



# **Community Health Needs Assessment**

## **Final Summary Report**

**September 2013**

**HOLLERAN**

## TABLE OF CONTENTS

### **Executive Summary**

### **Community Health Needs Assessment Overview**

Hospital & Community Profile

Methodology

### **Secondary Data Profile Overview**

Background

Key findings

Summary of Findings

### **Identification of Community Health Needs**

Appendix A: Secondary Data Profile References

Appendix B: Prioritization Session Participants

## EXECUTIVE SUMMARY

Bristol Hospital led a comprehensive Community Health Needs Assessment (CHNA) to evaluate the health needs of individuals living in and around Bristol, Connecticut beginning in 2013. The purpose of the assessment was to gather information about local health needs and health behaviors. The assessment examined a variety of indicators including risky health behaviors (alcohol use, tobacco use) and chronic health conditions (diabetes, heart disease).

The completion of the CHNA enabled Bristol Hospital to take an in-depth look at its greater community. The findings from the assessment were utilized by Bristol Hospital to prioritize public health issues and develop a community health implementation plan focused on meeting community needs. Bristol Hospital is committed to the people it serves and the communities they live in. Healthy communities lead to lower health care costs, robust community partnerships, and an overall enhanced quality of life. This CHNA Final Summary Report serves as a compilation of the overall findings of each research component.

### Research Components

- Secondary Statistical Data Profile of Bristol, Connecticut
- Bristol Hospital Utilization Data for Behavioral Healthcare
- Bristol Community Prioritization Session

### Prioritized Health Issues

Based on the feedback from community partners including health care providers, public health experts, health and human service agencies, and other community representatives, Bristol Hospital plans to focus community health improvement efforts on the following health priorities:

- Mental Health & Substance/Alcohol Abuse
- Access to Care
- Senior Support
- Overweight/Obesity

### Documentation

A final report of the CHNA was made public on September 30, 2013 and can be found on Bristol Hospital's website. The Bristol Hospital Board of Directors adopted the Summary Report and an Implementation Plan for community health improvement activities on September 12, 2013.

## COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW

## Background

Bristol Hospital is a not-for-profit organization serving the residents of greater Bristol, Connecticut since 1921. It is a 134-bed facility with a medical staff of more than 200 physicians, representing over 40 specialties. Bristol Hospital offers a full range of services including an emergency center, a surgical center, a single-room-model maternity unit, an award-winning ICU, a skilled nursing facility, a spine and pain center, a gastroenterology institute, behavioral health services, and an advanced diagnostic imaging department. The mission of Bristol Hospital is to “Enhance the health and well-being of our community. We will provide safe, quality care and services to our patients through our continuum of services and health promotions. We will collaborate with health professional and other organizations as advocates for our community. We will provide the opportunity for growth to our medical staff and employees in an environment where each individual is respected and valued.” The vision of Bristol Hospital is to “aspire to be recognized as the best community healthcare provider in Connecticut.” To achieve this vision, Bristol Hospital utilizes a core set of values which:

- Creates a culture of safety, quality and services that is embraced as an individual and team responsibility
- Ensures a user-friendly continuum modeled on providing patient-centered care and services
- Continually assesses and promotes new services and technology
- Serves as the responsible steward and advocate for the health of our community

Bristol Hospital defined their primary service area as the city of Bristol, located in Hartford County, Connecticut. Bristol is a suburban city with a population of 60,477. The population is slightly older and comprised primarily of English-speaking, White/Caucasian residents. The conclusions drawn from the various research components are based on findings representing all of Bristol.

## Methodology

The CHNA was comprised of quantitative research components. A brief synopsis of the research components is included below with further details provided throughout the document:

### Quantitative Data:

- A Statistical Secondary Data Profile depicting population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates and other health statistics for Bristol, Connecticut was compiled.
- Hospital Utilization Data for patients presenting to Bristol Hospital with behavioral health issues was collected and analyzed.

## Research Partner

Bristol Hospital contracted with Holleran, an independent research and consulting firm located in Lancaster, Pennsylvania, to conduct research in support of the CHNA. Holleran has 21 years of experience in conducting public health research and community health assessments. The firm provided the following assistance:

- Collected and interpreted secondary data

- Facilitated a Prioritization and Planning Session
- Prepared all reports

Community engagement and feedback were an integral part of the CHNA process. Bristol Hospital sought community input through the inclusion of community leaders in the prioritization and implementation planning process. Public health and health care professionals shared knowledge and expertise about health issues, and leaders and representatives of non-profit and community-based organizations provided insight on the community, including the medically underserved, low income, and minority populations.

Following the completion of the CHNA research, Bristol Hospital prioritized community health issues and developed an implementation plan to address prioritized community needs.

### **Research Limitations**

It should be noted that the availability and time lag of secondary data may present some research limitations. Bristol Hospital sought to mitigate limitations by including representatives of diverse and underserved populations through the prioritization and planning session.

## SECONDARY DATA PROFILE OVERVIEW

### Background

One of the initial undertakings of the CHNA was to create a Secondary Data Profile. Secondary data is comprised of data obtained from existing resources and includes demographic and household statistics, education and income measures, morbidity and mortality rates, health indicators, among other data points. The data was gathered and integrated into a graphical report to portray the current health and socio-economic status of residents in Bristol, Connecticut.

Secondary data was collected from reputable sources including the U.S. Census Bureau, Centers for Disease Control and Prevention (CDC), Healthy People 2020, and the Connecticut Department of Public Health. Data sources are listed throughout the report and a full reference list is included in Appendix A. The data represents a point in time study using the most recent data possible. When available, state and national comparisons are provided as benchmarks.

The profile details data covering the following areas:

- Demographic/Socioeconomic Statistics
- Mortality Statistics
- Maternal & Child Health Statistics
- Sexually Transmitted Illness
- Communicable Disease Statistics
- Mental Health Statistics
- Cancer Statistics
- Environmental Health Statistics
- Health Care Access Statistics
- Crime Statistics

A summary section is included at the end of the report to highlight strengths, opportunities, and differences for the town of Bristol. State and national comparative data is generally what determines if an indicator is a strength or opportunity within the community. However, it is still important for readers to interpret the data and make appropriate conclusions independent of the state and national comparisons.

**Secondary Data Profile Key Findings**

**Population Statistics**

Table 1. Overall Population (2010)

	U.S.		Connecticut		Bristol	
Population	308,745,538		3,574,097		60,477	
Population Change (00' - 10')	9.7%		4.9%		0.7%	
Gender	n	%	n	%	n	%
Male	151,781,326	49.2	1,739,614	48.7	29,143	48.2
Female	156,964,212	50.8	1,834,483	51.3	31,334	51.8

Source: U.S. Census Bureau, 2010

**Population Change**

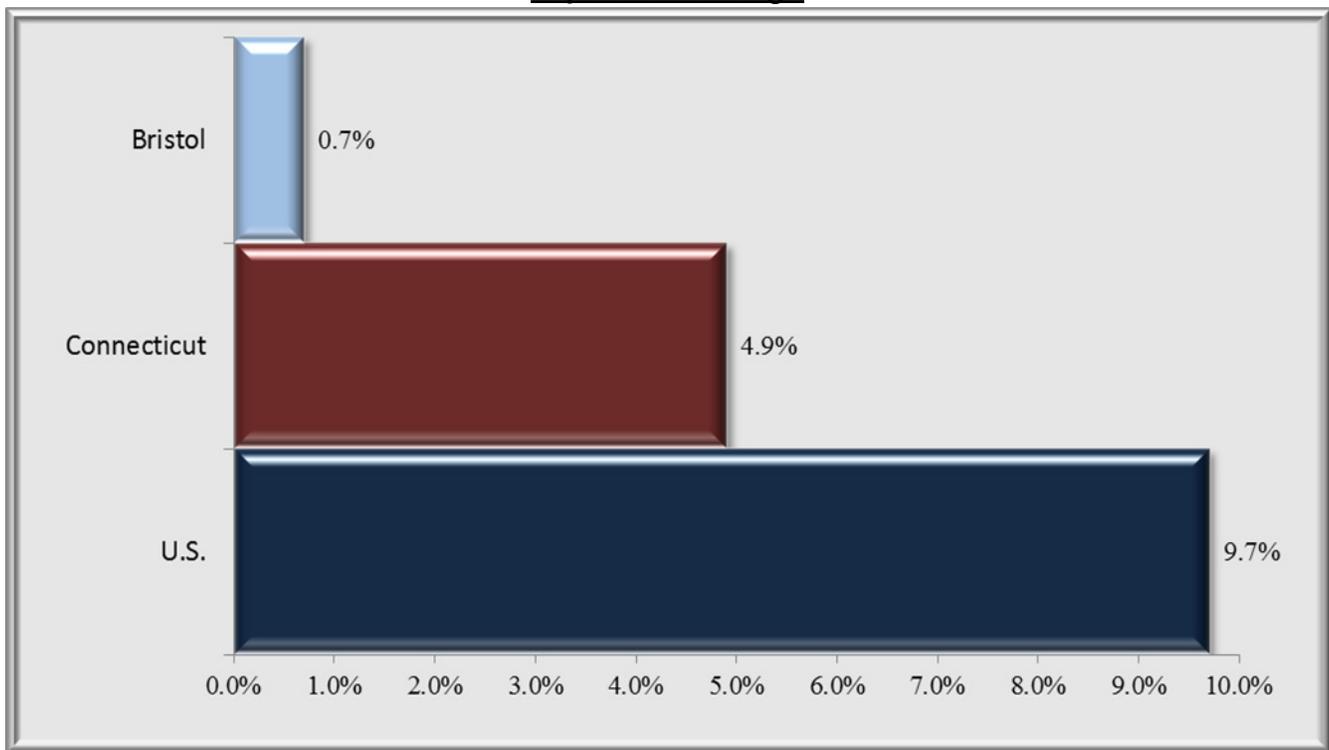


Figure 1. Percent population change, Bristol compared to Connecticut and the U.S. (2000 - 2010).

Table 2. Population by Age (2010)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Under 5	20,201,362	6.5	202,106	5.7	3,416	5.6
5 – 9	20,348,657	6.6	222,571	6.2	3,482	5.8
10 – 14	20,677,194	6.7	240,265	6.7	3,747	6.2
15 – 19	22,040,343	7.1	250,834	7.0	3,550	5.9
20 – 24	21,585,999	7.0	227,898	6.4	3,558	5.9
25 – 29	21,101,849	6.8	214,145	6.0	4,309	7.1
30 – 34	19,962,099	6.5	206,232	5.8	3,885	6.4
35 – 39	20,179,642	6.5	222,401	6.2	3,962	6.6
40 – 44	20,890,964	6.8	262,037	7.3	4,437	7.3
45 – 49	22,708,591	7.4	291,272	8.1	4,785	7.9
50 – 54	22,298,125	7.2	284,325	8.0	4,920	8.1
55 – 59	19,664,805	6.4	240,157	6.7	3,986	6.6
60 – 64	16,817,924	5.4	203,295	5.7	3,414	5.6
65 – 69	12,435,263	4.0	149,281	4.2	2,483	4.1
70 – 74	9,278,166	3.0	105,663	3.0	1,810	3.0
75 – 79	7,317,795	2.4	89,252	2.5	1,661	2.7
80 – 84	5,743,327	1.9	77,465	2.2	1,438	2.4
85 and over	5,493,433	1.8	84,898	2.4	1,634	2.7
<b>Median Age</b>	<b>37.2</b>		<b>40.0</b>		<b>40.3</b>	
<b>% 18 years and over</b>	<b>76.0%</b>		<b>77.1%</b>		<b>78.6%</b>	
<b>% 65 years and over</b>	<b>13.0%</b>		<b>14.2%</b>		<b>14.9%</b>	

Source: U.S. Census Bureau, 2010

Table 3. Racial Breakdown (2010)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
White	223,553,265	72.4	2,772,410	77.6	53,065	87.7
Black/African American	38,929,319	12.6	362,296	10.1	2,323	3.8
American Indian/ Alaska Native	2,932,248	0.9	11,256	0.3	117	0.2
Asian	14,674,252	4.8	135,565	3.8	1,173	1.9
Native Hawaiian or Other Pacific Islander	540,013	0.2	1,428	0.0	10	0.0
Two or more races	9,009,073	2.9	92,676	2.6	1,537	2.5
Hispanic or Latino <sup>a</sup>	50,477,594	16.3	479,087	13.4	5,829	9.6

Source: U.S. Census Bureau, 2010

<sup>a</sup> Hispanic/Latino residents can be of any race, for example, White Hispanic or Black/African-American Hispanic

Table 4. Language Spoken at Home, 5 Years Old and Older (2009 - 2011)

	U.S.	Connecticut	Bristol
Population 5 years old and over	289,077,942	3,372,311	57,281
English only	79.4%	78.8%	83.1%
Language other than English	20.6%	21.2%	16.9%
Speak English less than "very well"	8.7%	8.4%	6.4%
Spanish	12.8%	10.7%	6.9%
Speak English less than "very well"	5.7%	4.6%	2.8%
Other Indo-European languages	3.7%	7.6%	8.3%
Speak English less than "very well"	1.2%	2.6%	3.0%
Asian and Pacific Islander languages	3.2%	2.2%	1.3%
Speak English less than "very well"	1.6%	1.0%	0.6%
Other Languages	0.9%	0.6%	0.4%
Speak English less than "very well"	0.3%	0.2%	0.1%

Source: U.S. Census Bureau, n.d.

**Household Statistics**

Table 5. Households by Occupancy (2010)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Total housing units	131,704,730	100.0	1,487,891	100.0	27,011	100.0
Occupied units	116,716,292	88.6	1,371,087	92.1	25,320	93.7
Owner-occupied	75,986,074	65.1	925,286	67.5	16,387	64.7
Renter-occupied	40,730,218	34.9	445,801	32.5	8,933	35.3
Vacant units	14,988,438	11.4	116,804	7.9	1,691	6.3

Source: U.S. Census Bureau, 2010

**Vacant Housing Units**

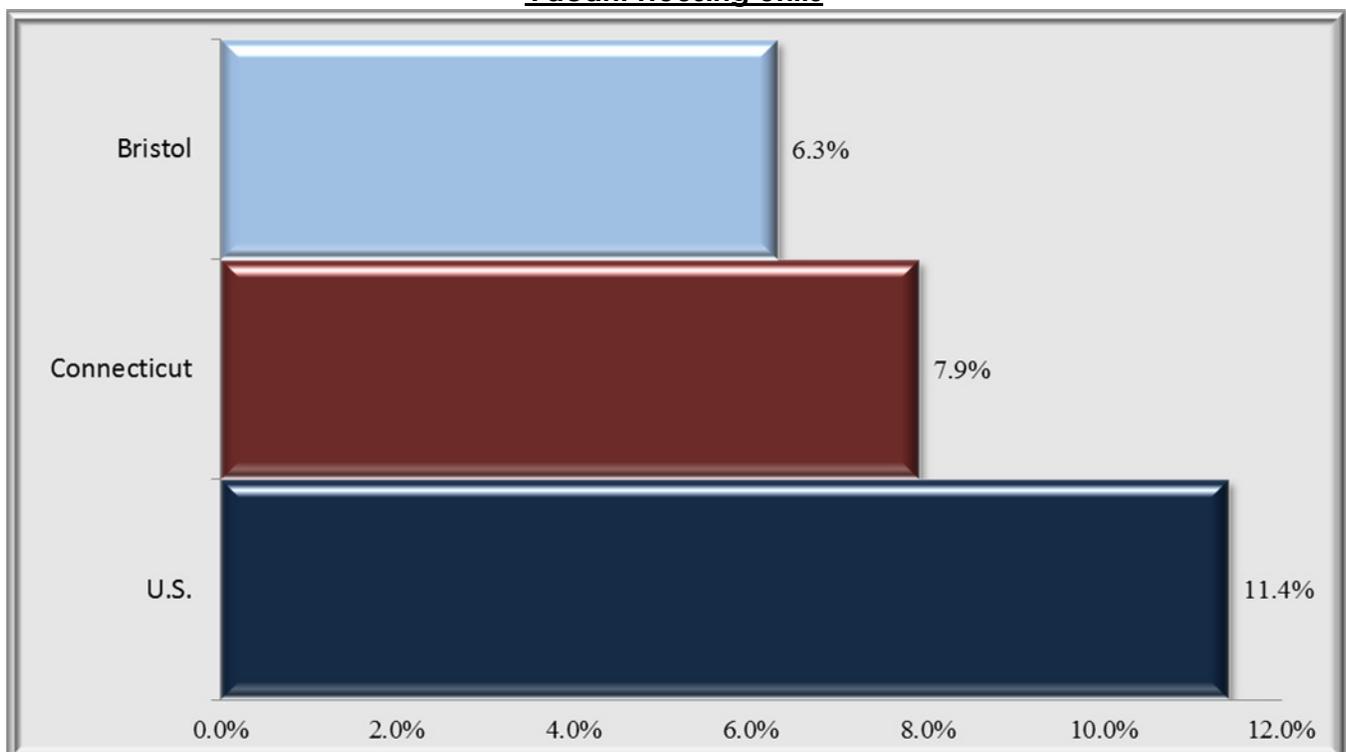


Figure 2. Percentage of vacant housing units, Bristol compared to Connecticut and the U.S. (2010).

