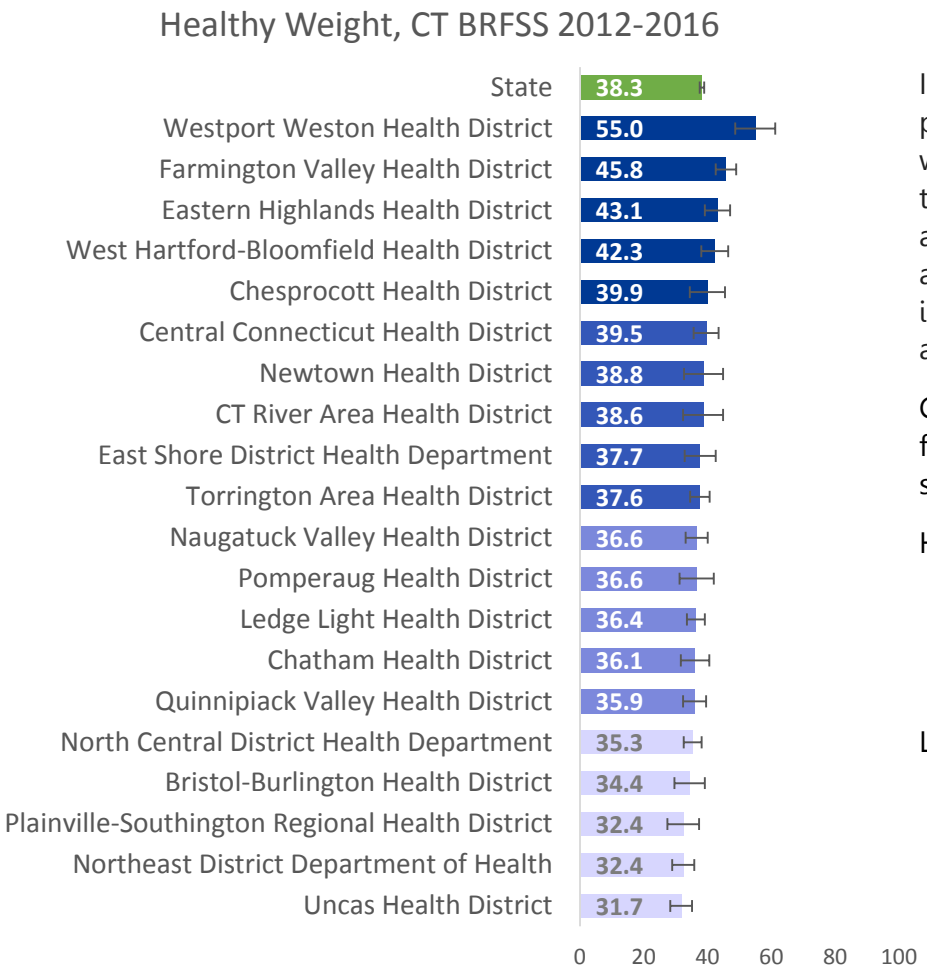
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Healthy Weight by Health District

Percentage of adults with healthy weight (BMI: 18.5-24.9kg/m^2), in quartiles



Health District Ranking



In Connecticut during 2012-2016, the prevalence of adults at a healthy weight was 38.3%. In Connecticut during 2016, the prevalence of obesity was greatest among older adults, non-Hispanic Black and Hispanic adults, adults with lower income and educational levels, and adults with disability.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Eastern Highlands Health District
- Farmington Valley Health District
- Westport Weston Health District

Lower:

- Northeast District Department of Health
- Plainville-Southington Regional Health District
- Uncas Health District

Current Health Care Coverage

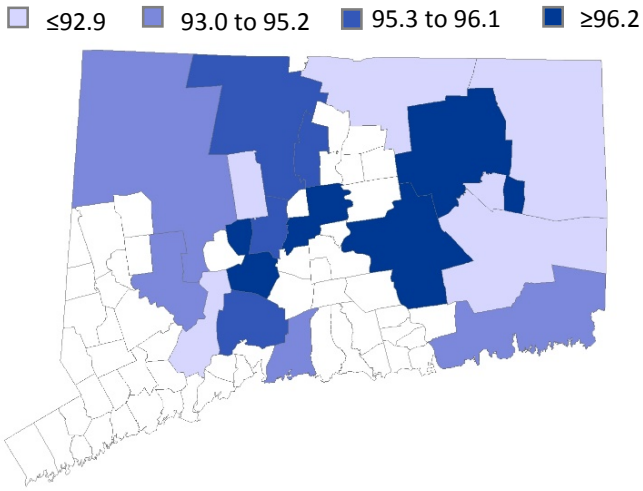
People who have access to a personal health care provider or a regular health care setting have better health outcomes.[4]

CT BRFSS respondents were asked if they had any kind of health care coverage, including health insurance, prepaid plans, or government plans such as Medicare.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

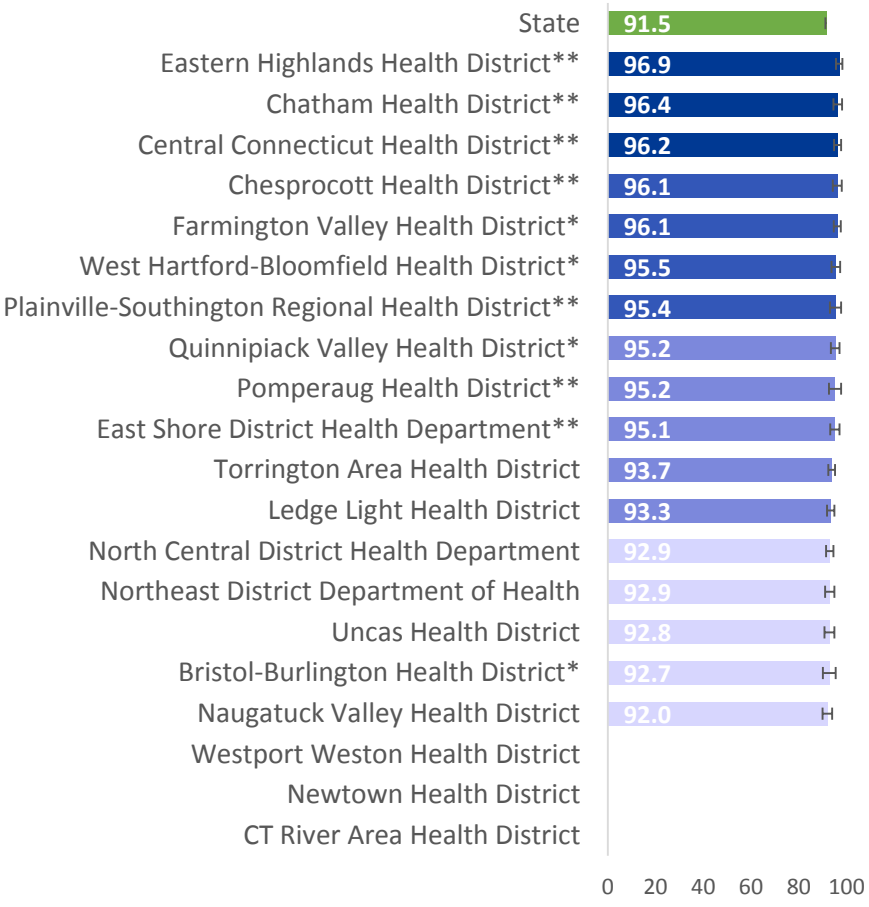
Current Health Care Coverage by Health District

Percentage of adults with healthcare coverage, in quartiles



Health District Ranking

Health Insurance Coverage, CT BRFSS 2012-2016



In Connecticut during 2012-2016, the prevalence of adults with health care coverage was 91.5%. In Connecticut during 2016, the prevalence of adults without health insurance was greatest among younger adults, men, Hispanic adults, adults with lower educational levels.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Torrington Area Health District

Due to the high coefficient variances, the estimates has been suppressed for Westport Weston Health District, CT River Area Health District, and Newtown Health District.

Housing Security

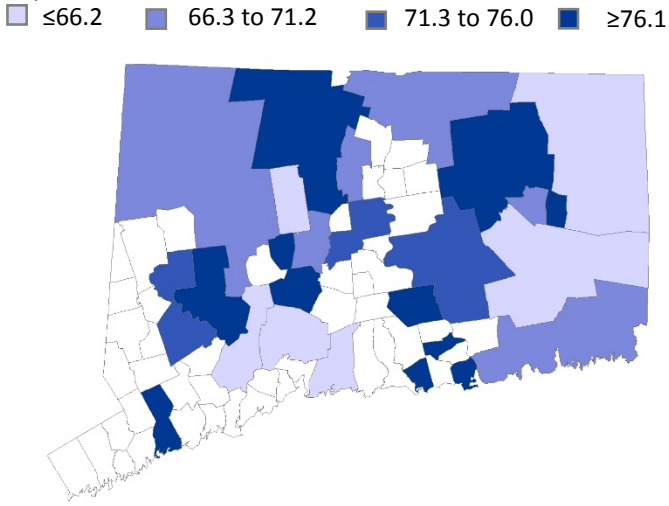
Financial stress can negatively impact a person's health. Previous BRFSS data have shown that adults experiencing housing instability or food insecurity are significantly more likely to suffer from insufficient sleep and mental distress.[5] Housing instability can also be a risk factor for homelessness.[6]

CT BRFSS respondents were asked to report how often in the past 12 months they felt worried or stressed about having enough money to pay for housing.

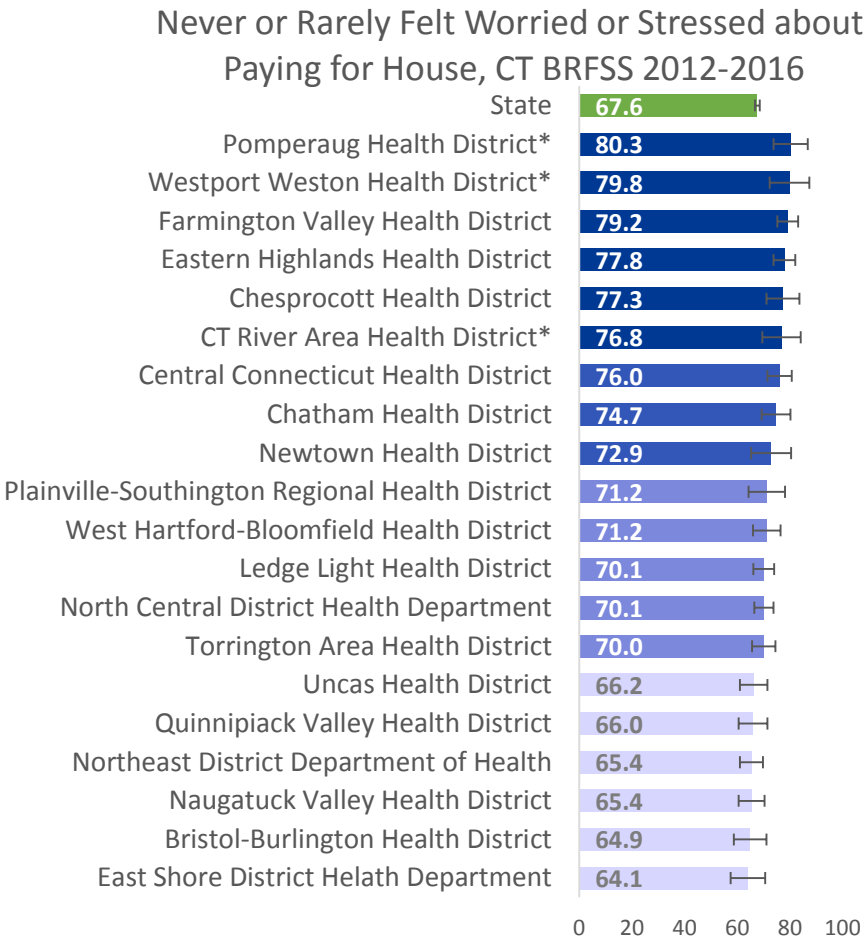
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2015 & 2016.

Housing security by Health District

Percentage of adults who never or rarely felt worried or stressed about having enough money to pay for housing, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 67.6% of adult residents reported they never or rarely felt worried or stressed about having enough money to pay for housing. In Connecticut during 2016, the prevalence of always or usually feeling stressed about having enough money for housing was greatest among younger adults, women, minority race/ ethnic group, adults with lower income and educational levels, adults without insurance, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Chesprocott Health District
- Central Connecticut Health District
- Chatham Health District
- Eastern Highlands Health District
- Farmington Valley Health District

Food Security

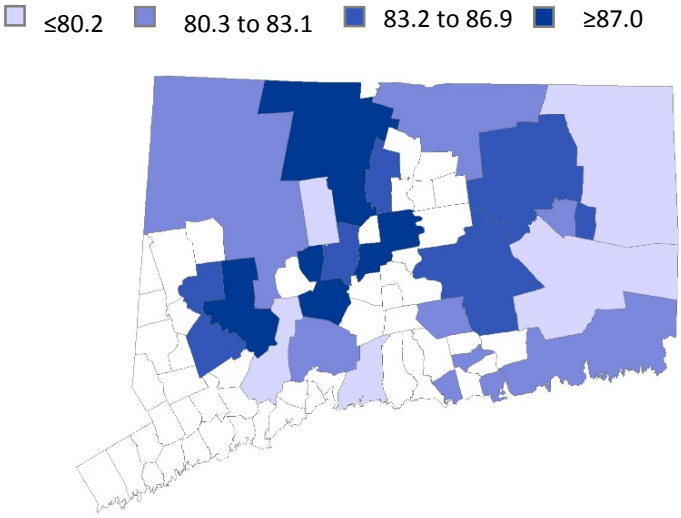
Financial stress can negatively impact a person's health. Previous BRFSS data have shown that adults experiencing housing instability or food insecurity are significantly more likely to suffer from insufficient sleep and mental distress.[5] Among low-income adults, food insecurity is associated with chronic disease, such as diabetes or hypertension.[7]

CT BRFSS respondents were asked to report how often in the past 12 months they felt worried or stressed about having enough money to buy nutritious meals.

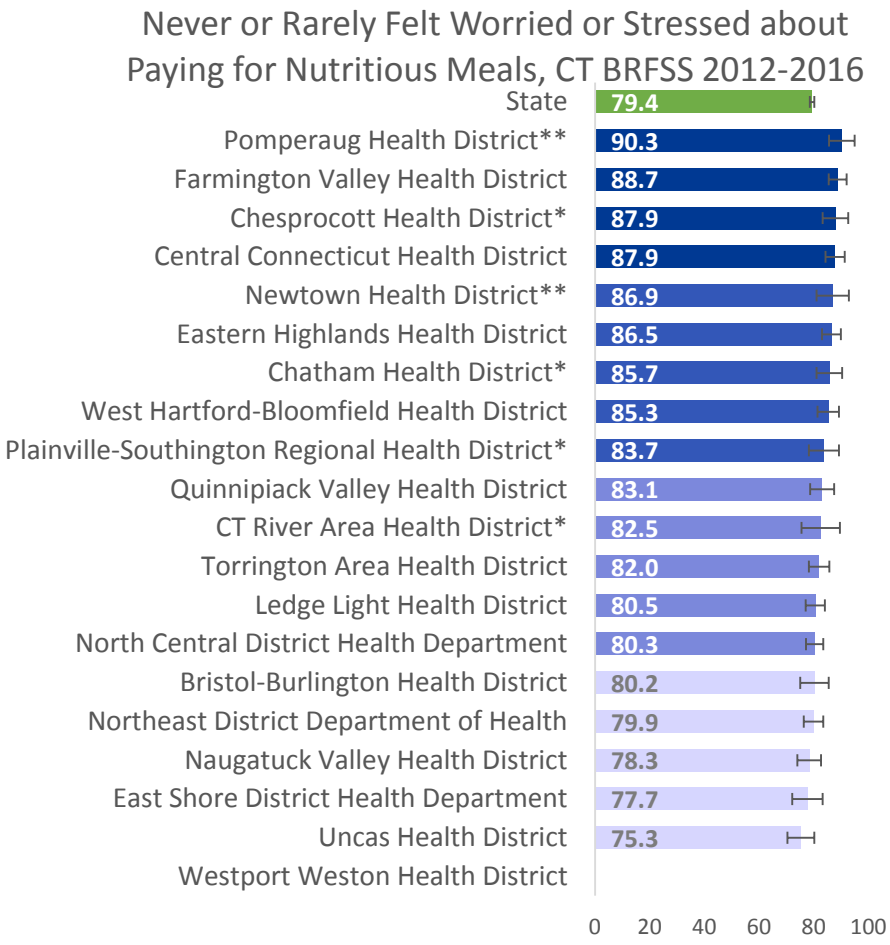
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2015 & 2016.

Food Security by Health District

Percentage of adults who never or rarely felt worried or stressed about having enough money to pay for nutritious meals, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 79.4% of adults never or rarely felt worried or stressed about having enough money to pay for nutritious meals. In Connecticut during 2016, the prevalence of always or usually feeling stress about having enough money to buy nutritional meals was greatest among younger adults, women, Hispanic adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Central Connecticut Health District
- Farmington Valley Health District
- Eastern Highlands Health District
- West Hartford-Bloomfield Health District

Due to the high coefficient variances, the estimates has been suppressed for Westport Weston Health District.

At Least One Personal Doctor

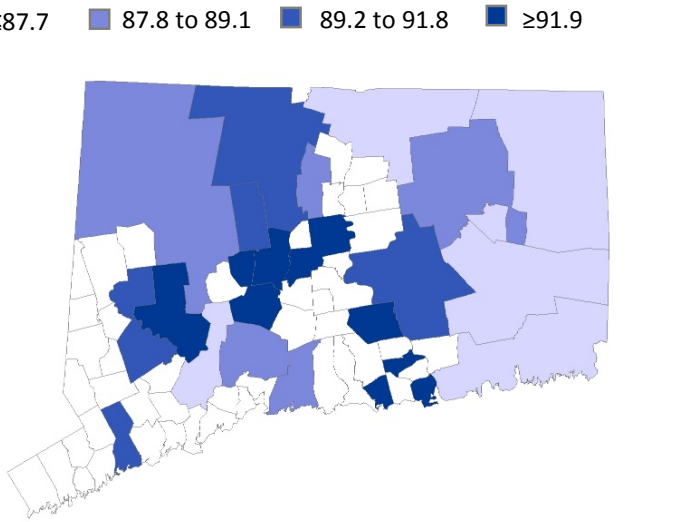
People who have access to a personal health care provider or a regular health care setting have better health outcomes.[8] Limited healthcare coverage is a barrier to access, and can adversely impact health outcomes.

CT BRFSS respondents were asked if they have at least one doctor or healthcare professional that they consider their personal doctor.

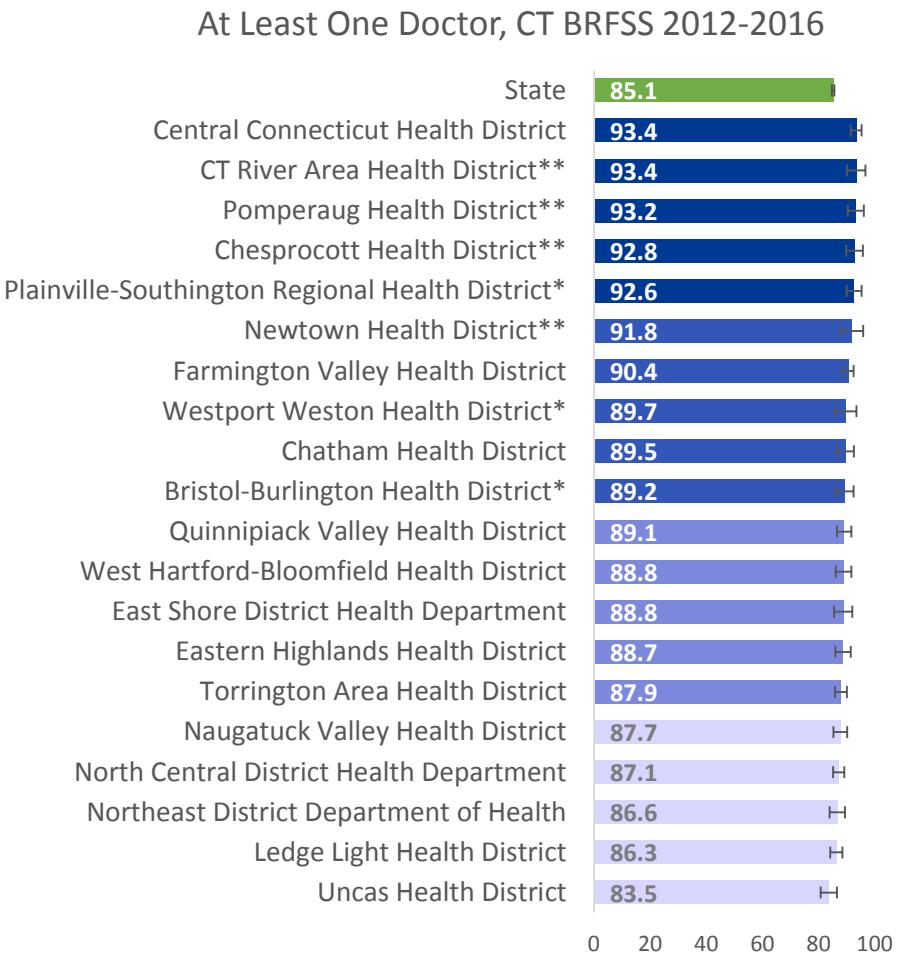
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

At Least One Personal Doctor by Health District

Percentage of adults with at least one personal doctor, in quartiles



Health District Ranking



In Connecticut during 2012-2016, the prevalence of adults with at least one personal doctor was 85.1%. In Connecticut during 2016, the prevalence was greatest among older adults, women, non-Hispanic White and non-Hispanic Black adults, adults with higher income and educational levels.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Central Connecticut Health District
- Chatham Health District
- Eastern Highlands Health District
- Farmington Valley Health District
- Quinnipiack Valley Health District
- Torrington Area Health District
- West Hartford-Bloomfield Health District

Adequate Sleep

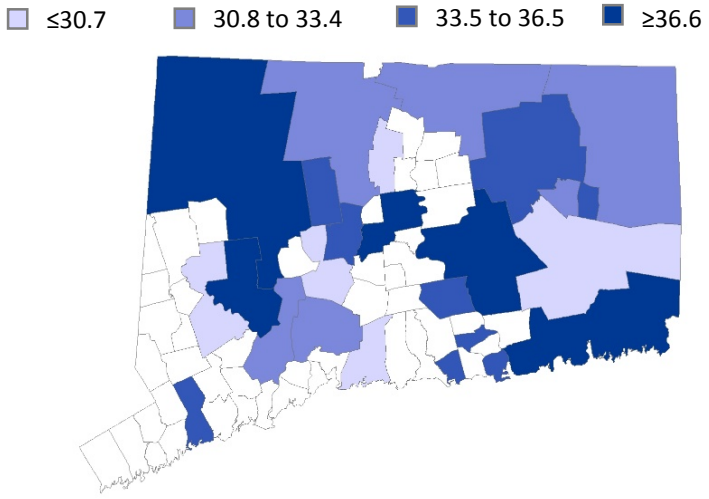
Lack of sleep can have a substantial impact on health. Studies have found that short sleep duration is associated with an increased risk of cardiovascular disease, diabetes, and obesity. Sleep loss can also impact daily function, with inadequate sleep increasing the risk of drowsy driving and crashes.[9]

CT BRFSS respondents were asked to report on average, the number of hours of sleep they receive in a 24-hour period.

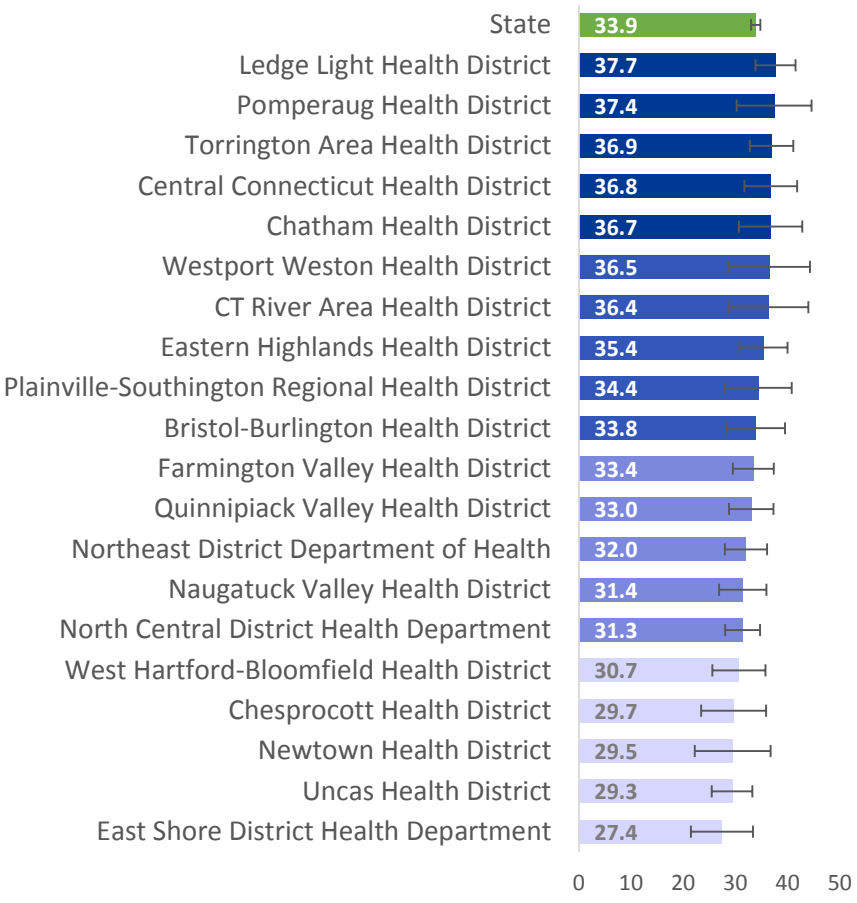
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013, 2014 & 2016.

Adequate Sleep by Health District

Percentage of adults who slept at least 8 hours on average, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 33.9% of adult residents reported receiving an average of 8 hours or more of sleep per day. In Connecticut during 2016, the prevalence was greatest among adults 18-34 years old and 55 years old and older and adults from household with incomes less than $35,000.

Compared to the statewide average, the prevalence of adults who reported an average of 8 hours or more of sleep daily was not significantly different across all health districts.

Aerobic and Strengthening Exercise

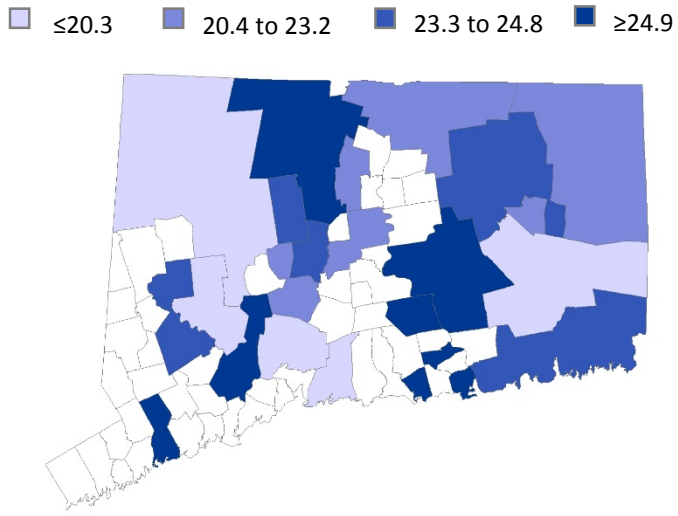
The 2008 Physical Activity Guidelines for Americans recommends that adults participate in at least 150 minutes a week of moderate-intensity aerobic physical activity and at least two or more times a week of muscle-strengthening activities for health benefits.[10] People who are physically active generally live longer and have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers.[11]

CT BRFSS respondents were asked to report the frequency of their physical activities.

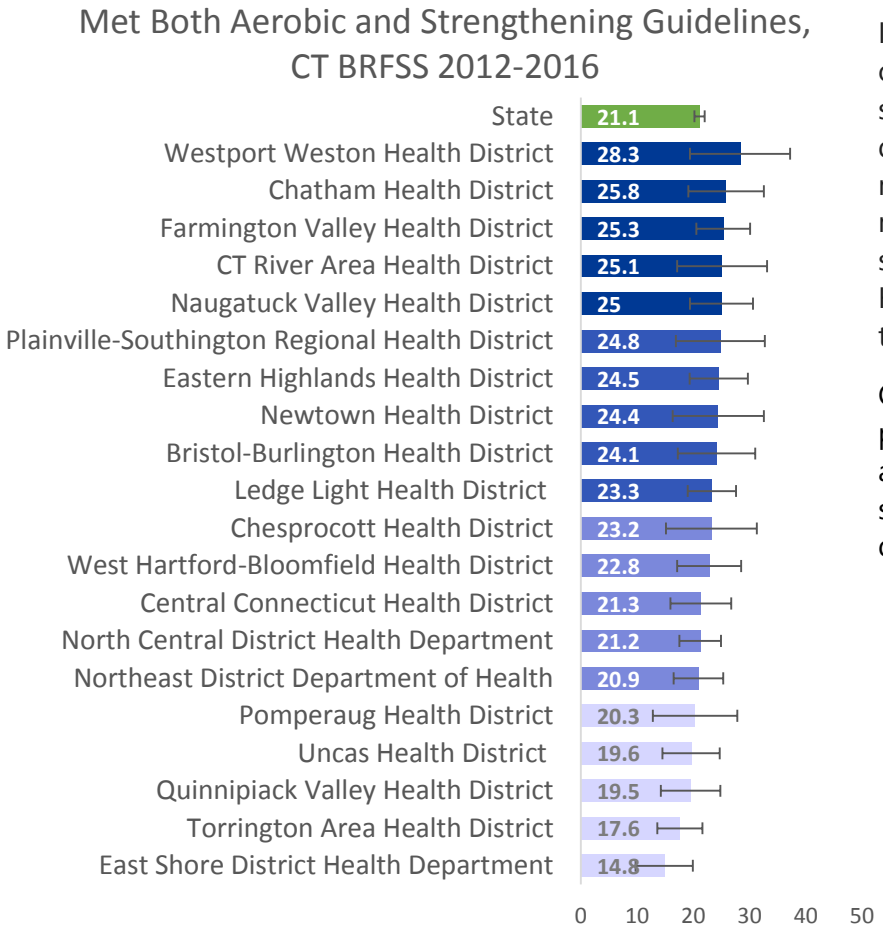
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

Met Aerobic and Strengthening Guidelines by Health District

Percentage of adults met both aerobic and strengthening physical activity guidelines, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 21.1% of adult residents met both aerobic and strengthening guidelines. In Connecticut during 2015, women were more likely to meet both guidelines, while men were more likely to meet muscle strengthening guideline only; and non-Hispanic White adults were more likely to meet aerobic guideline only.

Compared to the statewide average, the prevalence of adults met both aerobic and strengthening guidelines was not significantly different across all health districts.

Fruit Consumption

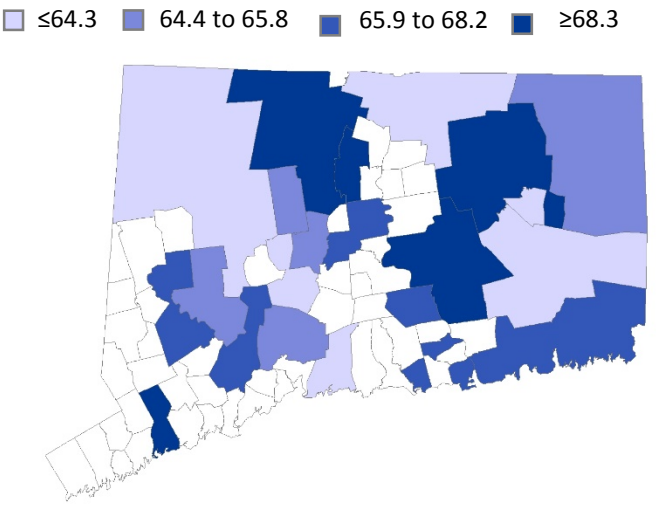
The Dietary Guidelines for Americans recommend that people consume five to thirteen servings of fruits and vegetables daily, with different amounts based on total calorie intake.[12] The average American, however, only eats about three servings of fruits and vegetables each day. [13]

CT BRFSS respondents were asked to report how often they ate fruits, including servings of 100% fruit juice.

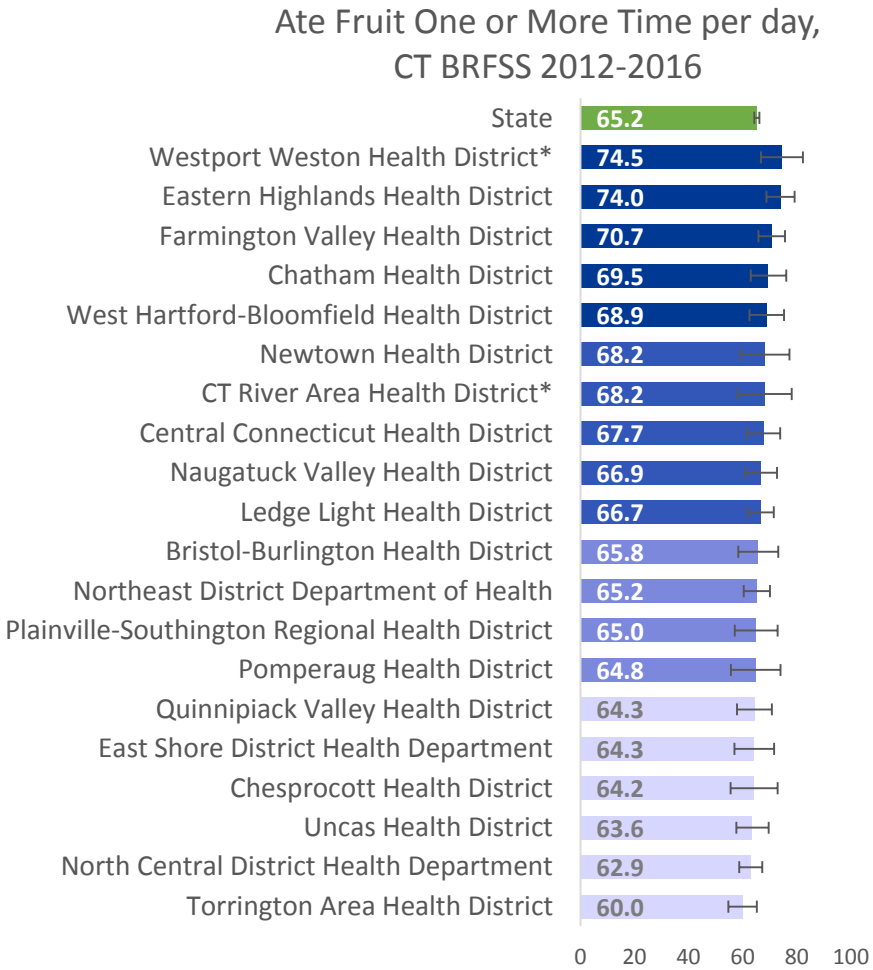
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

Fruit consumption by Health District

Percentage of adults who ate fruit one or more times daily, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 65.2% of adult residents reported consuming fruit one or more times per day. In Connecticut during 2015, the prevalence was greatest among older adults, women, non-Hispanic White adults, adults with higher education and incomes levels, adults with insurance, and non-adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Eastern Highlands Health District

Vegetable Consumption

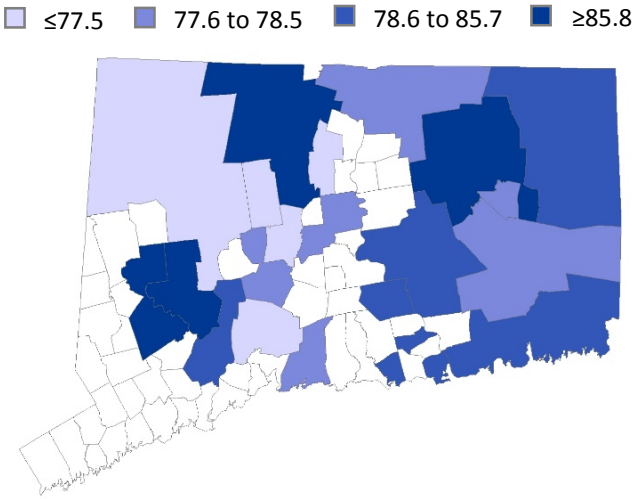
The Dietary Guidelines for Americans recommend that people consume five to thirteen servings of fruits and vegetables daily, with different amounts based on total calorie intake.[12] The average American, however, only eats about three servings of fruits and vegetables each day. [13]

CT BRFSS respondents were asked to report how often they ate vegetables, including servings of 100% fruit juice.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

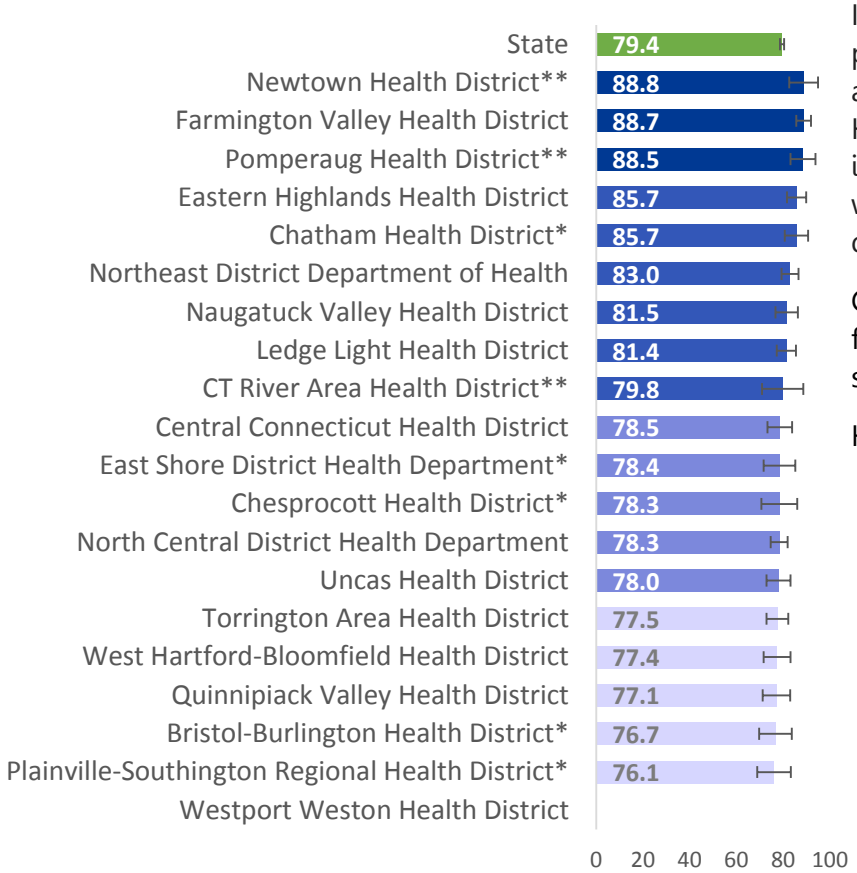
Vegetable Consumption by Health District

Percentage of adults ate vegetables one or more times per day, in quartiles



Health District Ranking

Ate vegetables one or more times per day, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 79.4% of adult residents reported consuming vegetables one or more times per day. In Connecticut during 2015, the prevalence was significantly greater among older adults, women, non-Hispanic White adults, adults with higher income and educational levels, adults with insurance, and non-adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Eastern Highlands Health District
- Farmington Valley Health District

Due to the high coefficient variances, the estimates has been suppressed for Westport Weston Health District.