Table 6. Households by Value for Owner-Occupied Units (2009 - 2011)

	U.S.	Connecticut	Bristol
--	------	-------------	---------

	n	%	n	%	n	%
Less than \$50,000	6,477,312	8.6	17,014	1.8	280	1.7
\$50,000 to \$99,999	11,489,800	15.3	21,317	2.3	365	2.2
\$100,000 to \$149,999	11,997,911	16.0	58,439	6.3	2,040	12.4
\$150,000 to \$199,999	11,417,607	15.2	129,744	14.0	4,409	26.8
\$200,000 to \$299,999	13,930,323	18.5	274,604	29.6	7,074	43.0
\$300,000 to \$499,999	11,943,665	15.9	262,712	28.3	1,978	12.0
\$500,000 to \$999,999	6,295,161	8.4	120,493	13.0	223	1.4
\$1,000,000 or more	1,572,273	2.1	43,470	4.7	72	0.4
<b>Median value</b>	<b>\$179,500</b>		<b>\$285,800</b>		<b>\$214,500</b>	

Source: U.S. Census Bureau, n.d.

**Median Value for Owner-Occupied Units**

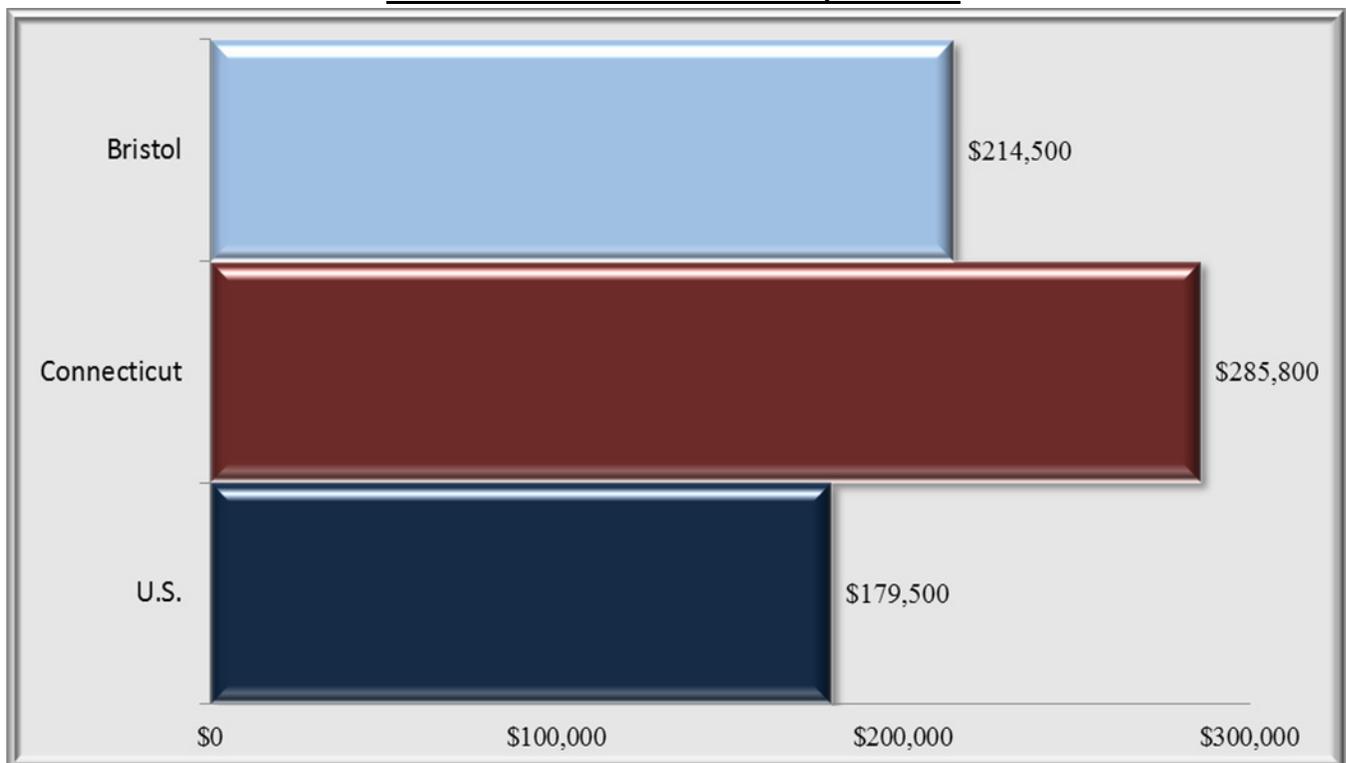


Figure 3. Median value for owner-occupied units, Bristol compared to Connecticut and the U.S. (2009 - 2011).

Table 7. Households by Selected Characteristics (2009 - 2011)

Selected Characteristics	U.S.	Connecticut	Bristol
--------------------------	------	-------------	---------

Lacking complete plumbing facilities	0.6%	0.4%	0.6%
Lacking complete kitchen facilities	1.0%	0.7%	0.7%
No telephone service available <sup>a</sup>	2.5%	1.4%	1.3%

Source: U.S. Census Bureau, n.d.

<sup>a</sup> Telephone service includes both landline and cell phone service

Table 8. Households by Type (2010)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Total households	116,716,292	100.0	1,371,087	100.0	25,320	100.0
Average household size	2.58	--	2.52	--	2.35	--
Average family size	3.14	--	3.08	--	2.95	--
Family households	77,538,296	66.4	908,661	66.3	15,833	62.5
Male householder, no wife	5,777,570	5.0	59,675	4.4	1,214	4.8
With own children under 18 yrs.	2,789,424	2.4	26,178	1.9	544	2.1
Female householder, no husband	15,250,349	13.1	176,973	12.9	3,230	12.8
With own children under 18 yrs.	8,365,912	7.2	97,651	7.1	1,803	7.1
Husband-wife families	56,510,377	48.4	672,013	49.0	11,389	45.0
Nonfamily households	39,177,996	33.6	462,426	33.7	9,487	37.5
Householder living alone	31,204,909	26.7	373,648	27.3	7,691	30.4

Source: U.S. Census Bureau, 2010

Table 9. Marital Status, 15 Years and Over (2009 - 2011)

	U.S.	Connecticut	Bristol
Never married	32.0%	32.4%	30.2%
Now married, except separated	49.0%	49.3%	48.4%
Separated	2.2%	1.5%	0.7%
Widowed	6.0%	6.2%	7.4%
Divorced	10.8%	10.6%	13.4%

Source: U.S. Census Bureau, n.d.

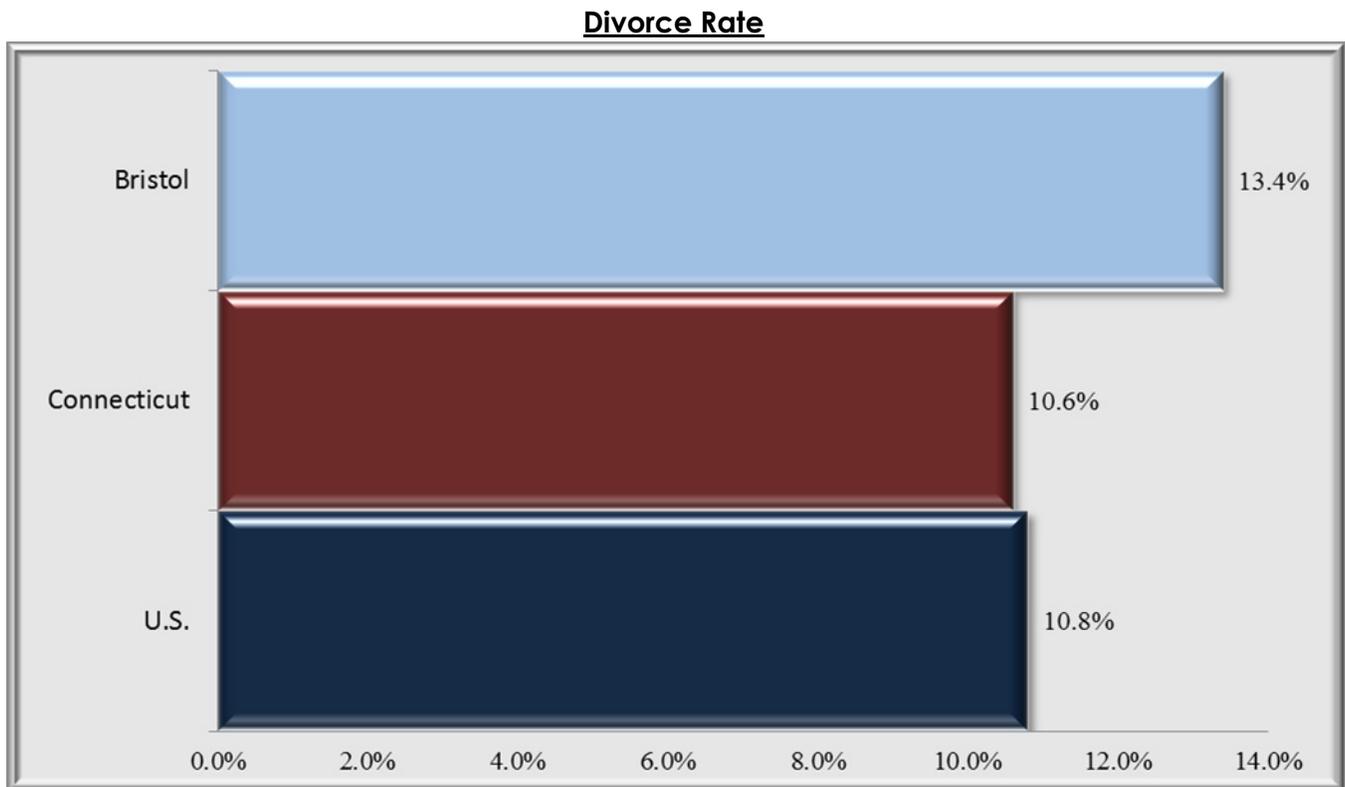


Figure 4. Divorce rate, Bristol compared to Connecticut and the U.S. (2009 - 2011).

## Income Statistics

Table 10. Household and Family Income in 2009 - 2011 Inflation-Adjusted Dollars

<b>Household Income</b>	<b>U.S.</b>		<b>Connecticut</b>		<b>Bristol</b>	
Total households	114,931,864		1,359,404		24,978	
	n	%	n	%	n	%
Less than \$10,000	8,529,677	7.4	77,277	5.7	1,584	6.3
\$10,000 to \$14,999	6,472,374	5.6	56,969	4.2	975	3.9
\$15,000 to \$24,999	12,655,735	11.0	114,773	8.4	2,595	10.4
\$25,000 to \$34,999	12,136,499	10.6	108,338	8.0	2,445	9.8
\$35,000 to \$49,999	15,964,063	13.9	156,771	11.5	3,468	13.9
\$50,000 to \$74,999	20,987,130	18.3	228,341	16.8	4,975	19.9
\$75,000 to \$99,999	13,829,482	12.0	180,573	13.3	3,787	15.2
\$100,000 to \$149,999	14,188,747	12.3	222,896	16.4	3,281	13.1
\$150,000 to \$199,999	5,214,111	4.5	99,977	7.4	1,174	4.7
\$200,000 or more	4,954,046	4.3	113,489	8.3	694	2.8
<b>Median income</b>	<b>\$51,484</b>		<b>\$67,427</b>		<b>\$56,155</b>	
<b>Mean income</b>	<b>\$70,909</b>		<b>\$94,088</b>		<b>\$68,784</b>	
<b>Family Income</b>	<b>U.S.</b>		<b>Connecticut</b>		<b>Bristol</b>	
Families	76,427,605		903,946		15,530	
<b>Median income</b>	<b>\$62,735</b>		<b>\$84,558</b>		<b>\$70,615</b>	
<b>Mean income</b>	<b>\$82,489</b>		<b>\$112,444</b>		<b>\$81,458</b>	
<b>Worker Earnings</b>	<b>U.S.</b>		<b>Connecticut</b>		<b>Bristol</b>	
<b>Median earnings</b>	<b>\$29,819</b>		<b>\$36,911</b>		<b>\$36,411</b>	
Median earnings for male full-time, year-round	\$47,208		\$61,556		\$51,514	
Median earnings for female full-time, year-round	\$37,199		\$46,677		\$44,101	

Source: U.S. Census Bureau, n.d.

Table 11. Social Assistance Enrollment (2009 - 2011)

	<b>U.S.</b>	<b>Connecticut</b>	<b>Bristol</b>
With supplemental security income	4.7%	3.6%	2.6%
Mean supplemental security income	\$8,811	\$8,982	\$7,970
With cash public assistance	2.8%	3.1%	4.9%
Mean cash public assistance income	\$3,860	\$4,496	\$3,126
With Food Stamps/SNAP benefits in the past 12 months	11.7%	9.8%	12.3%

Source: U.S. Census Bureau, n.d.

**Median Household Income**

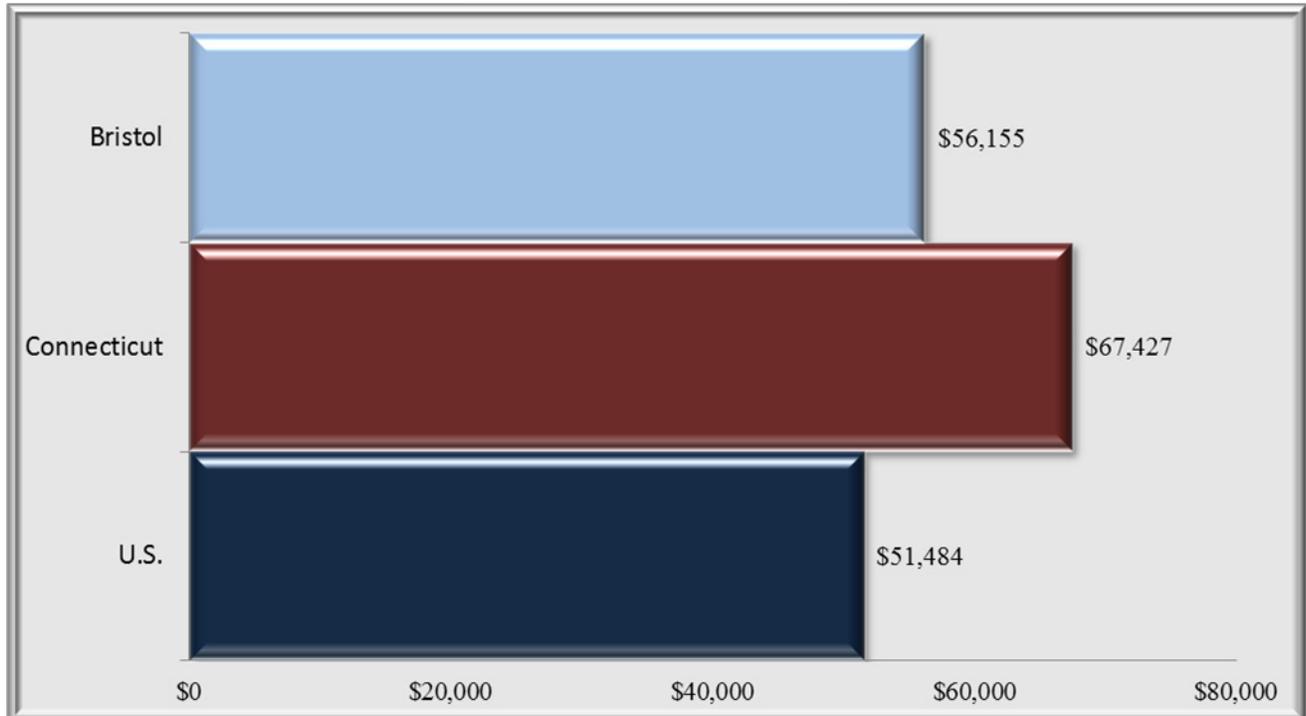


Figure 5. Median household income, Bristol compared to Connecticut and the U.S. (2009 - 2011).

**Median Family Income**

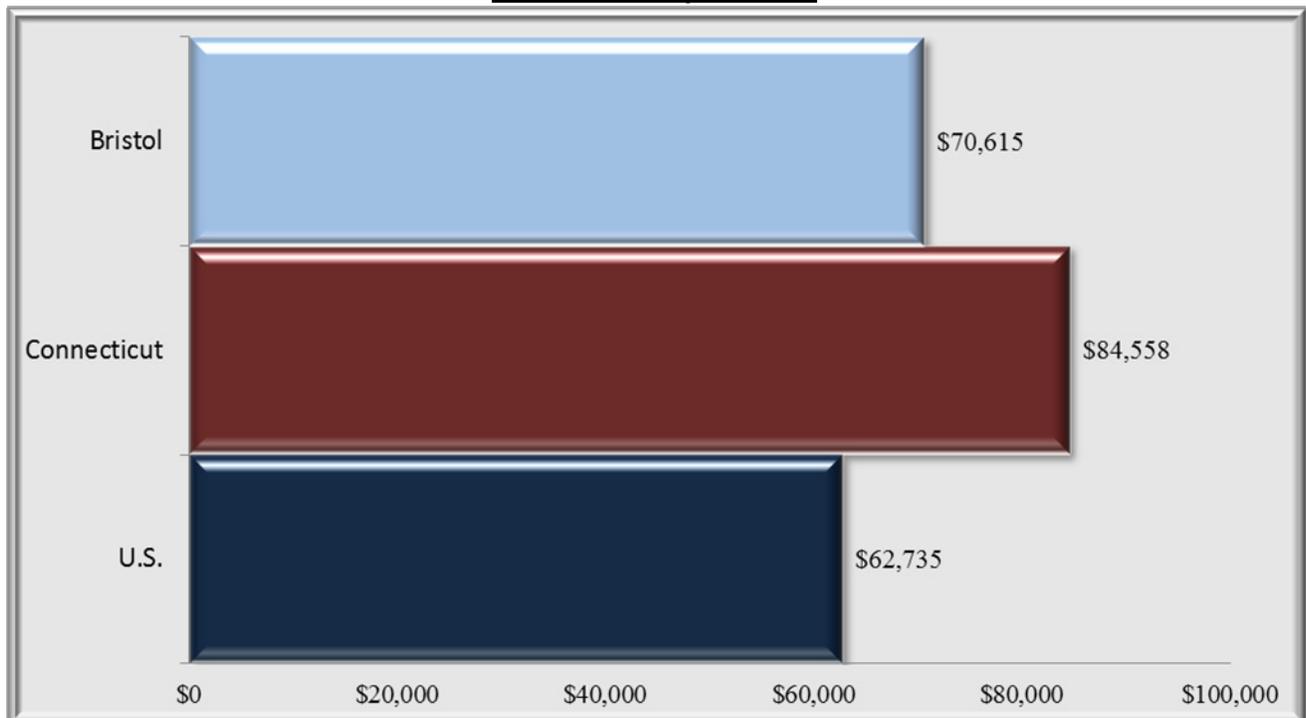


Figure 6. Median family income, Bristol compared to Connecticut and the U.S. (2009 - 2011).

Table 12. Poverty Status of Families and People in the Past 12 Months (2009 - 2011)

	U.S.	Connecticut	Bristol
Families	11.1%	7.2%	9.2%
With related children under 18 years	17.6%	11.6%	13.4%
With related children under 5 years	18.8%	13.8%	14.5%
Married couple families	5.5%	2.6%	5.4%
With related children under 18 years	8.2%	3.6%	6.3%
With related children under 5 years	7.3%	4.4%	8.0%
Families with female householder, no husband present	30.3%	23.8%	23.1%
With related children under 18 years	39.5%	31.3%	30.7%
With related children under 5 years	47.0%	39.8%	45.7%
All people	15.2%	10.1%	10.3%
Under 18 years	21.4%	13.3%	12.7%
18 years and over	13.2%	9.1%	9.7%
65 years and over	9.3%	6.5%	7.8%
Unrelated individuals 15 years and over	26.2%	21.0%	14.9%

Source: U.S. Census Bureau, n.d.

Table 13. 2011 Health and Human Services Poverty Guidelines

Size of Family Unit	48 Contiguous States and D.C.	Alaska	Hawaii
1	\$11,490	\$14,350	\$13,230
2	\$15,510	\$19,380	\$17,850
3	\$19,530	\$24,410	\$22,470
4	\$23,550	\$29,440	\$27,090
5	\$27,570	\$34,470	\$31,710
6	\$31,590	\$39,500	\$36,330
7	\$35,610	\$44,530	\$40,950
8	\$39,630	\$49,560	\$45,570
For each additional person, add:	\$4,020	\$5,030	\$4,620

Source: U.S. Department of Health and Human Services, 2013

Table 14. Students Eligible to Receive a Free or Reduced Lunch (2010 - 2011)

	Connecticut	Bristol School District
2010 - 2011	34.4%	40.0%

Source: Connecticut Department of Education, n.d.

**Employment Statistics**

Table 15. Employment Status (2009 - 2011)

	U.S.		Connecticut		Bristol	
Population 16 years and over	243,829,392		2,859,805		48,817	
	n	%	n	%	n	%
In labor force	157,326,655	64.5	1,951,971	68.3	34,140	69.9
Civilian labor force	156,201,959	64.1	1,943,192	67.9	34,016	69.7
Employed	140,145,661	57.5	1,746,793	61.1	30,413	62.3
Unemployed	16,056,298	6.6	196,399	6.9	3,603	7.4
Armed Forces	1,124,696	0.5	8,779	0.3	124	0.3
Not in labor force	86,502,737	35.5	907,834	31.7	14,677	30.1
<b>Unemployed civilian labor force</b>	<b>10.3%</b>		<b>10.1%</b>		<b>10.6%</b>	

Source: U.S. Census Bureau, n.d.

**Unemployment**

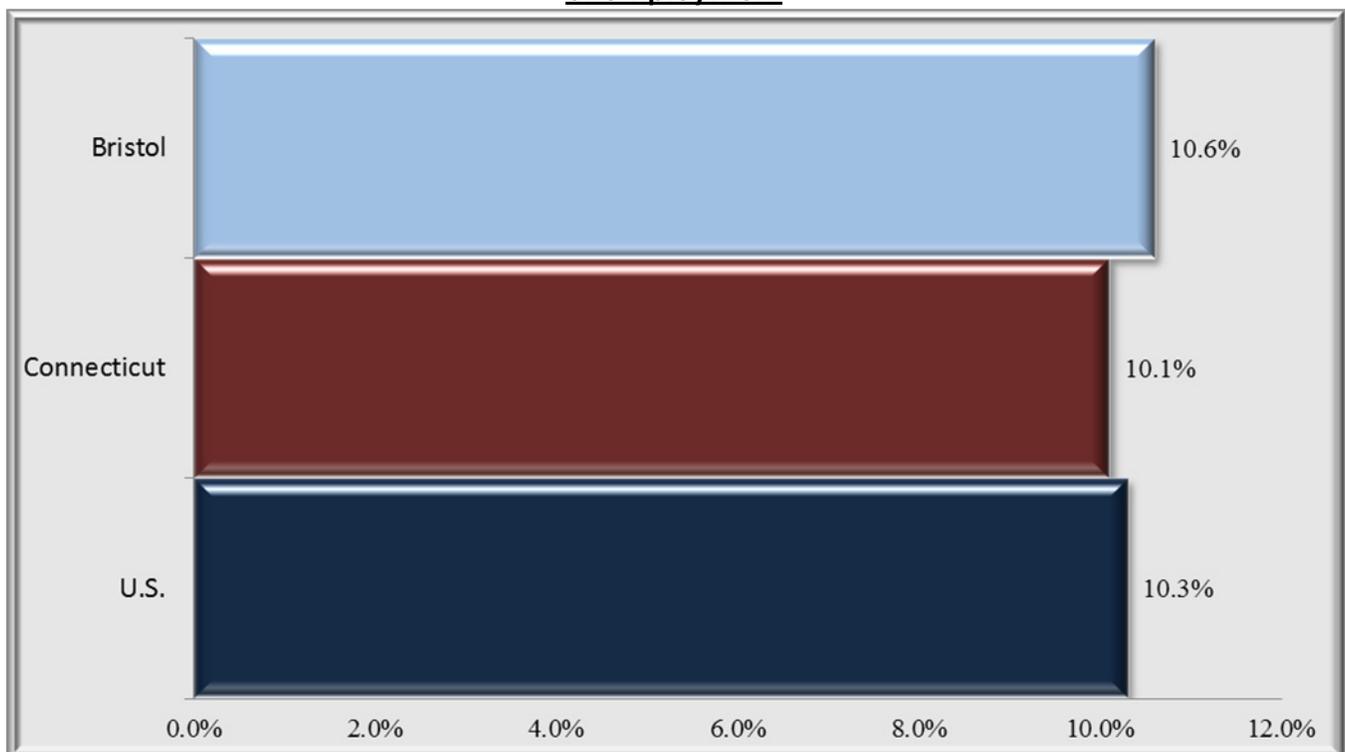


Figure 7. Unemployed civilian labor force, Bristol compared to Connecticut and the U.S. (2009 - 2011).

Table 16. Commuting To Work Status, Workers 16 Years and Over (2009 - 2011)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Car, truck, or van -- drove alone	105,421,876	76.4	1,352,476	78.8	25,528	85.7
Car, truck, or van -- carpooled	13,573,630	9.8	144,197	8.4	2,549	8.6
Public transportation (excluding taxicab)	6,864,593	5.0	78,733	4.6	189	0.6
Walked	3,887,229	2.8	51,070	3.0	319	1.1
Other means	2,367,729	1.7	20,107	1.2	369	1.2
Worked at home	5,961,871	4.3	69,934	4.1	832	2.8
<b>Mean travel time to work (minutes)</b>	<b>25.3</b>		<b>24.7</b>		<b>23.0</b>	

Source: U.S. Census Bureau, n.d.

Table 17. Estimated Major Occupational Groups, Civilian Employed Population 16 Years and Over (2009 - 2011)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Management, business, science, and arts	50,372,150	35.9	711,202	40.7	10,055	33.1
Service	25,241,477	18.0	306,464	17.5	5,412	17.8
Sales and office	34,855,682	24.9	426,386	24.4	8,195	26.9
Natural resources, construction, and maintenance	12,899,471	9.2	132,964	7.6	2,455	8.1
Production, transportation, and material moving	16,776,881	12.0	169,777	9.7	4,296	14.1

Source: U.S. Census Bureau, n.d.

Table 18. Class of Worker, Civilian Employed Population 16 Years and Over (2009 - 2011)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Private wage and salary workers	109,938,596	78.4	1,391,251	79.6	24,598	80.9
Government workers	21,159,555	15.1	237,270	13.6	4,362	14.3
Self-employed workers in own not incorporated business	8,849,434	6.3	116,239	6.7	1,430	4.7
Unpaid family workers	198,076	0.1	2,033	0.1	23	0.1

Source: U.S. Census Bureau, n.d.

Table 19. Estimated Major Industrial Group Percentages, Civilian Employed Population 16 Years and Over (2009 - 2011)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Agriculture, forestry, fishing and hunting, and mining	2,655,272	1.9	6,539	0.4	78	0.3
Construction	8,909,504	6.4	101,094	5.8	1,963	6.5
Manufacturing	14,640,244	10.4	193,152	11.1	4,715	15.5
Wholesale trade	3,979,663	2.8	43,227	2.5	660	2.2
Retail trade	16,246,356	11.6	189,948	10.9	3,138	10.3
Transportation and warehousing, and utilities	6,971,155	5.0	66,665	3.8	1,178	3.9
Information	3,057,887	2.2	42,113	2.4	1,442	4.7
Finance, insurance, real estate and rental and leasing	9,404,900	6.7	162,400	9.3	2,792	9.2
Professional, scientific, management, administrative and waste management services	14,906,696	10.6	189,609	10.9	2,159	7.1
Educational services, and health care and social assistance	32,376,279	23.1	459,714	26.3	7,924	26.1
Arts, entertainment, recreation, accommodation, and food services	12,956,562	9.2	144,326	8.3	2,032	6.7
Other services, except public administration	6,986,806	5.0	80,265	4.6	1,141	3.8
Public administration	7,054,337	5.0	67,741	3.9	1,191	3.9

Source: U.S. Census Bureau, n.d.

**Education Statistics**

Table 20. Educational Attainment, Population 25 Years and Over (2010)

	U.S.	Connecticut	Bristol
Less than 9th grade	6.1%	4.6%	5.0%
9th to 12th grade, no diploma	8.3%	6.7%	7.7%
High school graduate (includes equivalency)	28.4%	28.0%	38.4%
Some college, no degree	21.3%	17.7%	19.1%
Associate's degree	7.6%	7.3%	7.2%
Bachelor's degree	17.7%	20.2%	14.5%
Graduate or professional degree	10.5%	15.6%	8.0%
<b>Percent high school graduate or higher</b>	<b>85.6%</b>	<b>88.7%</b>	<b>87.3%</b>
<b>Percent bachelor's degree or higher</b>	<b>28.2%</b>	<b>35.8%</b>	<b>22.5%</b>

Source: U.S. Census Bureau, n.d.

**Educational Attainment**

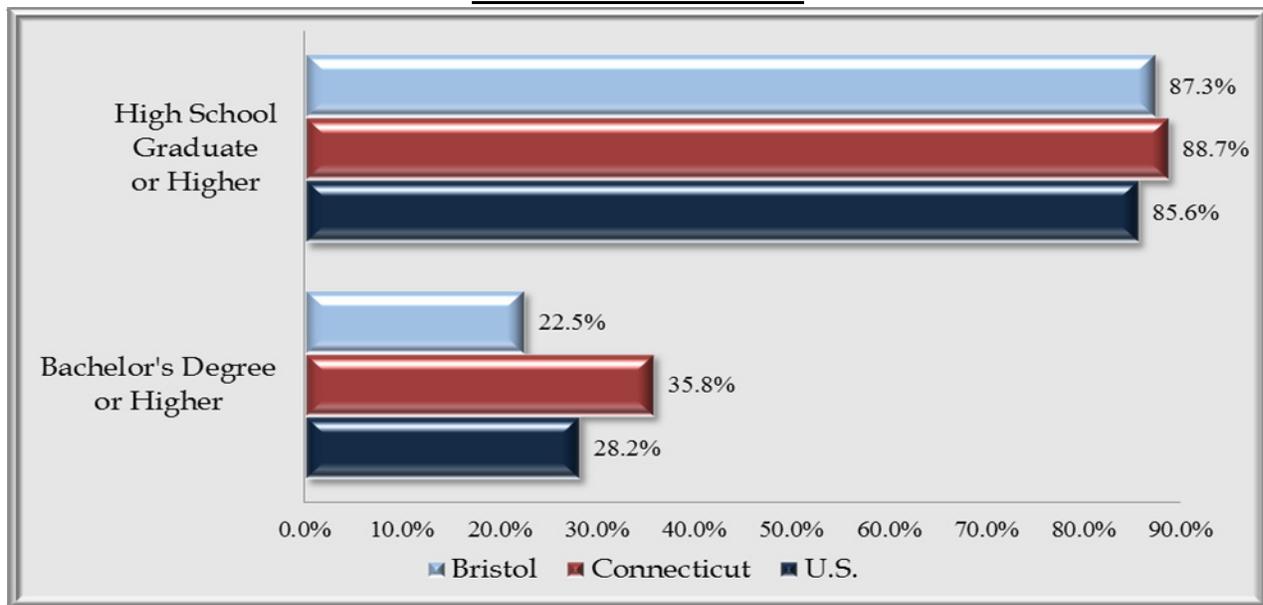


Figure 8. Educational attainment, Bristol compared to Connecticut and the U.S. (2009 - 2011).

Table 21. School Enrollment, Population 3 Years and Over (2010)

	U.S.	Connecticut	Bristol
Nursery school, preschool	6.0%	6.4%	7.6%
Kindergarten	5.1%	4.5%	5.5%
Elementary school (grades 1-8)	39.8%	39.3%	42.7%
High school (grades 9-12)	21.0%	22.1%	19.5%
College or graduate school	28.1%	27.7%	24.6%

Source: U.S. Census Bureau, n.d.