References

1. DeSalvo, Karen B, Bloser, N, Reynolds, K, He, Jiang, Muntner, P (2006) Mortality Prediction with a Single General Self-Rated Health Question. *Journal of General Internal Medicine 21(3):267-275*.

2. Centers for Disease Control and Prevention (2000) Measuring Healthy Days: Population Assessment of Health-Related Quality of Life, Atlanta, Georgia. *http://www.cdc.gov/hrqol/pdfs/mhd.pdf*

3. Centers for Disease Control and Prevention: Adult Overweight and Obesity: Causes and Consequences, Atlanta, Georgia http://www.cdc.gov/obesity/adult/causes/index.html, accessed on May 2, 2018

4. Gutkin, Cal (2009) Outliers: extended families, better health outcomes. Why everyone should have a family doctor. *Canadian Family Physician 55 (7):768*.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2718612/pdf/0550768.pdf, accessed on March 10, 2017.

5. Liu, Yong, et al. "Relationships between Housing and Good Insecurity, Frequent Mental Distress, and Insufficient Sleep among Adults in 12 US States, 2009." Preventing Chronic Disease. 11.1 (March 2014). *http://www.cdc.gov/pcd/issues/2014/13_0334.htm*

6. Kushel, Margot B., Reena Gupta, Lauren Gee, and Jennifer S. Haas. "Housing Instability and

Food Insecurity as Barriers to Health Care Among Low-Income Americans." Journal of General

Internal Medicine. 21.2 (January 2006): 71-77. *http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484604/*

7. United States Department of Agriculture Economic Research Center. "Food Security in the U.S:

Measurement." October 2017. *https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx*

8. Gutkin, Cal (2009) Outliers: extended families, better health outcomes. Why everyone should have a family doctor. *Canadian Family Physician 55 (7):768*. *http://www.cfp.ca/content/55/7/768.full*

9. Centers for Disease Control and Prevention. Sleep and sleep disorders. March 2017. https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html

10. U.S. Department of Health and Human Services: 2008 Physical Activity Guidelines for Americans. https://health.gov/paguidelines/pdf/paguide.pdf, assessed May 2, 2018.

11. U.S. Department of Health and Human Services: Physical Activity Guidelines Advisory Committee report, 2008. https://health.gov/paguidelines/report/pdf/CommitteeReport.pdf, assessed May 2, 2018.

12. U.S. Department of Agriculture and U.S. Department of Health and Human Services. "Dietary Guidelines for Americans, 2010." December 2010. http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf

13. Harvard School of Public Health. "Vegetables and Fruits." The Nutrition Source. 2015. http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vegetables-and-fruits/

No Leisure Time Physical Activity

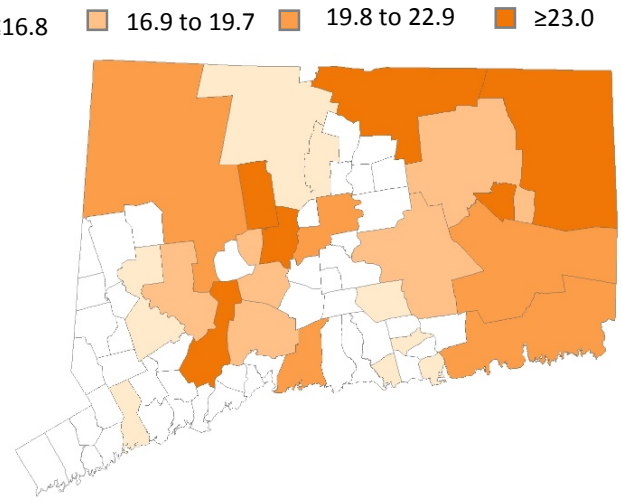
Regular physical exercise has been shown to prevent certain chronic diseases, just as a sedentary lifestyle is a risk factor for a variety of obesity, bone and joint diseases, depression, and chronic diseases.[1] Physical activity also improves mental health and prolongs quality of life.[2]

CT BRFSS respondents were asked to report whether they had participated in any physical activities or exercises such as running, calisthenics, golf, gardening or walking, other than for their job, in the past 30 days.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

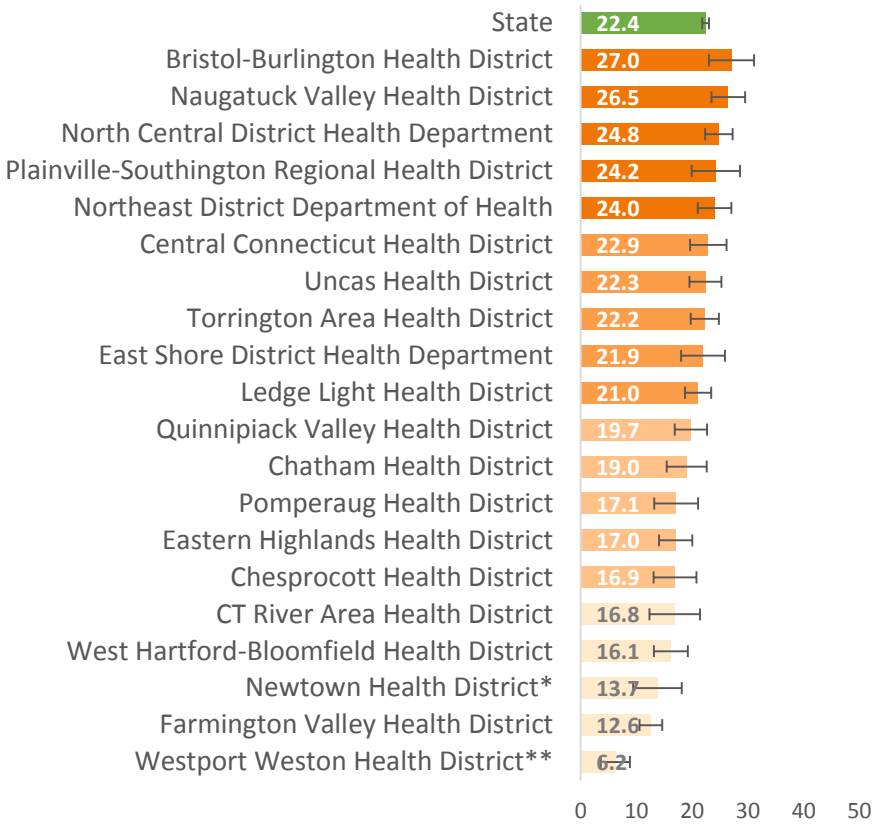
No Leisure Time Physical Activity by Health District

Percentage of adults who did not engage in any leisure or recreational physical activity in the past month, in quartiles



Health District Ranking

No Leisure Time Physical Activities in the Past 30 days, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 22.4% of adult residents reported had no leisure time physical activities in the past 30 days. In Connecticut during 2016, the prevalence of adults with no leisure time physical activities was significantly elevated among older adults, women, minority race/ethnicity groups, adults with lower income and education levels, adults without insurance, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Naugatuck Valley Health District

Lower:

- Chesprocott Health District
- CT River Area Health District
- Farmington Valley Health District
- Eastern Highlands Health District
- Pomperaug Health District
- West Hartford-Bloomfield Health

Health Risk Behaviors

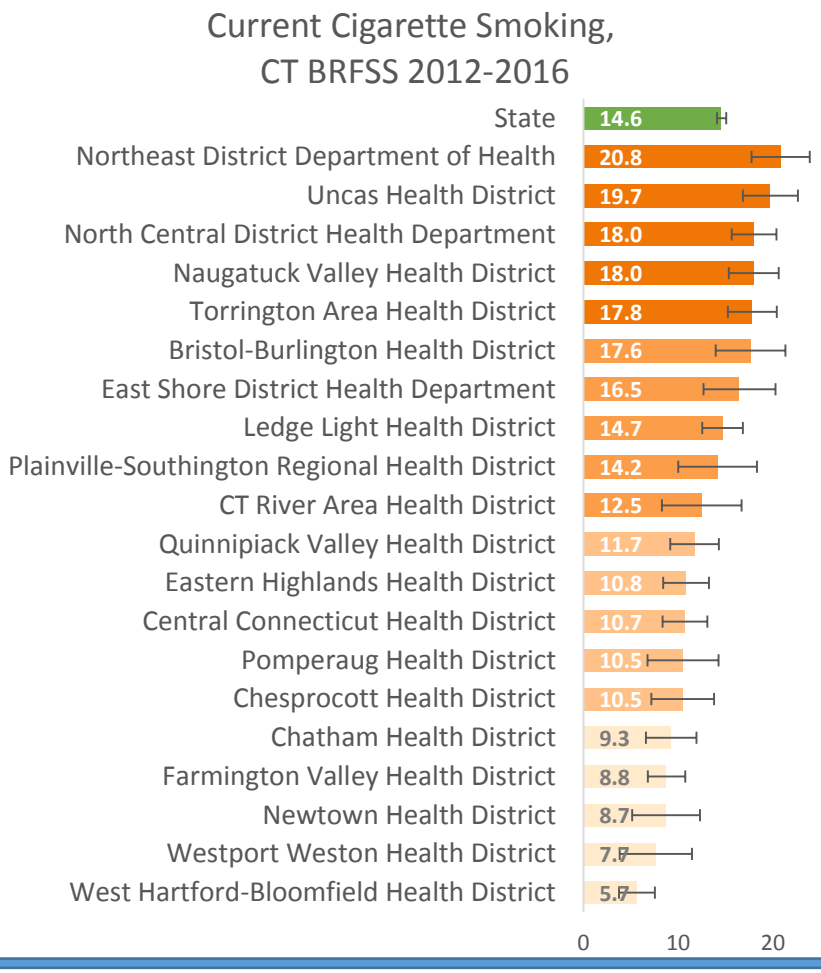
Current Cigarette Smoking

According to the Surgeon General, smoking is the number one preventable cause of death in the U.S.[3] It is detrimental to nearly every organ in the body and causes poorer overall health. Smokers were more likely to develop lung cancer, stroke and heart disease when compared to non-smokers.

CT BRFSS respondents were asked whether they currently smoked cigarettes every day, some days, or not at all, among those who reported they had smoked at least 100 cigarettes in their entire life.

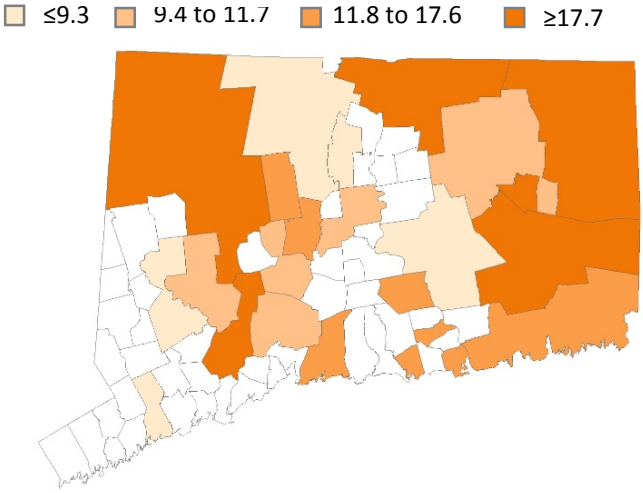
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Health District Ranking



Current Cigarette Smoking by Health District

Percentage of adults who were current smoker, in quartiles



In Connecticut during 2012-2016, 14.6% of adult residents were current smokers. In Connecticut during 2016, the prevalence was greatest among younger adults, men, non-Hispanic Black adults, adults from households earning $35,000-$74,999, adults without insurance, adults with disabilities, and adults with no more than a high school education.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Naugatuck Valley Health District
- North Central District Health Department
- Northeast District Department of Health
- Torrington Area Health District
- Uncas Health District

Lower:

- Central Connecticut Health District
- Chatham Health District
- Chesprocott Health District
- Eastern Highlands Health District
- Farmington Valley Health District
- Newtown Health District
- West Hartford-Bloomfield Health District

Hookah Use

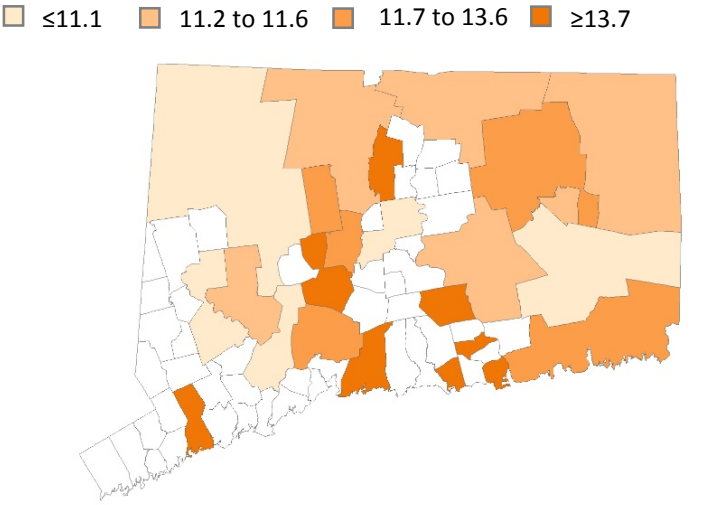
Although cigarette smoking in the United States has been steadily declining, use of alternative tobacco products has become more prevalent in recent years.[4] The negative health risks associated with hookahs, or water pipes, are well established and for some, this type of tobacco use is associated with increased risk for cigarette use.[5]

CT BRFSS respondents were asked if they had ever used a hookah.

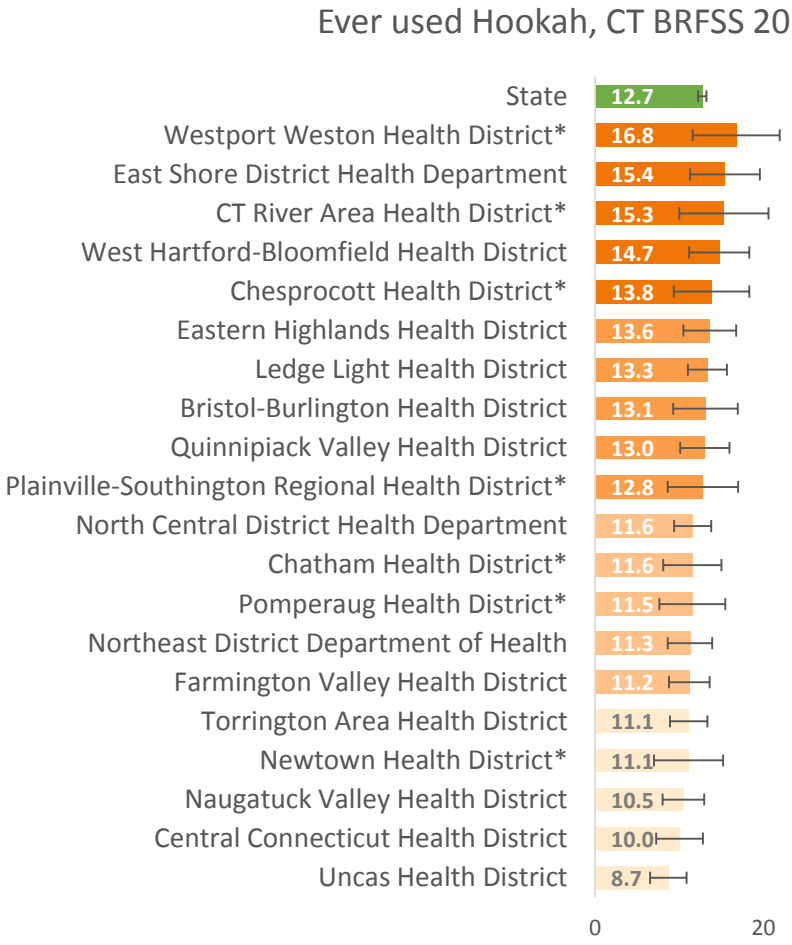
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Ever Used a Hookah by Health District

Percentage of adults who had ever used hookah, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 12.7% of adults ever used a hookah. In Connecticut during 2016, the prevalence was significantly greater among younger adults, men, adults with higher income and educational levels.

Compared to the statewide average, the prevalence of adults ever used hookah was significantly-

Lower:

- Uncas Health District

Electronic Cigarettes

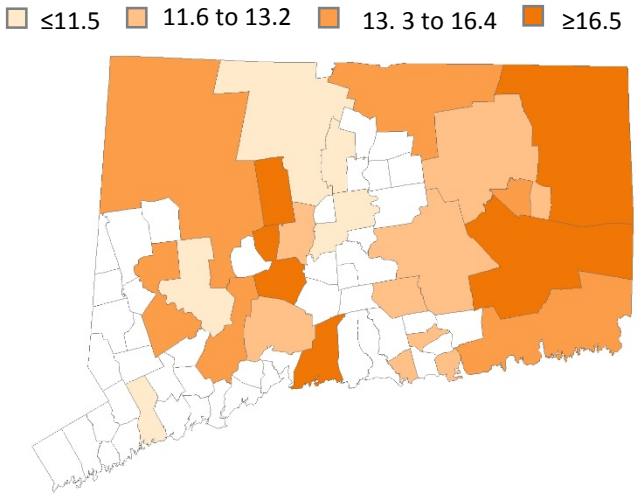
Although cigarette smoking in the United States has been steadily declining, the use of alternative tobacco products has become more prevalent in recent years.[4] The health effects of non-cigarette tobacco are often perceived as less harmful than traditional cigarettes, particularly in younger age groups, yet nicotine exposure during adolescence may have long-lasting adverse effects on the developing adolescent brain. [6]

CT BRFSS respondents were asked if they had ever used an electronic cigarette.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

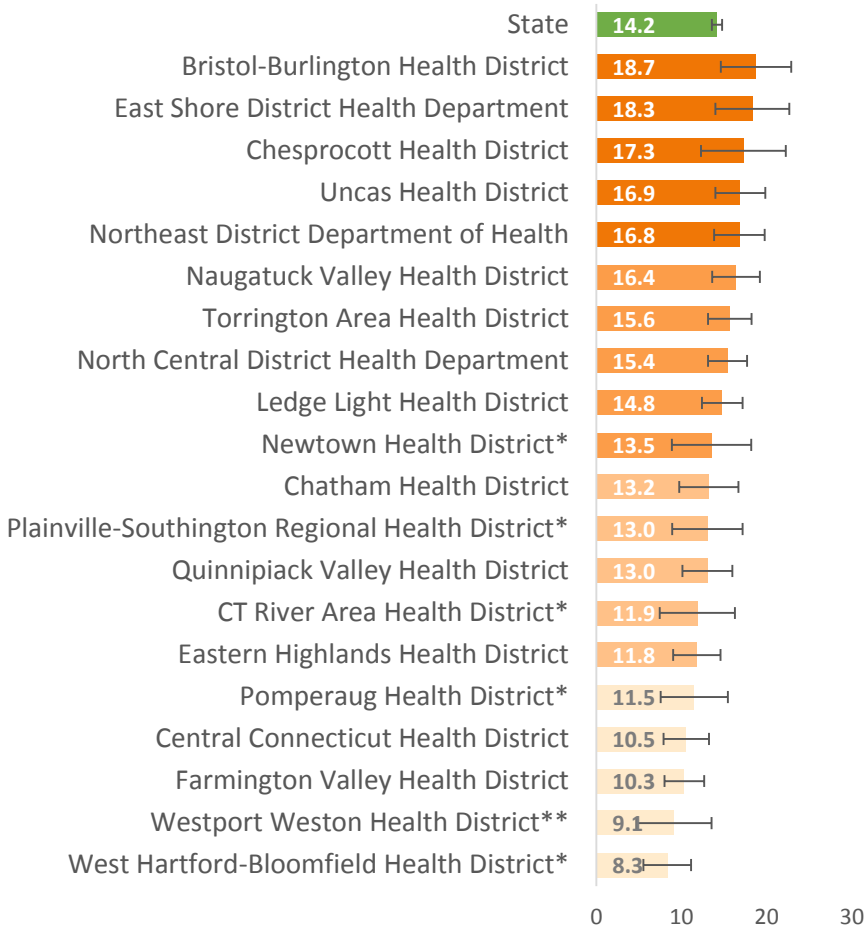
Ever Used Electronic Cigarettes by Health District

Percentage of adults who had ever used e-cigarette, in quartiles



Health District Ranking

Ever Used E-cigarette, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 14.2% of adults ever used electronic cigarettes. In Connecticut during 2016, the prevalence was significantly greater among younger adults, men, adults with lower education and incomes levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Lower:

- Central Connecticut Health District
- Eastern Highlands Health District
- Farmington Valley Health District
- Quinnipiack Valley Health District

Excessive Alcohol Consumption

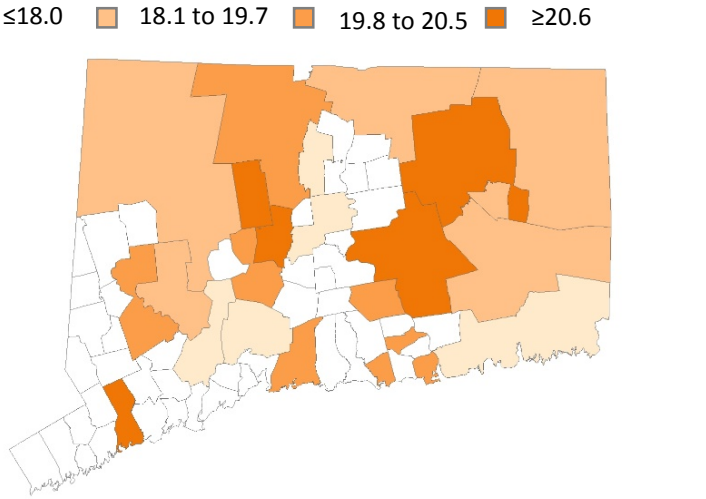
Excessive alcohol consumption is associated with numerous health problems,[7] including liver disease, neurological damage and alcohol poisoning, which can lead individuals to engage in risky and violent behaviors.[8]

CT BRFSS respondents were asked if they had consumed alcohol in the past 30 days, and if they responded positively, they were asked about frequency of and amount of alcohol consumed. Respondents were defined as engaging in excessive alcohol consumption if either binge drinking or heavy drinking was answered positively.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

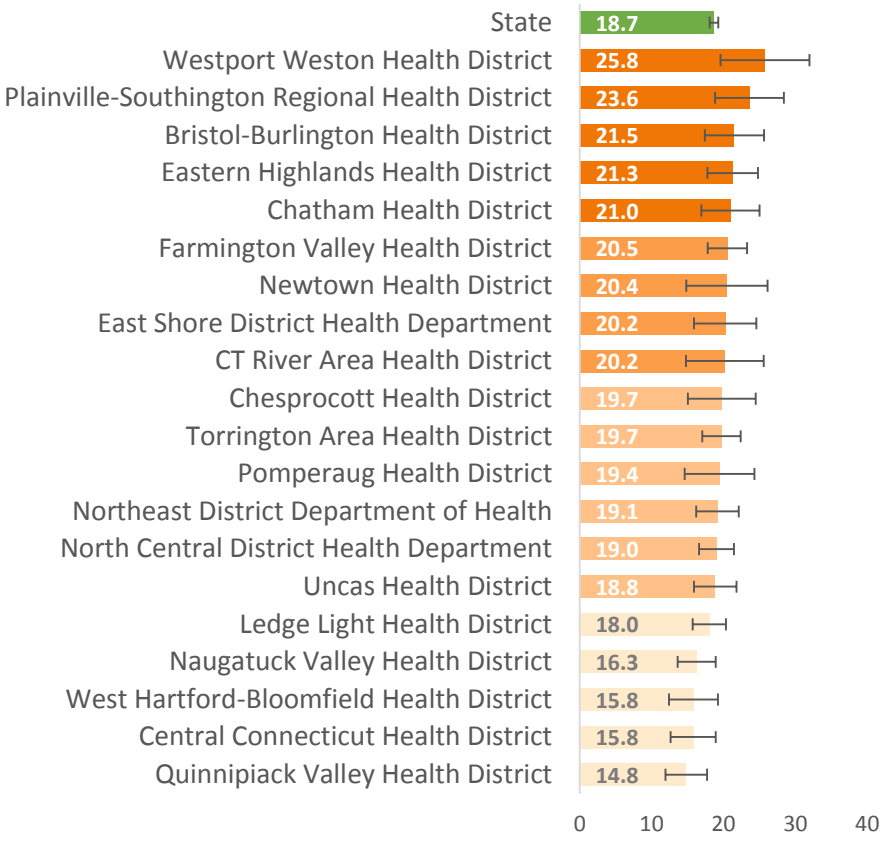
Excessive Alcohol Consumption by Health District

Percentage of adults who engaged in excessive drinking, in quartiles



Health District Ranking

Excessive Alcohol Consumption in Past Month, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 18.7% of adults engaged in excessive drinking (either binge drinking or heavy drinking), in past month. In Connecticut during 2016, the prevalence was significantly greater among younger adults, men, non-Hispanic White and Hispanic adults, adults with higher income and education levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Westport Weston Health District

Lower:

- Quinnipiack Valley Health District

References

1. Warburton, DE, Nichol, CW, Bredlin, SSD (2006) Health Benefits of Physical Activity: The Evidence. Canadian Medical Association Journal 174(6):801-809. http://www.cmaj.ca/content/174/6/801.full.pdf, accessed on March 10, 2017.
2. American Heart Association (2015) Physical activity improves quality of life, Dallas, Texas. http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Physical-activity-improves-quality-of-life_UCM_307977_Article.jsp#.WunFci7wZaR, assessed on May 2,2018.
3. ublic Health Service (2014) The health consequences of smoking – 50 years of progress: A report of the Surgeon General. U.S. Department of Health and Human Services, Atlanta, Georgia. https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf, assessed on May 2,2018.
4. 6 O'Connor, RJ (2012) Non-cigarette tobacco products: What have we learned and where are we headed? Tob Control. 2012 March ; 21(2): 181–190
5. American Lung Association (2007) An emerging deadly trend: Waterpipe tobacco use. http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf, assessed on May 2,2018..
6. Schivo, M, Avdalovic, MV, Murin, S. (2014) Non-cigarette tobacco and the lung. Clin Rev Allergy Immunol. 2014 Feb;46(1):34-53.
7. Centers for Disease Control and Prevention (2016) Alcohol and public health: Frequently asked questions. https://www.cdc.gov/alcohol/faqs.htm, accessed on May 2, 2018.
8. Centers for Disease Control and Prevention: Fact Sheets- Binge drinking. https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm, accessed on May 2, 2018.

Health Protective Behaviors

Routine Check-up

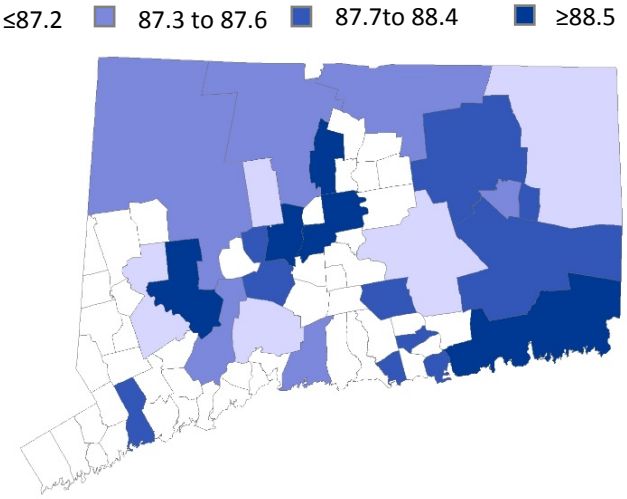
Routine check-ups are important for disease prevention and age-appropriate screening. [1] They are an important mechanism for identifying chronic conditions in the early stages, which allow patients and doctors more options for treatment before a condition worsens.

CT BRFSS respondents were asked how long it had been since they last visited a doctor for a routine check-up.

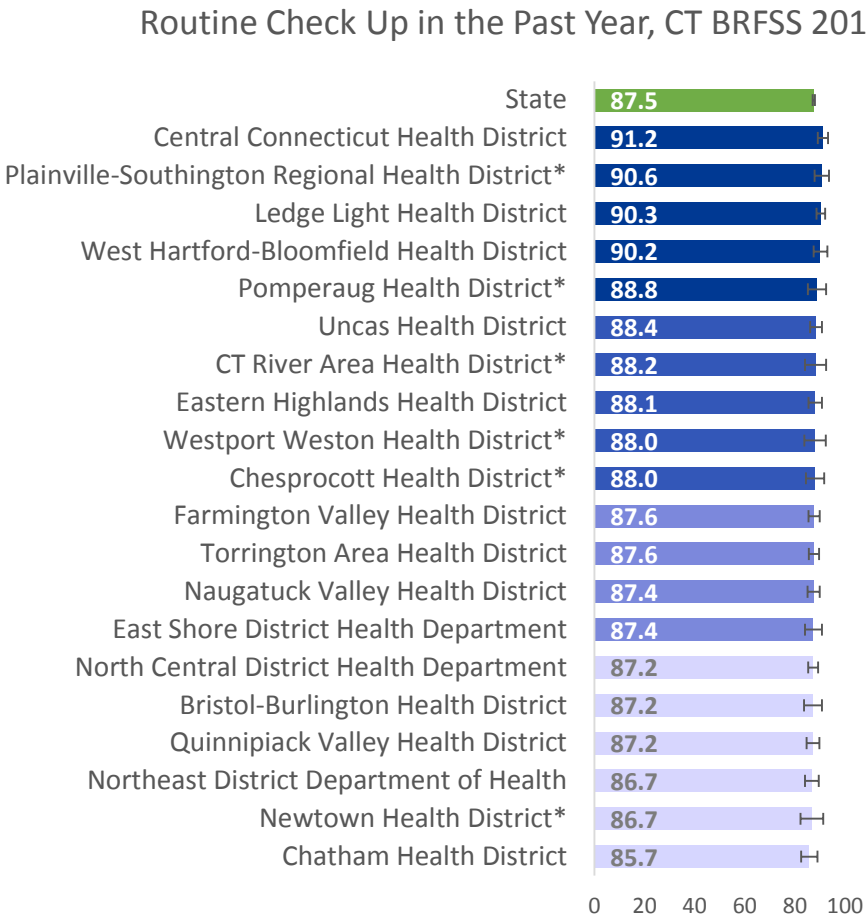
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Routine Check-up in the Past Year by Health District

Percentage of adults who had a routine check-up in the past year, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 87.5% of adult residents reported having a routine check-up in the past year. In Connecticut during 2016, the prevalence was significantly greater among older adults, women, non-Hispanic Black and White adults, adults with insurance, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Central Connecticut Health District
- Ledge Light Health District

Influenza Vaccination

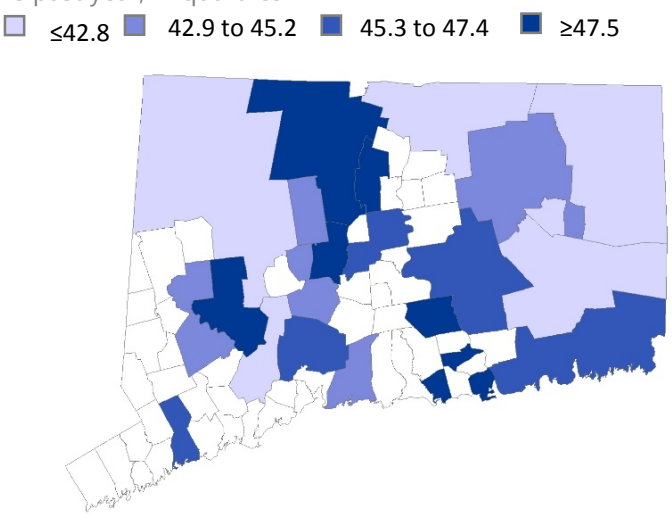
The influenza (flu) virus can cause serious infections, hospitalizations and even death in some susceptible individuals.[2] Seasonal flu vaccines are recommended by the Advisory Committee on Immunization Practices through CDC for everyone over six months of age.[3]

CT BRFSS respondents were asked if they had received the seasonal flu vaccine in the past year, either as a shot or nasal spray mist.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

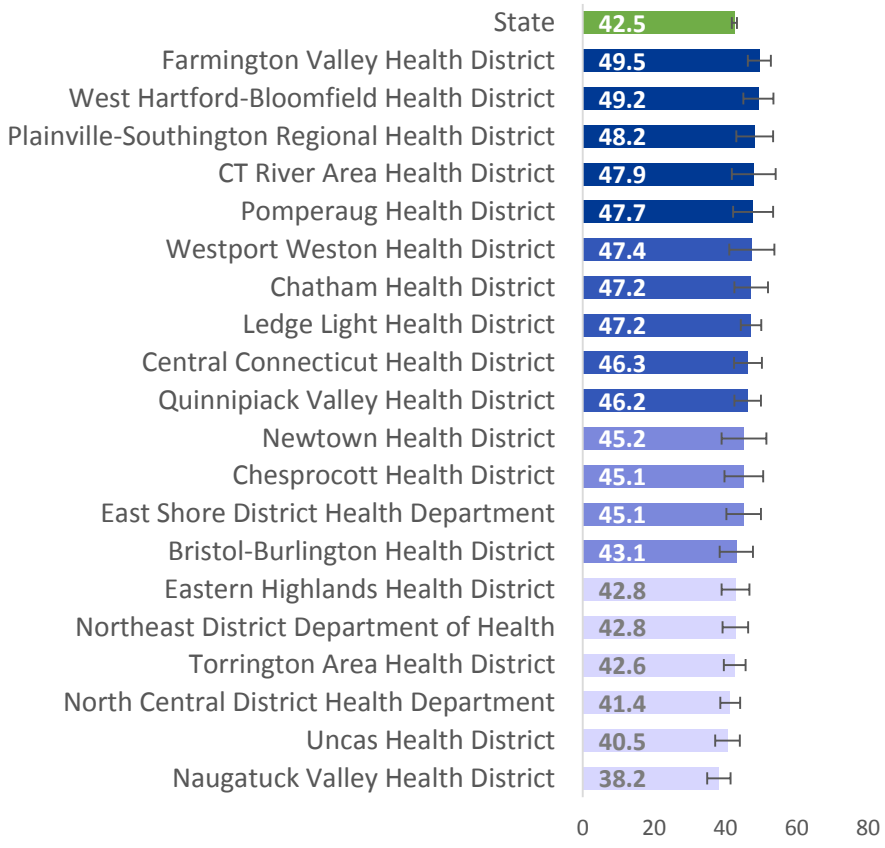
Influenza Vaccination in the Past Year by Health District

Percentage of adults who received an influenza vaccination in the past year, in quartiles



Health District Ranking

Influenza Vaccination in the Past Year, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 42.5% of adults received an influenza vaccination in the past year. In Connecticut during 2016, the prevalence was significantly elevated among adults 55 years old and older, women, non-Hispanic White adults, adults with higher income and educational levels, adults with insurance, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Farmington Valley Health District
- Ledge Light Health District
- West Hartford-Bloomfield Health District

Lower:

- Naugatuck Valley Health District

Pneumococcal Vaccination

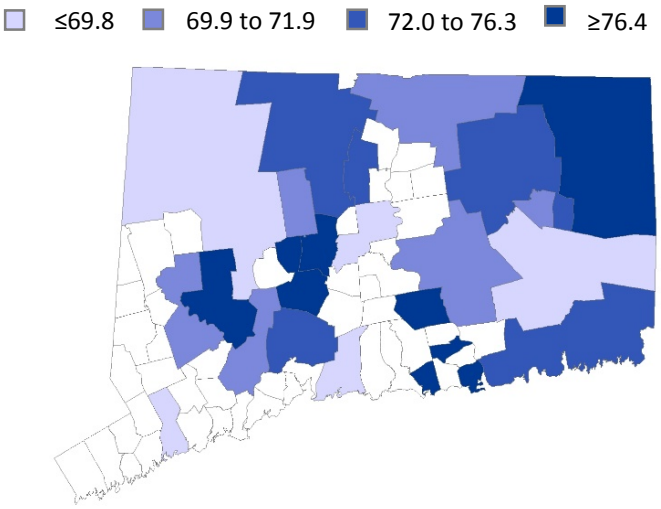
Pneumonia is a lung infection that can be caused by viruses, bacteria or fungi. Pneumococcal vaccinations are recommended for children under two years of age, adults 19-64 years old who smoke tobacco, adults at least 65 years old, and all adults with existing medical conditions.[4]

CT BRFSS respondents age 65 and older were asked if they had ever received a pneumococcal vaccination.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

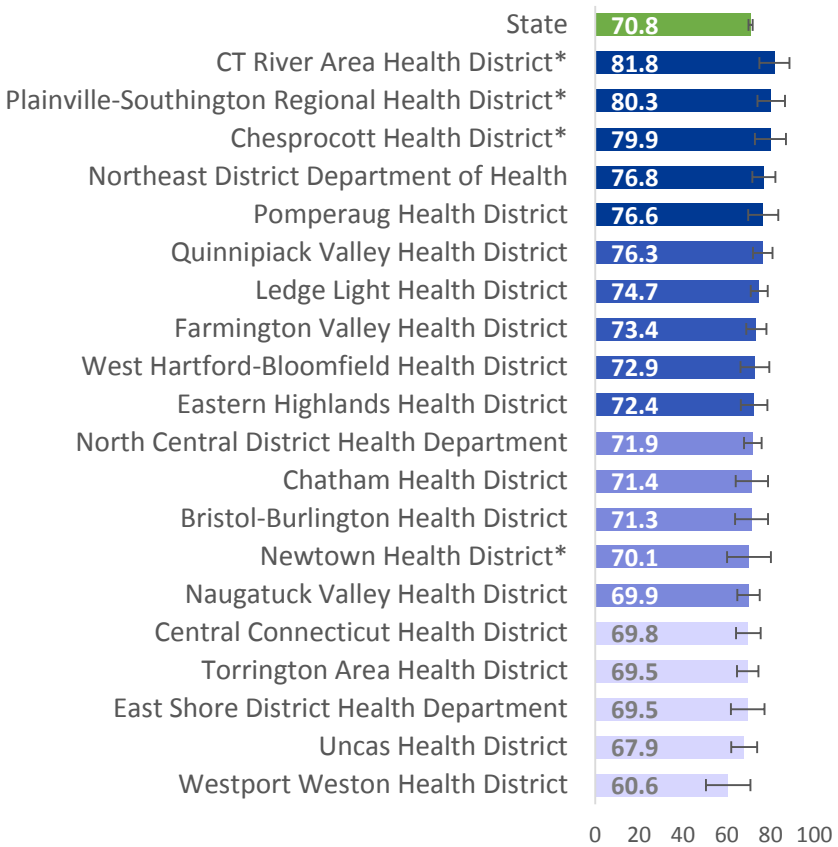
Ever Had Pneumococcal Vaccination by Health District

Percentage of adults (age 65 and older) who received the pneumococcal vaccination, in quartiles



Health District Ranking

Ever Had Pneumococcal Vaccination (65 and older), CT BRFSS 2012-2016



In Connecticut during 2012-2016, 70.8% of adults 65 years and older had ever received a pneumococcal vaccination. In Connecticut during 2016, the prevalence was not significantly different from the U.S., and the state ranked 27th among all states in the country for its prevalence.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Quinnipiack Valley Health District

Health Protective Behaviors

Human Immunodeficiency Virus (HIV) Test

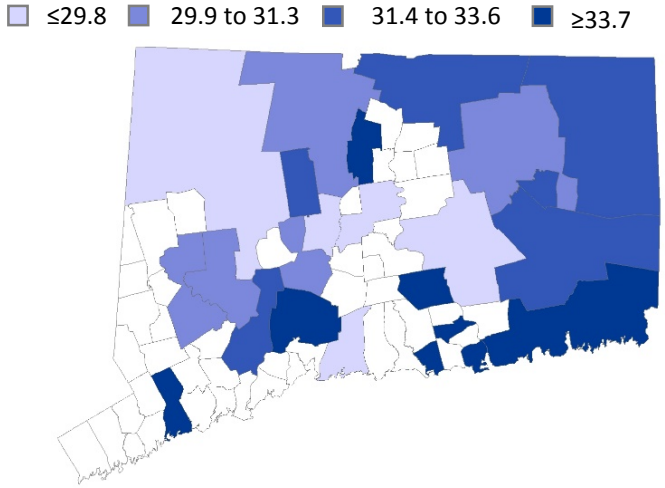
Over one million Americans are living with the Human Immunodeficiency Virus (HIV), and of those, about one in eight are not aware they are infected.[5]

CT BRFSS respondents were asked if they had ever been tested for HIV, not including tests when donating blood.