**Health Insurance Coverage Statistics**

Table 22. Health Insurance Coverage for Civilian Non-Institutionalized Population (2009 - 2011)

	U.S.		Connecticut		Bristol	
	n	%	n	%	n	%
Civilian non-institutionalized population	304,085,860		3,514,446		59,838	
With health insurance coverage	257,803,646	84.8	3,201,882	91.1	53,977	90.2
Private health insurance	201,453,987	66.2	2,616,462	74.4	41,786	69.8
Public coverage	89,835,432	29.5	989,755	28.2	19,272	32.2
No health insurance coverage	46,282,214	15.2	312,564	8.9	5,861	9.8
Population under 18 years without health insurance coverage	5,940,027	8.0	26,368	3.2	331	2.6

Source: U.S. Census Bureau, n.d.

**Population without Health Insurance**

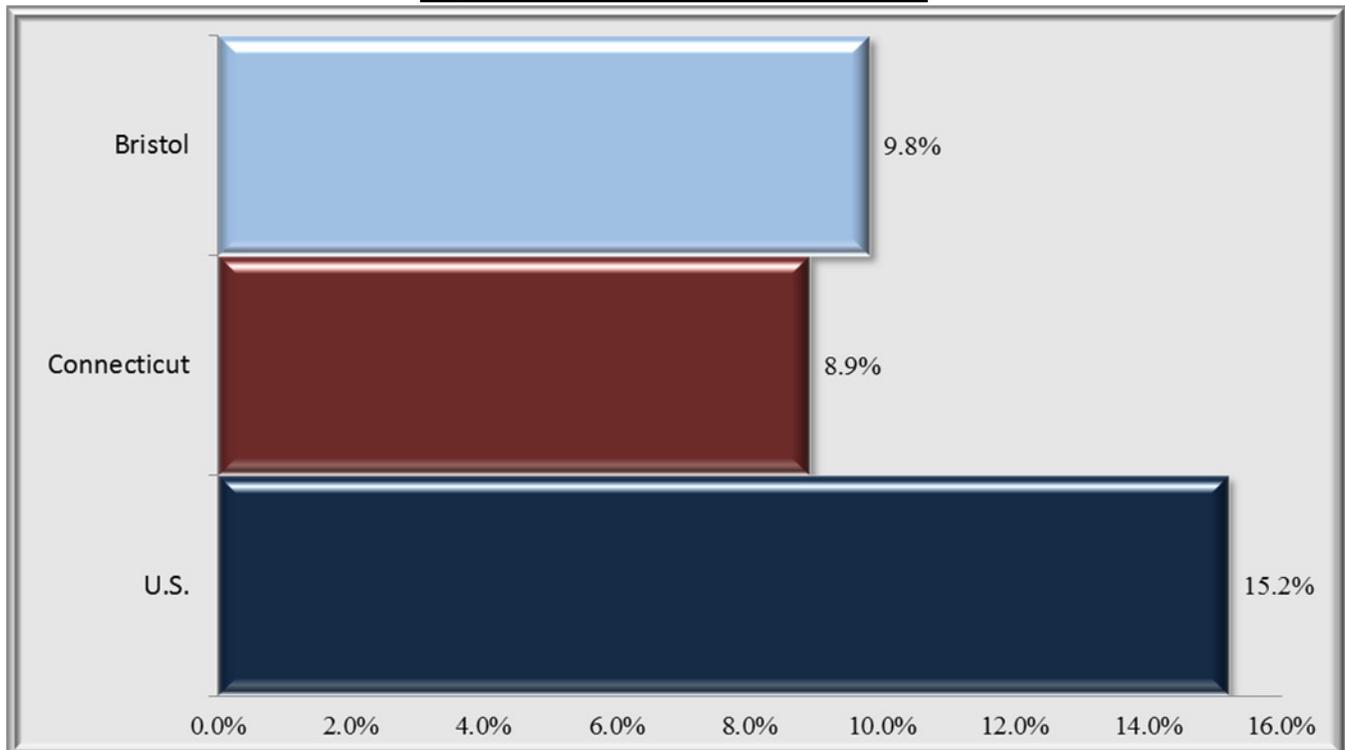


Figure 9. Civilian non-institutionalized population without health insurance coverage, Bristol compared to Connecticut and the U.S. (2009 - 2011).

**Mortality Statistics**

Table 23. Mortality, All Ages (2010; 2006 - 2010)

	<b>U.S.</b>	<b>Connecticut</b>	<b>Bristol</b>
Total deaths (2010)	2,468,435	28,597	553
Crude rate per 1,000 (2010)	8.0	8.0	8.8
Age-adjusted rate per 100,000 (2006 – 2010)	767.4	665.8	729.1

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, 2013

**Age-Adjusted Mortality Rate**

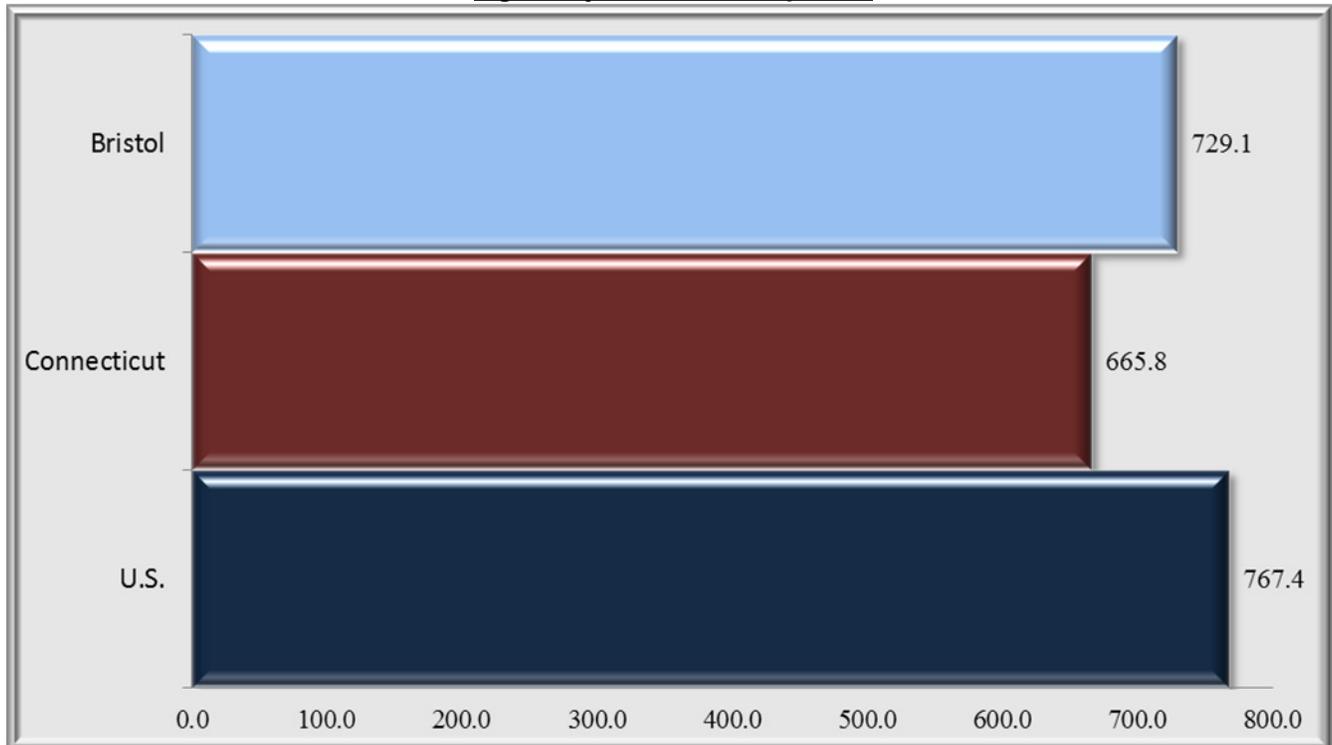


Figure 10. Age-adjusted mortality rate per 100,000, Bristol compared to Connecticut and the U.S. (2006 - 2010).

Table 24. Top 10 Leading Causes of Death, All Ages (2006 - 2010)

	U.S.	Connecticut	Bristol
The following are the top 10 leading causes of death in ranking order of the United States.			
Diseases of heart	25.0%	25.1%	26.8%
Malignant neoplasms (Cancer)	23.1%	23.8%	21.5%
Chronic lower respiratory diseases	5.5%	4.9%	6.8%
Cerebrovascular diseases (Stroke)	5.4%	5.0%	4.8%
Accidents (Unintentional injuries)	5.0%	4.5%	4.6%
Alzheimer's disease	3.2%	2.7%	2.1%
Diabetes Mellitus	2.9%	2.3%	2.5%
Influenza and pneumonia	2.2%	2.4%	3.3%
Nephritis, nephrotic syndrome and nephrosis	2.0%	2.0%	2.0%
Intentional self-harm (Suicide)	1.5%	1.0%	1.0%

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, 2013

**Deaths due to Diseases of the Heart**

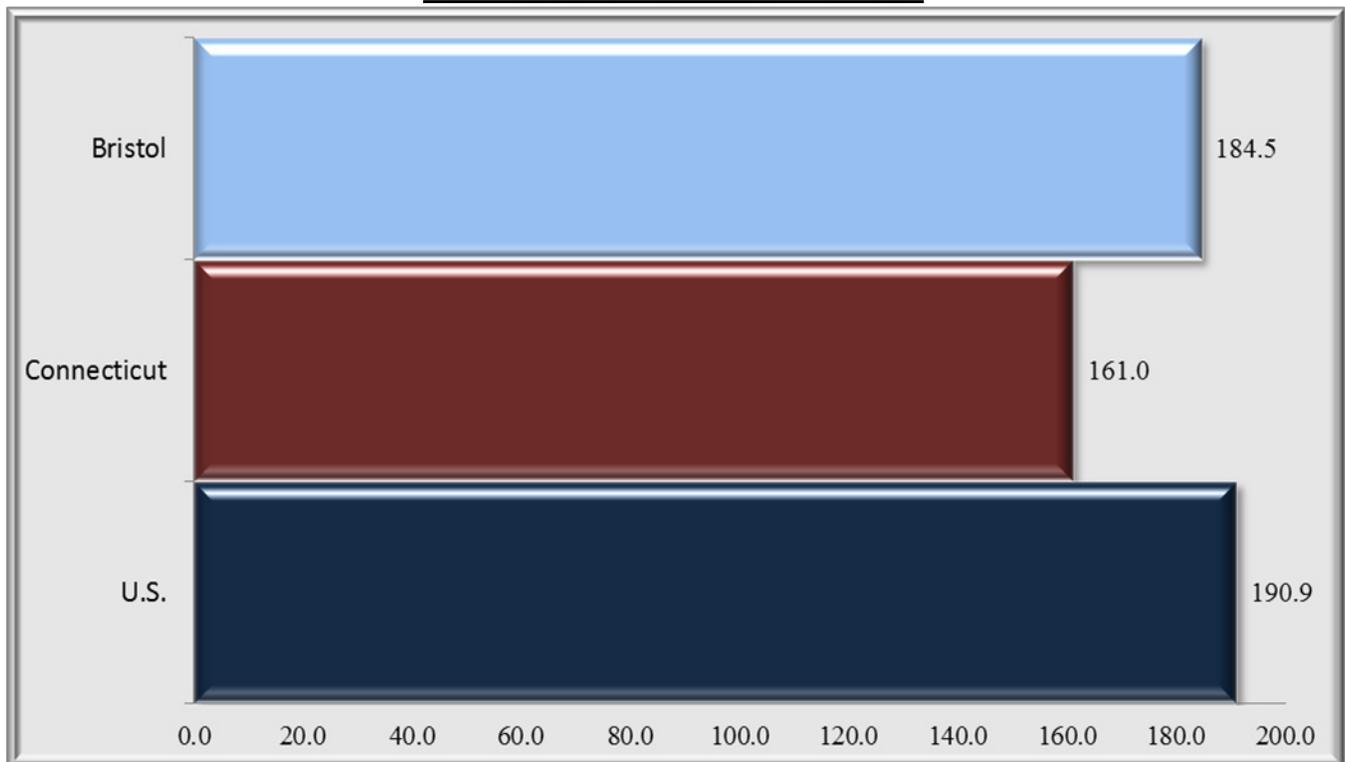


Figure 11. Diseases of the heart death rate per age-adjusted 100,000, Bristol compared to Connecticut and the U.S. (2006 - 2010).

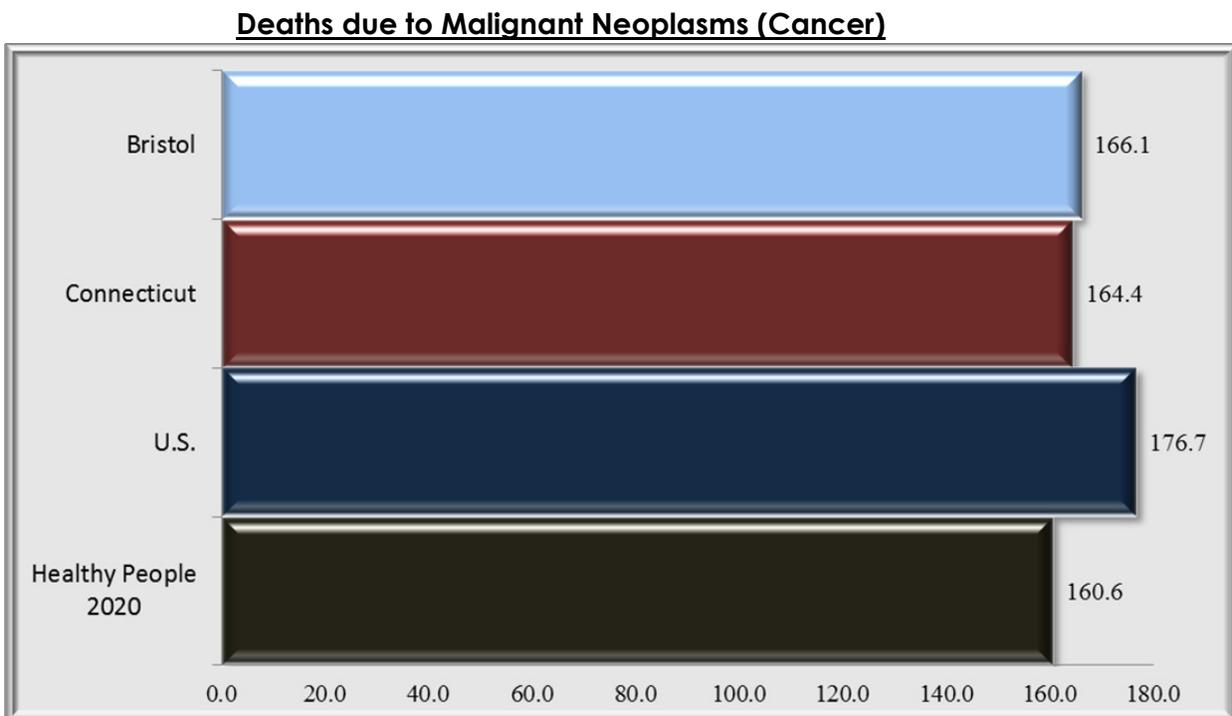


Figure 12. Malignant neoplasms (cancer) death rate per age-adjusted 100,000, Bristol compared to Connecticut, the U.S., and Healthy People 2020 (2006 - 2010).

**Deaths due to Chronic Lower Respiratory Disease**

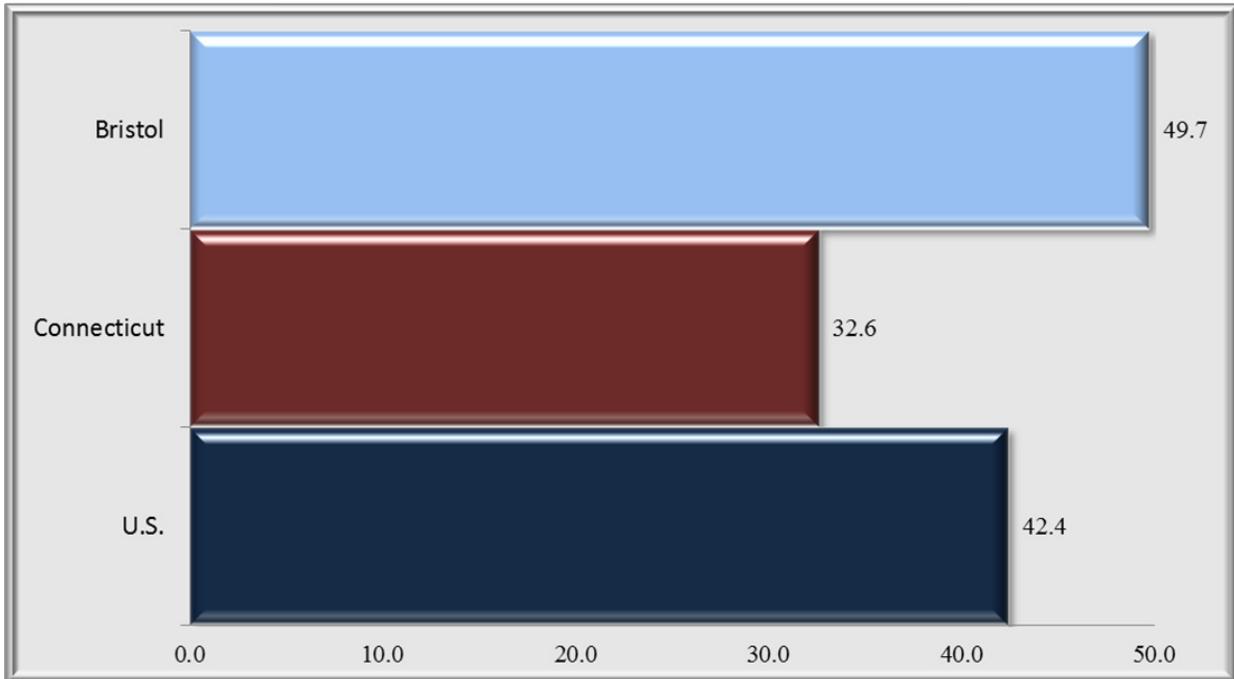


Figure 13. Chronic lower respiratory disease death rate per age-adjusted 100,000 population, Bristol compared to Connecticut and the U.S. (2006 - 2010).

**Maternal and Child Health Statistics**

Table 25. Live Births per 1,000 (2010)

	<b>U.S.</b>	<b>Connecticut</b>	<b>Bristol</b>
Total live births	3,999,386	37,713	666
Total birth rate	13.0	10.5	11.0

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, 2013

**Live Birth Rate**

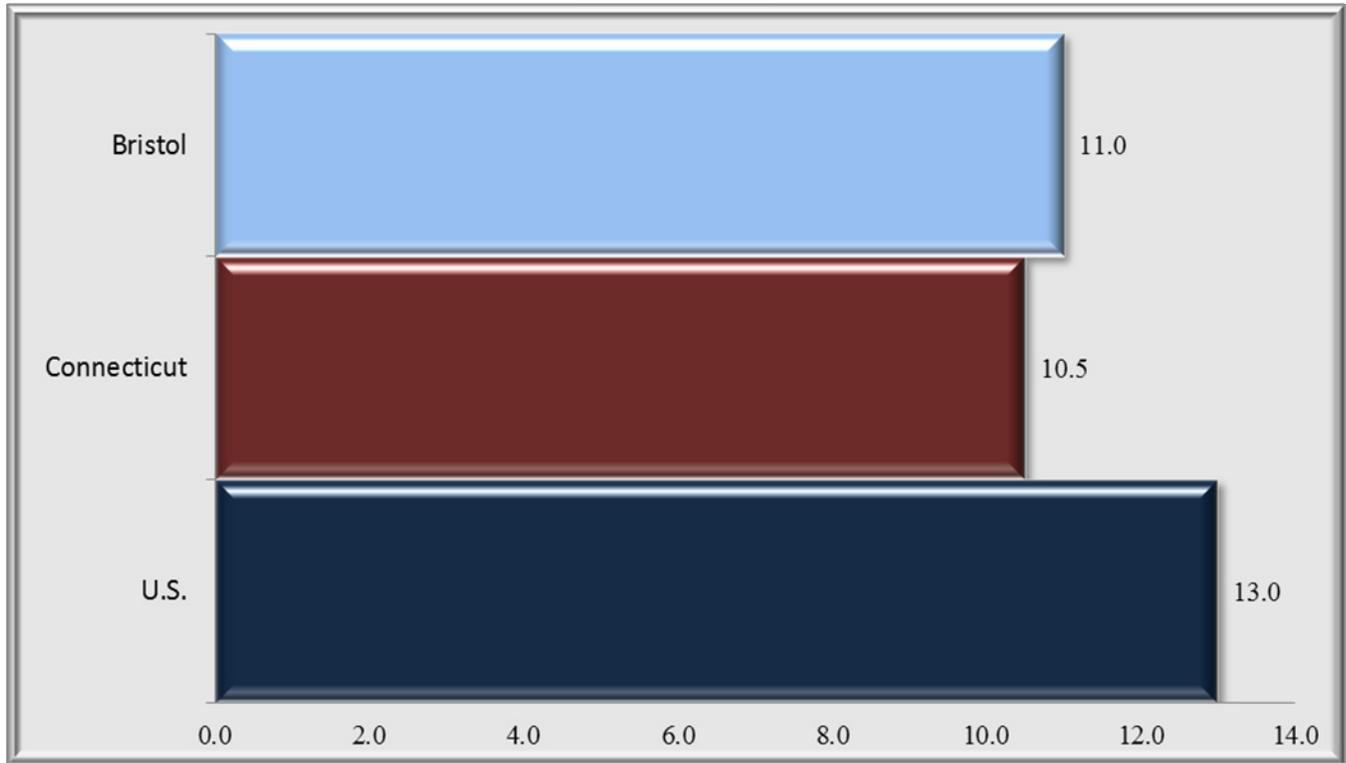


Figure 14. Live birth rate per 1,000, Bristol compared to Connecticut and the U.S. (2010)

Table 26. Birth Weight (2010)

	Healthy People 2020		U.S.		Connecticut		Bristol	
	%	n	%	n	%	n	%	
Low birth weight	7.8	325,563	8.2	3,018	8.0	41	6.2	
Very low birth weight	1.4	57,841	1.5	577	1.5	6	0.9	

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, 2013  
 Healthy People 2020, 2012

**Low Birth Weight**

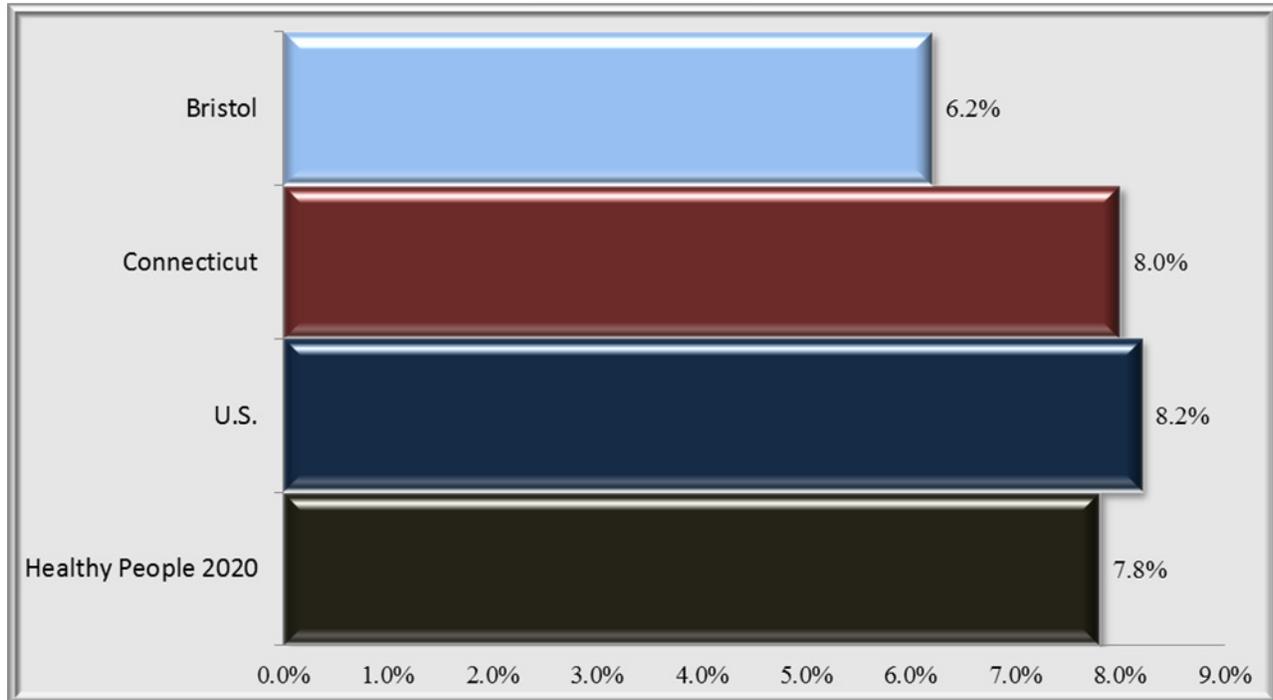


Figure 15. Percentage of infants born with low birth weight, Bristol compared to Connecticut, the U.S., and Healthy People 2020 (2010).

Table 27. Percent of All Births to Teenagers (2010)

	U.S		Connecticut		Bristol	
	n	%	n	%	n	%
<15 years	4,497	0.1	20	0.1	0	0.0
<18 years	113,670	2.8	642	1.7	8	1.2
<20 years	372,175	9.3	2,294	6.1	40	6.0

Sources: Center for Disease Control and Prevention, 2012  
Connecticut Department of Public Health, 2013

Table 28. Prenatal Care Adequacy (2010)

	Healthy People 2020 <sup>b</sup>	Connecticut	Bristol
Late or None <sup>a</sup>	N/A	12.8%	9.0%
White	N/A	8.9%	7.6%
Black	N/A	19.5%	N/A
Hispanic	N/A	19.5%	16.3%
Non-Adequate	N/A	20.2%	17.5%
White	N/A	17.0%	16.9%
Black	N/A	26.4%	15.2%
Hispanic	N/A	25.5%	21.2%
Adequate	77.6%	42.6%	36.7%

White		43.6%	36.7%
Black		38.3%	43.5%
Hispanic		41.2%	31.7%
Intensive		37.3%	45.9%
White		39.4%	46.4%
Black		35.3%	41.3%
Hispanic		33.3%	47.1%

Sources: Connecticut Department of Public Health, 2013  
Healthy People 2020, 2012

<sup>a</sup> Late prenatal care defines mothers seeking prenatal care in the second or third trimester  
<sup>b</sup> Healthy People 2020 represents the percentage of mothers who receive early and adequate prenatal care and is not a direct comparison to data provided for Connecticut and Bristol, which includes early and late prenatal care.

**Mothers Receiving Late or No Prenatal Care**

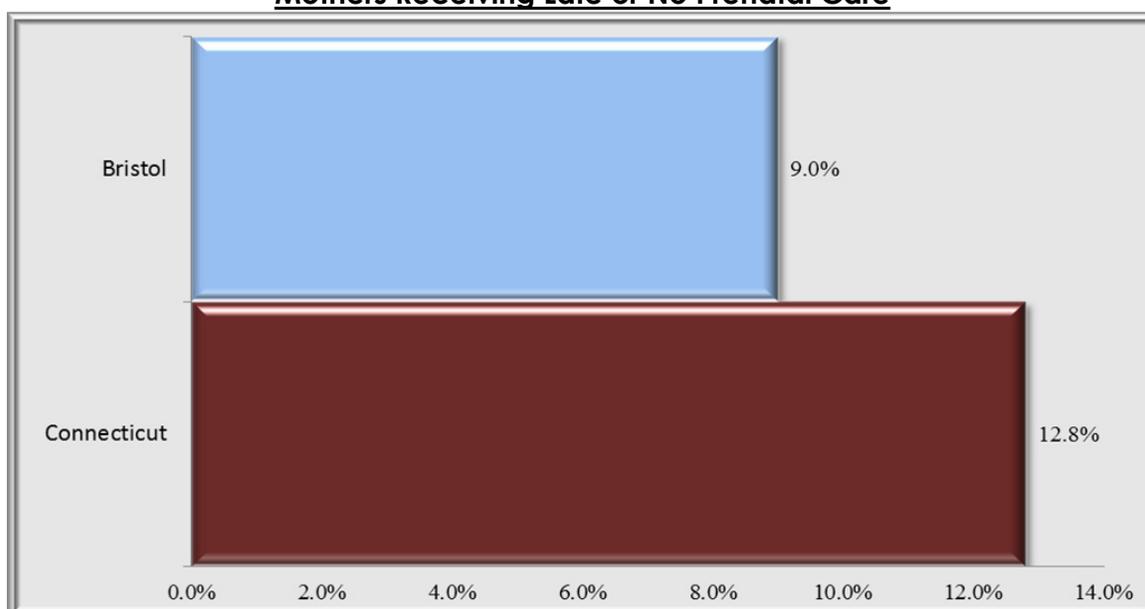


Figure 16. Mothers receiving late or no prenatal care, Bristol compared to Connecticut (2010).

Table 29. Infant Mortality per 1,000 live births (2010)

	Healthy People 2020	U.S.		Connecticut		Bristol	
	Rate	n	Rate	n	Rate	n	Rate
Infant	6.0	24,586	6.2	196	5.2	5	7.5
Neonatal	4.1	16,188	4.1	149	4.0	2	*
Postneonatal	2.0	8,398	2.1	47	1.2	3	*
Fetal	5.6	N/A	N/A	197	5.2	3	*

Sources: Center for Disease Control and Prevention, 2013  
Connecticut Department of Public Health, 2013  
Healthy People 2020, 2012 \*Rates not calculated for counts less than 5

**Infant Mortality Rate**

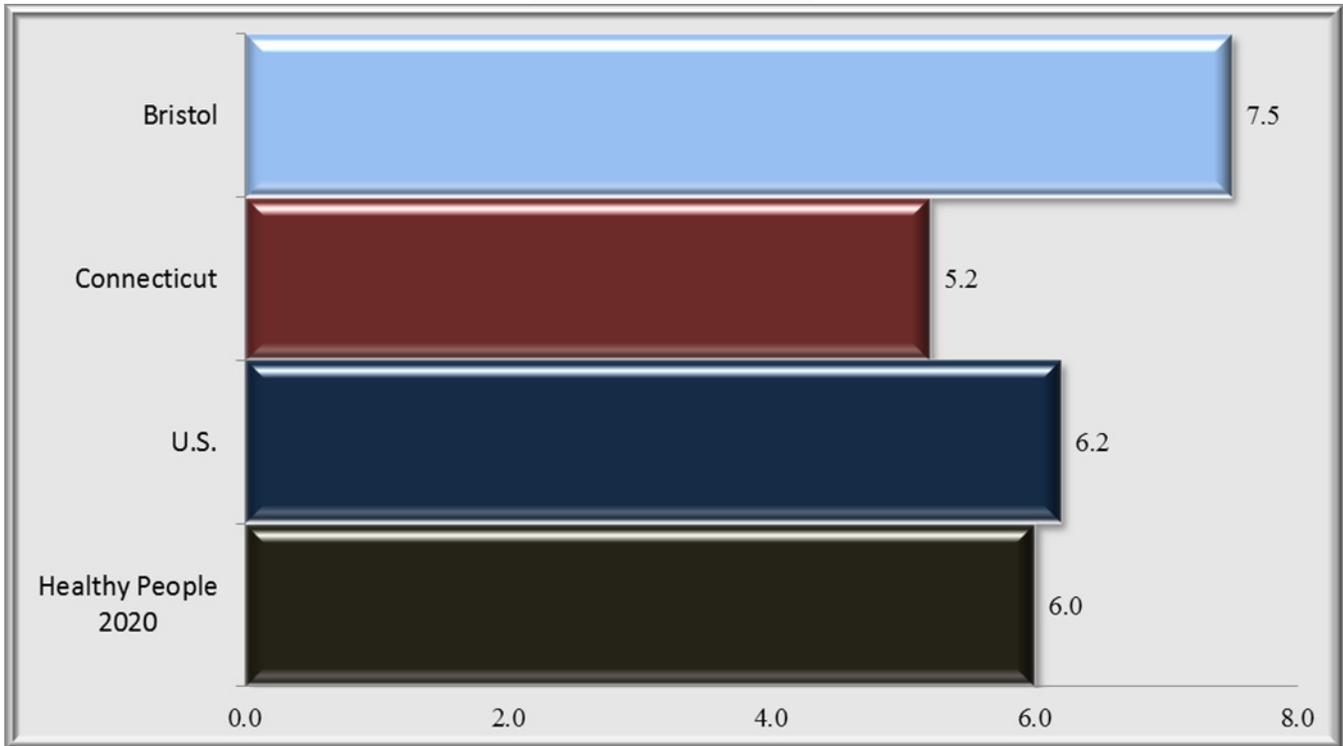


Figure 17. Infant mortality rate per 1,000 live births, Bristol compared to Connecticut, the U.S. and Healthy People 2020 (2010).