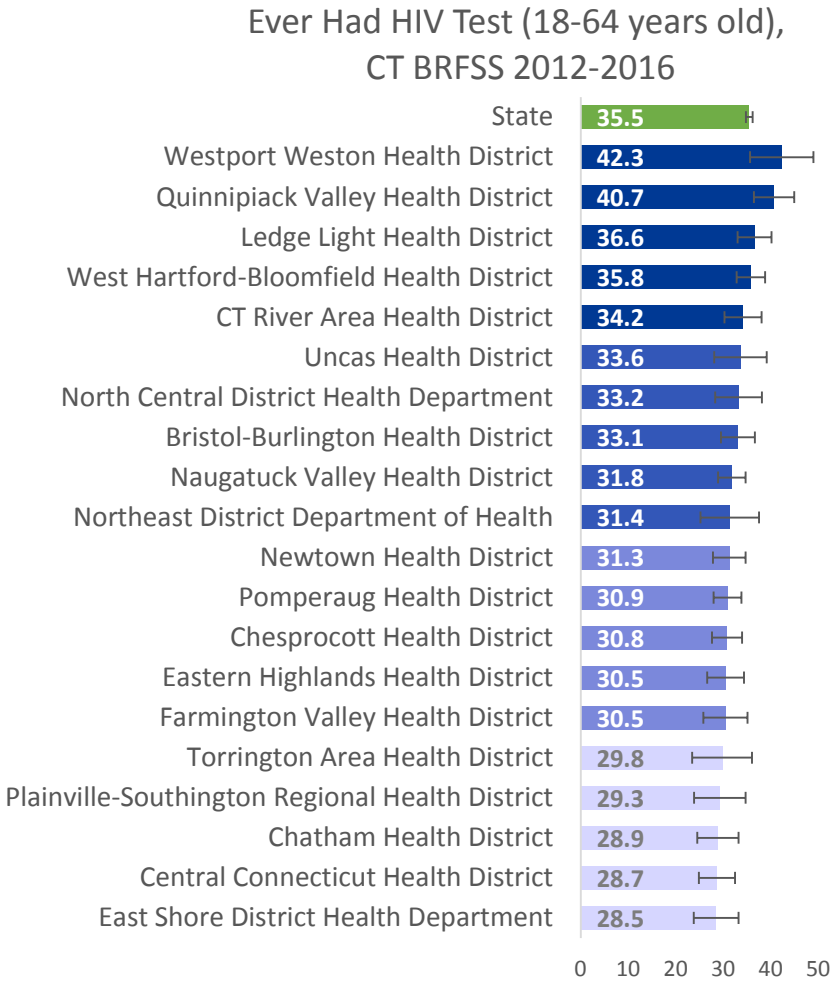
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Ever Had HIV Test by Health District

Percentage of adults (18-64 years old) who had ever been tested for HIV, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 35.5% of adults 18-64 years old had ever been tested for HIV. In Connecticut during 2016, the prevalence was significantly greater among younger adults, women, non-Hispanic Black and Hispanic adults, adults with incomes less than $35,000 and at least $75,000, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Quinnipiack Valley Health District

Lower:

- Central Connecticut Health District
- Chatham Health District
- East Shore District Health Department
- Eastern Highlands Health District
- Farmington Valley Health District
- Plainville-Southington Regional Health District
- Torrington Area Health District

Prostate Cancer Screening

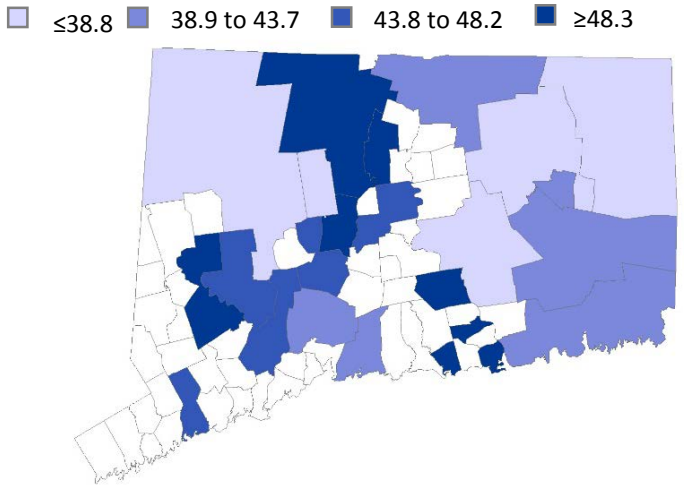
Prostate-specific antigen (PSA) is a protein produced by the prostate, and elevated levels of PSA in the blood are correlated with a higher risk for prostate cancer.[6] While there is disagreement over whether PSA tests should be recommended as a screening tool, there is agreement that a man considering a PSA test should be informed of benefits and risks of the test.[7]

CT BRFSS male respondents age 40 and older were asked if they had ever had a PSA test, and for those who had, how long it had been since their last test.

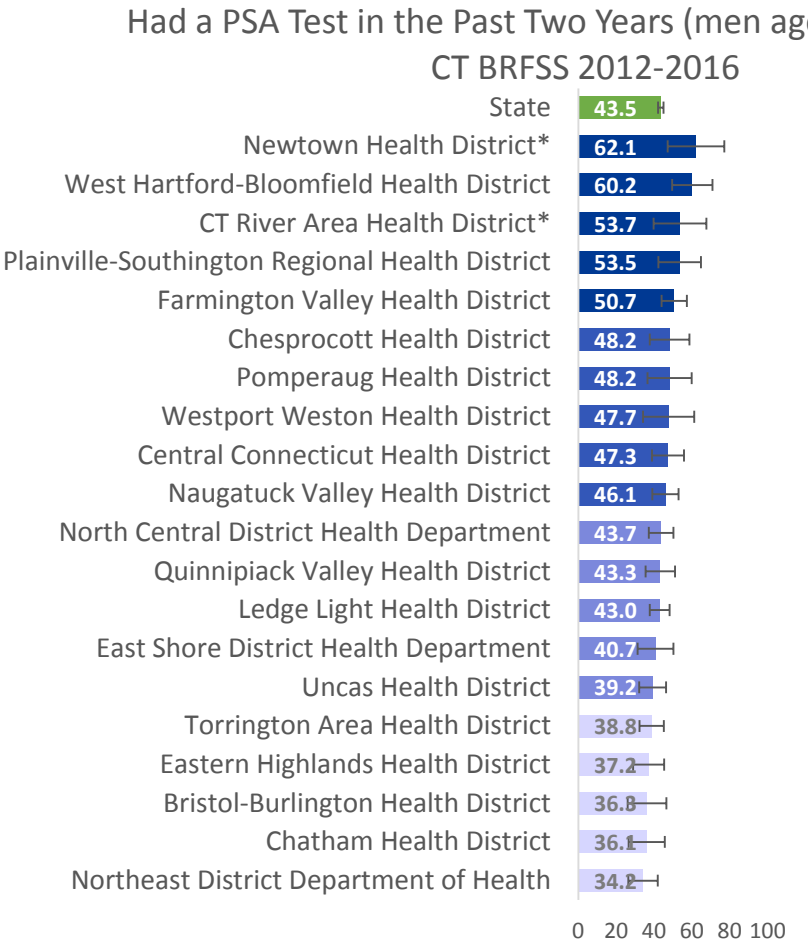
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

Had a PSA Test in the Past Two Years by Health District

Percentage of men (40 and older) who had a PSA test in the past two years, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 43.5% of men age 40 and older had a PSA test in the past two years. In Connecticut during 2016, the prevalence was significantly greater among older men 55 years old or older, non-Hispanic White men, and men with higher income and education levels.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- West Hartford-Bloomfield Health District

Lower:

- Northeast District Department of Health

Breast Cancer Screening

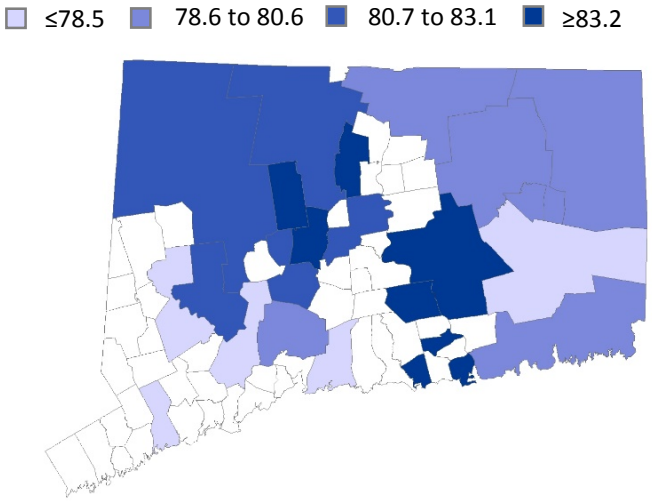
Breast cancer is the second leading cause of death from cancer in women.[8] The purpose of breast cancer screening is to look for cancer before there are signs or symptoms of the disease.[9] The American Cancer Society (ACS) suggested women with an average risk of breast cancer begin regular mammography screenings at age 45, with the opportunity to begin screening at age 40.[10]

CT BRFSS female respondents aged 40 and older were asked if they had ever had a mammogram, and for those who had, how long it had been since their last test.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

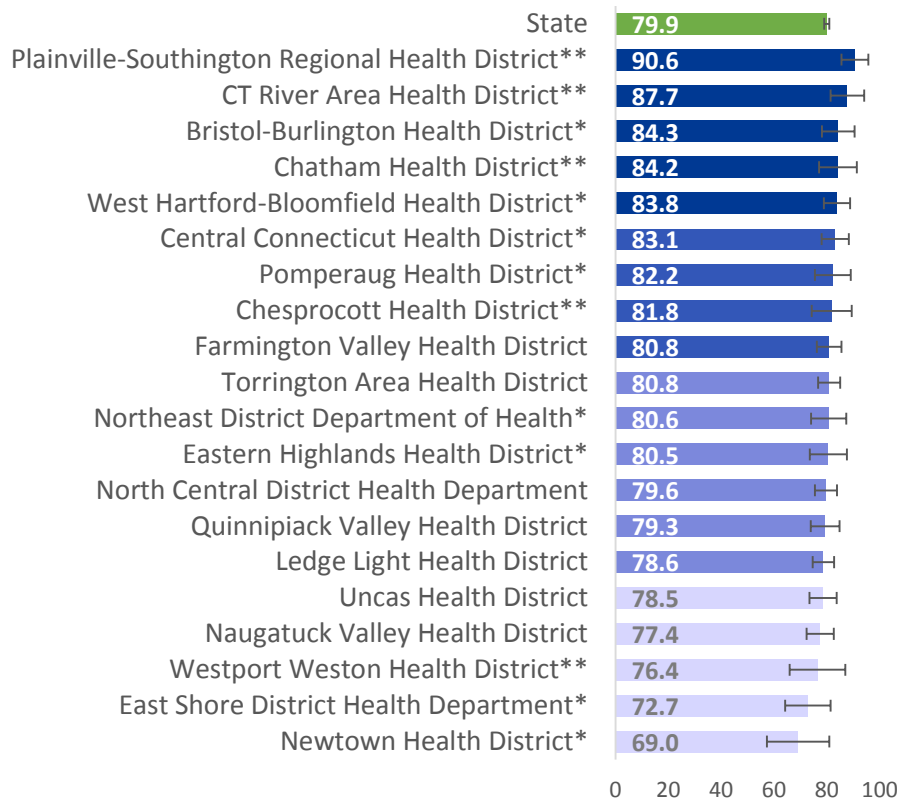
Had a Mammogram in the Past Two Years by Health District

Percentage of women (40 and older) who had a mammogram screening in the past two years, in quartiles



Health District Ranking

Had a Mammogram in Past Two Years, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 79.9% of women age 40 and older received a mammogram in the past two years. In Connecticut during 2016, the prevalence was significantly greater among women with higher income and educational levels, women with insurance, and non-disabled women.

Compared to the statewide average, the prevalence of women 40 and older received a mammogram in the past two years was not significantly different across all health districts.

Health Protective Behaviors

Dentist Visit

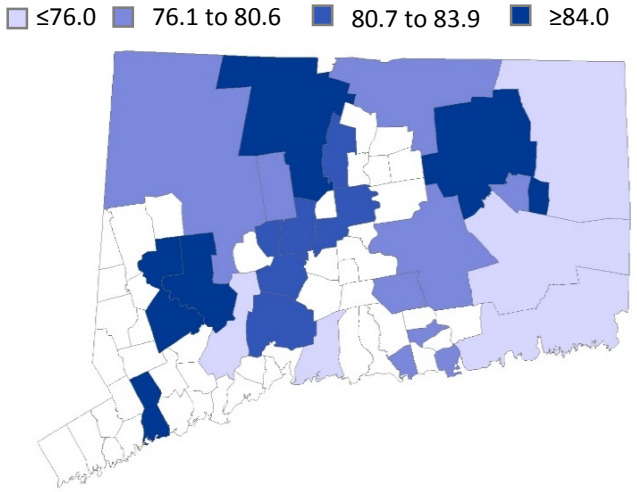
Untreated tooth decay (cavities) and periodontal (gum) disease can affect an individual's ability to eat, speak, and manage other chronic diseases such as diabetes and heart disease. Regular dental visits also contribute to good oral health.[11]

CT BRFSS respondents were asked how long it had been since they last visited a dentist or dental clinic for any reason.

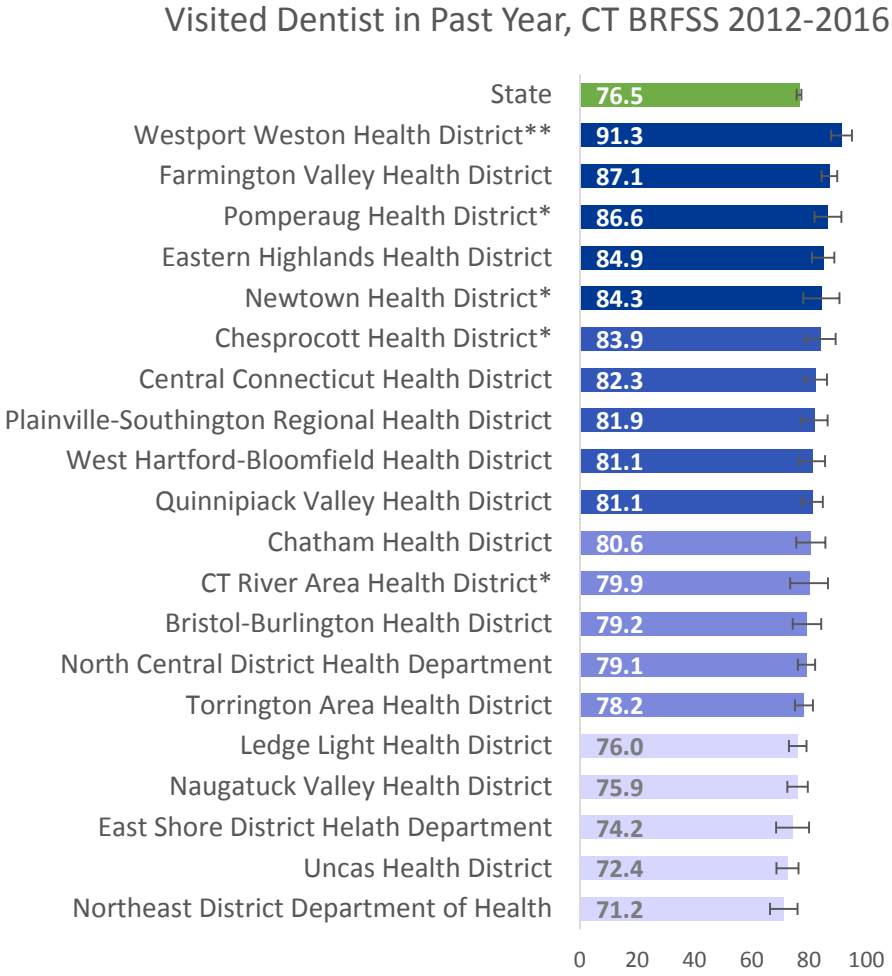
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

Dentist Visit in the Past Year by Health District

Percentage of adults who had a dental visit in the past year, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 76.5% of adult residents visited a dentist in the past year. In Connecticut during 2016, the prevalence was elevated significantly among adults 35-54 years old, women, non-Hispanic White and Black adults, adults with higher income and educational levels, adults with health insurance, and non-adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Central Connecticut Health District
- Eastern Highlands Health District
- Farmington Valley Health District
- Plainville-Southington Regional Health District
- Quinnipiack Valley Health District

References

1. Centers for Disease Control and Prevention: Regular check-ups are important. https://www.cdc.gov/family/checkup/, accessed on May 2, 2018
2. Centers for Disease Control and Prevention: Influenza (Flu), Key facts about seasonal flu vaccine. http://www.cdc.gov/flu/protect/keyfacts.htm, accessed on May 2, 2018.
3. American Council on Immunization Practices (2016) Prevention and control of seasonal influenza with vaccines recommendations of the Advisory Committee on Immunization Practices — United States, 2016–17 Influenza Season. Centers for Disease Control and Prevention, Atlanta, Georgia. MMWR Recommendations and Reports 65(5). https://www.cdc.gov/mmwr/volumes/65/rr/pdfs/rr6505.pdf, accessed on May 2, 2018.
4. Centers for Disease Control and Prevention (2016) Vaccines and Preventable Diseases: Pneumococcal Vaccination. http://www.cdc.gov/VACCINES/vpd-vac/pneumo/default.htm#vacc, accessed on March 14, 2017.
5. AIDS.gov (2016) AIDS 101: HIV in the United States. U.S. Secretary's Minority AIDS Initiative Fund. *http://aids.gov/hiv-aids-basics/hiv-aids-101/statistics/#ref2*, accessed on March 14, 2017.
6. Centers for Disease Control and Prevention: Prostate Cancer, What Screening Tests Are There? *http://www.cdc.gov/cancer/prostate/basic_info/screening.htm*
7. National Institutes of Health, National Cancer Institute: Prostate-Specific Antigen (PSA) Test. http://www.cancer.gov/cancertopics/factsheet/detection/PSA
8. Centers for Disease Control and Prevention: Breast Cancer, Basic Information about Breast Cancer. *http://www.cdc.gov/cancer/breast/basic_info/*
9. National Institutes of Health: National Cancer Institute: Breast Cancer Screening (PDQ®).

   http://www.cancer.gov/types/breast/patient/breast-screening-pdq
10. Oeffinger, KC, Fontham, ETH, Etzioni, R, Herzig, A, Michaelson, JS, Shih, Y-CT, Walter, LC, Church, TR, Flowers, CR, LaMonte, SJ, Wolf, AMD, DeSantis, C, Lortet-Tieulent, J, Andrews, K, Manassaram-Baptiste, D, Saslow, D, Smith, RA, Brawley, OW, Wender, R (2015) Breast Cancer Screening for Women at Average Risk: 2015 Guideline Update From the American Cancer Society. *JAMA 314(15):1599-1614*.
11. Centers for Disease Control and Prevention (1999) Achievements in Public Health, 1900–1999: Fluoridation of Drinking Water to Prevent Dental Caries. *MMWR 48(41):933–940*.

Chronic Conditions

Current Asthma

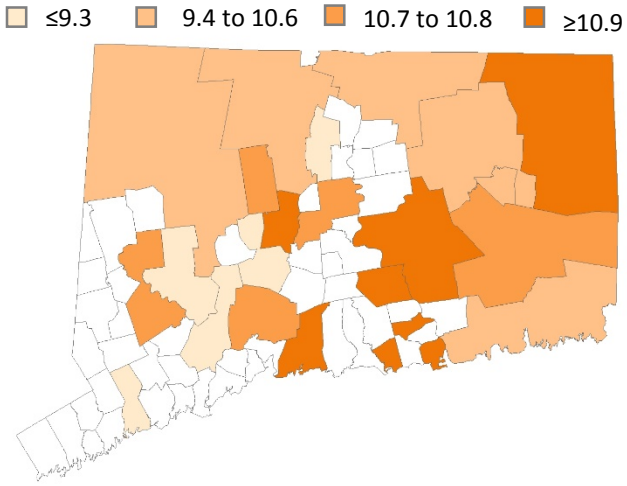
Asthma is a chronic lung disease that causes airways to become inflamed or swollen, with symptoms of shortness of breath, coughing, and /or wheezing.[1] Four thousand people die in the U.S. each year due to asthma related causes.[2]

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had asthma, and among those who had ever been diagnosed, whether or not they still had asthma.

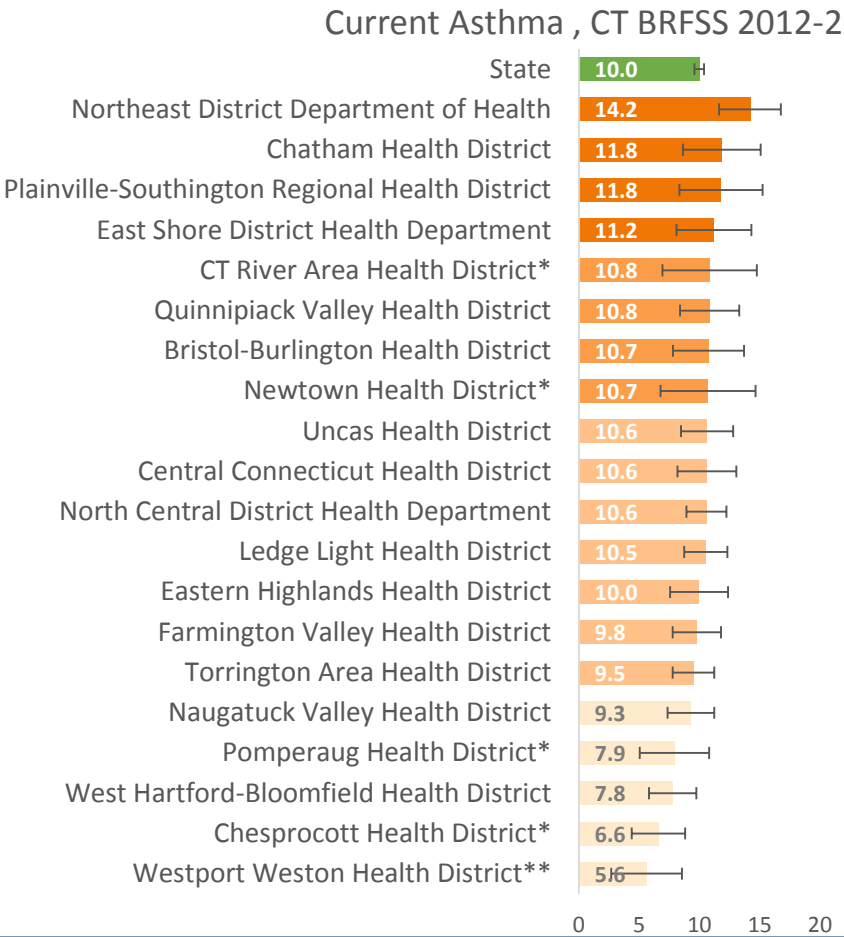
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Current Asthma by Health District

Percentage of adults who currently had asthma, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 10.0% of adult residents currently had asthma. In Connecticut during 2016, the prevalence was significantly greater among women, Hispanic adults, adults with lower income and educational levels.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Northeast District Department of Health

Chronic Conditions

Chronic Obstructive Pulmonary Disease

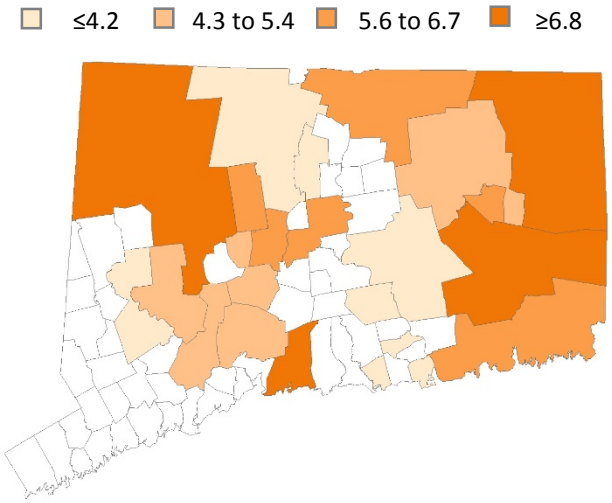
Chronic Obstructive Pulmonary Disease (COPD) is a lung disease that includes two main conditions: emphysema and chronic bronchitis.[3] The disease causes irreversible damage to the lungs and airways, which causes less air to flow to the lungs.

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had COPD, emphysema or chronic bronchitis.

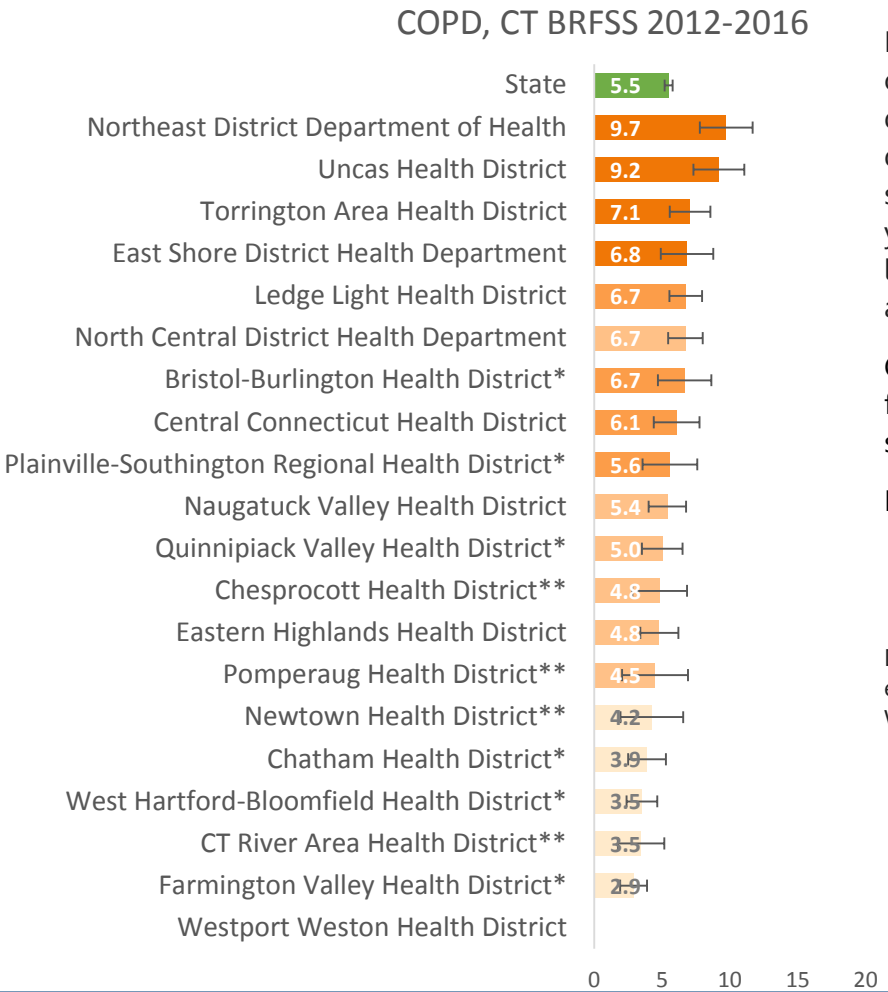
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

COPD by Health District

Percentage of adults ever diagnosed with COPD, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 5.5% of adult residents had ever been diagnosed with COPD. In Connecticut during 2016, the prevalence was significantly greater among adults 55 years old or older, women, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Northeast District Department
- Uncas Health District

Due to the high coefficient variances, the estimates has been suppressed for Westport Weston Health District.

Arthritis

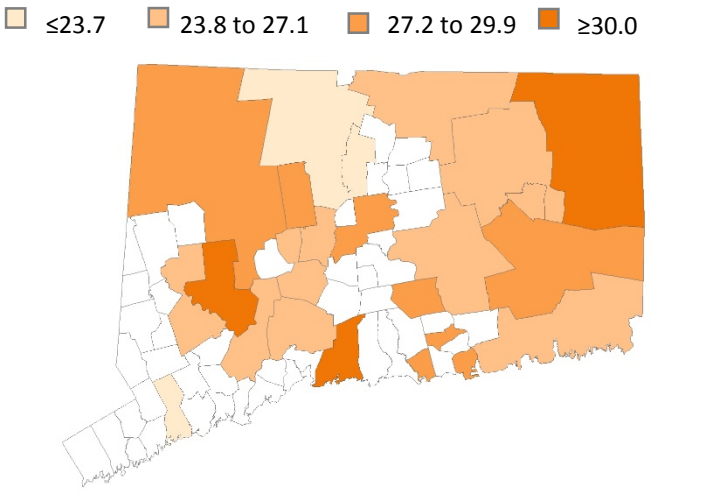
Arthritis includes over one hundred rheumatic conditions that affect joints and connective tissues. It is the most common cause of disability in the U.S. [4] The risk of developing arthritis symptoms increases with age.[5]

CT BRFSS respondents were asked if they were ever told they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

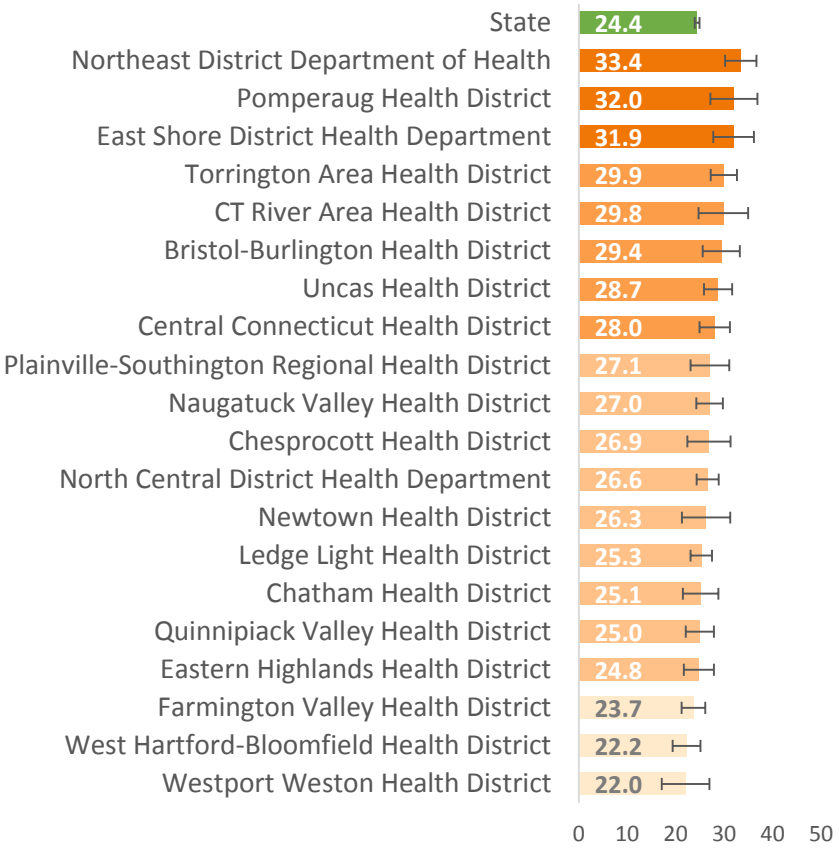
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Arthritis by Health District

Percentage of adults who were ever diagnosed with arthritis, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 24.4% of adult residents had ever been diagnosed with arthritis. In Connecticut during 2016, the prevalence was significantly greater for older adults, women, non-Hispanic White adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Bristol-Burlington Health District
- East Shore District Health Department
- Northeast District Department of Health
- Pomperaug Health District
- Torrington Area Health District
- Uncas Health District

Chronic Conditions

Diabetes

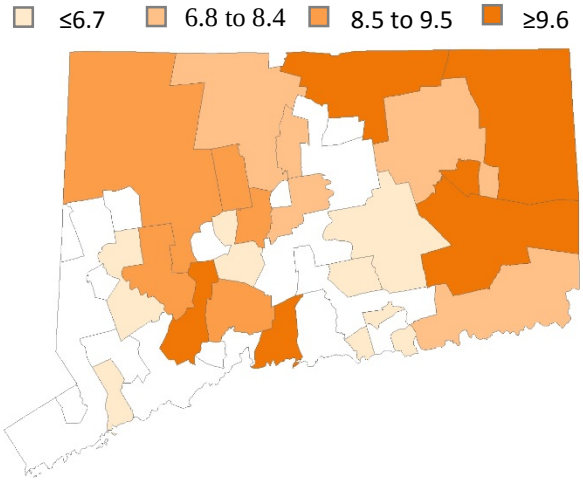
Diabetes is a disease characterized by high levels of blood sugar. It can lead to serious health problems, such as heart disease, stroke, kidney disease, blindness, lower-extremity amputation, and dental issuses.[6]

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had diabetes.

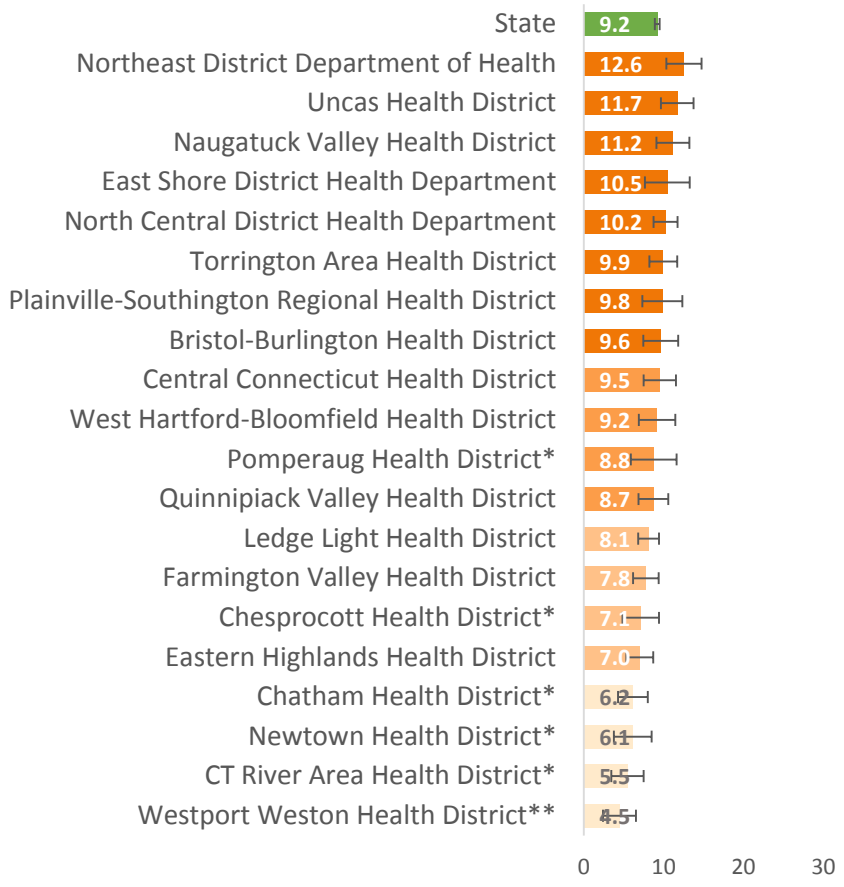
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Diabetes by Health District

Percentage of adults who were ever diagnosed with diabetes, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 9.2% of adults had ever been diagnosed with diabetes. In Connecticut during 2016, the prevalence was significantly greater among adults 55 years old or older, non-Hispanic Black adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Northeast District Department of Health
- Uncas Health District

Lower:

- Eastern Highlands Health District

Cardiovascular disease

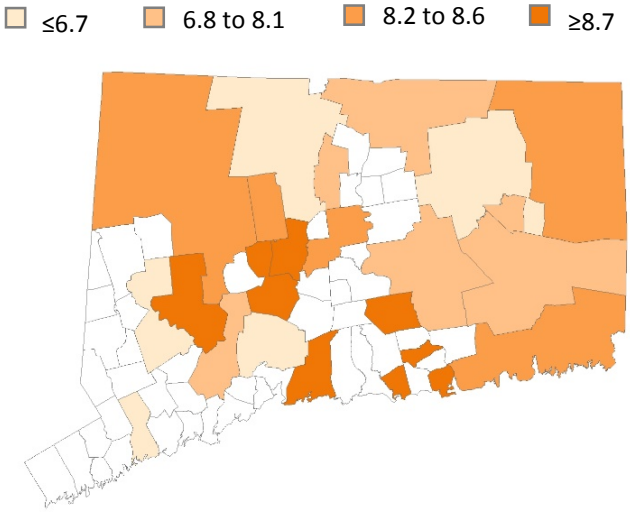
Cardiovascular disease (CVD), commonly known as heart disease, encompasses several heart conditions. It is the leading cause of death for men and women and for people of most racial/ethnic groups in the United States.[7]

CT BRFSS respondents were asked if they were ever told by a doctor or health care professional that they had a heart attack or myocardial infarction, angina or coronary heart disease, or stroke.

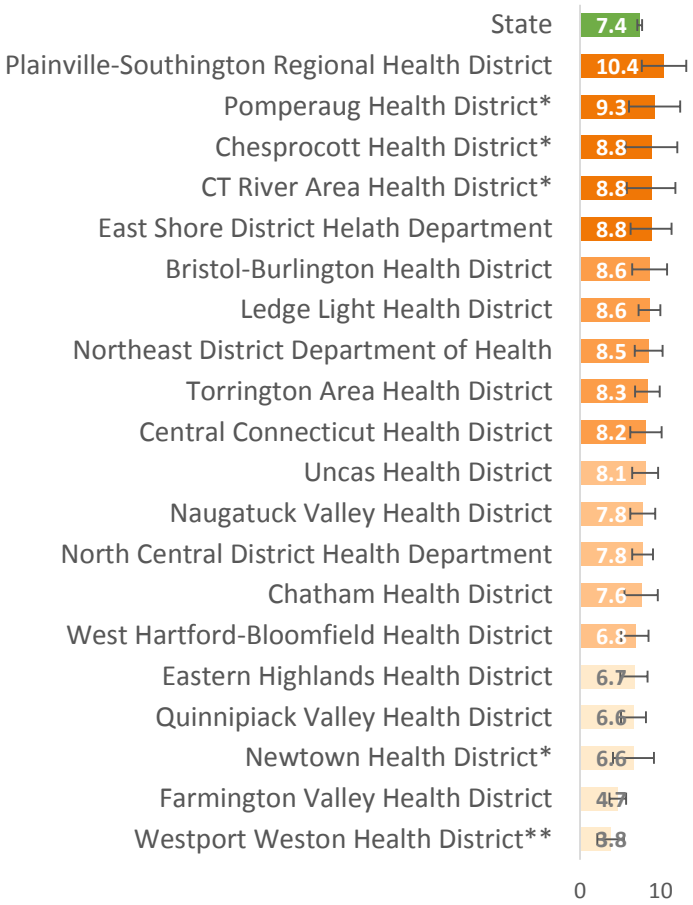
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Cardiovascular Disease by Health District

Percentage of adults who were ever diagnosed with cardiovascular disease, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 7.4% of adult residents had ever been diagnosed with cardiovascular diseases. In Connecticut during 2016, the prevalence was greatest among adults 55 years old and older, men, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Lower:

- Farmington Valley Health District

Cancer

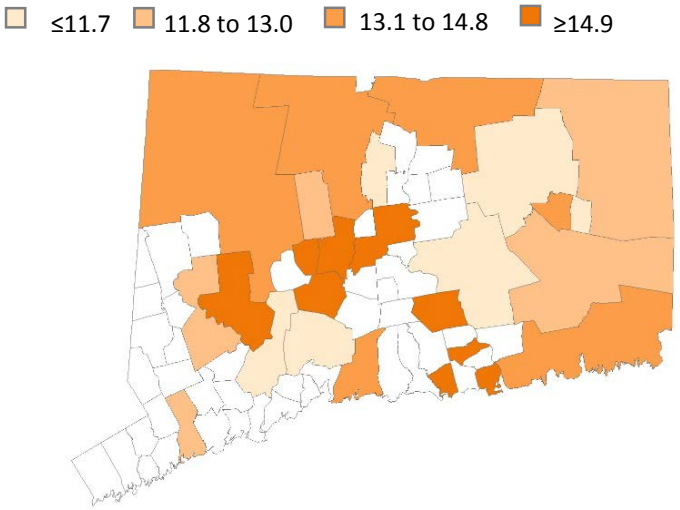
After heart disease, cancer is the second leading cause of death among Americans. More than 500,000 Americans die every year from cancer.[8] Many cancers can be prevented by eating a healthy diet, staying physically active, limiting alcohol consumption, not smoking, and practicing sun-safe behaviors.

CT BRFSS respondents were asked if they were ever told they had any other type of cancer including skin cancer.

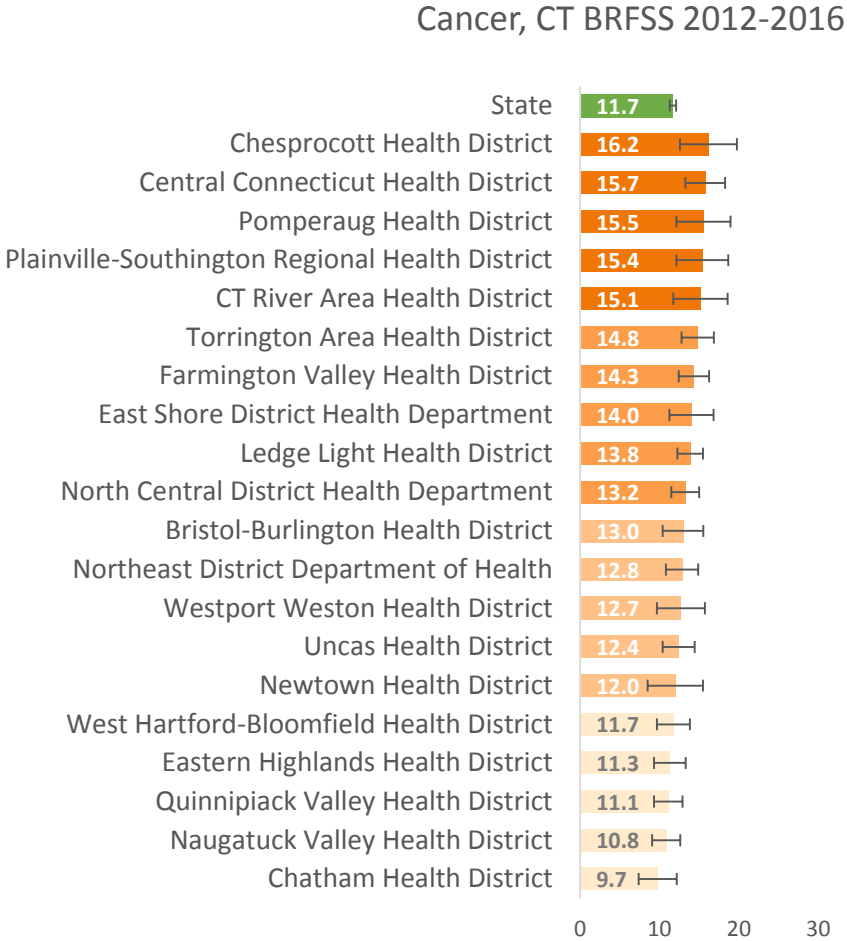
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Cancer by Health District

Percentage of adults ever diagnosed with cancer, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 11.7% of adult residents had ever been diagnosed with cancer. In Connecticut during 2016, the prevalence was significantly greater among adults 55 years old or older, women, non-Hispanic White adults, adults with disabilities, and adults with more than a high school education.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- Central Connecticut Health District
- Chesprocott Health District
- Farmington Valley Health District
- Ledge Light Health District
- Plainville-Southington Regional Health District
- Pomperaug Health District
- Torrington Area Health District

Chronic Conditions

Depression

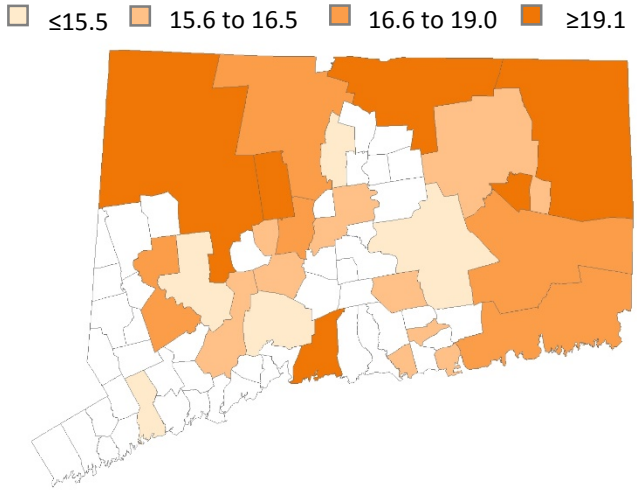
Depression is a common and serious illness that can take several forms, with symptoms including persistent feelings of sadness, anxiety, emptiness, and hopelessness, as well as fatigue, irritability and restlessness. [9]

CT BRFSS respondents were asked if they were ever told they had a depressive disorder including depression, major depression, dysthymia, or minor depression.

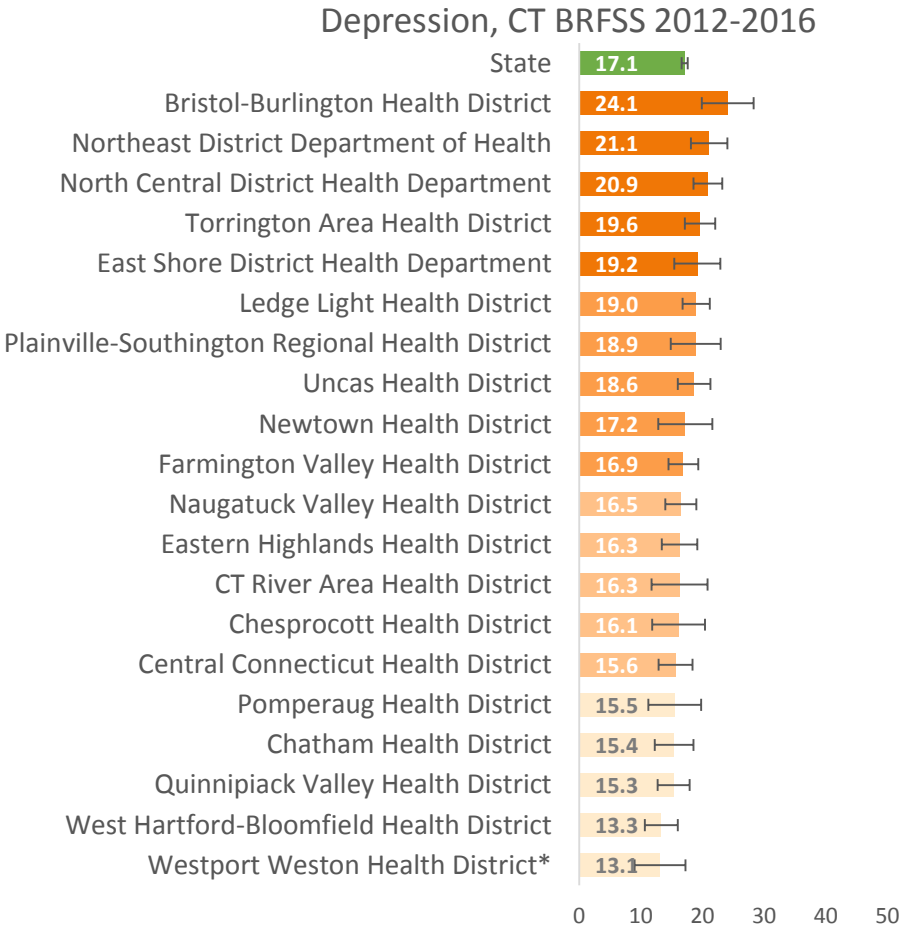
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Depression by Health District

Percentage of adults who were ever diagnosed with depression, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 17.1% of adult residents were ever diagnosed with depression. In Connecticut during 2016, the prevalence was significantly greater for women, Hispanic adults and non-Hispanic White adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following local health districts were significantly-

Higher:

- North Central District Health Department
- Northeast District Department of Health

Lower:

- West Hartford-Bloomfield Health District

References

1. Centers for Disease Control and Prevention (2015) Winnable Battles 2010-2015 Progress Report: HIV Infection, Atlanta, Georgia. https://www.cdc.gov/winnablebattles/targets/pdf/hiv-winnablebattles-progressreport.pdf, accessed on March 14, 2017

2. Centers for Disease Control and Prevention. Breathing Easier. *http://www.cdc.gov/asthma/pdfs/breathing_easier_brochure.pdf*

3. National Heart, Lung and Blood Institute. "What Is COPD?" 5 June 2012. *http://www.nhlbi.nih.gov/health/health-topics/topics/copd,* accessed on March 14, 2017.

4. Centers for Disease Control and Prevention (2017) Arthritis basics, Atlanta, Georgia.

http://www.cdc.gov/arthritis/basics.htm, accessed on March 14, 2017.

5. Centers for Disease Control and Prevention (2017) Arthritis, Quick Stats, Atlanta, Georgia. *http://www.cdc.gov/arthritis/press/quickstats.html*, accessed on March 14, 2017.

6. Centers for Disease Control and Prevention: Diabetes Report Card 2012. *http://www.cdc.gov/diabetes/pubs/pdf/diabetesreportcard.pdf*, accessed on March 15, 2017.

7. Centers for Disease Control and Prevention: Heart Disease Fact Sheet, Atlanta, Georgia. *http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_heart_disease.pdf*, accessed on March 15, 2017.

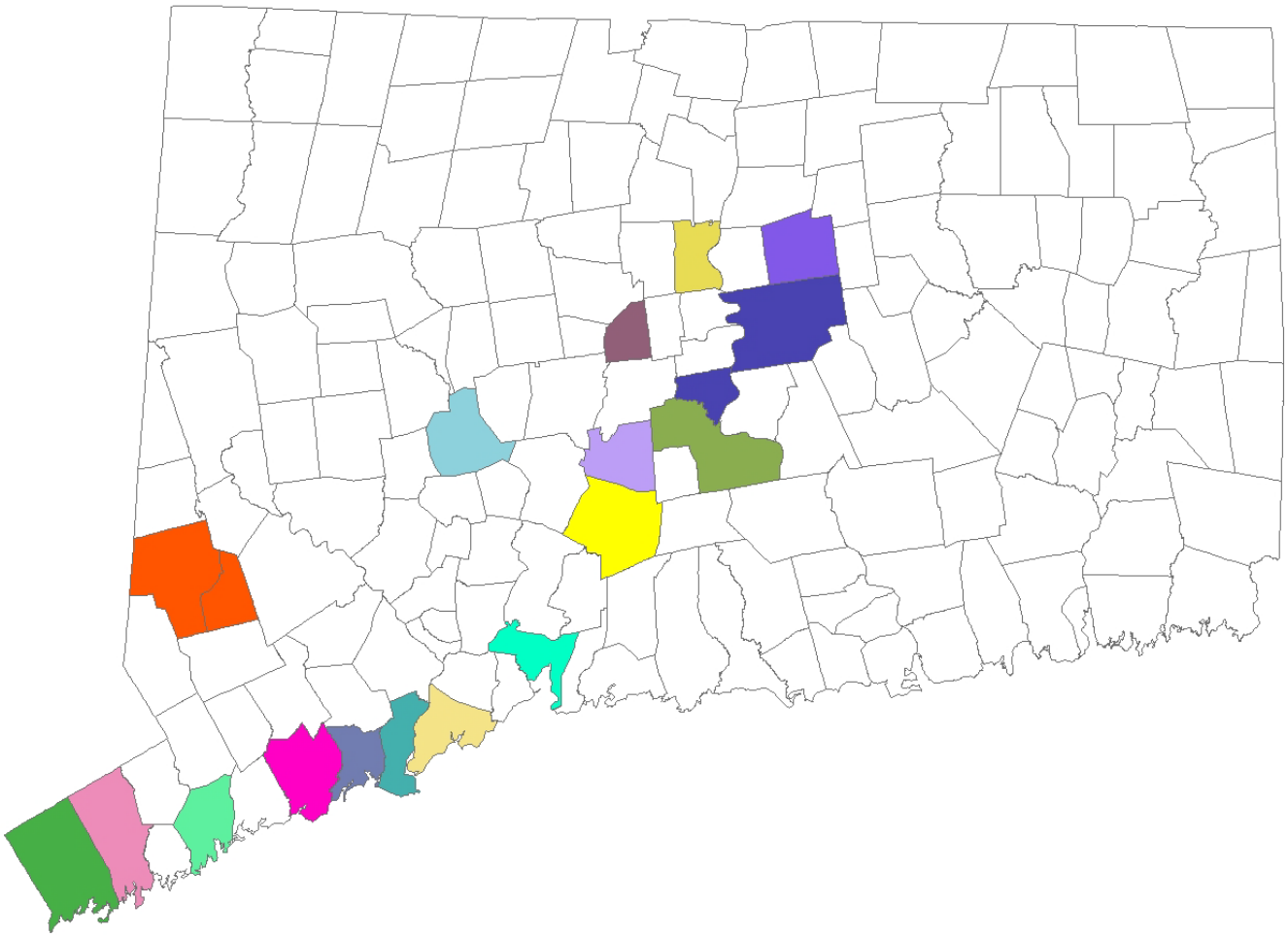
8. Centers for Disease Control and Prevention: Cancer Prevention and Control, Statistics for Different Kinds of Cancer. *http://www.cdc.gov/cancer/dcpc/data/types.htm*

9. National Institute of Mental Health (2016) Depression, National Institute of Mental Health, Bethesda, Maryland.

https://www.nimh.nih.gov/health/topics/depression/index.shtml, accessed March 15, 2017.

Health in Selected Municipal Local Health Departments

In the following section, data is presented for select Connecticut municipal health departments as indicated in the map and list below.



- Hartford
- New Britain
- New Haven
- Waterbury
- Danbury & Bethel
- Milford
- Stratford
- Fairfield
- Bridgeport
- Stamford
- Norwalk
- Greenwich
- Manchester
- Meriden
- Middletown
- Wallingford
- Glastonbury & Cromwell

General Health Status

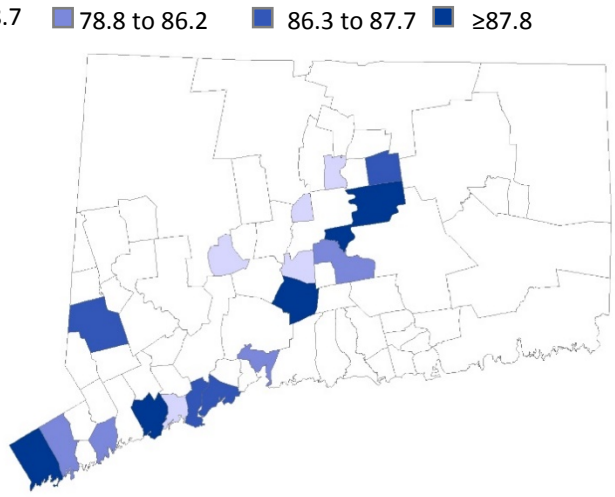
General self-rated health status is a valuable measure to collect alongside more objective health measures as there are strong predictive properties for health outcomes; specifically, self-reports of poor health are strongly associated with mortality.[1]

CT BRFSS respondents were asked to rate their general health as excellent, very good, good, fair or poor.

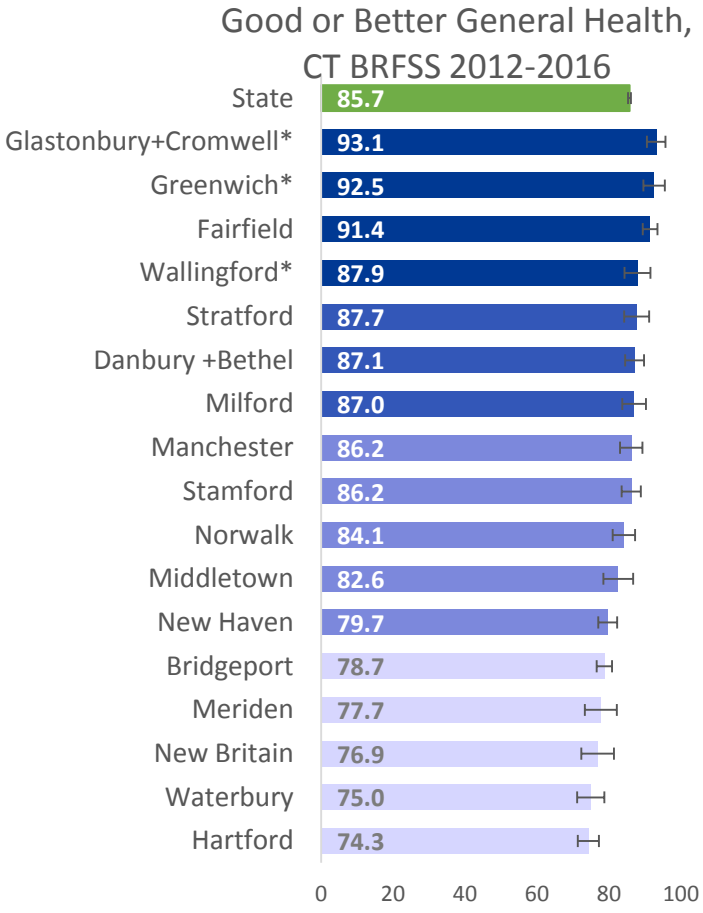
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Good or Better General Health by Health Department

Percentage of adults who reported good, very good, or excellent health, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 85.7% of adult residents reported being in good or better general health. In Connecticut during 2016, the prevalence was greatest among younger adults, Non-Hispanic White adults, adults with higher income and educational levels, and adults with insurance.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Lower:

- Hartford, New Britain, New Haven, Waterbury, Bridgeport, Meriden

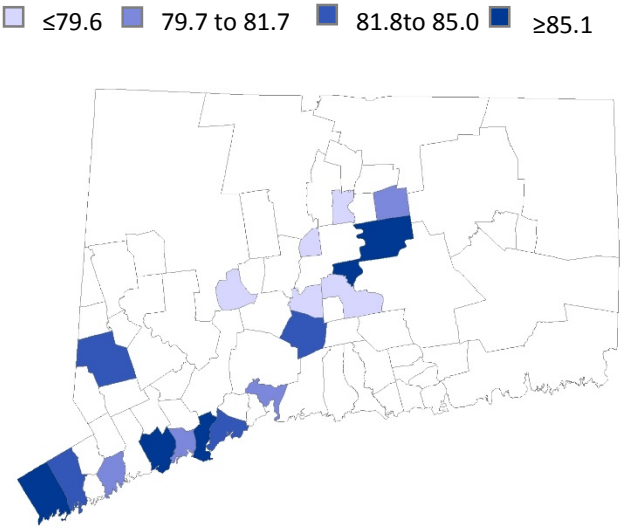
Mental Health

The BRFSS uses the "Healthy Days Measure" to assess health-related quality of life. The Healthy Days Measure has been useful for identifying health disparities and tracking population trends. [2] This measure defines adults in poor physical or mental health if they reported 14 or more days (within the past 30 days) for which their mental health was "not good".

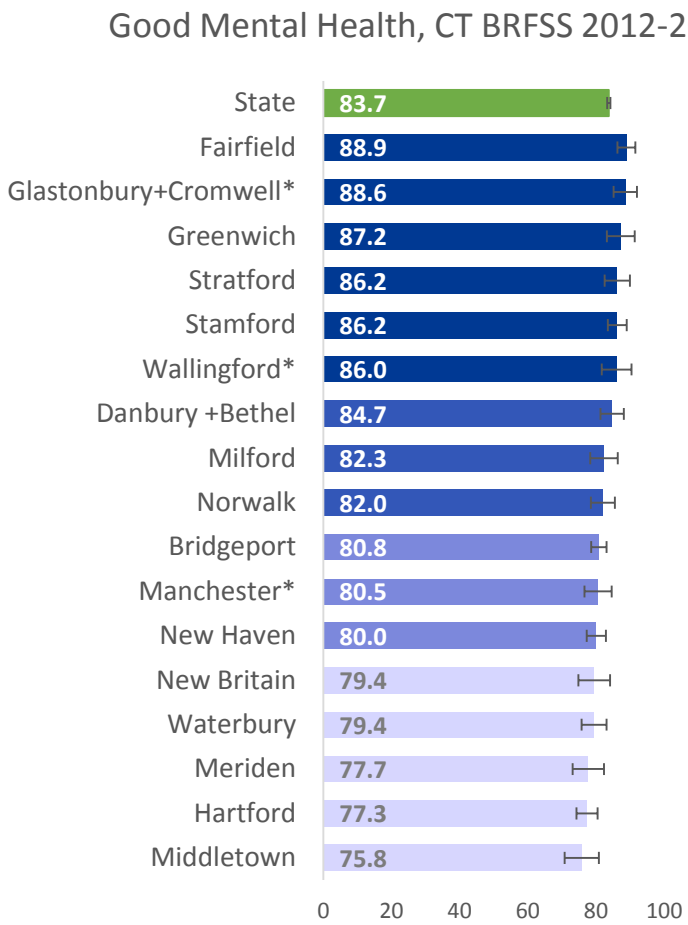
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Good Mental Health by Health Department

Percentage of adults in good mental health, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 83.7% of adult residents reported being in good mental health. In Connecticut during 2016, the prevalence was greatest among younger adults, Men, Hispanic adults, adults with higher income and educational levels, and adults without disability.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Lower:

- Hartford, New Haven, Waterbury, Bridgeport, Meriden, Middletown

Physical Health

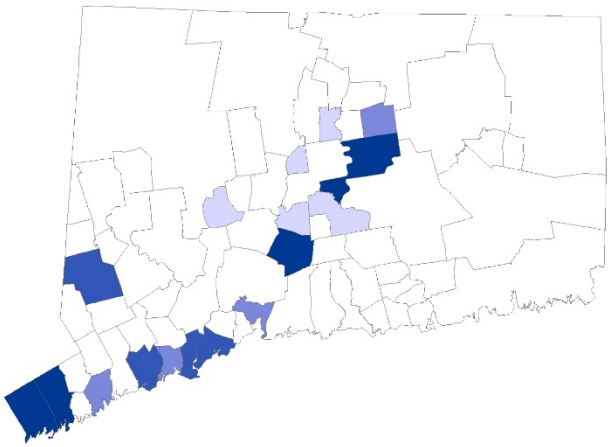
The BRFSS uses the "Healthy Days Measure" to assess health-related quality of life. The Healthy Days Measure has been useful for identifying health disparities and tracking population trends.[2] This measure defines adults in poor physical or mental health if they reported 14 or more days (within the past 30 days) for which their physical health was "not good".

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

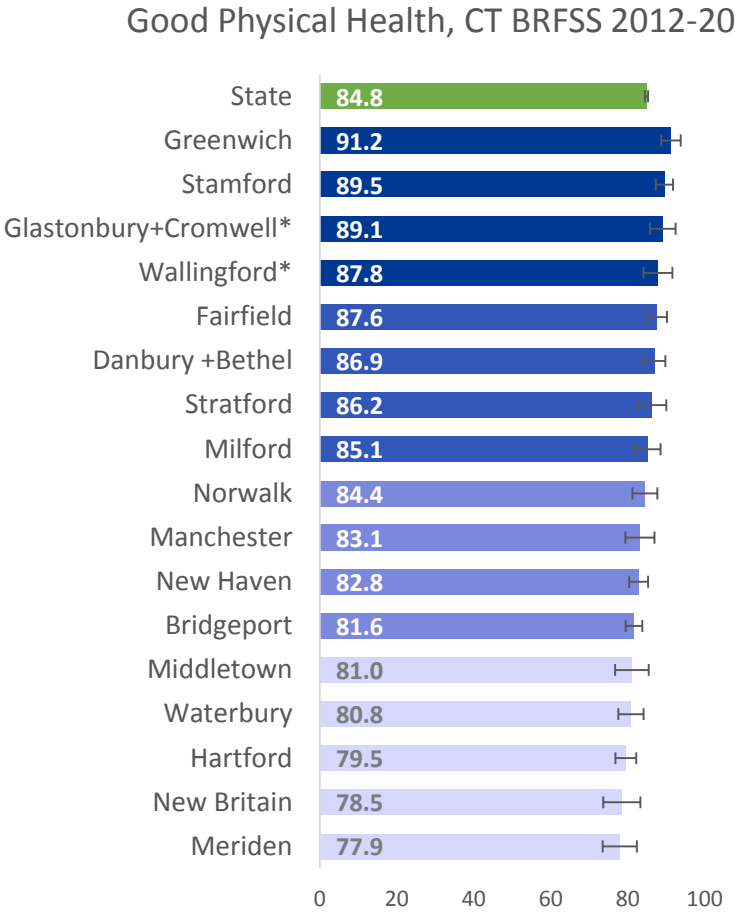
Good Physical Health by Health Department

Percentage of adults in good physical health, in quartiles

≤81.0 | 81.1 to 84.4 | 84.5 to 87.6 | ≥87.7



Health District Ranking



In Connecticut during 2012-2016, 84.8% of adult residents reported being in good physical health. In Connecticut during 2016, the prevalence was significantly elevated among younger adults, Hispanic adults, adults with higher income and educational levels, and adults without disability.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield, Greenwich

Lower:

- Hartford, New Britain, Waterbury, Bridgeport, Meriden

Healthy Weight

Overweight and obese adults are at risk of developing a wide range of health problems, including high blood pressure, type 2 diabetes, coronary heart disease, certain cancers, stroke and other diseases.[3]

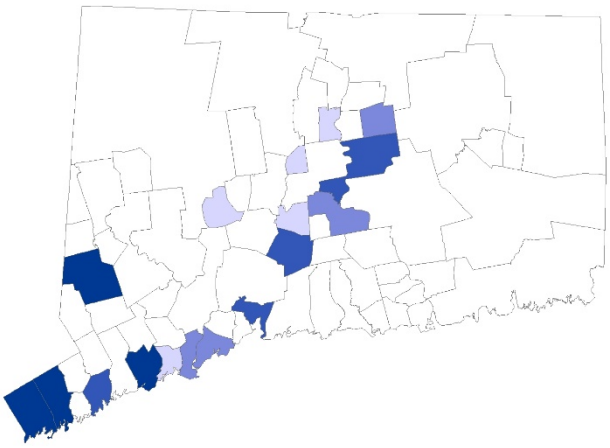
CT BRFSS respondents were asked to provide their height and weight. A body mass index (BMI) was calculated.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

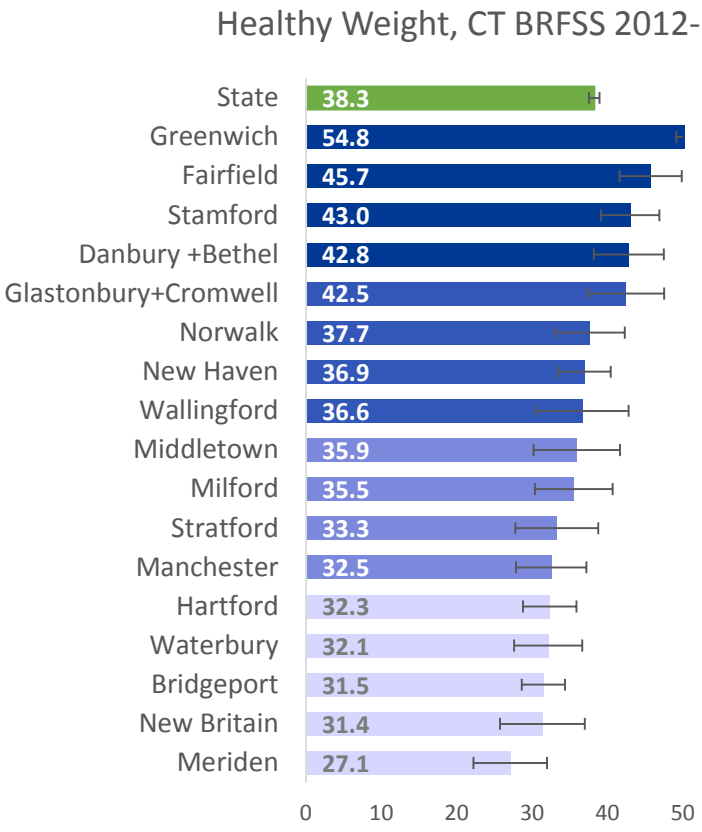
Healthy Weight by Health Department

Percentage of adults with healthy weight (BMI: 18.5-24.9kg/m^2), in quartiles

≤32.3 | 32.4 to 35.9 | 36.0 to 42.5 | ≥42.6



Health District Ranking



In Connecticut during 2012-2016, 38.3% of adults had a healthy weight status. In Connecticut during 2016, the prevalence of obesity was greatest among older adults, Non-Hispanic Black adults and Hispanic adults, adults with lower income and educational levels, and adults with disability.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield, Stamford, Greenwich

Lower:

- Hartford, New Britain, Waterbury, Bridgeport, Manchester, Meriden

Current Health Care Coverage

People who have access to a personal health care provider or a regular health care setting have better health outcomes.[4]

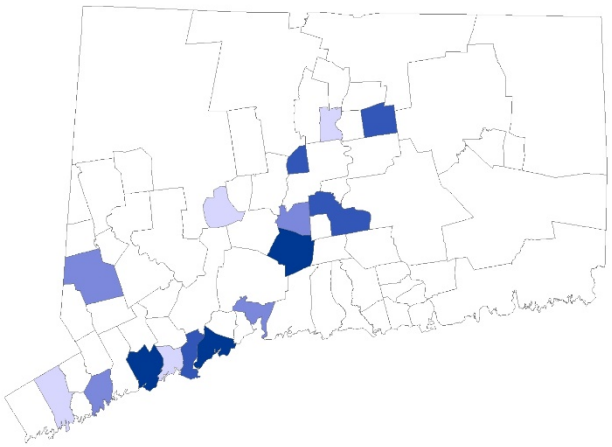
CT BRFSS respondents were asked if they have any kind of health care coverage, including health insurance, prepaid plans, or government plans such as Medicare.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

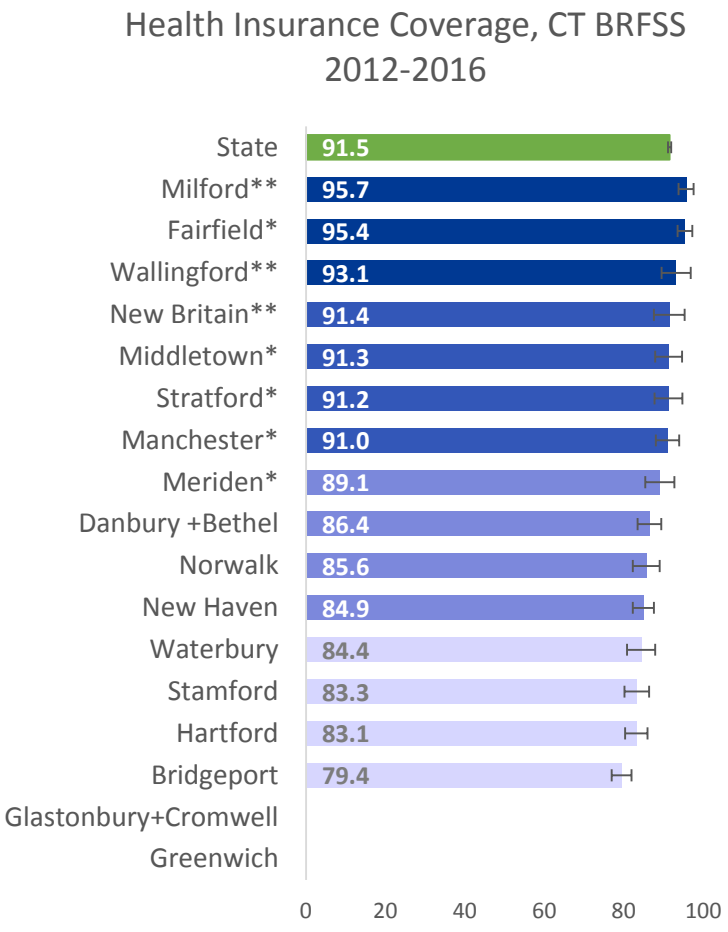
Current Health Care Coverage by Health Department

Percentage of adults with current healthcare coverage, in quartiles

≤84.4 84.5 to 89.1 89.2 to 91.4 ≥91.5



Health District Ranking



In Connecticut during 2012-2016, 91.5% of adults had current health care coverage. In Connecticut during 2016, the prevalence of adults without insurance was greatest among younger adults, men, Hispanic adults, adults with lower educational levels.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Hartford, New Haven, Waterbury, Danbury+Bethel, Bridgeport, Stamford

Due to the high coefficient variances, the estimates has been suppressed for Glastonbury+Cromwell, Greenwich.

Housing Security

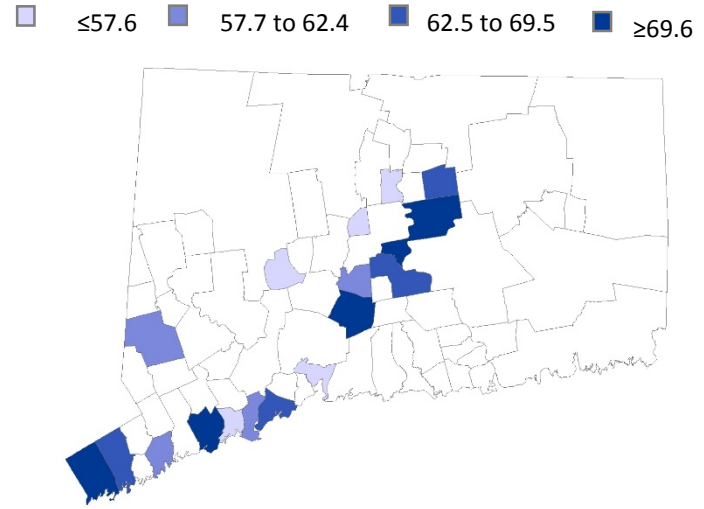
Financial stress can negatively impact a person's health. Previous BRFSS data have shown that adults experiencing housing instability or food insecurity are significantly more likely to suffer from insufficient sleep and mental distress.[5] Housing instability can be a risk factor for homelessness.[6]

CT BRFSS respondents were asked to report how often in the past 12 months they felt worried or stressed about having enough money to pay for housing.

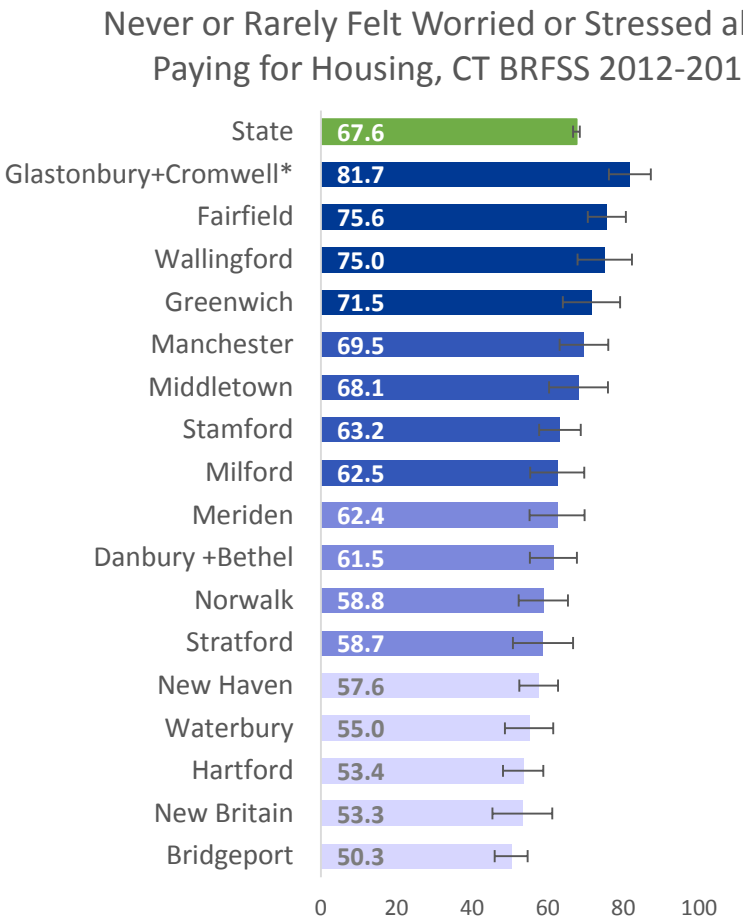
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2015 & 2016.

Housing Security by Health Department

Percentage of adults never or rarely felt worried or stressed about having enough money to pay for housing, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 67.6% of adult residents reported they never or rarely felt worried or stressed about having enough money to pay for housing. In Connecticut during 2016, the prevalence of always or usually feeling stressed about having enough money for housing was greatest among younger adults, women, minority race/ ethnic group, adults with lower income and educational levels, adults without insurance and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Lower:

- Hartford, New Britain, New Haven, Waterbury, Bridgeport, Norwalk

Food Security

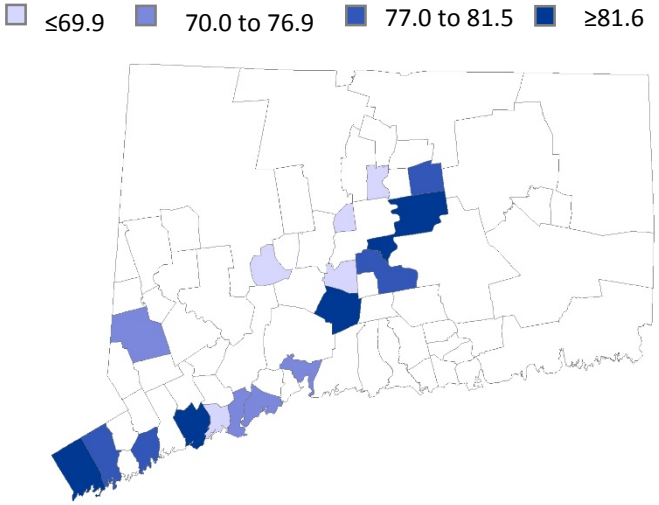
Financial stress can negatively impact a person's health. Previous BRFSS data have shown that adults experiencing housing instability or food insecurity are significantly more likely to suffer from insufficient sleep and mental distress.[5] Among low-income adults, food insecurity is associated with chronic disease, such as diabetes or hypertension.[7]

CT BRFSS respondents were asked to report how often in the past 12 months they felt worried or stressed about having enough money to buy nutritious meals.