**Sexually Transmitted Illness Statistics**

Table 30. Sexually Transmitted Illness Cases per 100,000 (2009, 2011)<sup>a</sup>

	U.S		Connecticut		Bristol	
	n	Rate	n	Rate	n	Rate
HIV	49,273	15.8	348	9.7	2	*
Gonorrhea	301,174	98.1	2,554	72.6	17	27.8
Chlamydia	1,244,180	405.3	12,136	344.9	115	188.4
Primary/Secondary Syphilis	13,997	4.6	65	1.8	0	0.0

Sources: Center for Disease Control and Prevention, 2013  
 Connecticut Department of Public Health, n.d.

<sup>a</sup> All statistics represent 2009 data with the exception of HIV, which represents 2011 data

\*Rates not calculated for counts less than 5

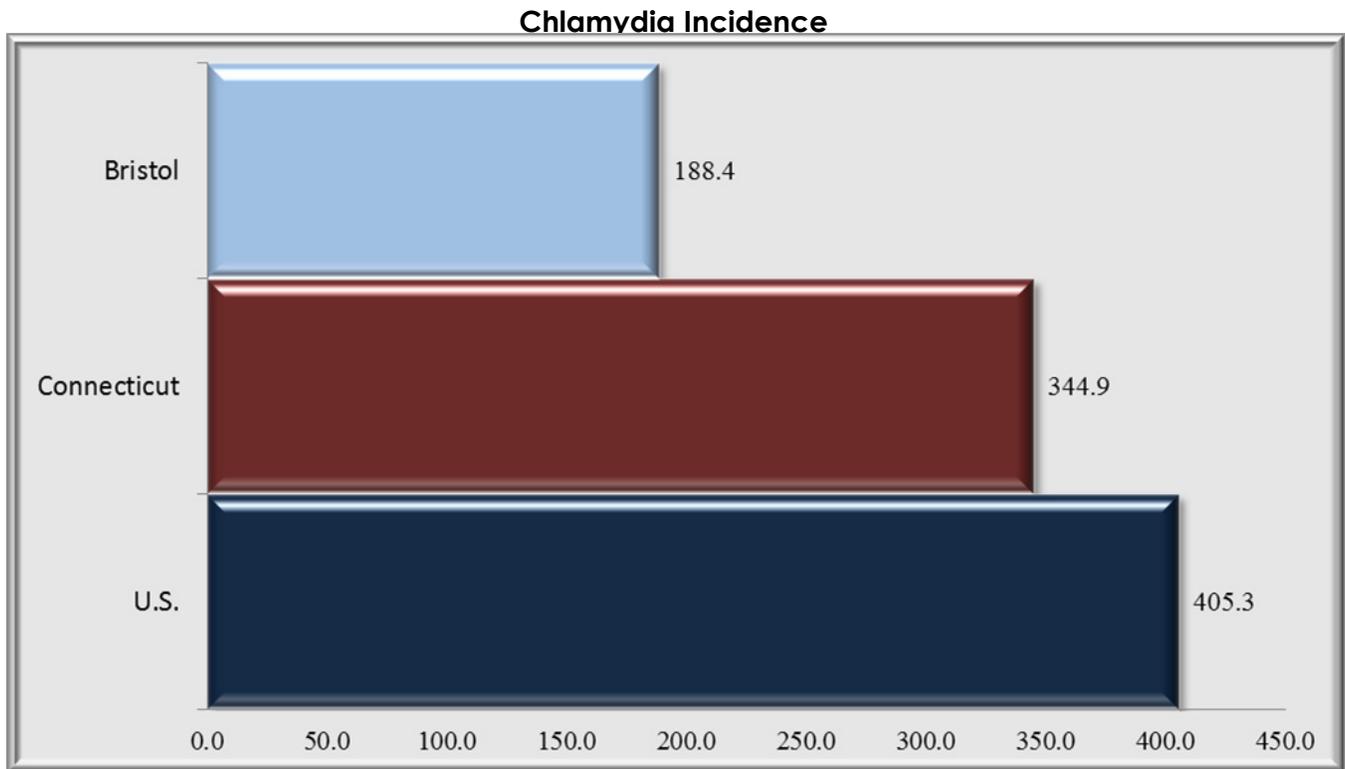


Figure 18. Chlamydia rates per 100,000, Bristol compared to Connecticut and the U.S. (2009).

**Communicable Disease Statistics**

Table 31. Hepatitis Cases per 100,000 (2011)

	Healthy People 2020		U.S. <sup>a</sup>		Connecticut		Bristol	
	Rate	n	Rate	n	Rate	n	Rate	
Acute Hepatitis A	0.3	1,670	0.5	18	0.5	0	0.0	
Acute Hepatitis B	N/A	3,350	1.1	19	0.5	0	0.0	
Chronic Hepatitis B	N/A	N/A	N/A	351	9.8	3	*	
Acute Hepatitis C	0.2	850	0.3	47	1.3	3	*	

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, n.d.

<sup>a</sup>Statistics represent 2010 data

\*Rates not calculated for counts less than 5

Table 32. Influenza Cases per 100,000 (August 26, 2012 – May 11, 2013)<sup>a</sup>

	Connecticut		Bristol	
	n	Rate	n	Rate
Type A (2009 H1N1)	38	1.0	1	*
Type A (H1N1 seasonal)	0	0.0	0	0.0
Type A (H3N2 seasonal)	1,399	39.1	21	34.7

Total Cases	9,430	263.4	128	211.5
-------------	-------	-------	-----	-------

Source: Connecticut Department of Public Health, n.d.

°Rates calculated based on 2011 population estimates

\*Rates not calculated for counts less than 5

Table 33. Confirmed and Probable Lyme Disease Cases per 100,000 (2012)

	U.S. <sup>°</sup>		Connecticut		Bristol	
	n	Rate	n	Rate	n	Rate
	33,097	10.6	2,658	78.0	7	11.7

Sources: Center for Disease Control and Prevention, 2013

Connecticut Department of Public Health, n.d.

°Statistics represent 2011 data

Table 34. Tuberculosis Incidence per 100,000 (2011)

	U.S		Connecticut		Bristol	
	n	Rate	n	Rate	n	Rate
	10,528	3.4	83	2.3	1	*

Sources: Center for Disease Control and Prevention, 2012

Connecticut Department of Public Health, n.d.

### Mental Health Statistics

Table 35. Deaths Due to Suicide per 100,000 (2006 – 2010)

	Healthy People 2020	U.S	Connecticut	Bristol
Number of deaths	N/A	179,206	1,485	29
Crude rate	N/A	11.8	8.4	9.6
Age-adjusted rate	10.2	11.6	8.0	9.2

Sources: Center for Disease Control and Prevention, 2012

Connecticut Department of Public Health, 2013

**Deaths due to Suicide**

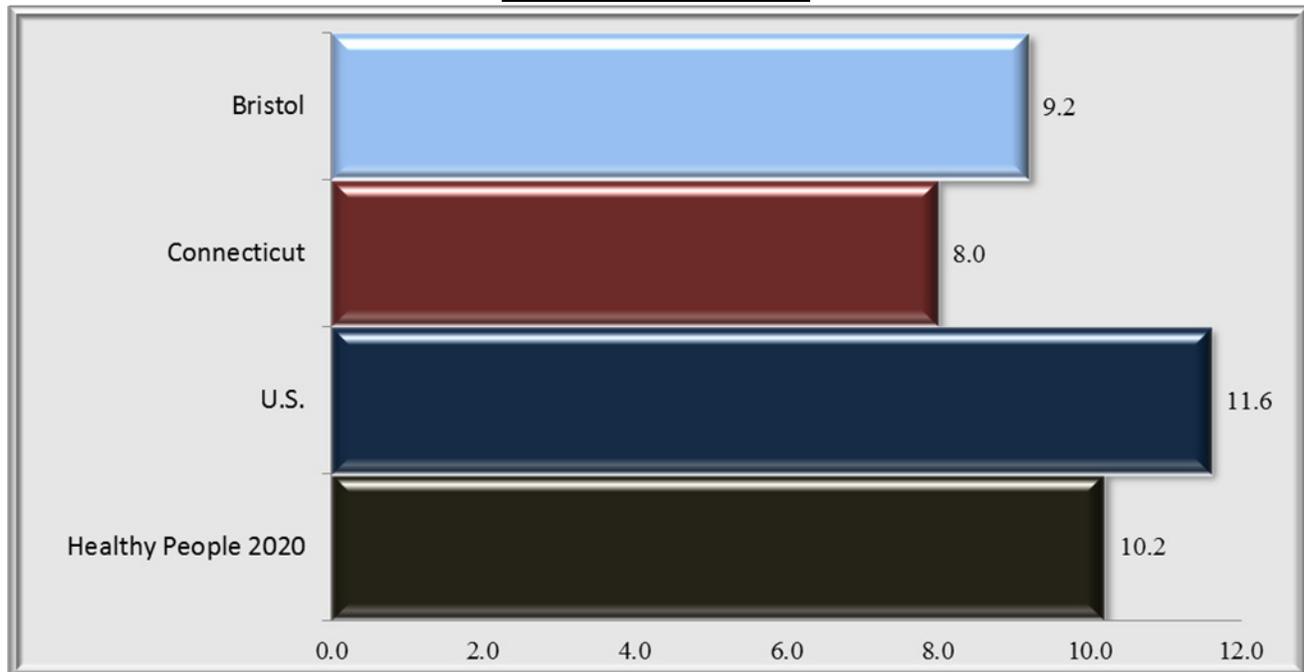


Figure 19. Suicide rates per 100,000, Bristol compared to Connecticut, the U.S., and Healthy People 2020 (2006 - 2010).

Table 36. Inpatient and Outpatient Behavioral Health Visits (June 1, 2011 – May 31, 2013)

	Inpatient	Outpatient	Total
All behavioral health issues			
Total patients	781	1,616	2,397 (4.0% of population)
Total visits	1,219	32,063	33,282
Co-occurring disorders			
Total patients	466	923	1,389 (2.3% of population)
Total visits	719	11,670	12,389

Source: Bristol Hospital, 2013

Table 37. Behavioral Health Patient Demographics (June 1, 2011 – May 31, 2013)

	Percentage
Gender	
Male	49%
Female	51%
Age	
18-24	15%
25-44	47%
45-64	33%
65+	5%

Marital Status	
Married	21%
Single	60%
Divorced	14%
Separated	2%
Widowed	3%
Race	
Non – Hispanic White/Caucasian	79.7%
Non – Hispanic Black/African American	5.4%
Non – Hispanic Asian	0.1%
Non – Hispanic Other/Unknown	0.9%
Ethnicity	
Non-Hispanic	86.2%
Hispanic	10.4%
Unknown	3.4%
Insurance Coverage	
Managed Care	32%
Government	62%
Self-Pay/Uninsured	5%

Source: Bristol Hospital, 2013

Table 38. Top Five Diagnosed Behavioral Health Disorders (June 1, 2011 – May 31, 2013)

	Percentage
Alcohol Dependence/Withdrawal	12%
Anxiety Disorders	11%
Episodic Mood Disorders	10%
Opioid Dependence	8%
Depressive Disorder	4%

Source: Bristol Hospital, 2013

### Cancer Statistics

Table 39. Cancer Incidence by Site per 100,000 (2007)

	U.S.		Connecticut		Bristol	
	n	Rate	n	Rate	n	Rate
Female breast	207,908	122.5	2,854	155.6 <sup>a</sup>	48	153.2 <sup>a</sup>
Colorectal	146,936	46.6	1,795	51.3	36	59.1
Lung	211,539	67.6	2,602	74.3	64	105.1
Prostate	233,443	162.9	3,015	173.3 <sup>a</sup>	44	151.0 <sup>a</sup>
<b>All Sites</b>	<b>1,510,594</b>	<b>479.3</b>	<b>19,669</b>	<b>561.6</b>	<b>334</b>	<b>548.3</b>

Sources: Center for Disease Control and Prevention, 2013

Connecticut Department of Public Health, n.d.

ª Rates based on 2010 population counts

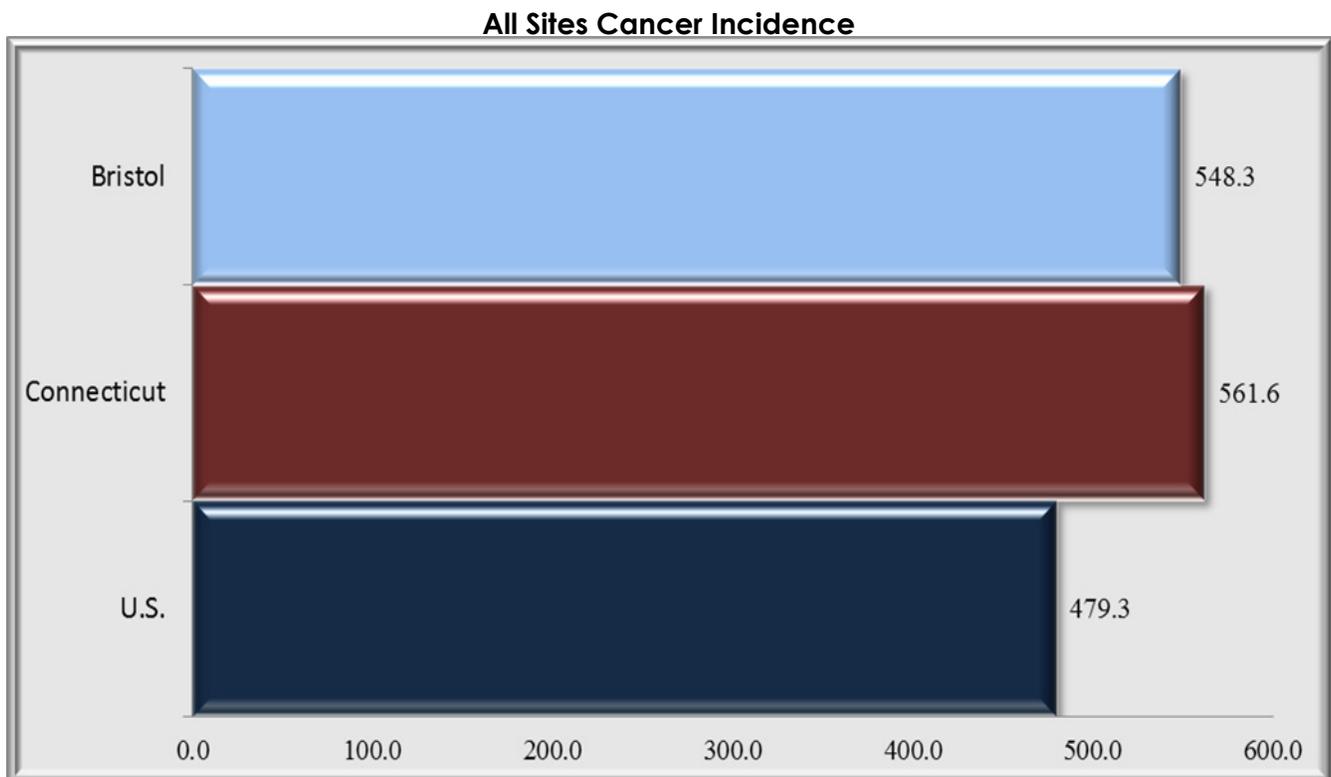


Figure 20. Cancer incidence per 100,000, Bristol compared to Connecticut and the U.S. (2007).