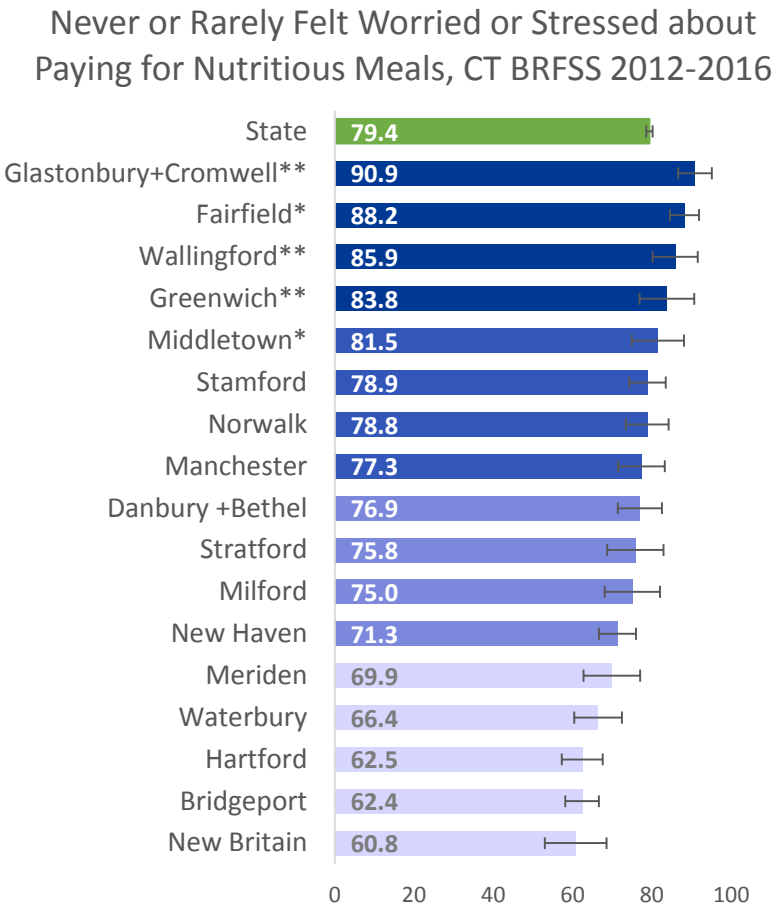
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2015 & 2016.

Food Security by Health Department

Percentage of adults never or rarely felt worried or stressed about having enough money to pay for nutritious meals, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 79.4% of adult residents reported never or rarely felt worried or stressed about having enough money to pay for nutritious meals. In Connecticut during 2016, the prevalence of always or usually feeling stress about having enough money to buy nutritional meals was greatest among younger adults, women, Hispanic adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Hartford, New Britain, New Haven, Waterbury, Bridgeport, Meriden

At Least One Personal Doctor

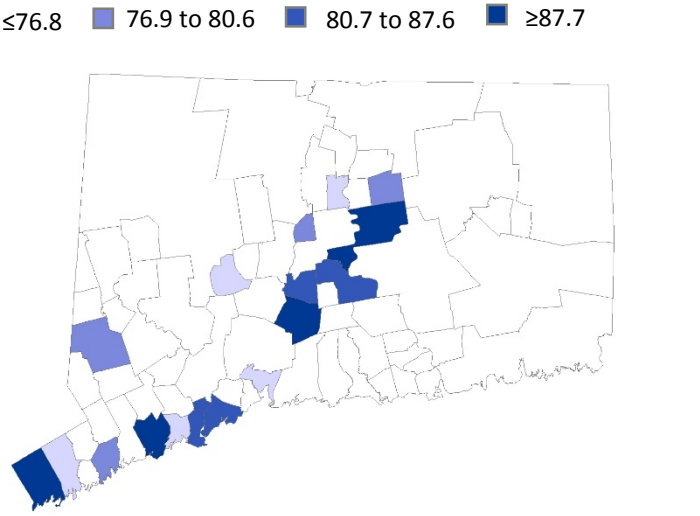
People who have access to a personal health care provider or a regular health care setting have better health outcomes.[8] Limited healthcare coverage is a barrier to access to care and can adversely impacts health outcomes.

CT BRFSS respondents were asked if they have at least one doctor or healthcare professional that they consider their personal doctor.

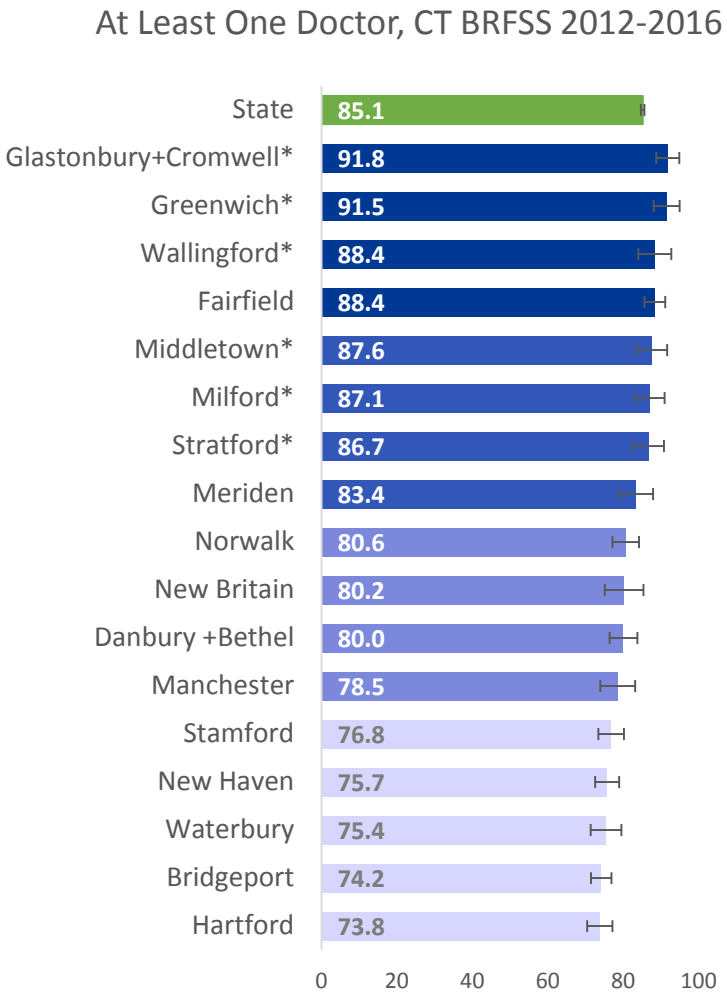
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

At Least One Personal Doctor by Health Department

Percentage of adults with at least one personal doctor, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 85.1% of adult residents reported having at least one personal doctor. In Connecticut during 2016, the prevalence was greatest among older adults, women, Non-Hispanic White and non-Hispanic Black adults, adults with higher income and educational levels.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Hartford, New Haven, Waterbury, Danbury+Bethel, Bridgeport, Stamford, Norwalk, Manchester

Adequate Sleep

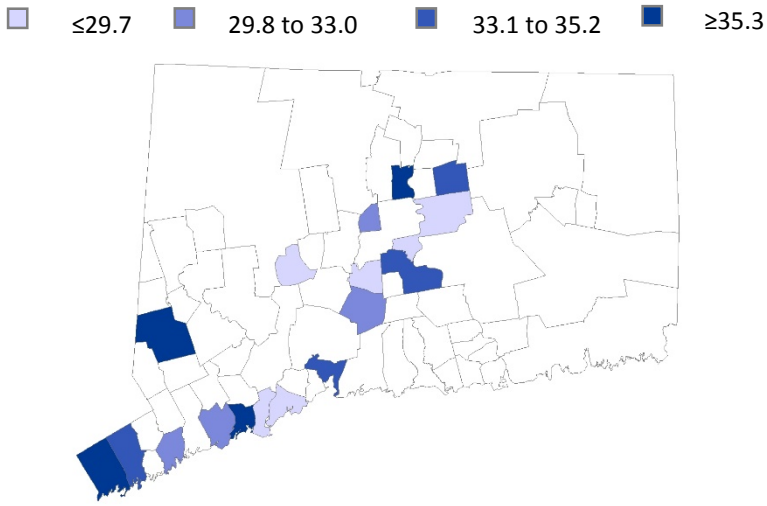
Lack of sleep can have a substantial impact on health. Studies have found that short sleep duration is associated with an increased risk of cardiovascular disease, diabetes, and obesity. Sleep loss can also impact daily function, with inadequate sleep increasing the risk of drowsy driving and crashes.[9]

CT BRFSS respondents were asked to report on average, the number of hours of sleep they receive in a 24-hour period.

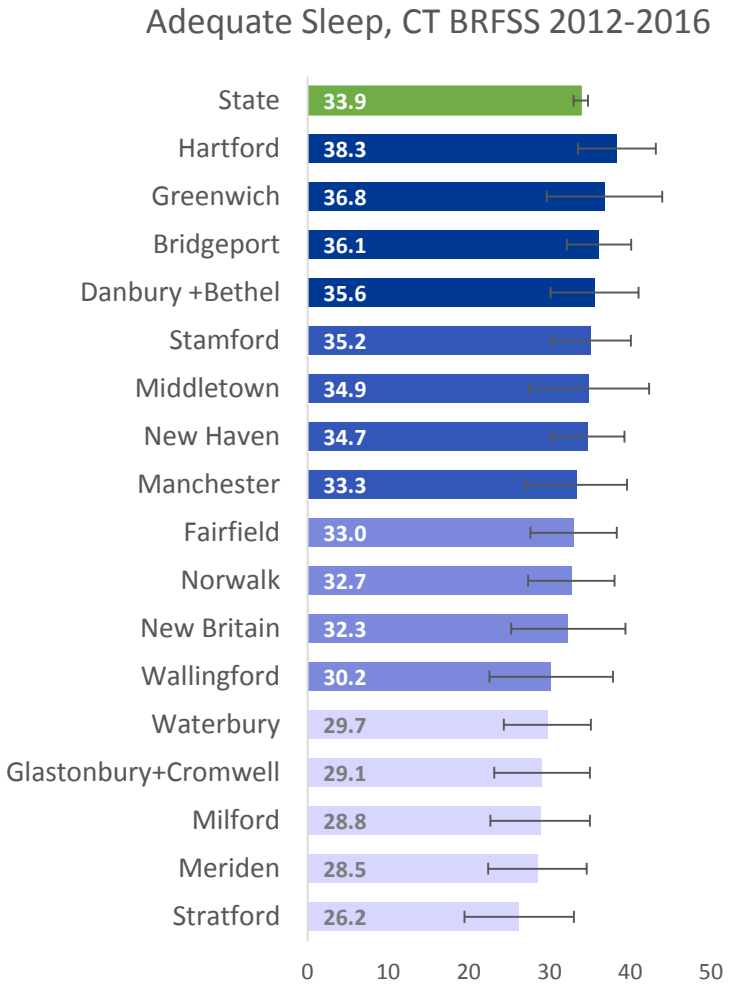
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013, 2014 & 2016.

Adequate Sleep by Health Department

Percentage of adults who slept at least 8 hours on average, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 33.9% of adult residents reported an average of 8 hours of sleep or more daily. In Connecticut during 2016, the prevalence was greatest among adults 18-34 years old and 55 years old and older and adults from household with incomes less than $35,000.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Stratford

Aerobic and Strengthening Exercise

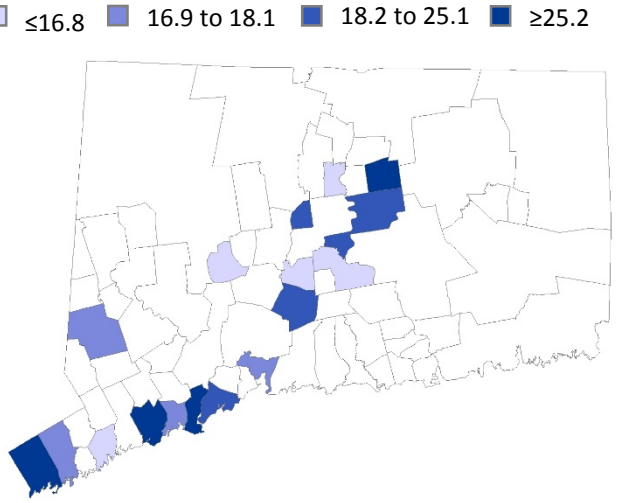
The 2008 Physical Activity Guidelines for Americans recommends that adults participate in at least 150 minutes a week of moderate-intensity aerobic physical activity and at least two or more times a week of muscle-strengthening activities for health benefits. [10] People who are physically active generally live longer and have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers.[11]

CT BRFSS respondents were asked to report the frequency of their physical activities.

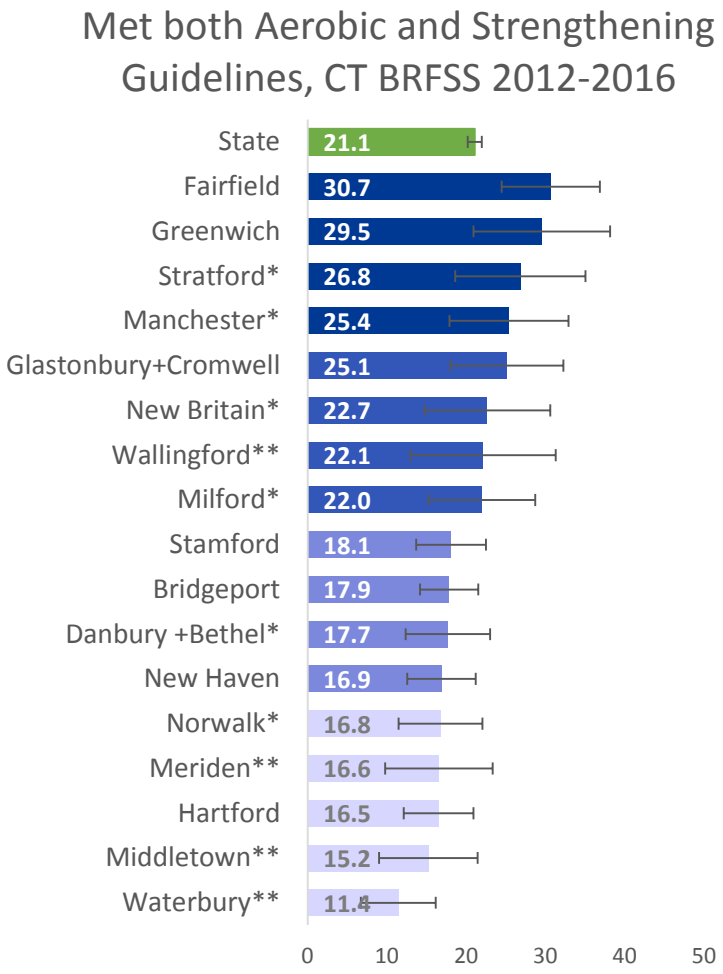
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

Met Aerobic and Strengthening Guidelines by Health Department

Percentage of adults met both aerobic and strengthening physical activity guidelines, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 21.1% of adult residents met both aerobic and strengthening physical activity guidelines. In Connecticut during 2015, women were more likely to meet both guidelines, while men were more likely to meet muscle strengthening guideline only; and non-Hispanic White adults were more likely to meet aerobic guideline only.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Fruit Consumption

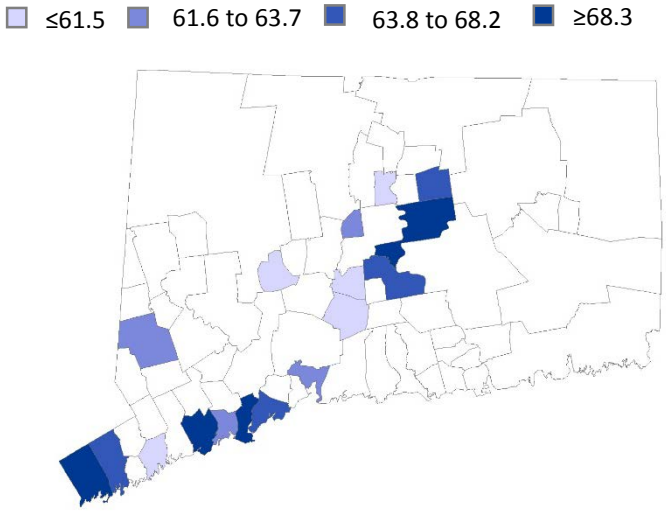
The Dietary Guidelines for Americans recommend that people consume five to thirteen servings of fruits and vegetables daily, with different amounts based on total calorie intake.[12] The average American, however, only eats about three servings of fruits and vegetables each day.[13]

CT BRFSS respondents were asked to report how often they ate fruits, including servings of 100% fruit juice.

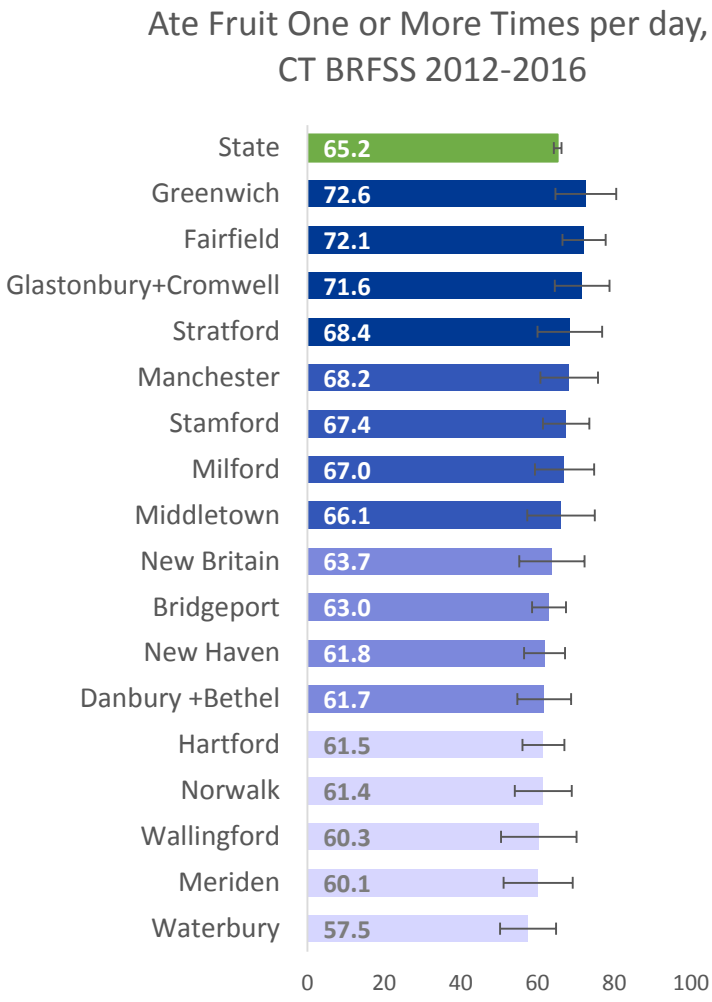
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

Fruit Consumption by Health Department

Percentage of adults who ate fruit one or more times daily, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 65.2% of adult residents reported consuming fruit one or more time per day. In Connecticut during 2015, the prevalence was greatest among older adults, women, non-Hispanic white adults, adults with higher education and incomes levels, adults with insurance, and non-adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Vegetable Consumption

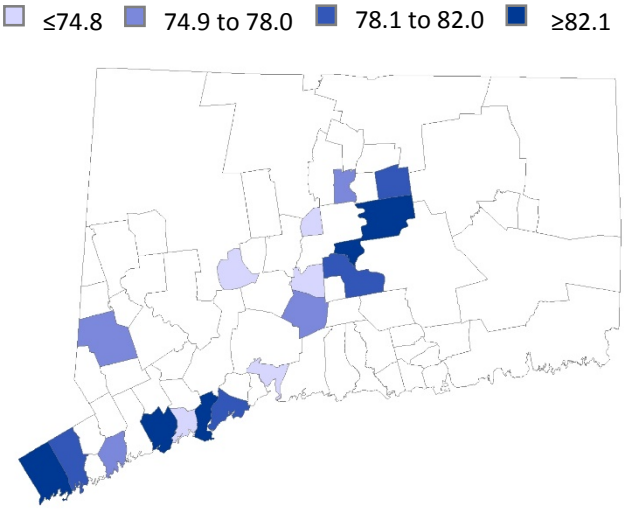
The Dietary Guidelines for Americans recommend that people consume five to thirteen servings of fruits and vegetables daily, with different amounts based on total calorie intake.[12] The average American, however, only eats about three servings of fruits and vegetables each day. [13]

CT BRFSS respondents were asked to report how often they ate vegetables, including servings of 100% fruit juice.

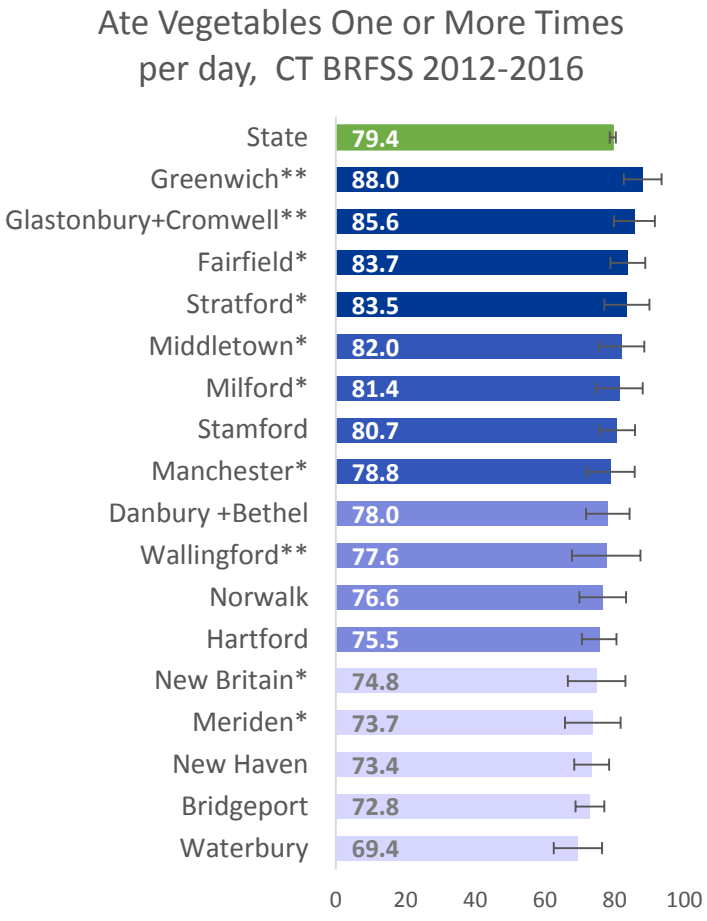
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2013 & 2015.

Vegetable Consumption by Health Department

Percentage of adults who ate vegetables one or more times per day, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 79.4% of adult residents reported consuming vegetables one or more time per day. In Connecticut during 2015, the prevalence was significantly greater among older adults, women, non-Hispanic White adults, adults with higher income and educational levels, adults with insurance, and non-adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- New Haven, Waterbury, Bridgeport

References

1. DeSalvo, Karen B, Bloser, N, Reynolds, K, He, Jiang, Muntner, P (2006) Mortality Prediction with a Single General Self-Rated Health Question. *Journal of General Internal Medicine 21(3):267-275*.

2. Centers for Disease Control and Prevention (2000) Measuring Healthy Days: Population Assessment of Health-Related Quality of Life, Atlanta, Georgia. *http://www.cdc.gov/hrqol/pdfs/mhd.pdf*

3. Centers for Disease Control and Prevention: Adult Overweight and Obesity: Causes and Consequences, Atlanta, Georgia http://www.cdc.gov/obesity/adult/causes/index.html, accessed on May 2, 2018

4. Gutkin, Cal (2009) Outliers: extended families, better health outcomes. Why everyone should have a family doctor. *Canadian Family Physician 55 (7):768*.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2718612/pdf/0550768.pdf, accessed on March 10, 2017.

5. Liu, Yong, et al. "Relationships between Housing and Good Insecurity, Frequent Mental Distress, and Insufficient Sleep among Adults in 12 US States, 2009." Preventing Chronic Disease. 11.1 (March 2014). *http://www.cdc.gov/pcd/issues/2014/13_0334.htm*

6. Kushel, Margot B., Reena Gupta, Lauren Gee, and Jennifer S. Haas. "Housing Instability and

Food Insecurity as Barriers to Health Care Among Low-Income Americans." Journal of General

Internal Medicine. 21.2 (January 2006): 71-77. *http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484604/*

7. United States Department of Agriculture Economic Research Center. "Food Security in the U.S:

Measurement." October 2017. *https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx*

8. Gutkin, Cal (2009) Outliers: extended families, better health outcomes. Why everyone should have a family doctor. *Canadian Family Physician 55 (7):768*. *http://www.cfp.ca/content/55/7/768.full*

9. Centers for Disease Control and Prevention. Sleep and sleep disorders. March 2017. https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html

10. U.S. Department of Health and Human Services: 2008 Physical Activity Guidelines for Americans. https://health.gov/paguidelines/pdf/paguide.pdf, assessed May 2, 2018.

11. U.S. Department of Health and Human Services: Physical Activity Guidelines Advisory Committee report, 2008. https://health.gov/paguidelines/report/pdf/CommitteeReport.pdf, assessed May 2, 2018.

12. U.S. Department of Agriculture and U.S. Department of Health and Human Services. "Dietary Guidelines for Americans, 2010." December 2010. http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf

13. Harvard School of Public Health. "Vegetables and Fruits." The Nutrition Source. 2015. http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vegetables-and-fruits/

No Leisure Time Physical Activity

Regular physical exercise has been shown to prevent certain chronic diseases, just as a sedentary lifestyle is a risk factor for a variety of obesity, bone and joint diseases, depression, and chronic diseases.[1] Physical activity also improves mental health and prolongs quality of life.[2]

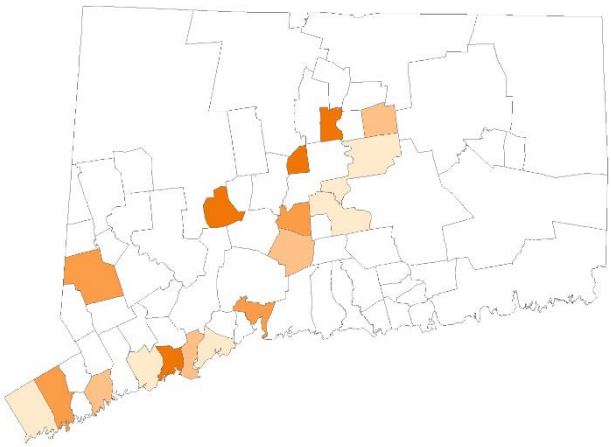
CT BRFSS respondents were asked to report whether they had participated in any physical activities or exercises such as running, calisthenics, golf, gardening or walking, other than for their job in the past 30 days.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

No Leisure Time Physical Activity by Health Department

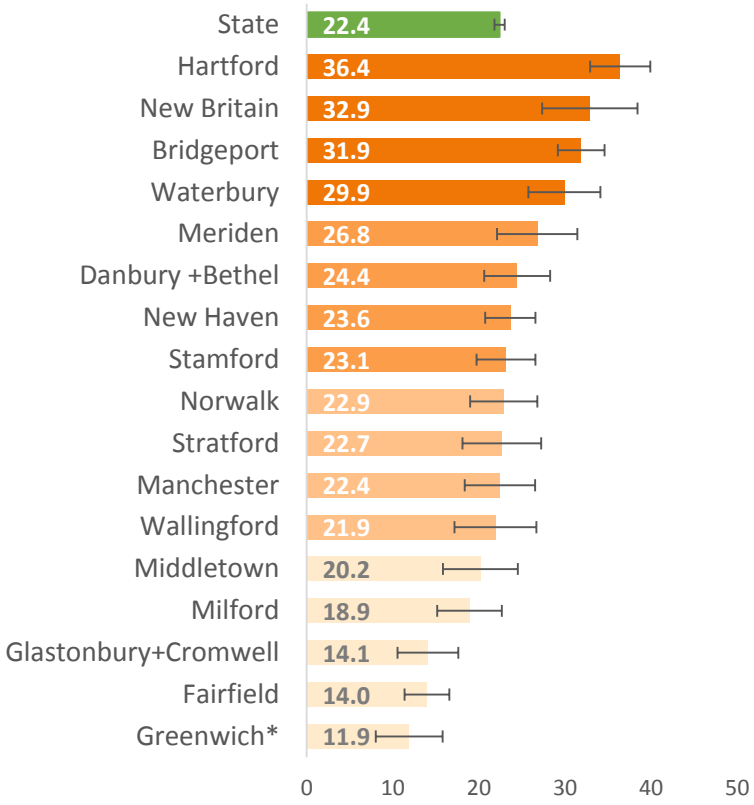
Percentage of adults who did not engage in any leisure or recreational physical activity in the past month, in quartiles

≤20.2 | 20.3 to 22.9 | 23.0 to 26.8 | ≥26.9



Health District Ranking

No Leisure Time Physical Activities in the past month, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 22.4% of adult residents reported had no leisure time physical activities in the past month. In Connecticut during 2016, the prevalence was significantly elevated among older adults, women, minority race/ethnicity groups, adults with lower income and education levels, adults without insurance, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, Waterbury, Bridgeport

Lower:

- Fairfield, Glastonbury+Cromwell

Current Cigarette Smoking

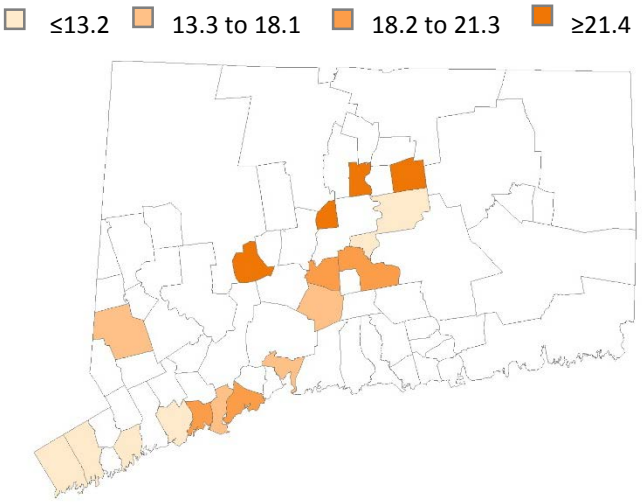
According to the Surgeon General, smoking is the number one preventable cause of death in the U.S. [3] It is detrimental to nearly every organ in the body and causes poorer overall health. Smokers were more likely to develop lung cancer, stroke and heart disease when compared to non-smokers.

CT BRFSS respondents were asked whether they currently smoked cigarettes every day, some days, or not at all, among those who reported they had smoked at least 100 cigarettes in their entire life.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

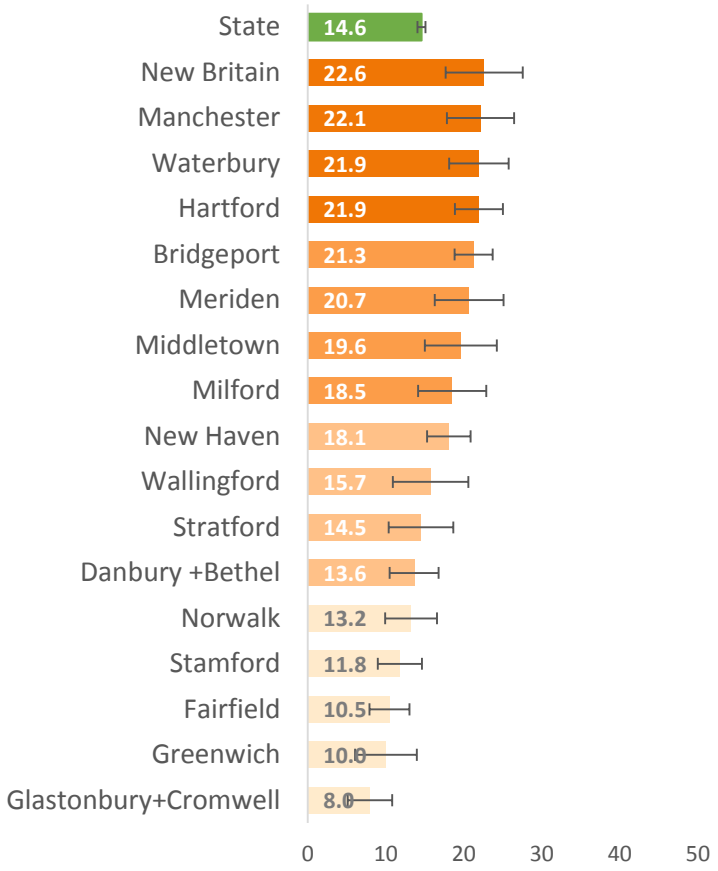
Current Cigarette Smoking by Health Department

Percentage of adults who were current smoker, in quartiles



Health District Ranking

Current Cigarette Smoking, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 14.6% of adult residents were current smokers. In Connecticut during 2016, the prevalence was greatest among younger adults, men, non-Hispanic Black adults, adults from households earning $35,000-$74,999, adults without insurance, adults with disabilities, and adults with no more than a high school education.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, New Haven, Waterbury, Bridgeport, Manchester, Meriden

Lower:

- Fairfield, Greenwich, Glastonbury+Cromwell

Hookah Use

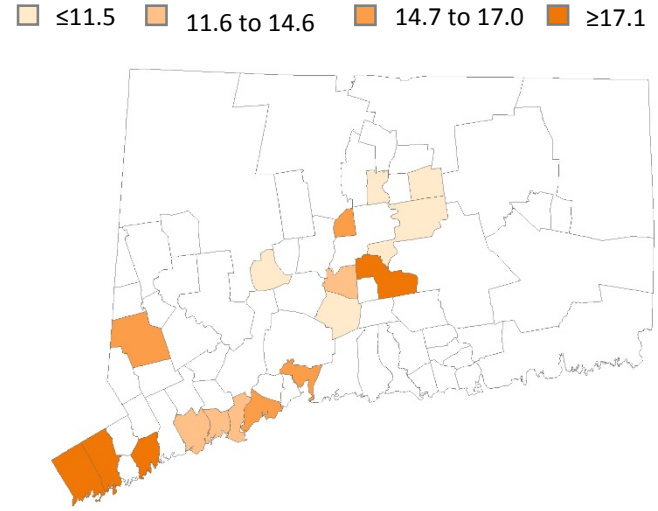
Although cigarette smoking in the United States has been steadily declining, use of alternative tobacco products has become more prevalent in recent years.[4] The negative health risks associated with hookahs, or water pipes, are well established, and for some, this type of tobacco use is associated with increased risk for cigarette use.[5]

CT BRFSS respondents were asked if they had ever used hookahs.

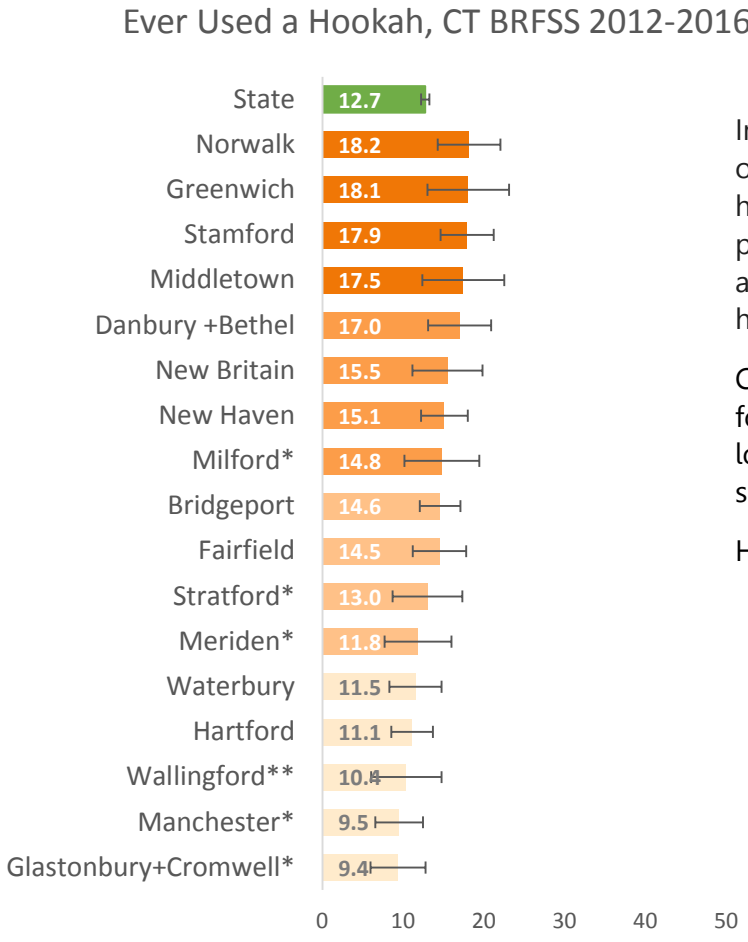
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Ever Used Hookah by Health Department

Percentage of adults who had ever used a hookah, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 12.7% of adult residents reported ever using hookah. In Connecticut during 2016, the prevalence was significantly greater among younger adults, men, adults with higher income and educational levels.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Stamford, Norwalk

Electronic Cigarettes

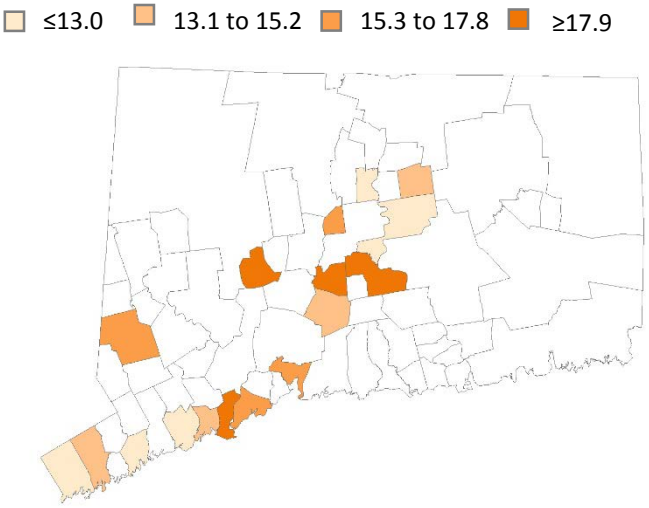
Although cigarette smoking in the United States has been steadily declining, the use of alternative tobacco products has become more prevalent in recent years.[4] The health effects of non-cigarette tobacco are often perceived as less harmful than traditional cigarettes, particularly in younger age groups, yet nicotine exposure during adolescence may have long-lasting adverse effects on the developing adolescent brain. [6]

CT BRFSS respondents were asked if they had ever used an electronic cigarette.

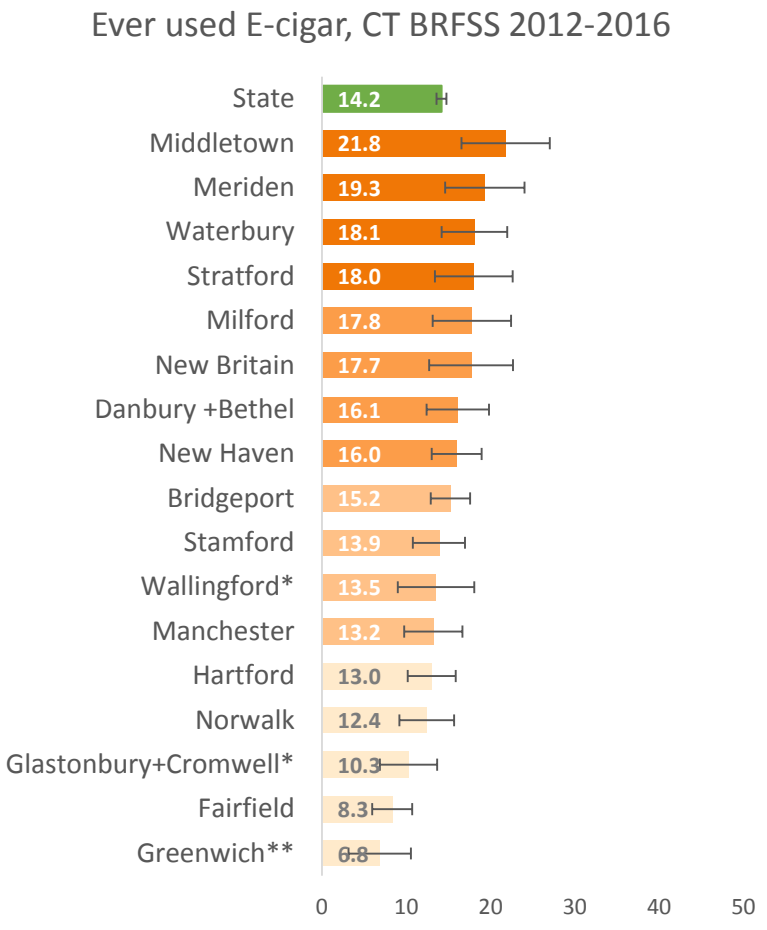
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Ever Used Electronic Cigarettes by Health Department

Percentage of adults who had ever used e-cigarettes, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 14.2% of adult residents reported ever using e-cigarettes. In Connecticut during 2016, the prevalence of adults ever used e-cigarettes was significantly greater among younger adults, men, adults with lower education and incomes levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Fairfield

Higher:

- Middletown

Excessive Alcohol Consumption

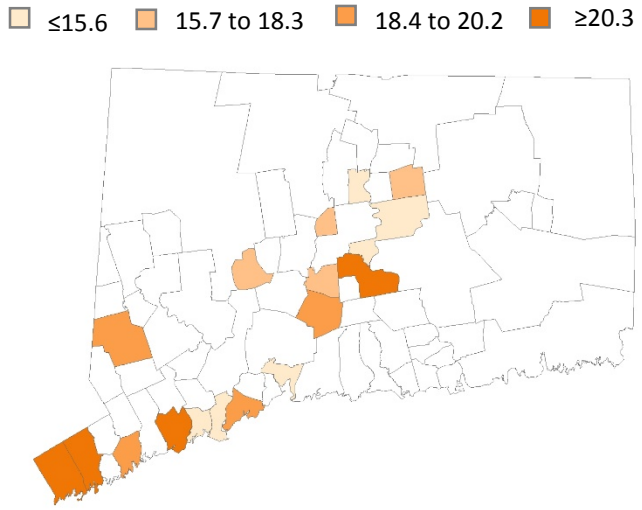
Excessive alcohol consumption is associated with numerous health problems,[7] including liver disease, neurological damage and alcohol poisoning, and can lead individual to engage in risky and violent behaviors.[8]

CT BRFSS respondents were asked if they had consumed alcohol in the past 30 days, and if they responded positively, they were asked about frequency of and amount of alcohol consumed. Respondents were defined as engaging in excessive alcohol consumption if either binge drinking or heavy drinking was answered positively.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

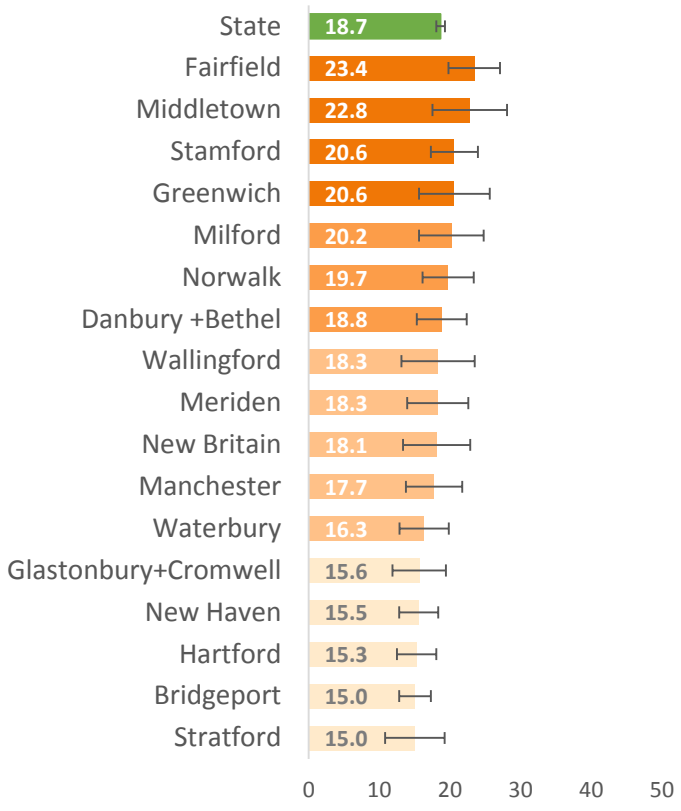
Excessive Alcohol Consumption by Health Department

Percentage of adults who engaged in excessive drinking, in quartiles



Health District Ranking

Excessive Alcohol Drinking in the past 30 days, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 18.7% of adults engaged in excessive drinking, (either binge drinking or heavy drinking), in the past month. In Connecticut during 2016, the prevalence was significantly greater among younger adults, men, non-Hispanic White and Hispanic adults, adults with higher income and education levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Lower:

- Bridgeport, Hartford

References

1. Warburton, DE, Nichol, CW, Bredlin, SSD (2006) Health Benefits of Physical Activity: The Evidence. Canadian Medical Association Journal 174(6):801-809. http://www.cmaj.ca/content/174/6/801.full.pdf, accessed on March 10, 2017.
2. American Heart Association (2015) Physical activity improves quality of life, Dallas, Texas. http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Physical-activity-improves-quality-of-life_UCM_307977_Article.jsp#.WunFci7wZaR, assessed on May 2,2018.
3. ublic Health Service (2014) The health consequences of smoking – 50 years of progress: A report of the Surgeon General. U.S. Department of Health and Human Services, Atlanta, Georgia. https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf, assessed on May 2,2018.
4. 6 O'Connor, RJ (2012) Non-cigarette tobacco products: What have we learned and where are we headed? Tob Control. 2012 March ; 21(2): 181–190
5. American Lung Association (2007) An emerging deadly trend: Waterpipe tobacco use. http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf, assessed on May 2,2018..
6. Schivo, M, Avdalovic, MV, Murin, S. (2014) Non-cigarette tobacco and the lung. Clin Rev Allergy Immunol. 2014 Feb;46(1):34-53.
7. Centers for Disease Control and Prevention (2016) Alcohol and public health: Frequently asked questions. https://www.cdc.gov/alcohol/faqs.htm, accessed on May 2, 2018.
8. Centers for Disease Control and Prevention: Fact Sheets- Binge drinking. https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm, accessed on May 2, 2018.

Health Protective Behaviors

Routine Check-up

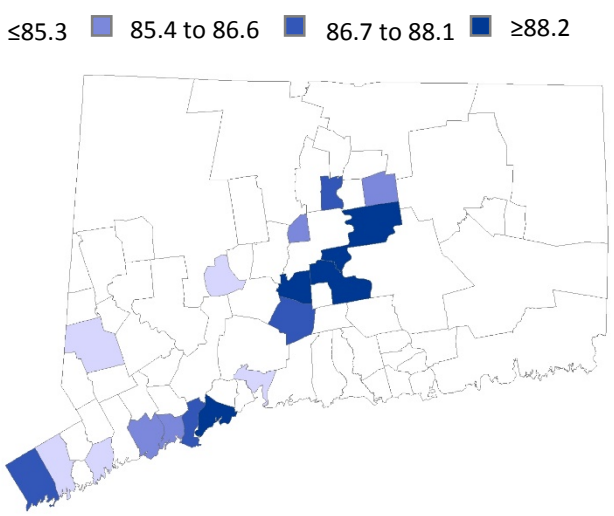
Routine check-ups are important for disease prevention and age-appropriate screening.[1] They are an important mechanism for identifying chronic conditions in the early stages, which allow patients and doctors more options for treatment before a condition worsens.

CT BRFSS respondents were asked how long it had been since they last visited a doctor for a routine check-up.

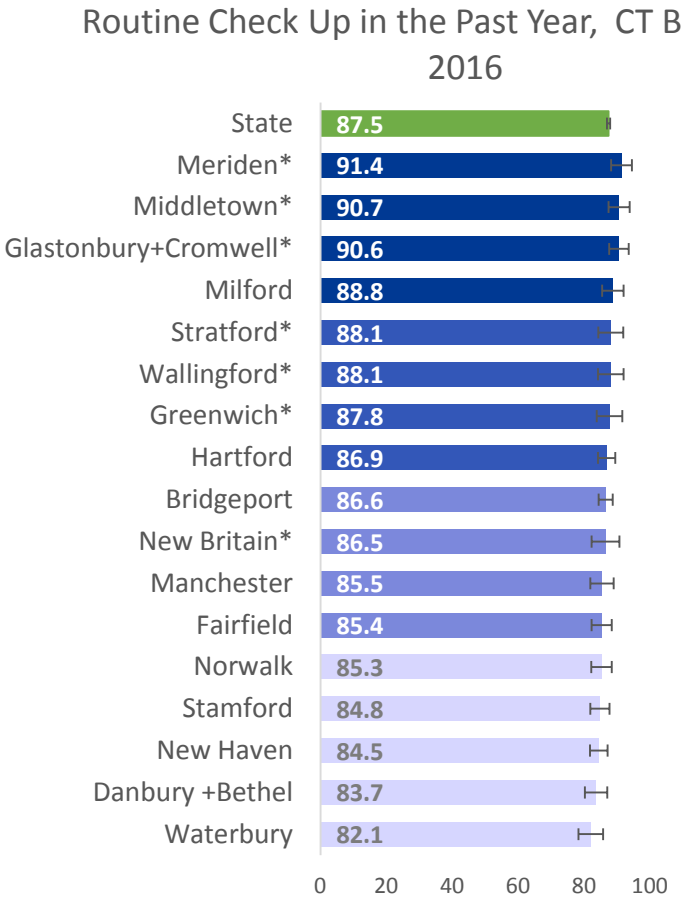
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Routine Check-up in the Past Year by Health Department

Percentage of adults who had a routine check-up in the past year, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 87.5% of adult residents reported having a routine check-up in the past year. In Connecticut during 2016, the prevalence was significantly greater among older adults, women, non-Hispanic Black and White adults, adults with insurance, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Waterbury

Influenza Vaccination

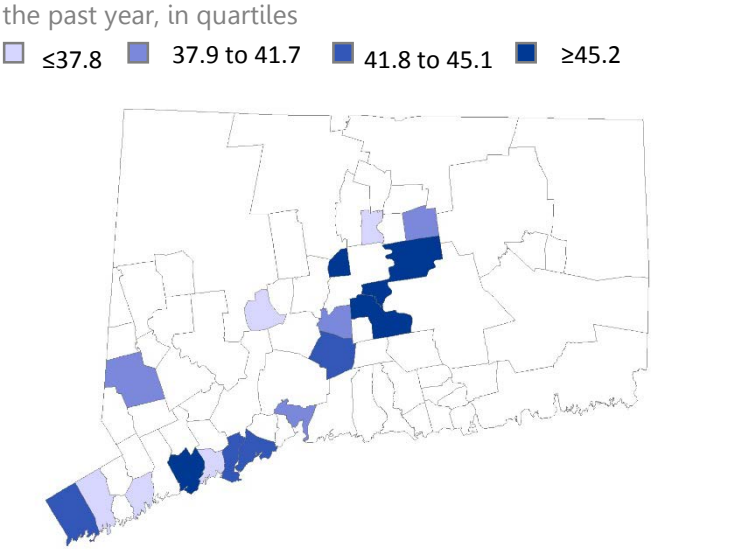
The influenza (flu) virus can cause serious infections, hospitalizations and even death in some susceptible individuals.[2] Seasonal flu vaccines are recommended by the Advisory Committee on Immunization Practices through CDC for everyone over six months of age.[3]

CT BRFSS respondents were asked if they had received the seasonal flu vaccine in the past year, either as a shot or nasal spray mist.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

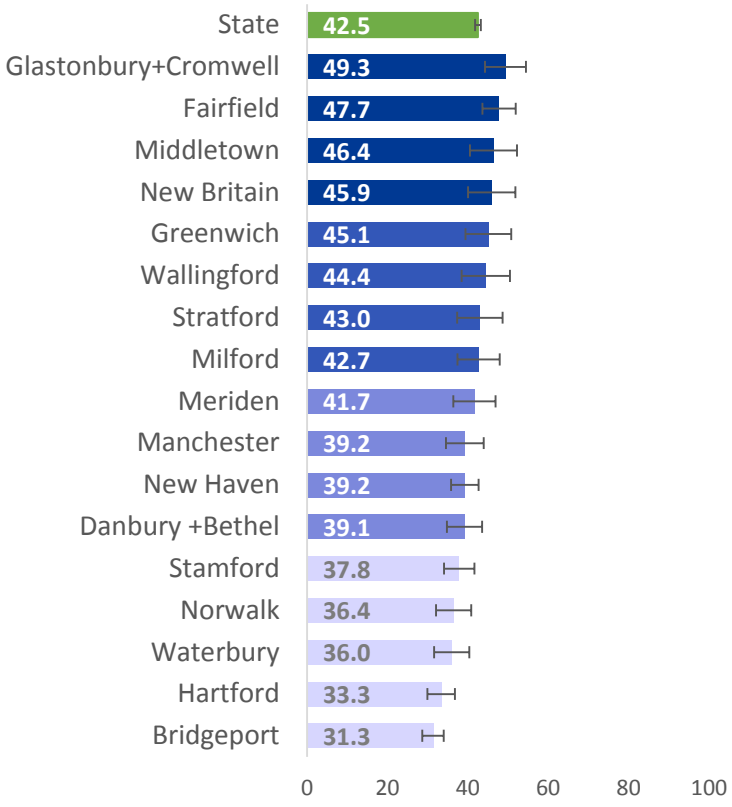
Influenza Vaccination in the Past Year by Health Department

Percentage of adults who received an influenza vaccination in the past year, in quartiles



Health District Ranking

Influenza Vaccination in the Past Year, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 42.5% of adults received an influenza vaccination in the past year. In Connecticut during 2016, the prevalence was significantly elevated among adults 55 years old and older, women, non-Hispanic White adults, adults with higher income and educational levels, adults with insurance, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield, Glastonbury+Cromwell

Lower:

- Hartford, Waterbury, Bridgeport, Stamford, Norwalk

Pneumococcal Vaccination

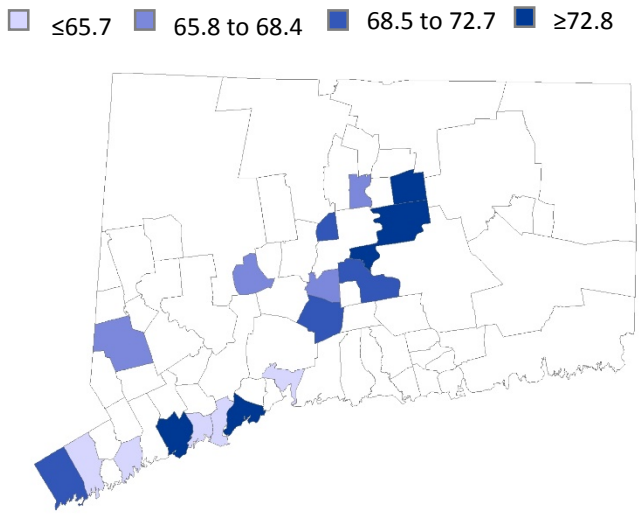
Pneumonia is a lung infection that can be caused by viruses, bacteria or fungi. Pneumococcal vaccinations are recommended for children under two years of age, adults 19-64 years old who smoke tobacco, adults at least 65 years old, and all adults with existing medical conditions.[4]

CT BRFSS respondents age 65 and older were asked if they had ever received a pneumococcal vaccination.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

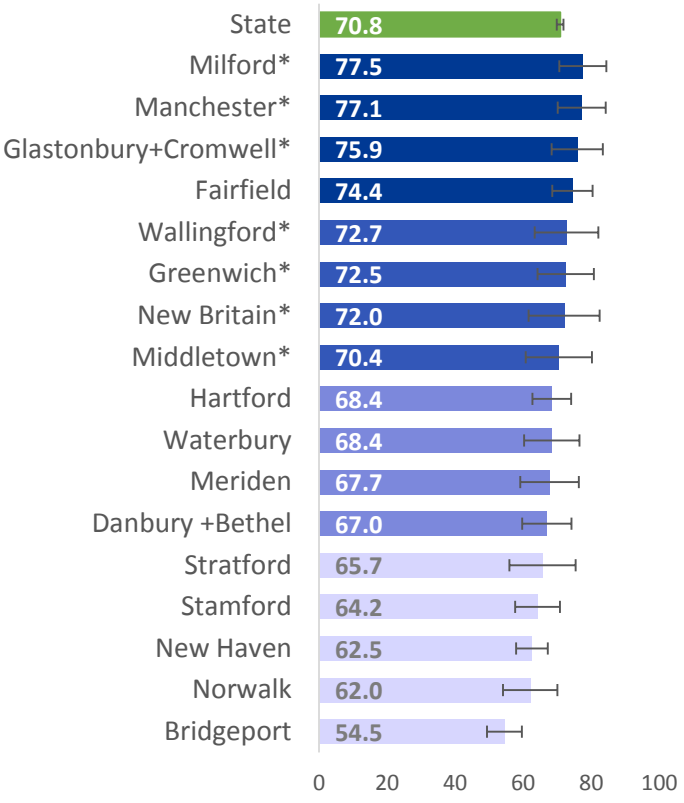
Ever Had Pneumococcal Vaccination by Health Department

Percentage of adults (65 and older) ever having the pneumococcal vaccination, in quartiles



Health District Ranking

Ever Had Pneumococcal Vaccination (65 years and older), CT BRFSS 2012-2016



In Connecticut during 2012-2016, 70.8% of adults 65 years and older had ever received a pneumococcal vaccination. In Connecticut during 2016, the prevalence was not significantly different from the U.S., and the state ranked 27th among all states in the country for its prevalence.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- New Haven, Bridgeport

Human Immunodeficiency Virus (HIV) Test

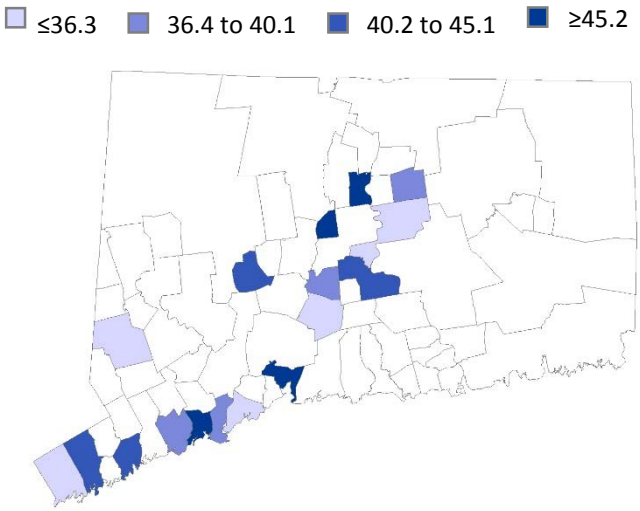
Over one million Americans are living with the Human Immunodeficiency Virus (HIV), and of those, about one in eight are not aware they are infected.[5]

CT BRFSS respondents were asked if they had ever been tested for HIV, not including tests when donating blood.

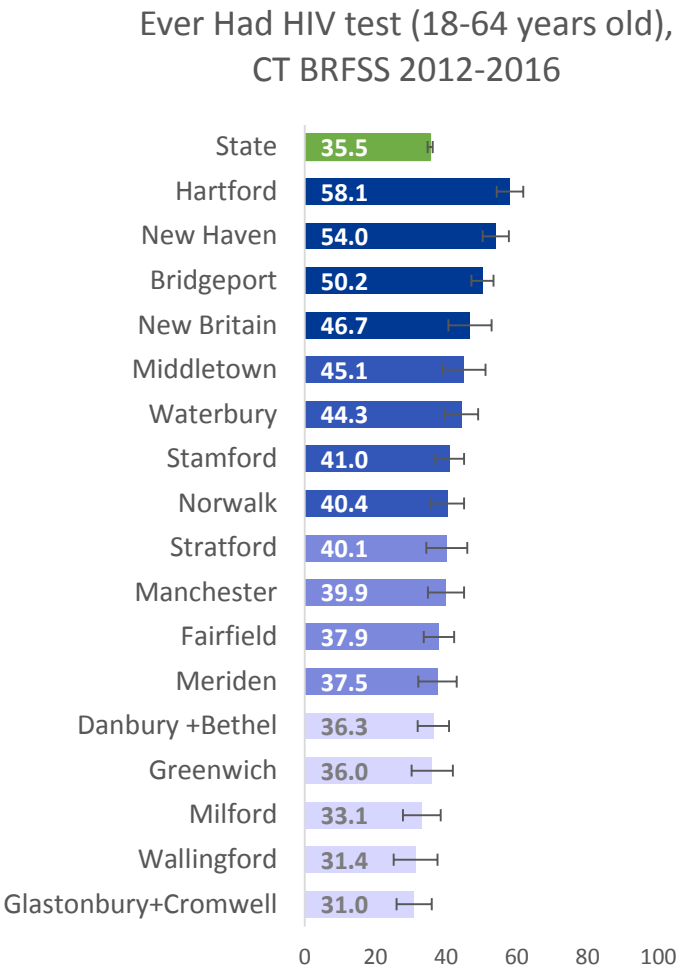
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Ever Had HIV Test by Health Department

Percentage of adults (18-64 years old) of ever had ever been tested for HIV, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 35.5% of adults 18-64 years old had ever been tested for HIV. In Connecticut during 2016, the prevalence was significantly greater among younger adults, women, non-Hispanic Black and Hispanic adults, adults with incomes less than $35,000 and at least $75,000, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, New Haven, Waterbury, Bridgeport, Stamford, Middletown

Prostate Cancer Screening

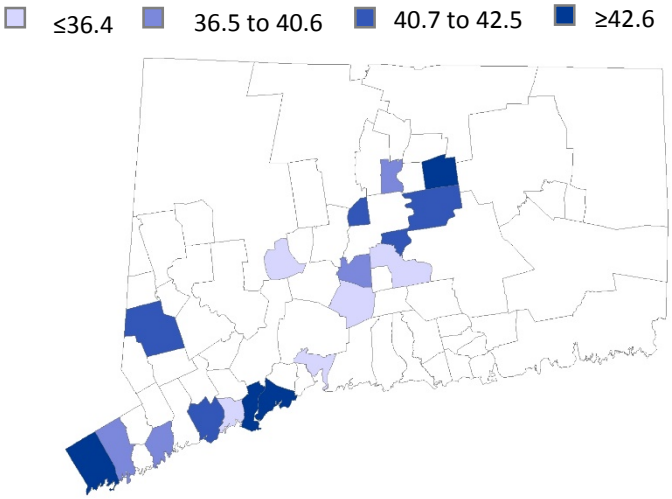
Prostate-specific antigen (PSA) is a protein produced by the prostate, and elevated levels of PSA in the blood are correlated with a higher risk for prostate cancer.[6] While there is disagreement over whether PSA tests should be recommended as a screening tool, there is agreement that a man considering a PSA test should be informed of benefits and risks of the test.[7]

CT BRFSS male respondents age 40 and older were asked if they had ever had a PSA test, and for those who had, how long it had been since their last test.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

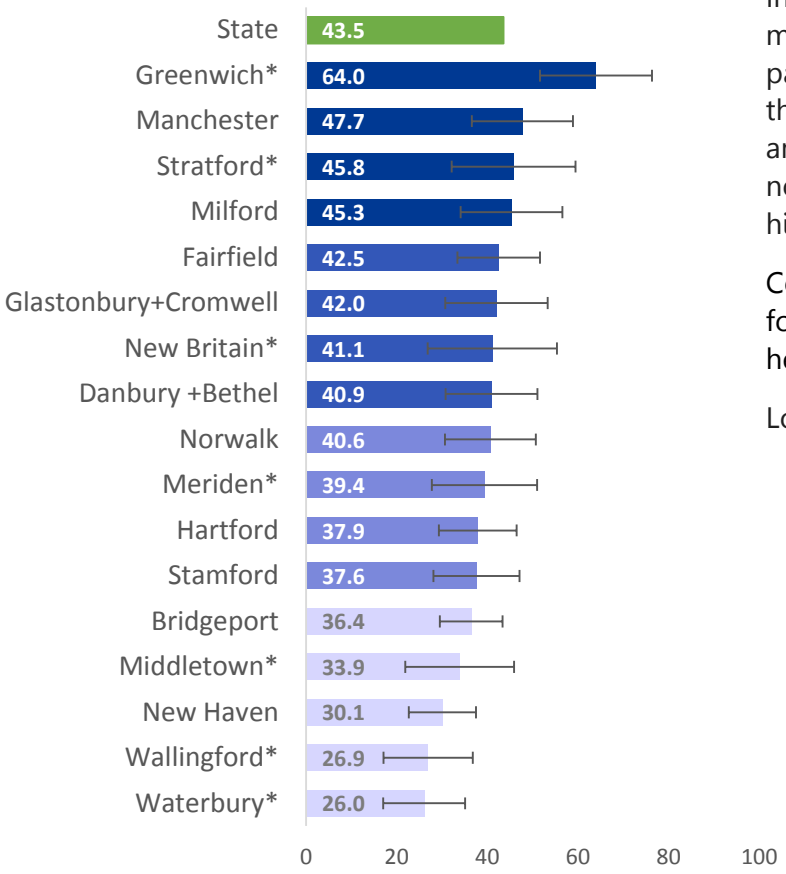
Had a PSA Test in the Past Two Years by Health Department

Percentage of men (40 and older) who had a PSA test in the past two years, in quartiles



Health District Ranking

Had a PSA Test in Past Two Years (men age 40 and older), CT BRFSS 2012-2016



In Connecticut during 2012-2016, 43.5% of men age 40 and older had a PSA test in the past two years. In Connecticut during 2016, the prevalence was significantly greater among older men 55 years old or older, non-Hispanic White men, and men with higher income and education levels.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- New Haven

Breast Cancer Screening

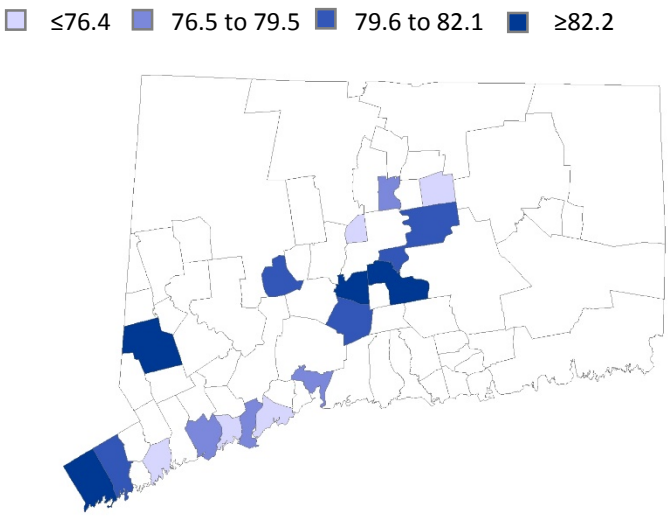
Breast cancer is the second leading cause of death from cancer in women.[8] The purpose of breast cancer screening is to look for cancer before there are signs or symptoms of the disease.[9] The American Cancer Society (ACS) suggested women with an average risk of breast cancer begin regular mammography screenings at age 45, with the opportunity to begin screening at age 40.[10]

CT BRFSS female respondents aged 40 and older were asked if they had ever had a mammogram, and for those who had, how long it had been since their last test.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

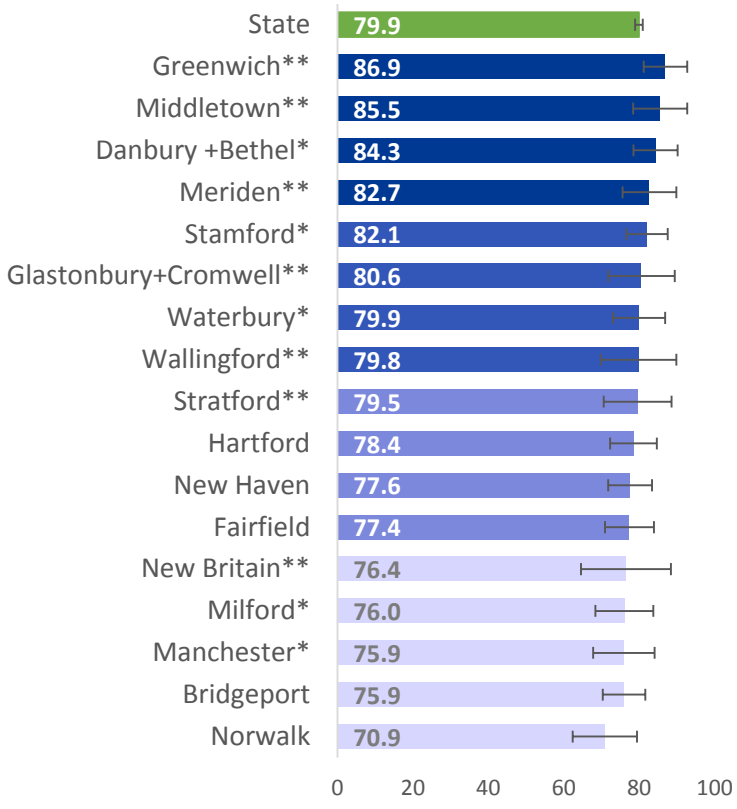
Had a Mammogram in the Past Two Years by Health Department

Percentage of women (40 and older) who had a mammogram test in the past two years, in quartiles



Health District Ranking

Women Had a mammagram in Past Two Years (40 and older), CT BRFSS 2012-2016



In Connecticut during 2012-2016, 79.9% of women age 40 and older received a mammogram in the past two years. In Connecticut during 2016, the prevalence was significantly greater among women with higher income and educational levels, women with insurance, and non-disabled women.

Compared to the statewide average, the prevalence of women 40 and older received a mammogram in the past two years was not significantly different across all selected municipal local health departments.

Health Protective Behaviors

Dentist Visit

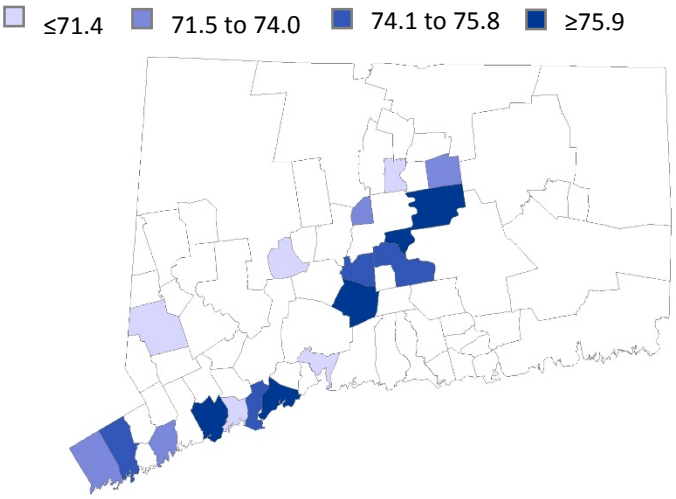
Untreated tooth decay (cavities) and periodontal (gum) disease can affect an individual's ability to eat, speak, and manage other chronic diseases such as diabetes and heart disease. Regular dental visits also contribute to good oral health.[11]

CT BRFSS respondents were asked how long it had been since they last visited a dentist or dental clinic for any reason.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012, 2014 & 2016.

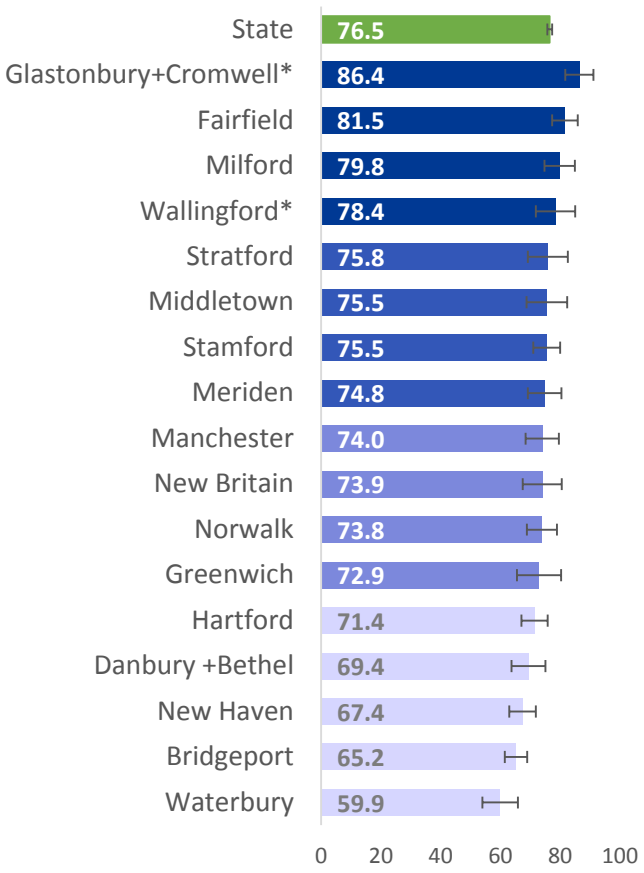
Visit a Dentist in the Past Year by Health Department

Percentage of adults had a dental visit in the past year, in quartiles



Health District Ranking

Visited Dentist in Past Year, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 76.5% of adult residents visited a dentist in the past year. In Connecticut during 2016, the prevalence was elevated significantly among adults 35-54 years old, women, non-Hispanic White and Black adults, adults with higher income and educational levels, adults with health insurance, and non-adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Fairfield

Lower:

- New Haven, Waterbury, Bridgeport, Danbury +Bethel

References

1. Centers for Disease Control and Prevention: Regular check-ups are important. https://www.cdc.gov/family/checkup/, accessed on May 2, 2018
2. Centers for Disease Control and Prevention: Influenza (Flu), Key facts about seasonal flu vaccine. http://www.cdc.gov/flu/protect/keyfacts.htm, accessed on May 2, 2018.
3. American Council on Immunization Practices (2016) Prevention and control of seasonal influenza with vaccines recommendations of the Advisory Committee on Immunization Practices — United States, 2016–17 Influenza Season. Centers for Disease Control and Prevention, Atlanta, Georgia. MMWR Recommendations and Reports 65(5). https://www.cdc.gov/mmwr/volumes/65/rr/pdfs/rr6505.pdf, accessed on May 2, 2018.
4. Centers for Disease Control and Prevention (2016) Vaccines and Preventable Diseases: Pneumococcal Vaccination. http://www.cdc.gov/VACCINES/vpd-vac/pneumo/default.htm#vacc, accessed on March 14, 2017.
5. AIDS.gov (2016) AIDS 101: HIV in the United States. U.S. Secretary's Minority AIDS Initiative Fund. *http://aids.gov/hiv-aids-basics/hiv-aids-101/statistics/#ref2*, accessed on March 14, 2017.
6. Centers for Disease Control and Prevention: Prostate Cancer, What Screening Tests Are There? *http://www.cdc.gov/cancer/prostate/basic_info/screening.htm*
7. National Institutes of Health, National Cancer Institute: Prostate-Specific Antigen (PSA) Test. http://www.cancer.gov/cancertopics/factsheet/detection/PSA
8. Centers for Disease Control and Prevention: Breast Cancer, Basic Information about Breast Cancer. *http://www.cdc.gov/cancer/breast/basic_info/*
9. National Institutes of Health: National Cancer Institute: Breast Cancer Screening (PDQ®).

   http://www.cancer.gov/types/breast/patient/breast-screening-pdq
10. Oeffinger, KC, Fontham, ETH, Etzioni, R, Herzig, A, Michaelson, JS, Shih, Y-CT, Walter, LC, Church, TR, Flowers, CR, LaMonte, SJ, Wolf, AMD, DeSantis, C, Lortet-Tieulent, J, Andrews, K, Manassaram-Baptiste, D, Saslow, D, Smith, RA, Brawley, OW, Wender, R (2015) Breast Cancer Screening for Women at Average Risk: 2015 Guideline Update From the American Cancer Society. *JAMA 314(15):1599-1614*.
11. Centers for Disease Control and Prevention (1999) Achievements in Public Health, 1900–1999: Fluoridation of Drinking Water to Prevent Dental Caries. *MMWR 48(41):933–940*.

Chronic Conditions

Current Asthma

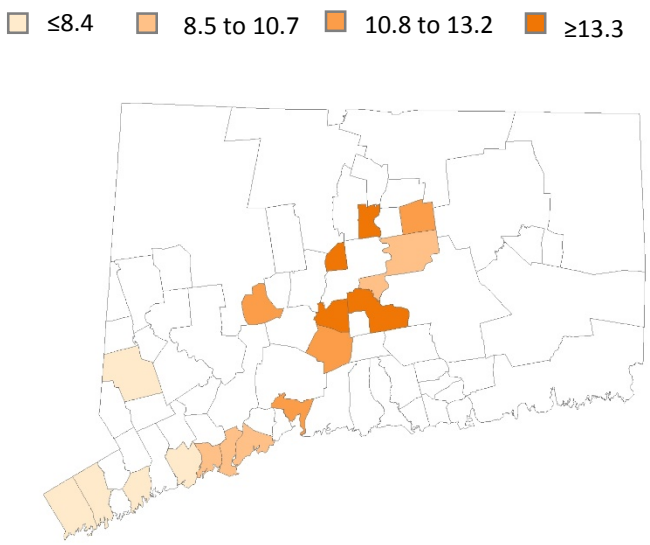
Asthma is a chronic lung disease that causes airways to become inflamed or swollen, with symptoms of shortness of breath, coughing, and /or wheezing.[1] Four thousand people die in the U.S. each year due to asthma related causes.[2]

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had asthma, and among those who had ever been diagnosed, whether or not they still had asthma.