Table 40. Cancer Mortality by Site per age-adjusted 100,000 (2006 – 2010)

	Healthy People 2020	U.S.		Connecticut		Bristol	
	Rate	n	Rate	n	Rate	n	Rate
Female breast	20.6	203,683	22.7	2,517	N/A	42	N/A
Colorectal	14.5	265,472	16.6	2,919	13.8	51	13.4
Trachea, Bronchus, & Lung	45.5	792,556	49.5	8,916	43.7	200	56.2
Prostate	21.2	142,586	9.0	1,811	N/A	22	N/A
<b>All Sites</b>	<b>160.6</b>	<b>2,830,603</b>	<b>176.7</b>	<b>34,083</b>	<b>164.4</b>	<b>604</b>	<b>166.1</b>

Sources: Center for Disease Control and Prevention, 2012  
 Connecticut Department of Public Health, 2013

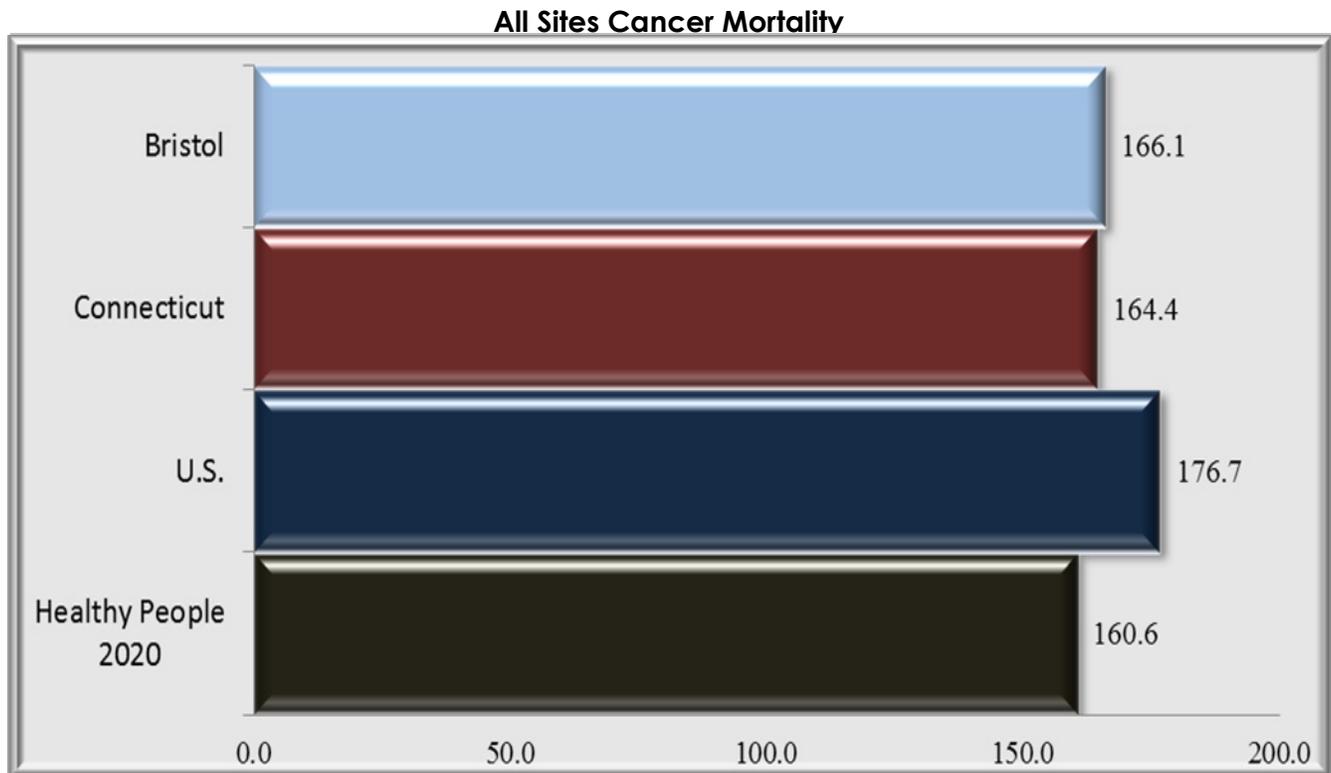


Figure 21. Cancer mortality per 100,000, Bristol compared to Connecticut, the U.S., and Healthy People 2020 (2006 - 2010).

**Environmental Health Statistics**

Table 41. Asthma Prevalence Rates among Public School Students per 100 (2006 - 2009)

	Connecticut		Bristol School District	
	n	Rate	n	Rate
Students with asthma	41,269	13.2	353	8.3

Source: Connecticut Department of Public Health, 2010

Table 42. Childhood Lead Screening by Age (2011)

	Connecticut		Bristol	
	n	%	n	%
Age 9 months – 2 years	55,960	67.6	843	61.1

Source: Connecticut Department of Public Health, 2012

Table 43. Childhood Blood Lead Levels  $\geq 10\mu\text{g}$  among Children Under Age Six (2011)

	Connecticut		Bristol	
	n	%	n	%
Prevalence	619	0.8	9	0.9

Incidence	434	0.6	7	0.7
-----------	-----	-----	---	-----

Source: Connecticut Department of Public Health, 2012

**Crime Statistics**

Table 44. Crime Offenses per 100,000 (2011)

	U.S		Connecticut		Bristol	
	n	Rate	n	Rate	n	Rate
Murder	14,612	4.7	129	3.6	1	1.6
Rape	83,425	26.8	688	19.2	12	19.0
Robbery	354,396	113.7	3,690	103.1	52	82.3
Aggravated Assault	751,131	241.1	5,380	150.3	55	87.1
Burglary	2,188,005	702.2	15,468	432.0	364	576.4
Larceny	6,159,795	1,976.9	55,357	1,546.0	1,028	1,627.9
Motor Vehicle Theft	715,373	229.6	6,620	184.9	114	180.5
Arson	52,333	18.2	379	10.6	9	14.3

Sources: Federal Bureau of Investigation, n.d.  
Connecticut Department of Public Safety, 2013

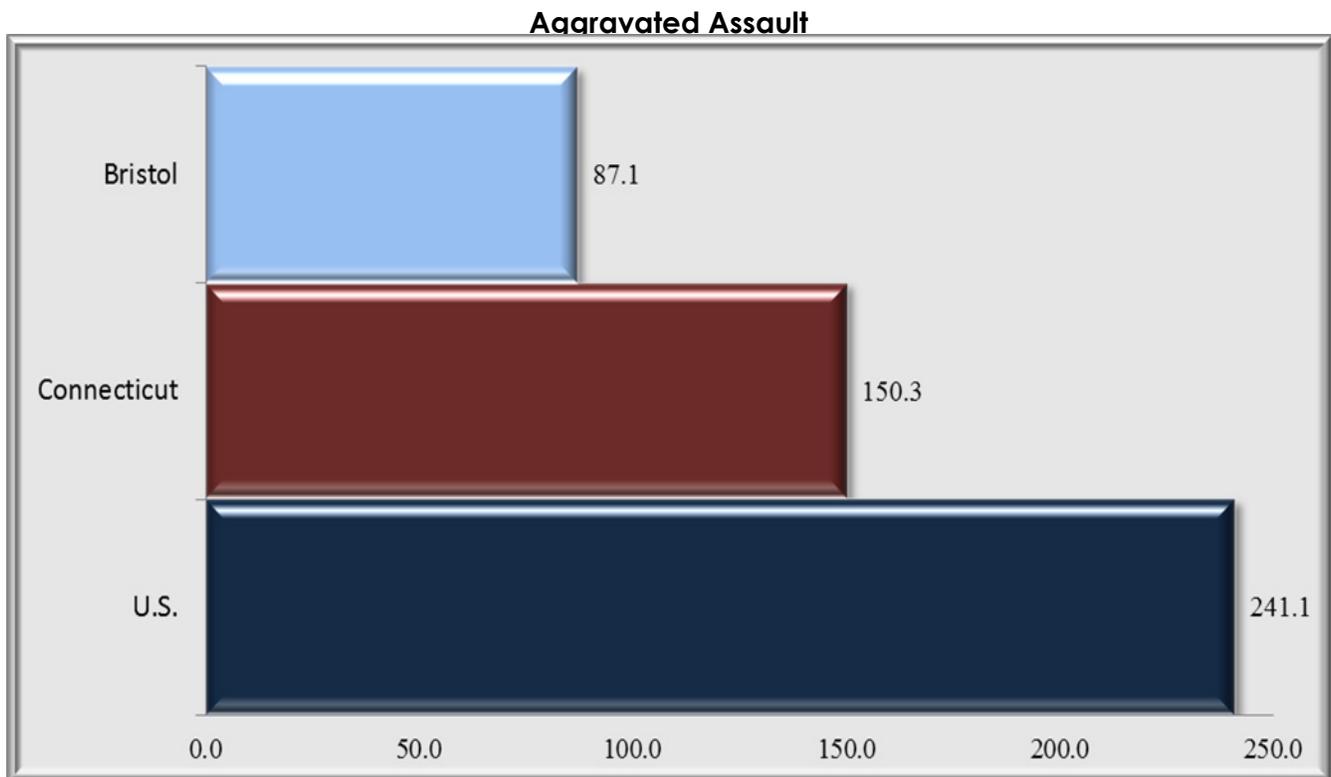


Figure 22. Aggravated Assault per 100,000, Bristol compared to Connecticut and

the U.S. (2011).

## Secondary Data Profile Summary of Findings

The following conclusions are drawn from comparisons of Bristol to Connecticut and United States secondary data. They are categorized as either Areas of Strength, Areas of Opportunity, or Areas of Difference. Areas of Strength highlight factors in which Bristol has a more favorable outcome than Connecticut and/or the Nation. In contrast, Areas of Opportunity highlight factors that Bristol can improve upon in comparison to Connecticut and/or the Nation. Areas in which Bristol differs notably from Connecticut and/or the Nation, but that cannot be considered strengths or opportunities, are considered Areas of Difference. For example, if Bristol had a notably larger male population versus female population, it is neither a strength nor an opportunity, but it is an Area of Difference.

### Areas of Strength

#### ❖ Income Statistics

- The percentage of Bristol families and individuals living in poverty typically falls between the percentages for Connecticut and the Nation; the percentage usually exceeds that of Connecticut and is less than that of the Nation. However, poverty percentages are lower than both Connecticut and the Nation for households headed by a female, children under 18 years, and unrelated individuals 15 years and over.

#### ❖ Health Insurance Coverage Statistics

- The percentage of Bristol residents who do not have health insurance coverage (9.8%) is higher when compared to Connecticut (8.9%), but notably less when compared to the Nation (15.2%). Residents of Bristol who are insured are more likely to have public coverage (32.2%) than residents of Connecticut (28.2%), and the Nation (29.5%).

#### ❖ Maternal & Child Health Statistics

- The low birth weight percentage in Bristol (6.2%) is lower than that of Connecticut (8.0%) and the Nation (8.2%) and exceeds the Healthy People 2020 goal of 7.8%.
- The percentage of births to teenagers in Bristol is consistent with Connecticut, but notably less when compared to the Nation.
- The percentage of mothers in Bristol receiving late or no prenatal care (9.0%) or non-adequate prenatal care (17.5%) is lower when compared to Connecticut (12.8%; 20.2%). In addition, the percentage of mothers receiving intensive prenatal care is higher for the entire population and all reported racial subgroups when compared to Connecticut.

#### ❖ Sexually Transmitted Illness Statistics

- The rates for sexually transmitted illnesses are lower in Bristol. In particular, the chlamydia rate per 100,000 in Bristol (188.4) is notably lower when compared to Connecticut (344.9) and the Nation (405.3).

#### ❖ Communicable Disease Statistics

- The influenza rate per 100,000 in Bristol (211.5) is lower than all of Connecticut (263.4).

❖ **Mental Health Statistics**

- The suicide age-adjusted death rate per 100,000 in Bristol (9.2) exceeds that of Connecticut (8.0), but is notably lower than that of the Nation (11.6) and meets the Healthy People 2020 goal of 10.2.

❖ **Environmental Health Statistics**

- The percentage of students with asthma in Bristol School District (8.3%) is lower when compared to all Connecticut public school districts (13.2%).

❖ **Crime Statistics**

- The rates for all reported crimes (property and violent) are lower in Bristol than in the Nation. In addition, crimes rates are lower in Bristol than in Connecticut for all reported crimes except burglary, larceny, and arson.

### Areas of Opportunity

❖ **Household Statistics**

- The percent of marriages that end in divorce is higher in Bristol (13.4%) than in Connecticut (10.6%) and the Nation (10.8%).

❖ **Income Statistics**

- In Bristol, the percentage of residents receiving cash public assistance (4.9%) and Food Stamps/SNAP (12.3%) is higher when compared to Connecticut (3.1%; 9.8%) and the Nation (2.8%; 11.7%).
- The percentage of students eligible to receive a free or reduced lunch during the 2010-2011 school year was higher in Bristol (40.0%) than in Connecticut (34.4%).

❖ **Employment Statistics**

- The unemployed civilian labor force in Bristol (10.6%) is slightly higher than in Connecticut (10.1%) and the Nation (10.3%).

❖ **Education Statistics**

- Residents aged 25 years and over in Bristol are less likely to have attained a bachelor's degree of higher (22.5%) when compared to Connecticut (35.8%), and the Nation (28.2%).

❖ **Mortality Statistics**

- The age-adjusted mortality rate per 100,000 in Bristol (729.1) is lower than that of the Nation (767.4), but notably higher than that of Connecticut (665.8).
- The age-adjusted mortality rate per 100,000 for chronic lower respiratory disease in Bristol (49.7) exceeds that of Connecticut (32.6) and the Nation (42.4). In addition, the age-adjusted mortality rate per 100,000 for diseases of the heart (184.5) exceeds that of Connecticut (161.0).

❖ **Maternal & Child Health Statistics**

- The infant mortality rate per 1,000 live births in Bristol (7.5) exceeds that of Connecticut (5.2), the Nation (6.2), and the Healthy People 2020 goal of 6.0. This is in contrast to the primarily positive findings regarding maternal health practices.

#### ❖ **Mental Health Statistics**

- The top behavioral health diagnosis at Bristol Hospital is alcohol dependence/withdrawal (12% of all diagnoses), which suggests that substance abuse may be an area of concern in the community.

#### ❖ **Cancer Statistics**

- The overall cancer incidence rate per 100,000 in Bristol (548.3) is consistent with Connecticut (561.6), but both rates are notably higher than that of the Nation (479.3).
- The lung cancer incidence rate per 100,000 in Bristol (105.1) is higher when compared to Connecticut (74.3) and the Nation (67.6). In addition, the lung cancer mortality rate per 100,000 in Bristol (56.2) is higher when compared to Connecticut (43.7), the Nation (49.5), and the Healthy People 2020 goal of 45.5.
- The colorectal cancer incidence rate per 100,000 in Bristol (59.1) is higher when compared to Connecticut (51.3) and the Nation (46.6).

#### ❖ **Environmental Health Statistics**

- The percentage of children age nine months to two years in Bristol who have been screened for lead (61.1%) is lower when compared to Connecticut (67.6%).

### **Areas of Difference**

#### ❖ **Population Statistics**

- The population growth between 2000 and 2010 in Bristol (0.7%) was notably less than that of Connecticut (4.9%) and the Nation (9.7%).
- Bristol has a slightly older overall population, particularly in comparison to the Nation. The median age is 40.3 years and 14.9% of residents are 65 years of age and over. The Nation has a median age of 37.2 and 13.0% of the population is 65 years and older.
- Bristol is less racially diverse when compared to Connecticut and the Nation. The city has a higher proportion of White residents (87.7%) and a lower proportion of Black/African American (3.8%), Asian (1.9%), and Hispanic (9.6%) residents.
- In addition to being less racially diverse, fewer residents in Bristol speak a language other than English at home (16.9%) when compared to residents across Connecticut (21.2%) and the Nation (20.6%). Residents that do speak a language other than English at home are more likely to speak an Indo-European language.

#### ❖ **Household Statistics**

- Bristol has a smaller average household size (2.35) and family size (2.95) when compared to Connecticut (2.52; 3.08) and the Nation (2.58; 3.14). In addition, a higher percentage of households in Bristol are nonfamily (37.5%) when compared to Connecticut (33.7%) and the Nation (33.6%).

## **IDENTIFICATION OF COMMUNITY HEALTH NEEDS**

## Prioritization Session

On August 20, 2013, approximately 40 individuals representing the Bristol community gathered to review the results of the 2013 Community Health Needs Assessment (CHNA). Among the attendees were representatives from local health and human service agencies, area non-profit organizations, health providers, and public health representatives. The goal of the meeting was to discuss and prioritize key findings from the CHNA and to set the stage for the development of the hospital's Implementation Strategy. A list of attendees can be found in Appendix B.

## Process

The prioritization meeting was facilitated by Holleran Consulting. The meeting began with an abbreviated research overview. This overview presented the results of the secondary data research and key findings of the CHNA.