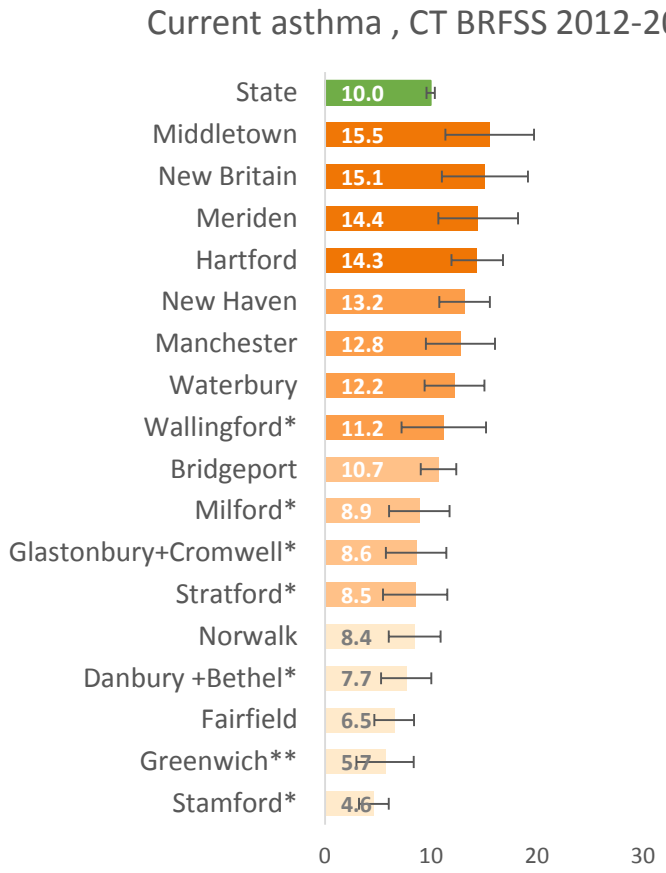
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Current Asthma by Health Department

Percentage of adults currently had asthma, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 10.0% of adult residents currently had asthma. In Connecticut during 2016, the prevalence was significantly greater among women, Hispanic adults, adults with lower income and educational levels.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, New Haven, Meriden, Middletown

Lower:

- Fairfield

Chronic Conditions

Chronic Obstructive Pulmonary Disease

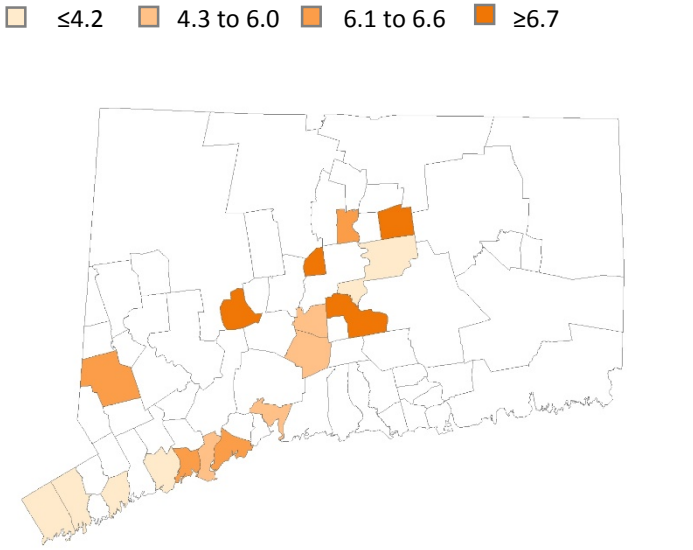
Chronic Obstructive Pulmonary Disease (COPD) is a lung disease that includes two main conditions: emphysema and chronic bronchitis.[3] The disease causes irreversible damage to the lungs and airways, which causes less air to flow to the lungs.

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had COPD, emphysema or chronic bronchitis.

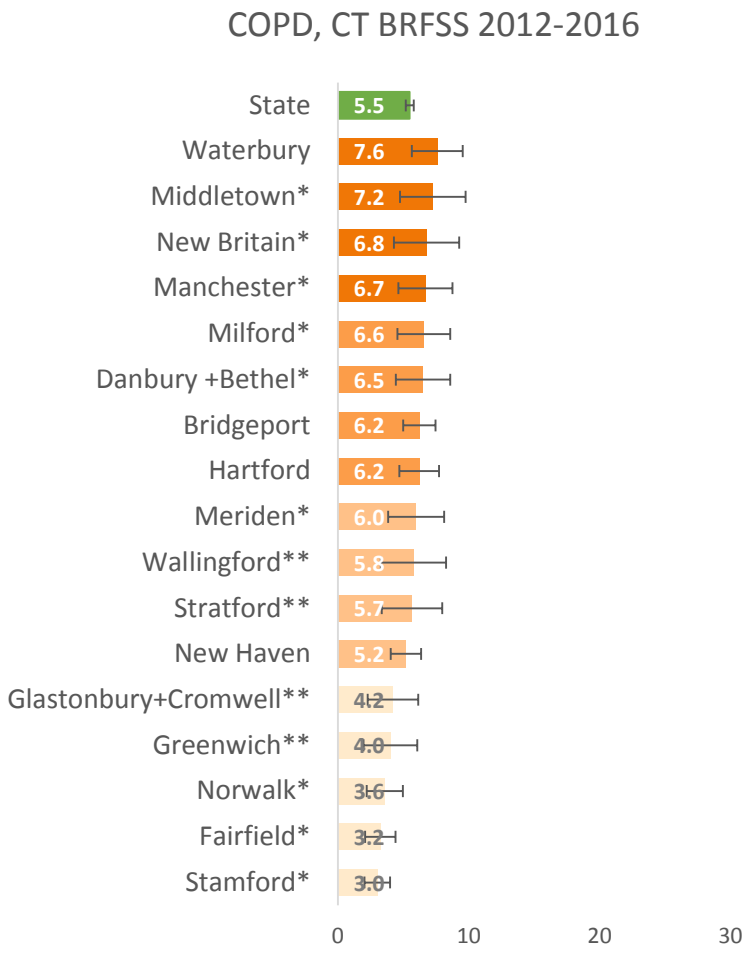
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

COPD by Health Department

Percentage of adults ever diagnosed with COPD, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 5.5% of adult residents had ever been diagnosed with COPD. In Connecticut during 2016, the prevalence of COPD was significantly greater among adults 55 years old or older, women, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the prevalence of COPD was not statistically significant across selected full time municipal local health departments.

*

Chronic Conditions

Arthritis

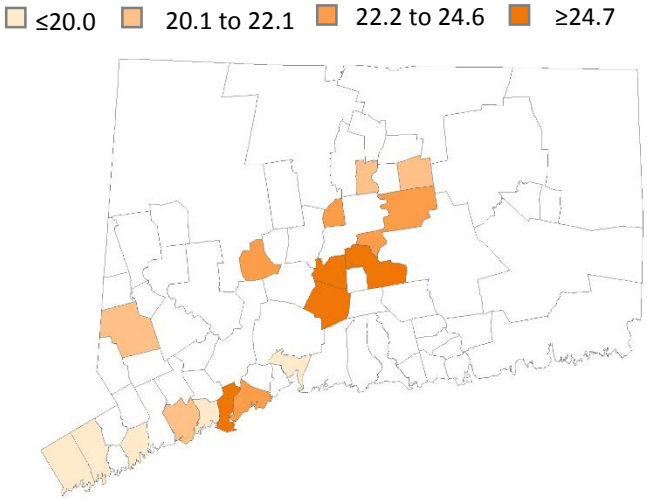
Arthritis includes over one hundred rheumatic conditions that affect joints and connective tissues. It is the most common cause of disability in the U.S. [4] The risk of developing arthritis symptoms increases with age.[5]

CT BRFSS respondents were asked if they were ever told they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

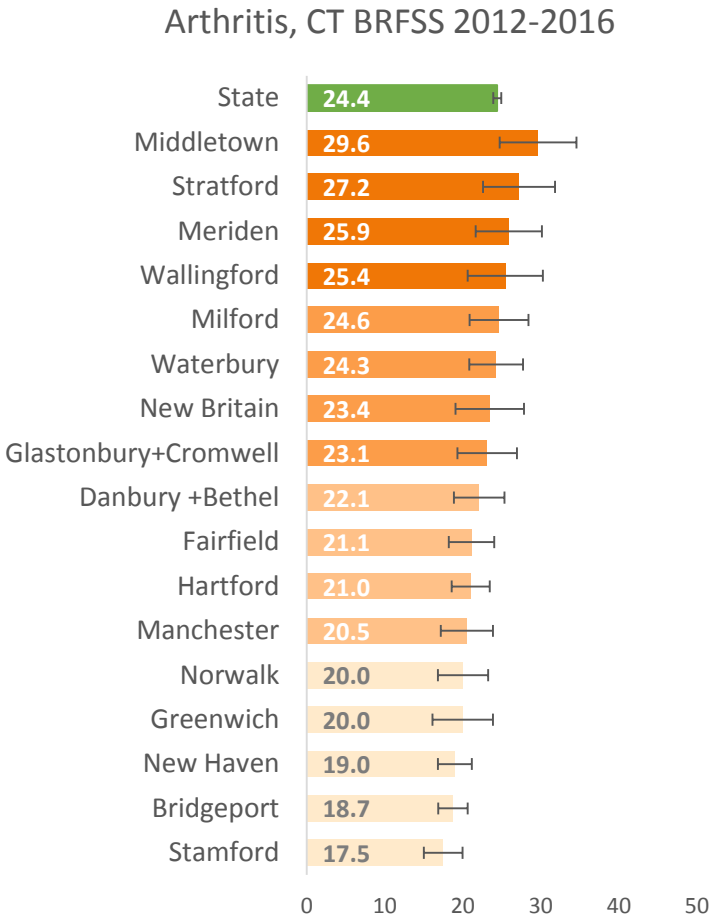
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Arthritis by Health Department

Percentage of adults ever diagnosed with arthritis, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 24.4% of adult residents had ever been diagnosed with arthritis. In Connecticut during 2016, the prevalence was significantly greater for older adults, women, non-Hispanic White adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Lower:

- Hartford, New Haven, Bridgeport, Stamford, Norwalk, Greenwich, Manchester

Chronic Conditions

Diabetes

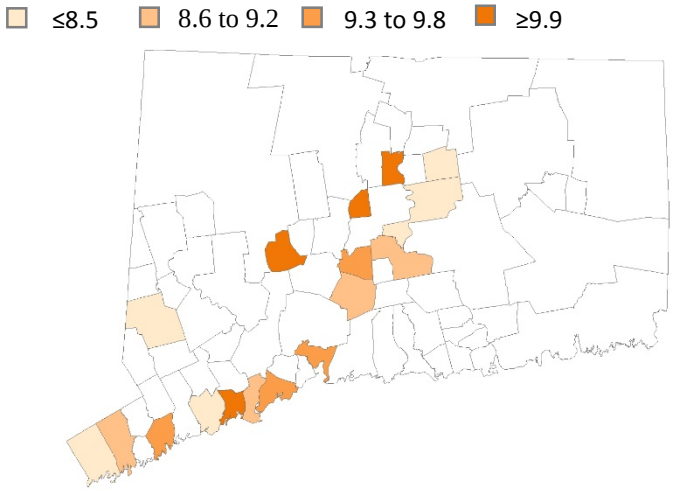
Diabetes is a disease characterized by high levels of blood sugar. It can lead to serious health problems such as heart disease, stroke, kidney disease, blindness, lower-extremity amputation, and dental issues.[6]

CT BRFSS respondents were asked if they had ever been told by a doctor or health professional that they had diabetes.

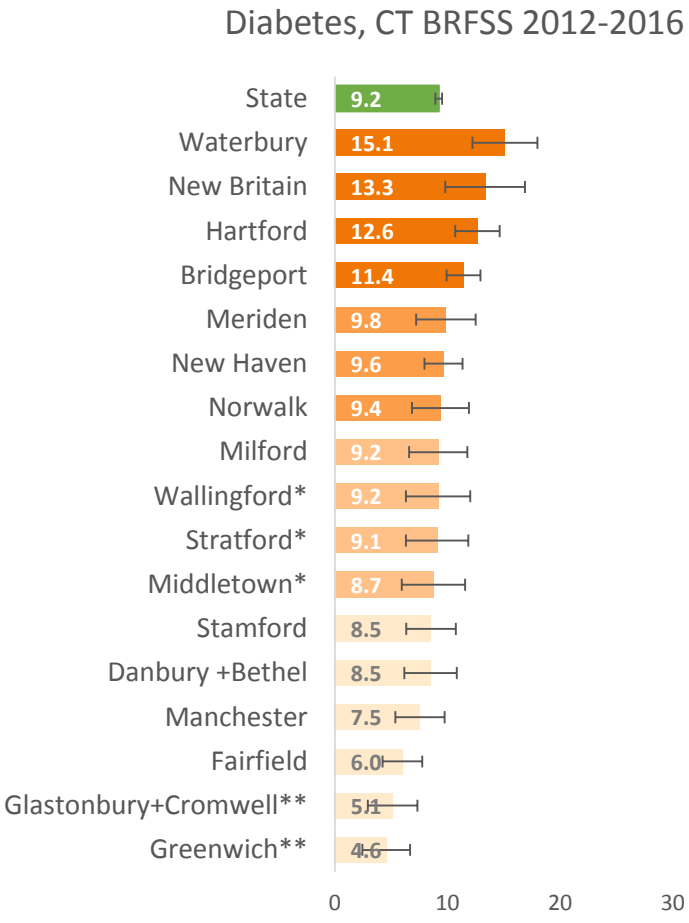
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Diabetes by Health Department

Percentage of adults ever diagnosed with diabetes, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 9.2% of adults had ever been diagnosed with diabetes. In Connecticut during 2016, the prevalence was significantly greater among adults 55 years old or older, non-Hispanic Black adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, Waterbury, Bridgeport

Lower:

- Fairfield

Cardiovascular disease

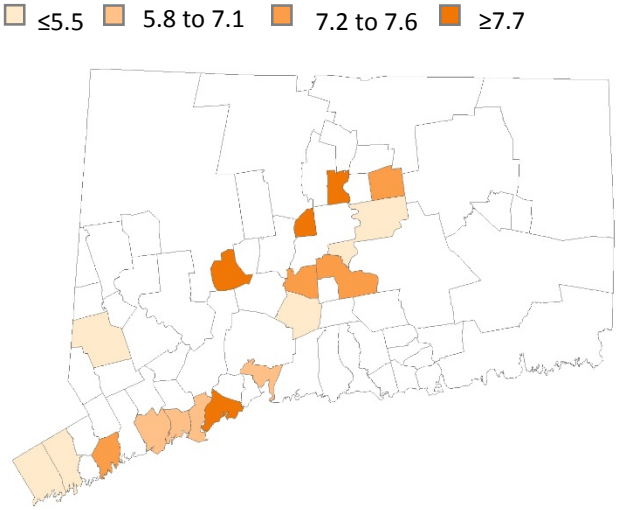
Cardiovascular disease (CVD), commonly known as heart disease, encompasses several heart conditions. It is the leading cause of death for men and women and for people of most racial/ethnic groups in the United States.[7]

CT BRFSS respondents were asked if they were ever told by a doctor or health care professional that they had a heart attack or myocardial infarction, angina or coronary heart disease, or stroke.

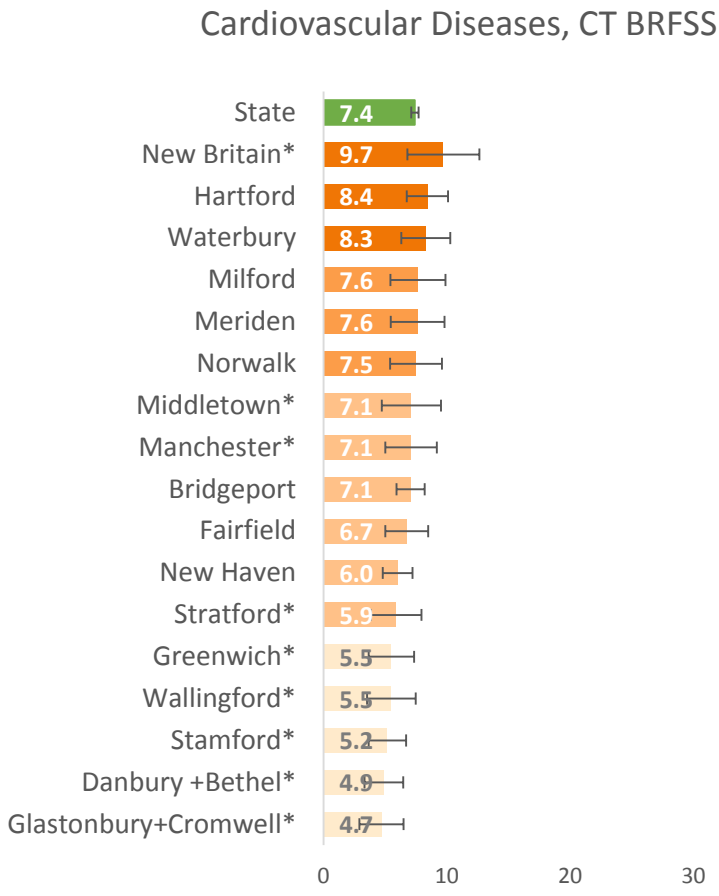
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Cardiovascular Disease by Health Department

Percentage of adults ever diagnosed with cardiovascular disease, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 7.4% of adult residents had ever been diagnosed with cardiovascular diseases. In Connecticut during 2016, the prevalence was greatest among adults 55 years old and older, men, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the prevalence of cardiovascular disease was not significant different across selected full time municipal local health departments.

Cancer

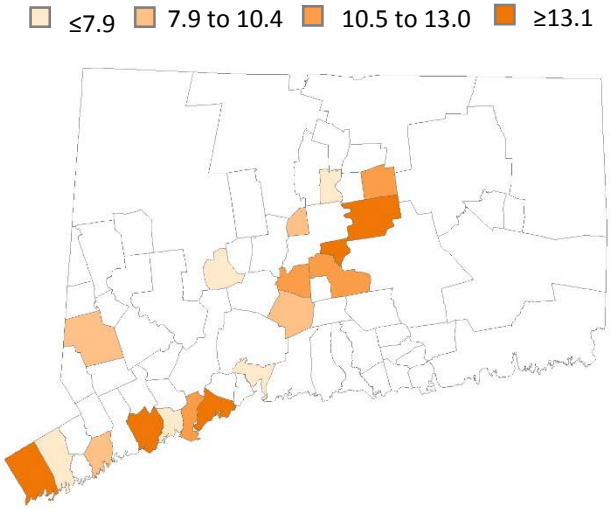
After heart disease, cancer is the second leading cause of death among Americans. More than 500,000 Americans die every year from cancer.[8] Many cancers can be prevented by eating a healthy diet, staying physically active, limiting alcohol consumption, not smoking, and practicing sun-safe behaviors.

CT BRFSS respondents were asked if they were ever told they had any other type of cancer including skin cancer.

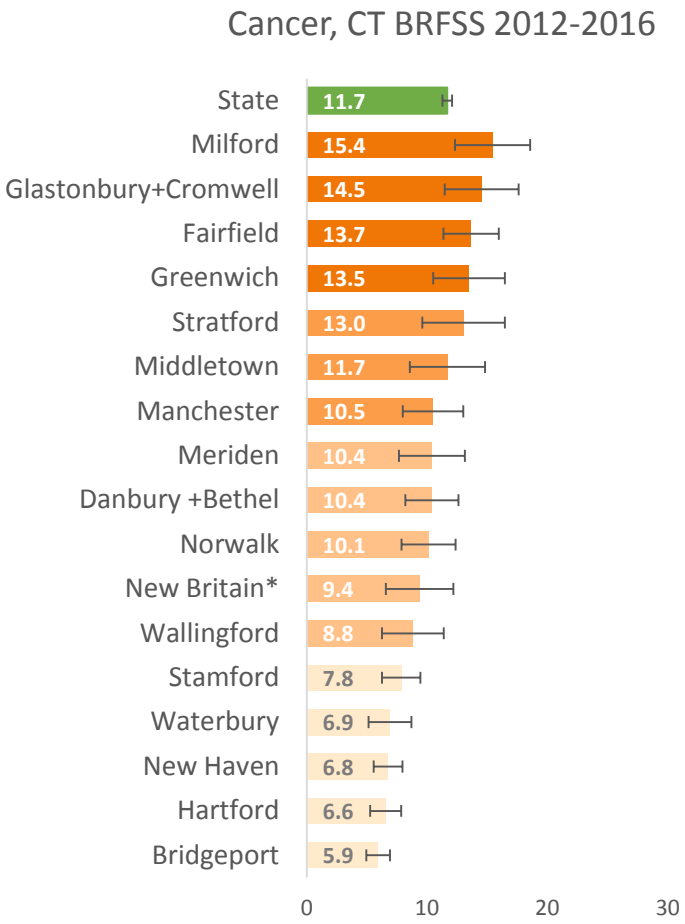
Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

Cancer by Health Department

Percentage of adults ever diagnosed with cancer, in quartiles



Health District Ranking



In Connecticut during 2012-2016, 11.7% of adult residents had ever been diagnosed with cancer. In Connecticut during 2016, the prevalence was significantly greater among adults 55 years old or older, women, non-Hispanic White adults, adults with disabilities, and adults with more than a high school education.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher: Milford

Lower:

- Hartford, New Haven, Waterbury, Bridgeport, Stamford

Chronic Conditions

Depression

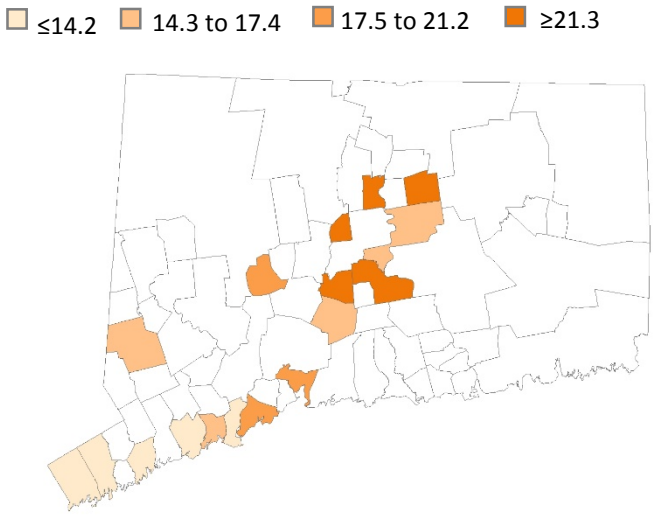
Depression is a common and serious illness that can take several forms, with symptoms including persistent feelings of sadness, anxiety, emptiness, and hopelessness, as well as fatigue, irritability and restlessness. [9]

CT BRFSS respondents were asked if they were ever told they had a depressive disorder including depression, major depression, dysthymia, or minor depression.

Data source: Connecticut Behavioral Risk Factor Surveillance System, 2012-2016.

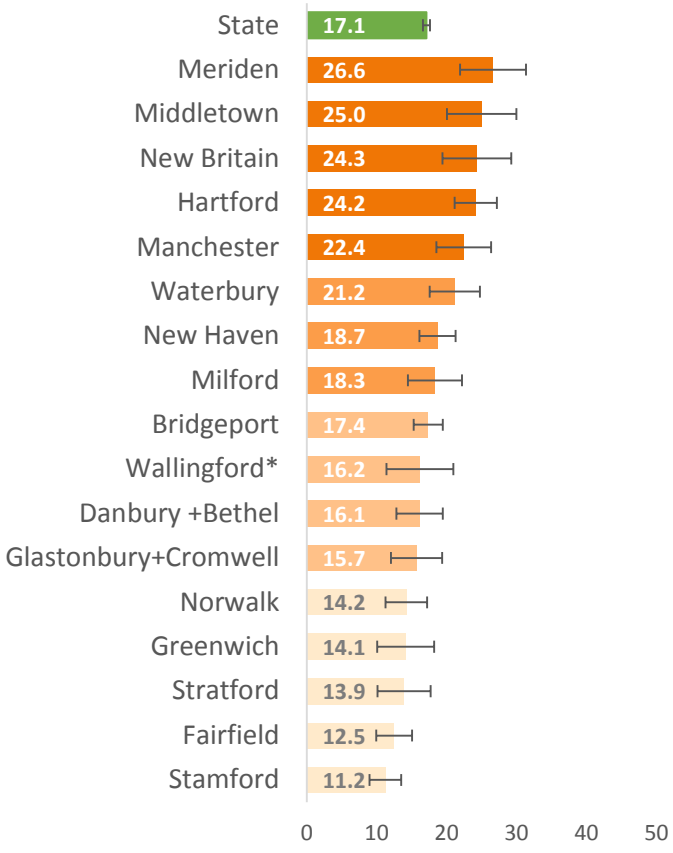
Depression by Health Department

Percentage of adults ever diagnosed with depression, in quartiles



Health District Ranking

Depression, CT BRFSS 2012-2016



In Connecticut during 2012-2016, 17.1% of adult residents were ever diagnosed with depression. In Connecticut during 2016, the prevalence was significantly greater for women, Hispanic adults and non-Hispanic White adults, adults with lower income and educational levels, and adults with disabilities.

Compared to the statewide average, the following selected full time municipal local health departments were significantly-

Higher:

- Hartford, New Britain, Manchester, Meriden, Middletown

Lower:

- Fairfield, Stamford

References

1. Centers for Disease Control and Prevention (2015) Winnable Battles 2010-2015 Progress Report: HIV Infection, Atlanta, Georgia. https://www.cdc.gov/winnablebattles/targets/pdf/hiv-winnablebattles-progressreport.pdf, accessed on March 14, 2017

2. Centers for Disease Control and Prevention. Breathing Easier. *http://www.cdc.gov/asthma/pdfs/breathing_easier_brochure.pdf*

3. National Heart, Lung and Blood Institute. "What Is COPD?" 5 June 2012. *http://www.nhlbi.nih.gov/health/health-topics/topics/copd,* accessed on March 14, 2017.

4. Centers for Disease Control and Prevention (2017) Arthritis basics, Atlanta, Georgia.

http://www.cdc.gov/arthritis/basics.htm, accessed on March 14, 2017.

5. Centers for Disease Control and Prevention (2017) Arthritis, Quick Stats, Atlanta, Georgia. *http://www.cdc.gov/arthritis/press/quickstats.html*, accessed on March 14, 2017.

6. Centers for Disease Control and Prevention: Diabetes Report Card 2012. *http://www.cdc.gov/diabetes/pubs/pdf/diabetesreportcard.pdf*, accessed on March 15, 2017.

7. Centers for Disease Control and Prevention: Heart Disease Fact Sheet, Atlanta, Georgia. *http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_heart_disease.pdf*, accessed on March 15, 2017.

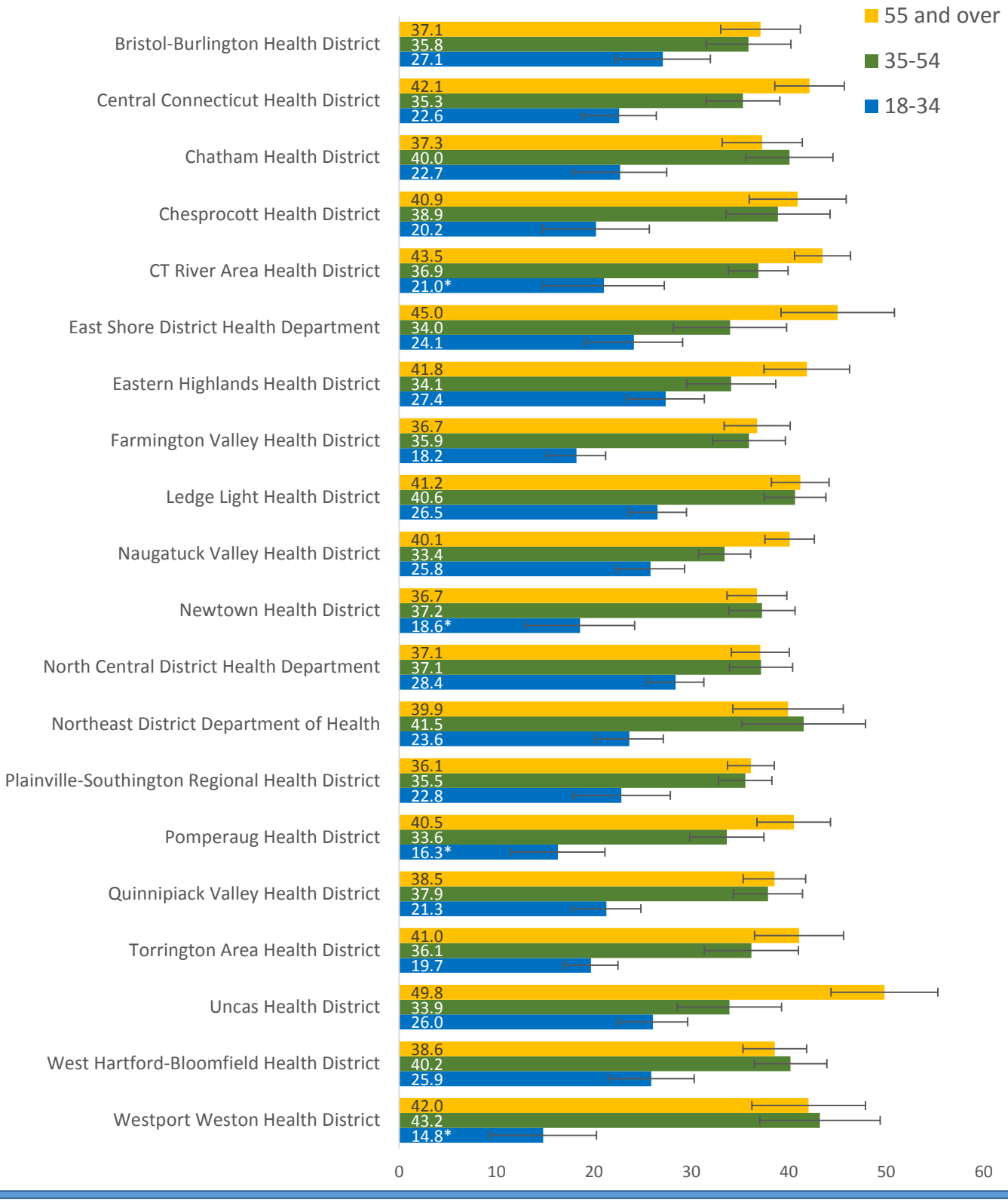
8. Centers for Disease Control and Prevention: Cancer Prevention and Control, Statistics for Different Kinds of Cancer. *http://www.cdc.gov/cancer/dcpc/data/types.htm*

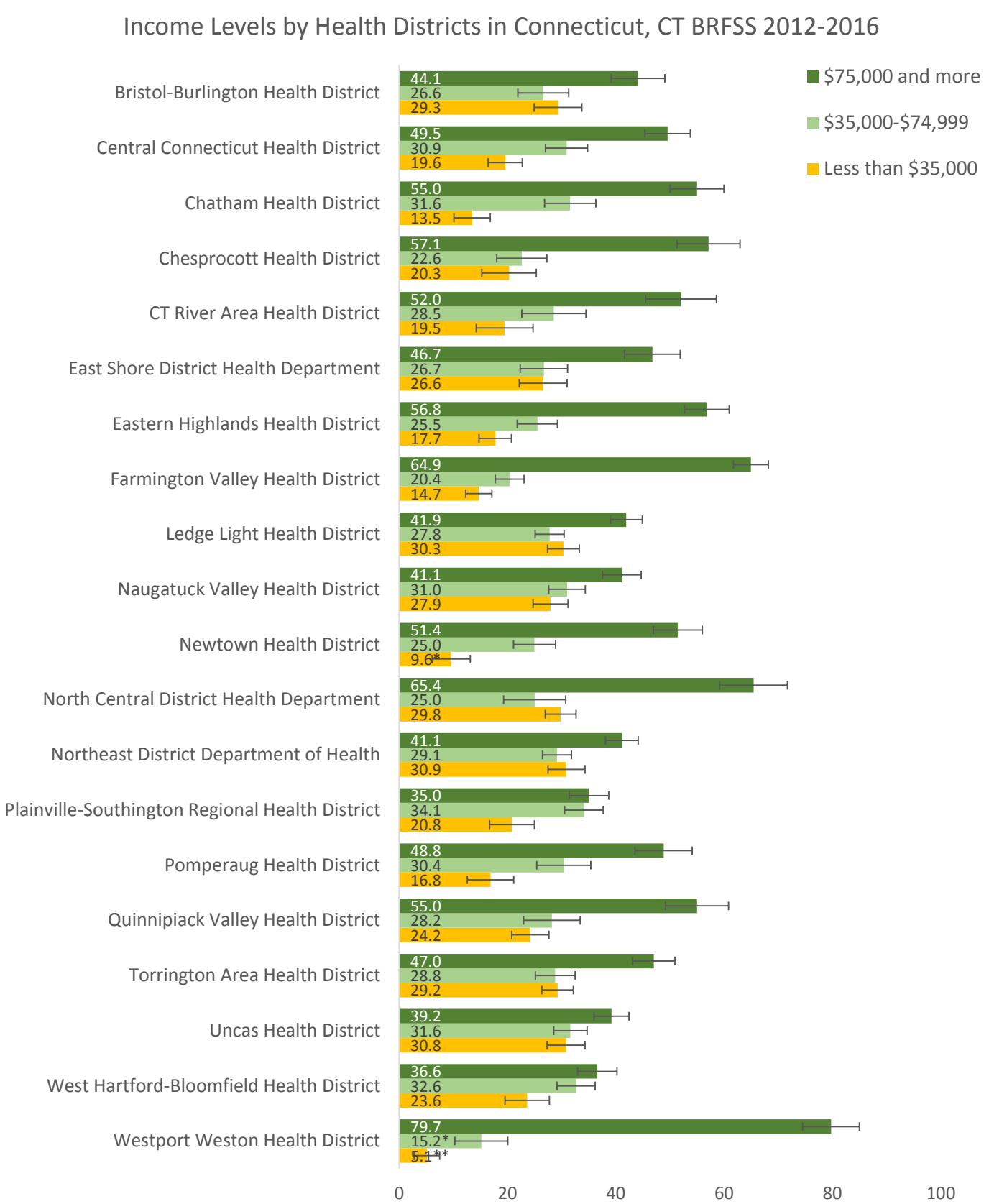
9. National Institute of Mental Health (2016) Depression, National Institute of Mental Health, Bethesda, Maryland.

https://www.nimh.nih.gov/health/topics/depression/index.shtml, accessed March 15, 2017.

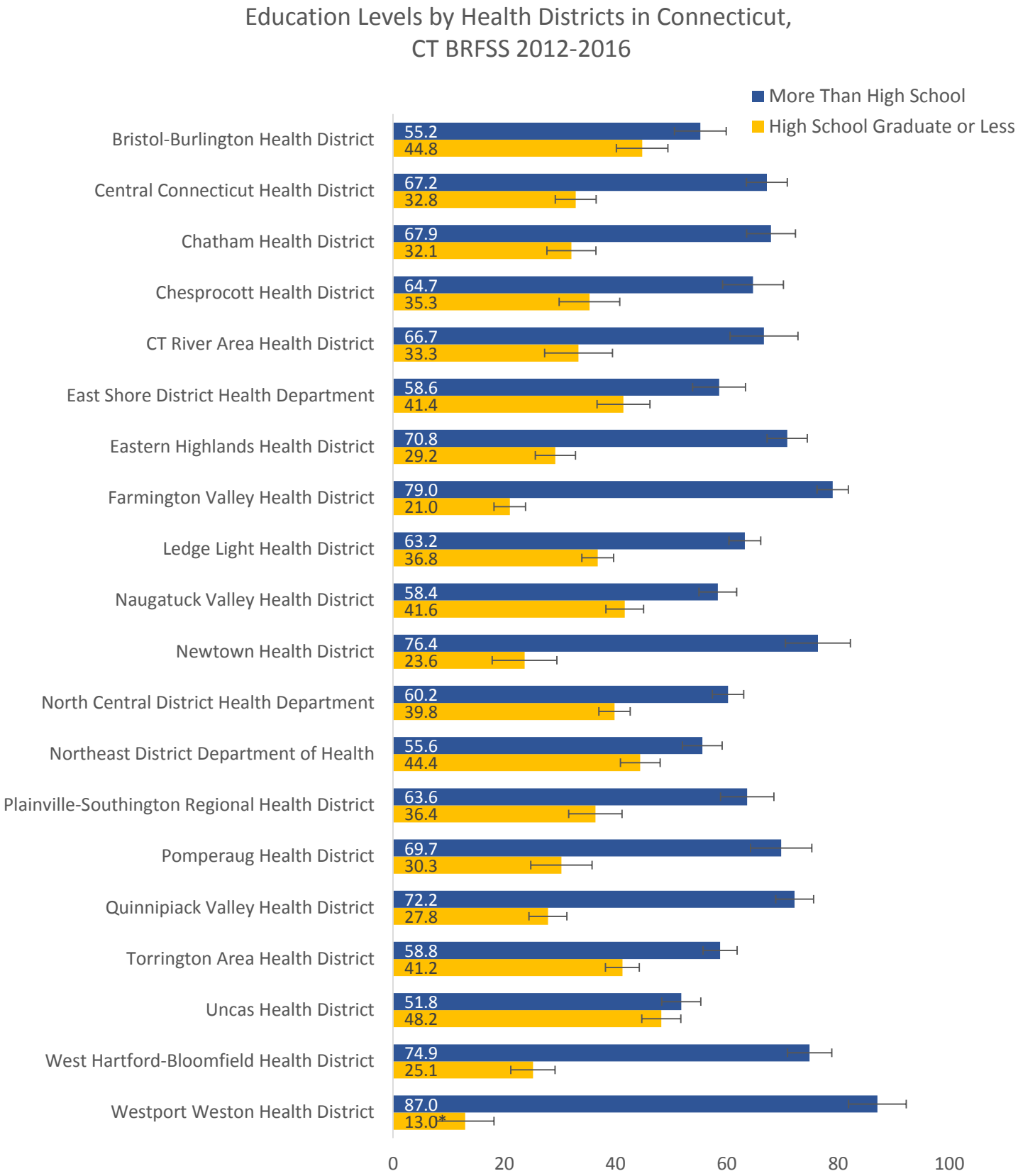
Demographics in Local Health Districts

Age Distribution by Health Districts in Connecticut, CT BRFSS 2012-2016

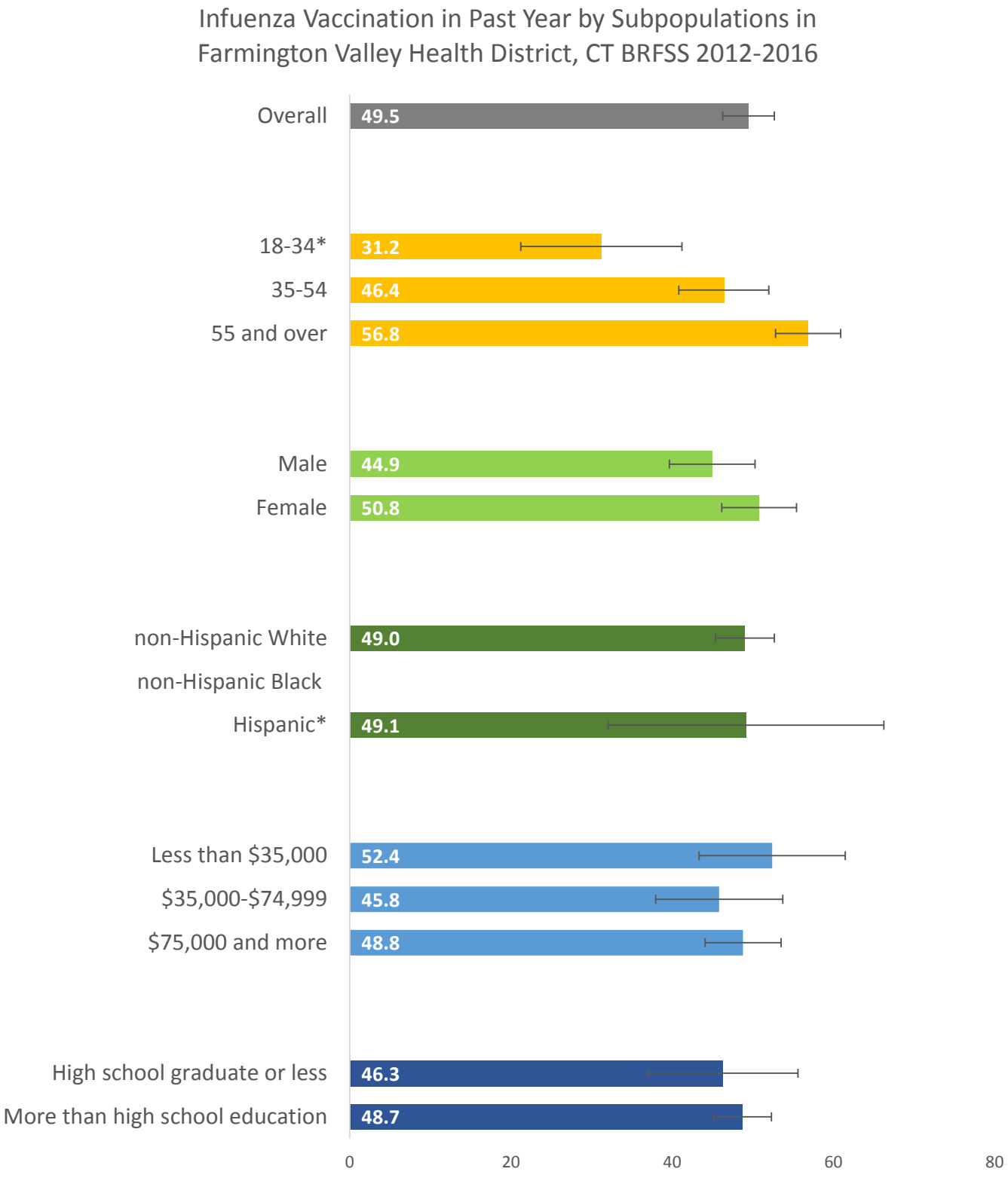



Income Levels by Health Districts in Connecticut, CT BRFSS 2012-2016
$75,000 and more
$35,000-$74,999
Less than $35,000
Bristol-Burlington Health District
44.1
26.6
29.3
Central Connecticut Health District
49.5
30.9
19.6
Chatham Health District
55.0
31.6
13.5
Chesprocott Health District
57.1
22.6
20.3
CT River Area Health District
52.0
28.5
19.5
East Shore District Health Department
46.7
26.7
26.6
Eastern Highlands Health District
56.8
25.5
17.7
Farmington Valley Health District
64.9
20.4
14.7
Ledge Light Health District
41.9
27.8
30.3
Naugatuck Valley Health District
41.1
31.0
27.9
Newtown Health District
51.4
25.0
9.6*
North Central District Health Department
65.4
25.0
29.8
Northeast District Department of Health
41.1
29.1
30.9
Plainville-Southington Regional Health District
35.0
34.1
20.8
Pomperaug Health District
48.8
30.4
16.8
Quinnipiack Valley Health District
55.0
28.2
24.2
Torrington Area Health District
47.0
28.8
29.2
Uncas Health District
39.2
31.6
30.8
West Hartford-Bloomfield Health District
36.6
32.6
23.6
Westport Weston Health District
79.7
15.2*
5.1**
0
20
40
60
80
100

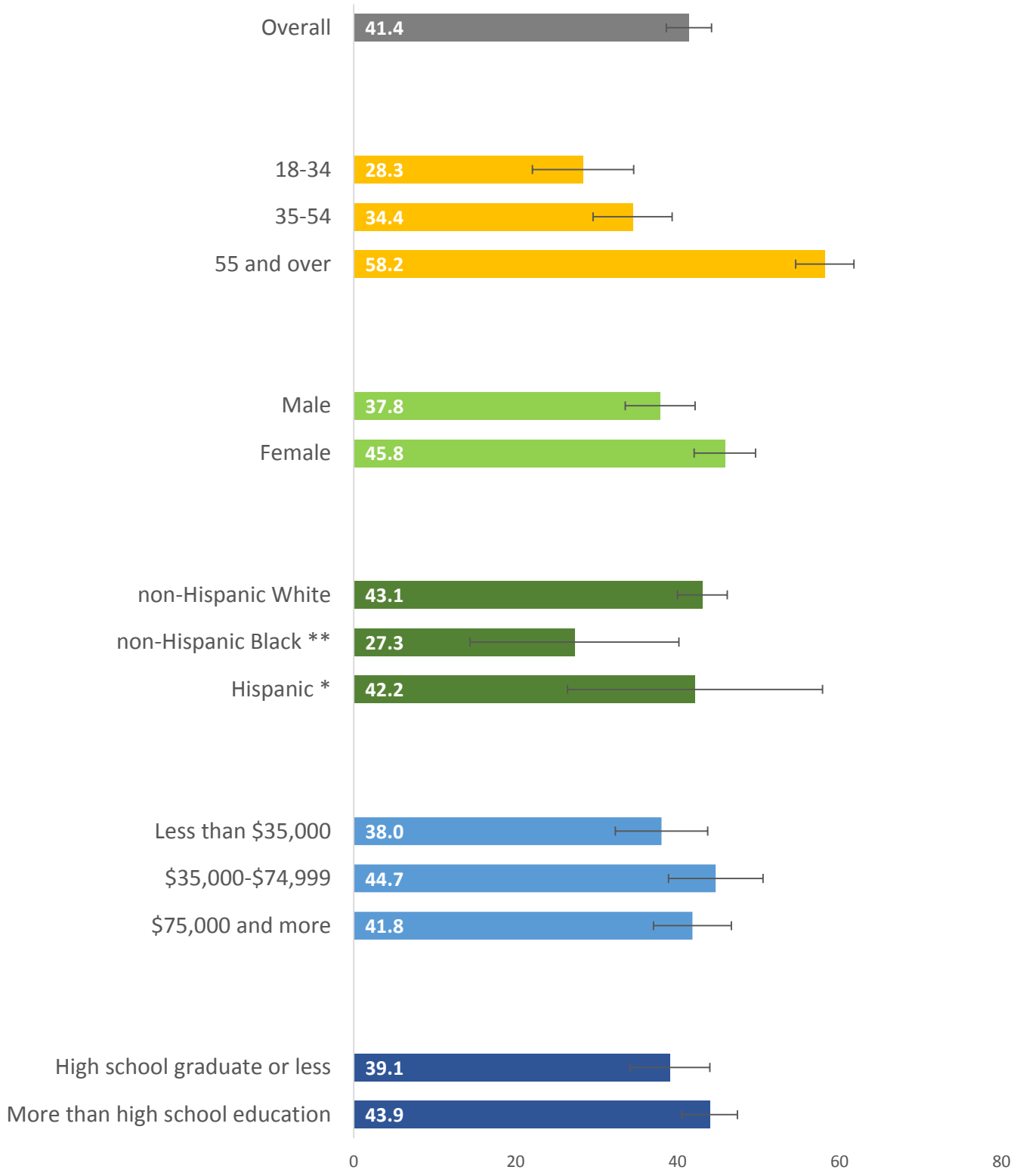
Appendix


Education Levels by Health Districts in Connecticut,
CT BRFSS 2012-2016
More Than High School
High School Graduate or Less
Bristol-Burlington Health District
55.2
44.8
Central Connecticut Health District
67.2
32.8
Chatham Health District
67.9
32.1
Chesprocott Health District
64.7
35.3
CT River Area Health District
66.7
33.3
East Shore District Health Department
58.6
41.4
Eastern Highlands Health District
70.8
29.2
Farmington Valley Health District
79.0
21.0
Ledge Light Health District
63.2
36.8
Naugatuck Valley Health District
58.4
41.6
Newtown Health District
76.4
23.6
North Central District Health Department
60.2
39.8
Northeast District Department of Health
55.6
44.4
Plainville-Southington Regional Health District
63.6
36.4
Pomperaug Health District
69.7
30.3
Quinnipiack Valley Health District
72.2
27.8
Torrington Area Health District
58.8
41.2
Uncas Health District
51.8
48.2
West Hartford-Bloomfield Health District
74.9
25.1
Westport Weston Health District
87.0
13.0*
0
20
40
60
80
100

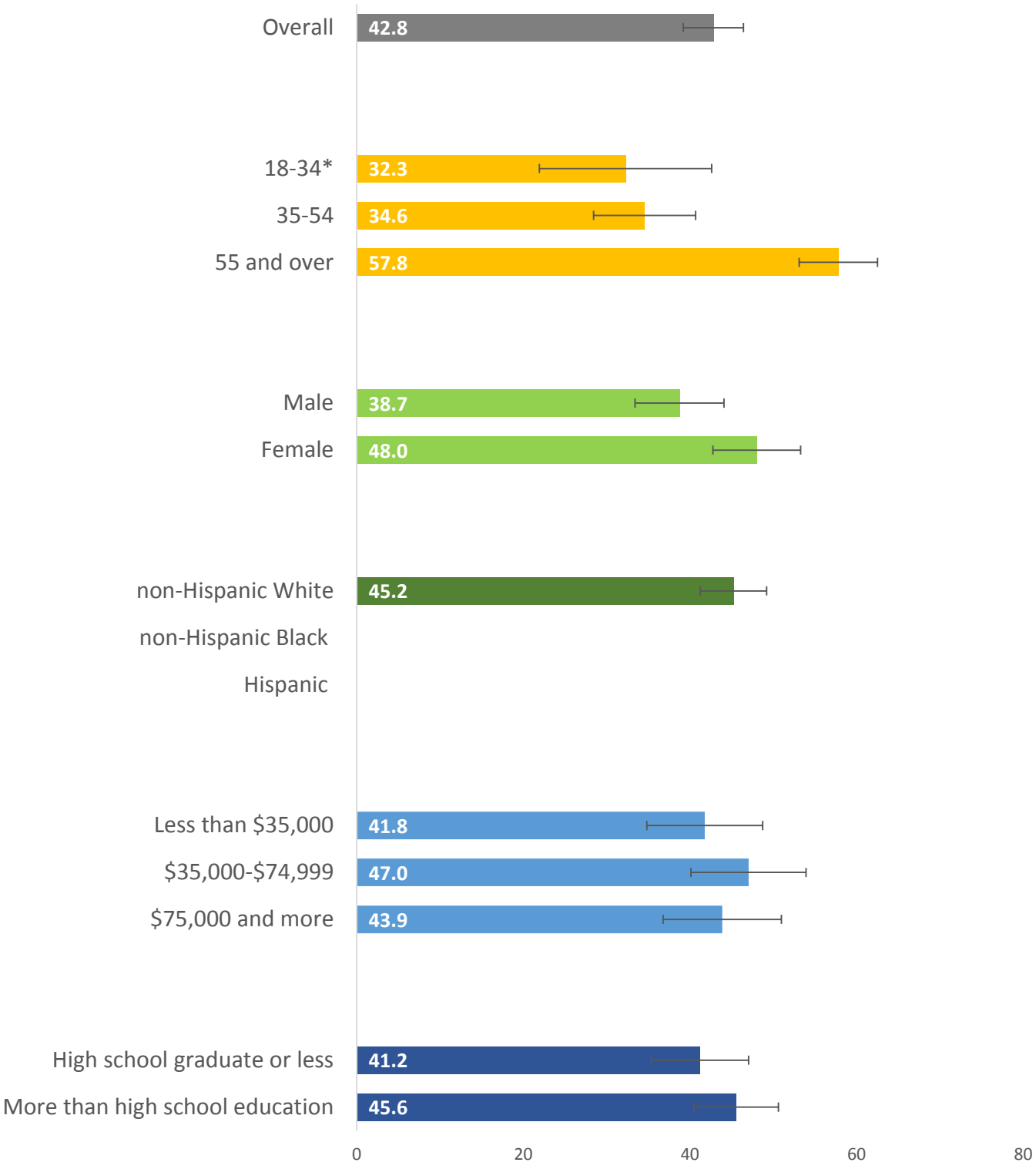
Influenza Vaccination in the Past Year by Local Health District

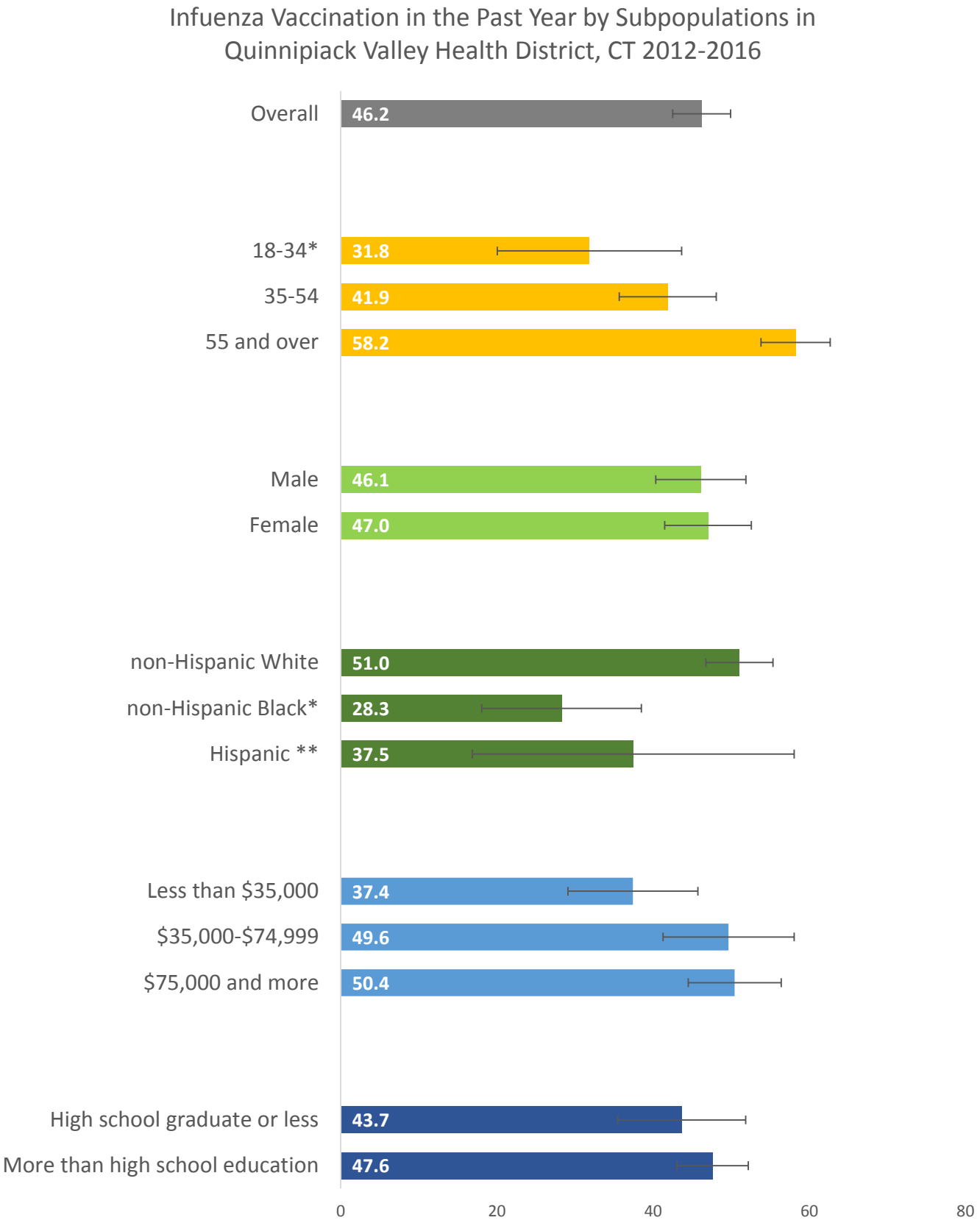


Infuenza Vaccination in the Past Year by Subpopulations in North Central District Health Department, CT BRFSS 2012-2016

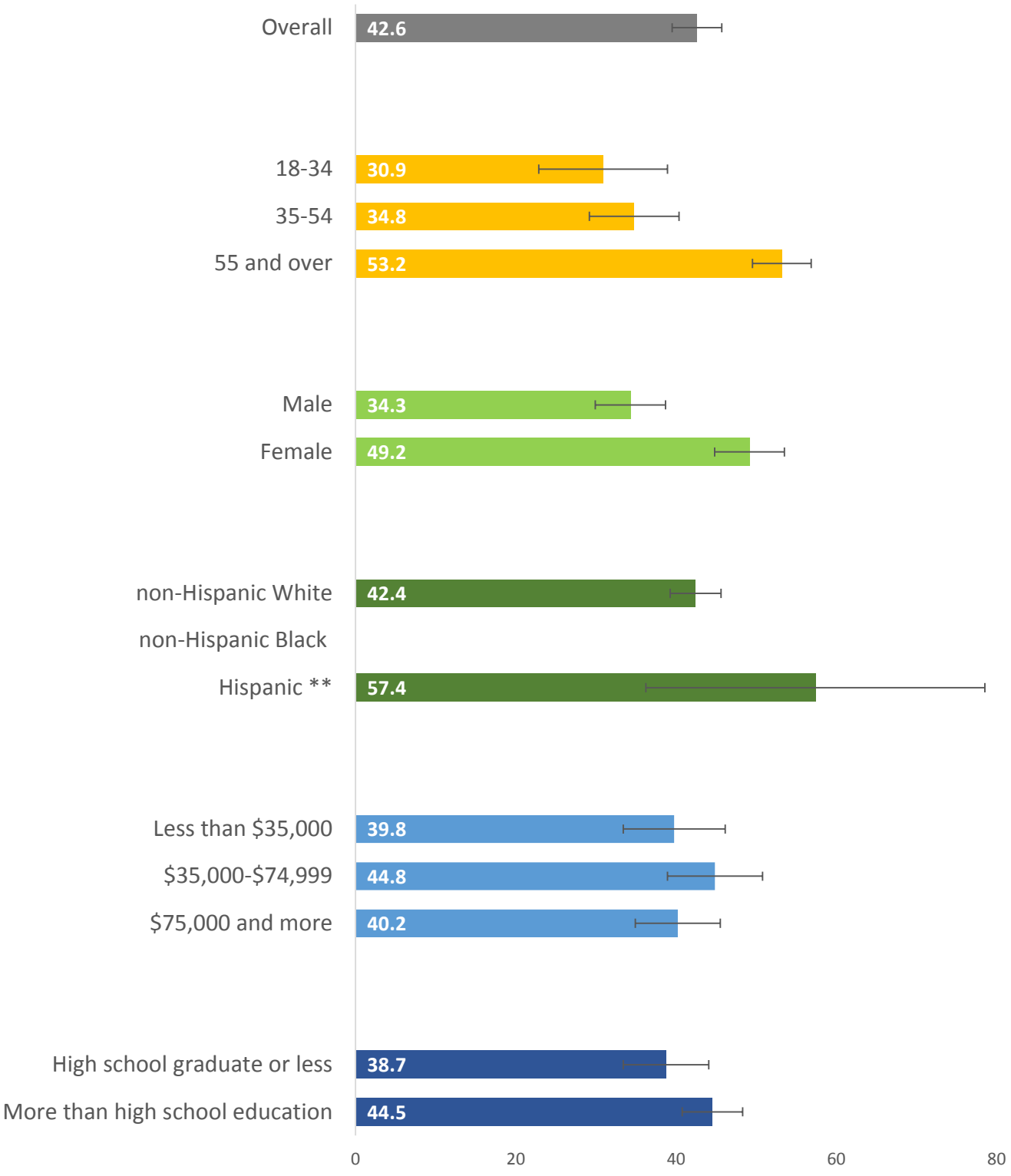


Infuenza Vaccination in the Past Year by Subpopulations in Northeast District Department of Health, CT BRFSS 2012-2016

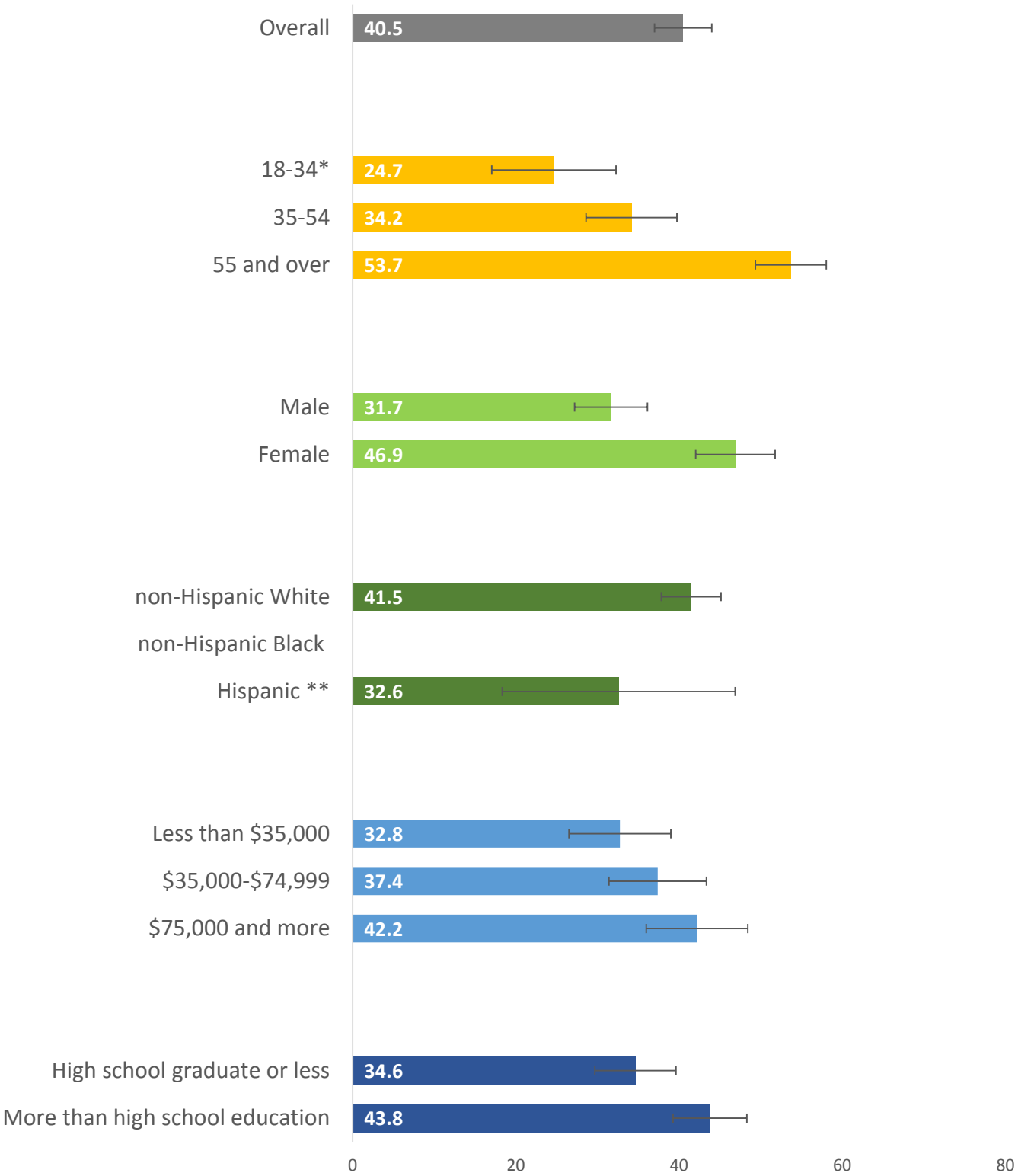


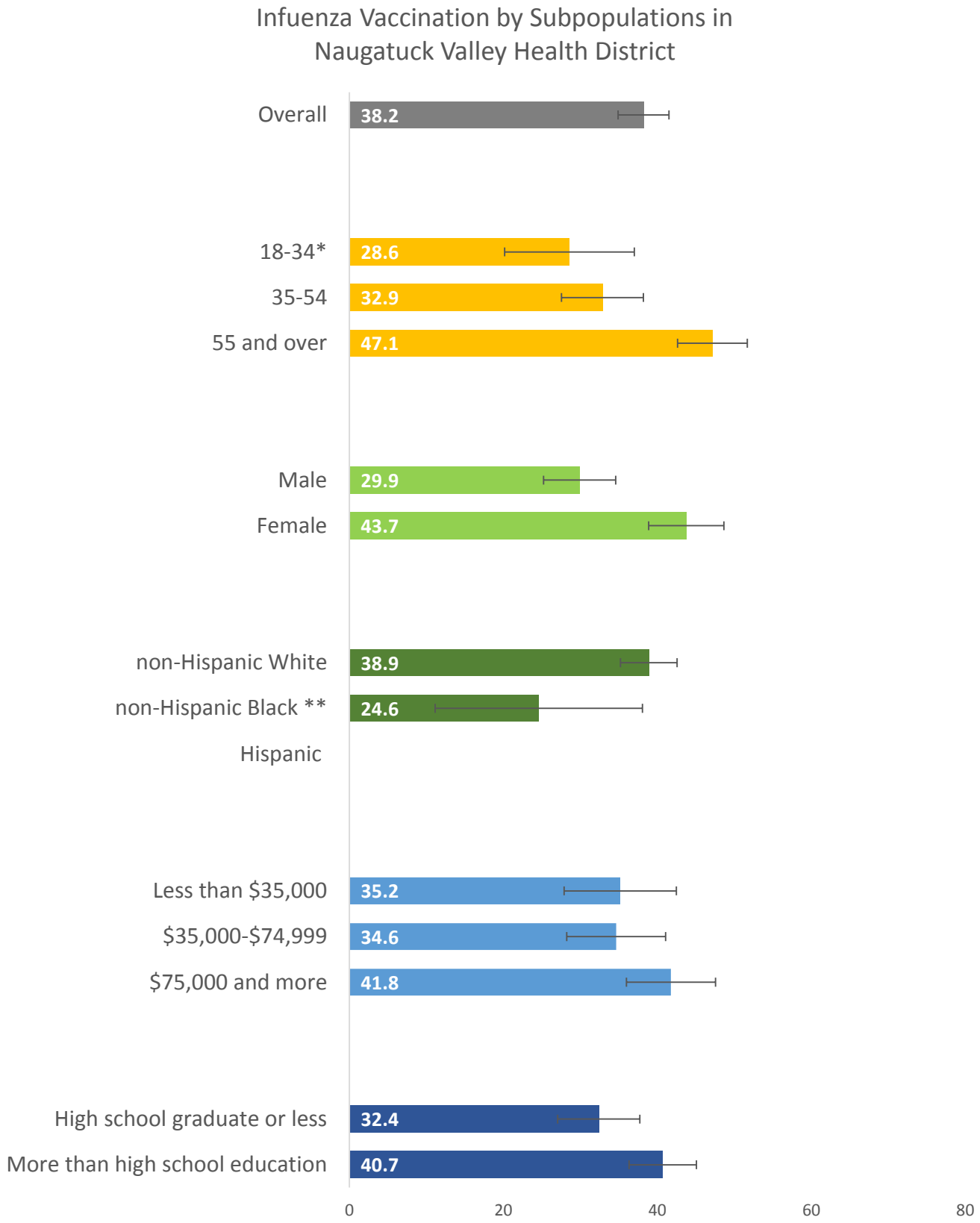

Infuenza Vaccination in the Past Year by Subpopulations in Quinnipiack Valley Health District, CT 2012-2016
Overall
46.2
18-34*
31.8
35-54
41.9
55 and over
58.2
Male
46.1
Female
47.0
non-Hispanic White
51.0
non-Hispanic Black*
28.3
Hispanic **
37.5
Less than $35,000
37.4
$35,000-$74,999
49.6
$75,000 and more
50.4
High school graduate or less
43.7
More than high school education
47.6
0
20
40
60
80

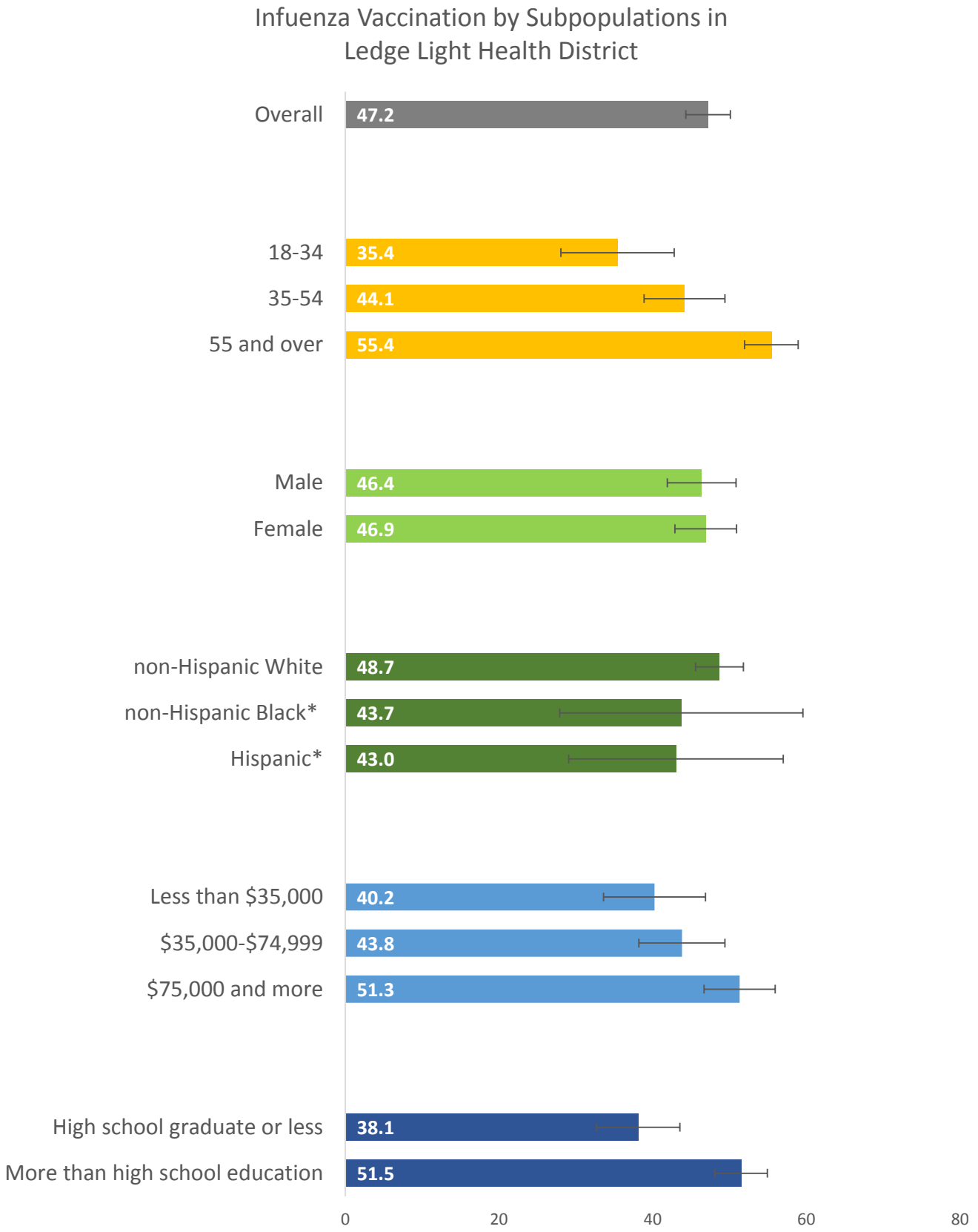
Infuenza Vaccination in the Past Year by Subpopulations in Torrington Area Health, CT 2012-2016



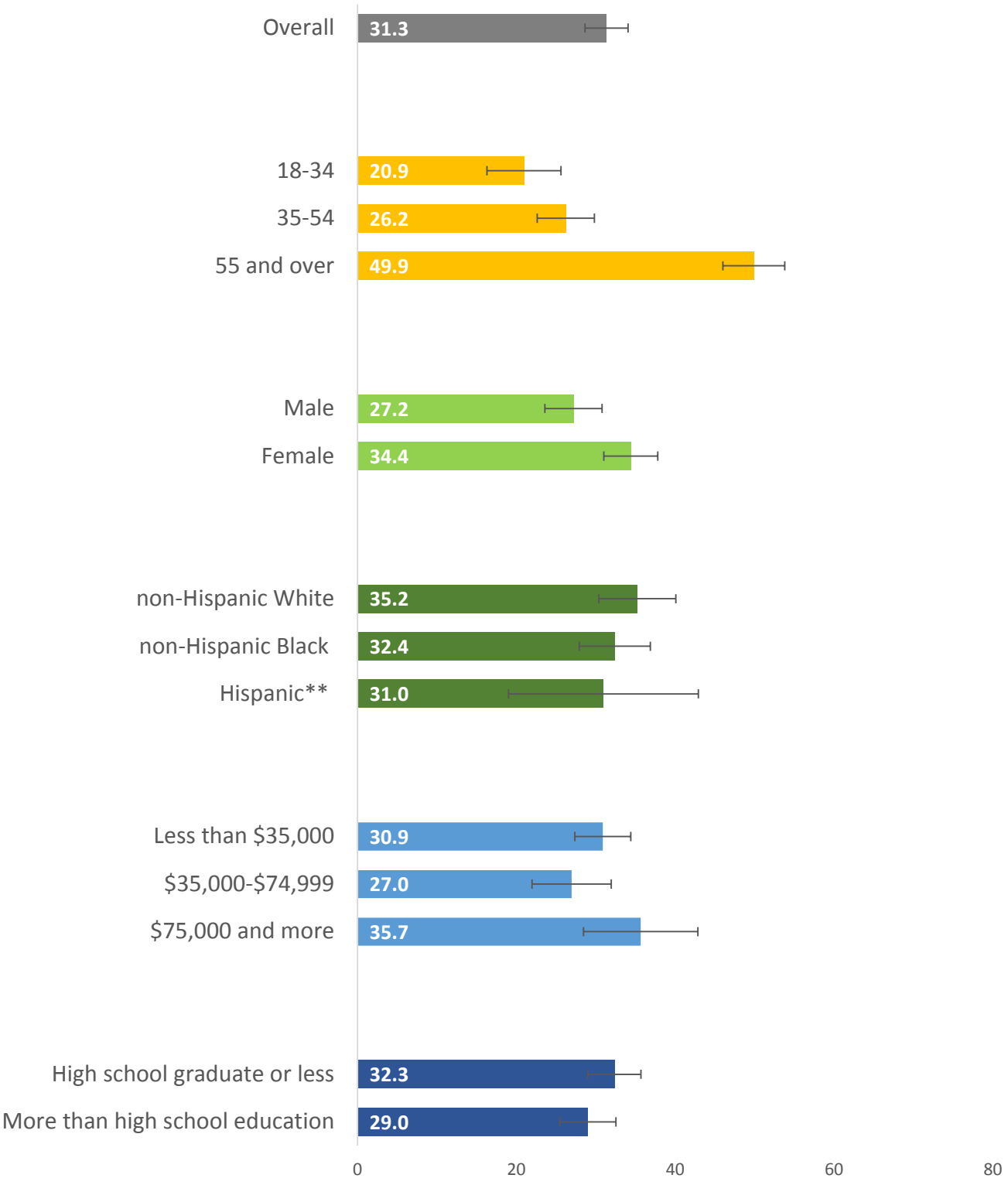
Infuenza Vaccination in the Past Year by Subpopulations in Uncas Health District, CT 2012-2016

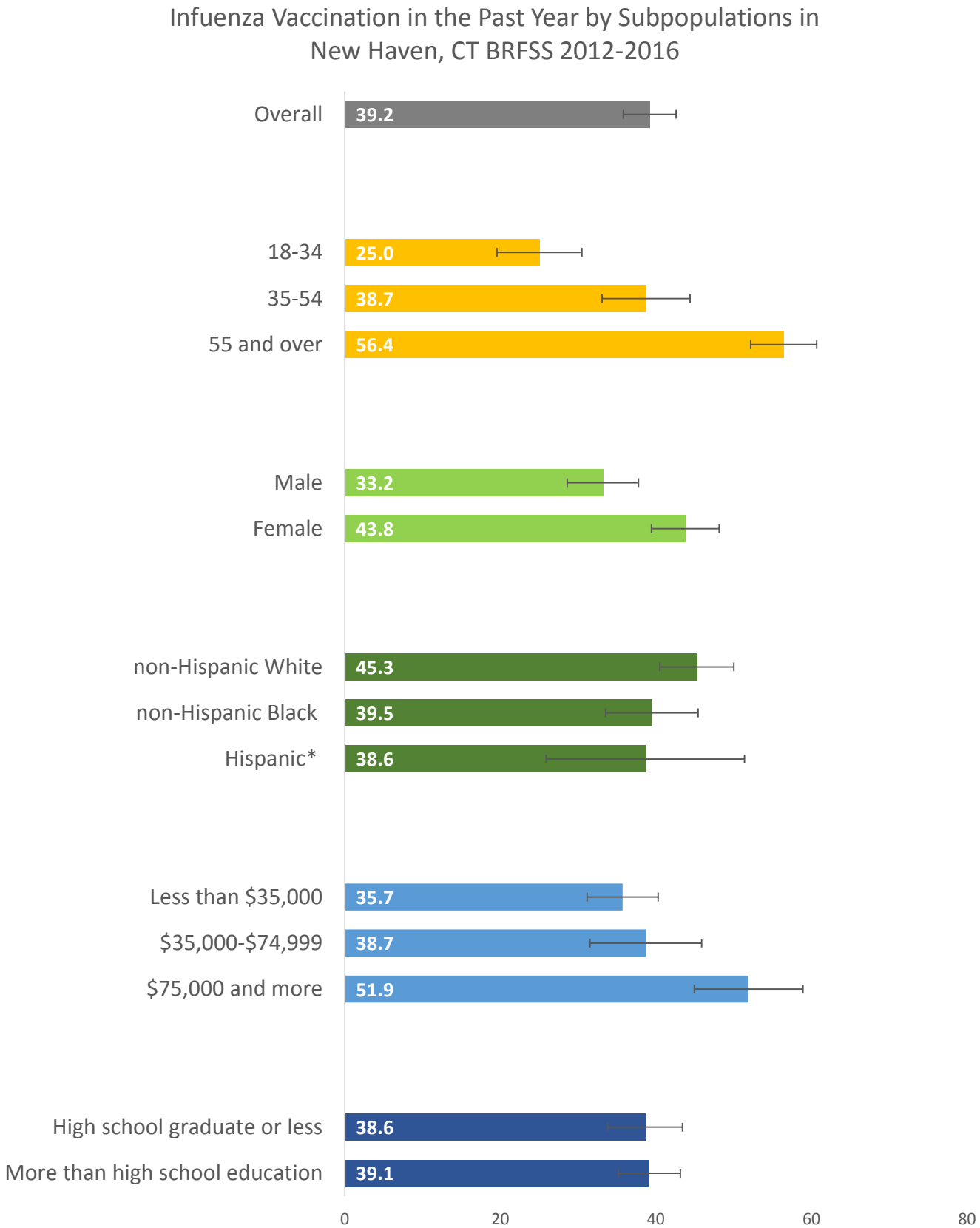



Infuenza Vaccination by Subpopulations in Naugatuck Valley Health District
Overall
38.2
18-34*
28.6
35-54
32.9
55 and over
47.1
Male
29.9
Female
43.7
non-Hispanic White
38.9
non-Hispanic Black **
24.6
Hispanic
Less than $35,000
35.2
$35,000-$74,999
34.6
$75,000 and more
41.8
High school graduate or less
32.4
More than high school education
40.7
0
20
40
60
80


Infuenza Vaccination by Subpopulations in Ledge Light Health District
Overall
47.2
18-34
35.4
35-54
44.1
55 and over
55.4
Male
46.4
Female
46.9
non-Hispanic White
48.7
non-Hispanic Black*
43.7
Hispanic*
43.0
Less than $35,000
40.2
$35,000-$74,999
43.8
$75,000 and more
51.3
High school graduate or less
38.1
More than high school education
51.5
0
20
40
60
80

Infuenza Vaccination in the Past Year by Subpopulations in Bridgeport, CT BRFSS 2012-2016




Infuenza Vaccination in the Past Year by Subpopulations in New Haven, CT BRFSS 2012-2016
Overall
39.2
18-34
25.0
35-54
38.7
55 and over
56.4
Male
33.2
Female
43.8
non-Hispanic White
45.3
non-Hispanic Black
39.5
Hispanic*
38.6
Less than $35,000
35.7
$35,000-$74,999
38.7
$75,000 and more
51.9
High school graduate or less
38.6
More than high school education
39.1
0
20
40
60
80

Infuenza Vaccination in the Past Year by Subpopulations in Hartford, CT BRFSS 2012-2016