Following the research overview, participants were provided with information regarding the prioritization process, criteria to consider when evaluating key areas of focus, and other aspects of health improvement planning, such as goal setting and developing strategies and measures. In a large-group format, attendees were then asked to share openly what they perceived to be the needs and areas of opportunity in the city. Through facilitated discussion, attendees developed the following "master list" of potential priority areas for the implementation plans.

Master list of community priorities (Presented in alphabetical order)

- Access To Care
- Cancer
- Heart Disease
- Mental Health & Substance/Alcohol Abuse
- Overweight/Obesity
- Respiratory Disease
- Senior Support
- Smoking/Tobacco Use

## Key Community Health Issues

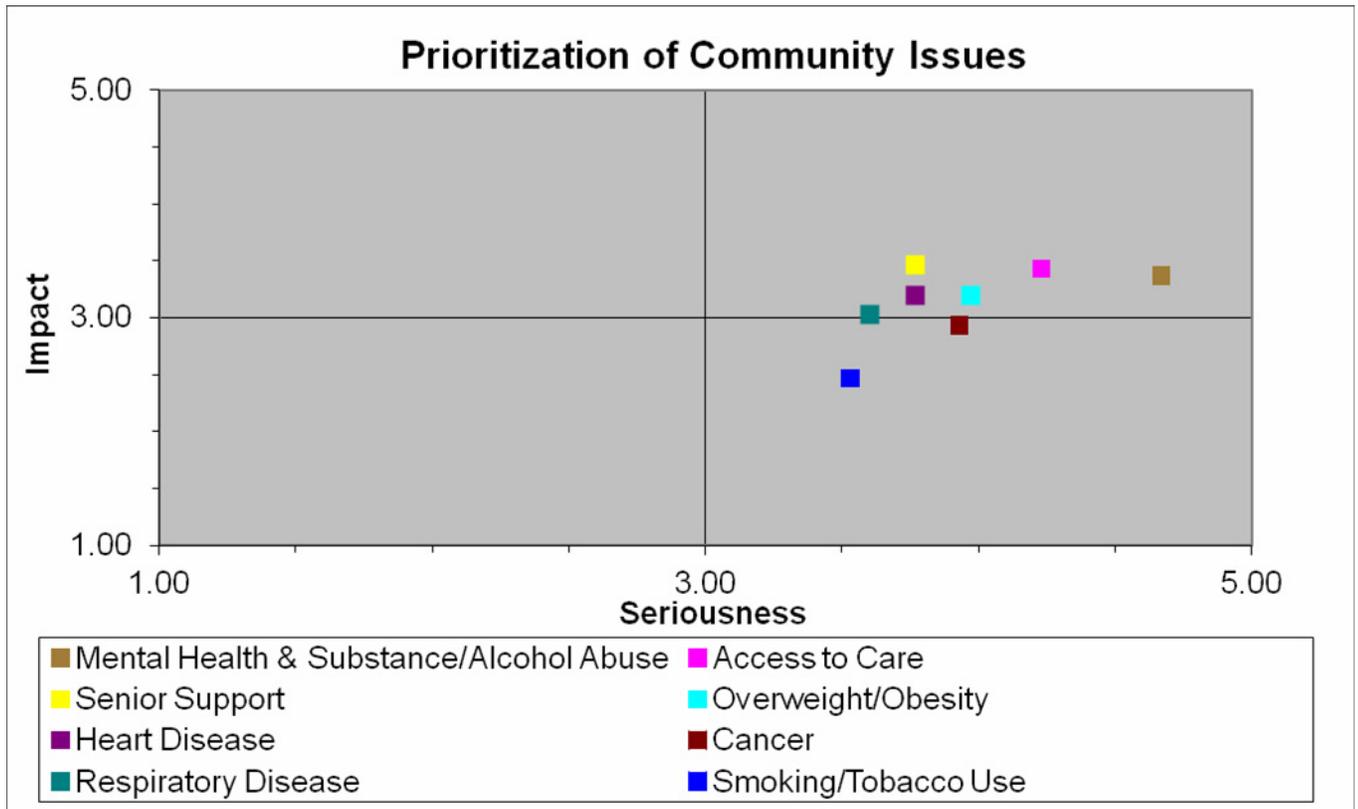
Once the master list was compiled, participants were asked to rate each need based on two criteria. The two criteria included the seriousness of the issue and the community's ability to impact the issue. Respondents were asked to rate each issue on a 1 (not at all serious; no ability to impact) through 5 (very serious; great ability to impact) scale. The ratings were gathered instantly and anonymously through a wireless audience response system. Each attendee received a keypad to register their vote. The following table reveals the results of the voting exercise.

Master List	Seriousness Rating	Impact Rating (average)	Average Total Score
-------------	--------------------	-------------------------	---------------------

	(average)		
<b>Mental Health &amp; Substance/Alcohol Abuse</b>	4.67	3.37	4.02
<b>Access to Care</b>	4.23	3.43	3.83
<b>Senior Support</b>	3.77	3.47	3.62
<b>Overweight/Obesity</b>	3.97	3.20	3.59
<b>Heart Disease</b>	3.77	3.20	3.49
<b>Cancer</b>	3.93	2.93	3.43
<b>Respiratory Disease</b>	3.60	3.03	3.32
<b>Smoking/Tobacco Use</b>	3.53	2.47	3.00

The priority area that was perceived as the most serious was Mental Health and Substance/Alcohol Abuse (4.67 average rating), followed by Access to Care (4.23 average rating), and Overweight/Obesity (3.97 average rating). The ability to impact Senior Support was rated the highest at 3.47, followed by Access to Care with an impact rating of 3.43.

The matrix below outlines the intersection of the seriousness and impact ratings. Those items in the upper right quadrant are rated the most serious and with the greatest ability to impact.



**Identified Health Priorities**

Attendees reviewed the findings from the voting and discussed cross-cutting approaches to further hone the priority areas. Ultimately, the following four priority areas for Bristol were adopted:

- Mental Health & Substance/Alcohol Abuse
- Access to Care
- Senior Support
- Overweight/Obesity

## Goal Setting

Bristol Hospital's Implementation Strategy illustrates the hospital's specific programs and resources that will support ongoing efforts to address the identified community health priorities. This work will be supported by community-wide efforts and leadership from the executive team and board of directors. The goal statements, related objectives and strategies, and inventory of existing community assets and resources for each of the four priority areas are listed below.

### 1) Mental Health and Substance/Alcohol Abuse

**Goal:** Improve mental health and reduce substance and alcohol abuse to protect the health, safety, and quality of life of Bristol residents.

#### Objectives:

- Increase the number of points of access for referral to services
- Increase the proportion of adults with mental health disorders and/or substance/alcohol abuse who receive treatment
- Increase the proportion of children with mental health disorders and/or substance/alcohol abuse who receive treatment
- Increase mental health and substance/alcohol abuse screenings by primary care providers

#### Key Indicators:

- Number/Percentage of patients accessing mental health and/or substance/alcohol abuse services through the hospital Emergency Department
- Number/Percentage of Emergency Department patients presenting with mental health and/or substance/alcohol abuse issues who are transferred to inpatient or outpatient facilities
- Number/Percentage of patients successfully referred for mental health and/or substance/alcohol abuse services
- Number/Percentage of primary care providers providing mental health treatment or referrals
- Percentage of primary care providers screening for mental health and/or substance/alcohol abuse
- Number of mental health and/or substance/alcohol abuse community outreach programs conducted and number of participants
- Number/Percentage of individuals who utilize mental health and/or substance/alcohol services (inpatient and outpatient)

#### Bristol Hospital Strategies:

- Bristol Hospital, in collaboration with the Wheeler Clinic, provides a Youth Mental Health First Aid Instructor Certification training to provide practitioners, mental health professionals, and educators an understanding of the risk factors and warning signs mental health problems in youth and how to help youth in crisis or experiencing mental health and/or substance abuse challenges.
- The Bristol Hospital Emergency Department is a point of access for patients requiring behavioral health services. Patients who are identified as requiring services are directly referred to the behavioral health unit within the hospital.

**Existing Community Assets to Address Need:**

- Wheeler Clinic
- Department of Mental Health & Addiction Services
- Bristol Community Organization social services
- The North American Family Institute
- United Way 2-1-1 program

**2) Access to Care**

**Goal:** Improve equitable access to comprehensive, quality health services.

**Objectives:**

- Increase the proportion of persons with a usual primary care provider
- Increase the proportion of persons who have a specific source of ongoing care
- Increase the number of practicing primary care providers
- Increase the proportion of persons with health insurance

**Key Indicators:**

- Number/Percentage of patients who are admitted to the Emergency Department without a primary care provider and who are connected to a provider upon discharge
- Number/Percentage of patients who are admitted to the hospital without a primary care provider and who are connected to a provider upon discharge
- Emergency Department usage rate for non-emergency care
- Hospital admissions rates/Hospital readmission rates
- Cost savings for reduction in unnecessary Emergency Department usage and hospital readmission rates
- Number/Percentage of patients who attend scheduled appointments
- Primary care physician to resident ratio
- Number/Percentage of adults and children with health insurance

**Bristol Hospital Strategies:**

- Bristol Hospital provides a listing of available primary care and urgent care providers and their information to all patients entering the emergency department.
- Bristol Hospital promotes access to available physician groups in local communications (church bulletins, health fairs, community events, etc.).
- Bristol Hospital offers free classes entitled, "The Doctor Is In." In these classes, Bristol Hospital physicians host discussions on the causes, prevention, diagnosis, and

treatment of disorders like neck pain, lung disease, sleep apnea, cardiovascular disease, thyroid disease, etc.

**Existing Community Assets to Address Need:**

- United Way Prescription Discount Program
- Bristol Community Organization case management services
- The Navigator and Assister Outreach Program that will train assisters to educate community members about the health exchange and the options available to them through it

**3) Senior Support**

**Goal:** Improve the health, function, and quality of life of older adults.

**Objectives:**

- Increase the proportion of older adults with one or more chronic health conditions who report confidence in managing their conditions
- Reduce the proportion of older adults who have moderate to severe functional limitations
- Increase the number of practicing geriatric care providers
- Increase the proportion of older adults with reduced physical or cognitive function who engage in light, moderate, or vigorous leisure-time physical activities

**Key Indicators:**

- Number/Percentage of older adults with a chronic health condition who comply with recommended care techniques (i.e. medications, glucose-level monitoring, foot checks, etc.)
- Number/Percentage of older adults with a chronic health conditions who are admitted to the hospital and report a high-level of understanding of disease management upon discharge
- Number/Percentage of older adults who report having one or more activities of daily living limitations
- Geriatric care physician to senior resident ratio
- Number/Percentage of older adults who are counseled on suitable physical activities based on their physical and cognitive function and who engage in these activities

**Bristol Hospital Strategies:**

- Bristol Hospital hired a new geriatric physician within the community who will coordinate care among primary care physicians and specialists for seniors and offer free speaking engagements on senior topics throughout the community
- The Bristol Hospital Diabetes Center offers free educational presentations at senior centers regarding diabetes and nutrition.
- Bristol Hospital offers free balance screenings to seniors to evaluate their risk(s) of falling.
- Bristol Hospital Home Care and Hospice offer free blood pressure screenings and bereavement counseling to seniors.

- Bristol Hospital offers a free Alzheimer's support group.

**Existing Community Assets to Address Need:**

- United Way TRIAD program
- Bristol Senior Community Center
- Bristol Senior Services
- Connecticut Community Care, Inc.
- Bristol Community Organization Retired & Senior Volunteer Program

**4) Overweight and Obesity**

**Goal:** Promote health and reduce chronic disease through healthful diets and physical activity and maintenance of healthy body weights.

**Objectives:**

- Increase the proportion of primary care physicians who regularly measure the Body Mass Index (BMI) of their patients
- Increase the proportion of physician office visits that include counseling or education related to nutrition or weight
- Reduce the proportion of adults and children who are overweight or obese

**Key Indicators:**

- Number/Percentage of primary care physicians who report the BMI of their patients
- Number/Percentage of overweight and obese adults and children based on BMI
- Number of individuals participating in health education programs
- Number/Percentage of patients who report incorporating healthy lifestyles behaviors and techniques and/or increased knowledge of the components of healthy living/lifestyles
- Emergency Department/Hospital admissions/readmissions for chronic conditions

**Bristol Hospital Strategies:**

- Through the Parent and Child Center, Bristol Hospital offers the following programs free of charge:
  - Growing Healthy Families: Worth the Weight
  - Cooking Matters in the Store
  - Gardening for Health
  - Preparing Healthy, Toddler Friendly Snacks and Meals
- Through the Parent and Child Center, Bristol Hospital also offers a program entitled, Nutrition and Young Children. This program is offered at a reduced rate due to grant funding from the Petit Family Foundation and the Fuller & Myrtle Barnes Fund for Education.
- Bristol Hospital offers a bariatric weight loss surgery program and support group. The support group offers free seminars on topics like "Portion control," "Getting through the holidays," and "Eating on the run: Good choices."
- Registered Dietitians at Bristol Hospital offer the program, Nutrition and Cooking Fundamentals.

- Bristol Hospital provides an Overeaters Anonymous Support Group for individuals recovering from compulsive overeating.

### Existing Community Assets to Address Need:

- Bristol/Burlington Health District
- United Way
- YMCA
- Private and public school systems

### Approval from Governing Body

The Bristol Hospital Quality Improvement Committee of the Board of Directors met on September 12, 2013 to review the findings of the CHNA and the recommended Implementation Strategy. The board voted to adopt the Final Summary Report and the Implementation Strategy and provide the necessary resources and support to carry out the initiatives therein.

## APPENDIX A: Secondary Data Profile References

Bristol Hospital. (2013). *Bristol Hospital behavioral health data*.

Centers for Disease Control and Prevention. (2012). *Births: Final data for 2010*. Retrieved from [http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_01.pdf)

Centers for Disease Control and Prevention. (2012). *Deaths: Final data for 2010*. Retrieved from [http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_04.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_04.pdf)

Centers for Disease Control and Prevention. (2012). *Lyme disease*. Retrieved from [http://www.cdc.gov/lyme/stats/chartstables/reportedcases\\_statelocality.html](http://www.cdc.gov/lyme/stats/chartstables/reportedcases_statelocality.html)

Centers for Disease Control and Prevention. (2012). *2011 Sexually transmitted diseases surveillance*. Retrieved from <http://www.cdc.gov/std/stats11/tables/1.htm>

Centers for Disease Control and Prevention. (2013). *Tuberculosis*. Retrieved from <http://www.cdc.gov/tb/publications/factsheets/statistics/TBTrends.htm>

Centers for Disease Control and Prevention. (2012). *Viral hepatitis*. Retrieved from <http://www.cdc.gov/hepatitis/Statistics/2010Surveillance/index.htm>

Centers for Disease Control and Prevention. (2013). *HIV surveillance report, 2011*. Retrieved from [http://www.cdc.gov/hiv/pdf/statistics\\_2011\\_HIV\\_Surveillance\\_Report\\_vol\\_23.pdf#Page=17](http://www.cdc.gov/hiv/pdf/statistics_2011_HIV_Surveillance_Report_vol_23.pdf#Page=17)

Centers for Disease Control and Prevention. (2013). *National program of cancer registries (NPCR)*. Retrieved from <http://apps.nccd.cdc.gov/uscs/>

Centers for Disease Control and Prevention, National Center for Health Statistics. (2012). *Underlying cause of death 1999-2010 on CDC WONDER online database*. Retrieved from <http://wonder.cdc.gov/controller/datarequest/D76>

Connecticut Department of Education. (n.d.). *Connecticut education data and research*. Retrieved

from [http://sdeportal.ct.gov/Cedar/WEB/ct\\_report/StudentNeedDT.aspx](http://sdeportal.ct.gov/Cedar/WEB/ct_report/StudentNeedDT.aspx)

Connecticut Department of Public Health. (2010). *Connecticut school-based asthma surveillance*

*report 2010*. Retrieved from

<http://www.ct.gov/dph/cwp/view.asp?a=3137&q=398480>

Connecticut Department of Public Health. (2012). *Childhood lead poisoning in Connecticut*. Retrieved from

[http://www.ct.gov/dph/cwp/view.asp?a=3140&q=387576&dphNav\\_GID=1828](http://www.ct.gov/dph/cwp/view.asp?a=3140&q=387576&dphNav_GID=1828)

Connecticut Department of Public Health. (2013). *Mortality/deaths*. Retrieved from

<http://www.ct.gov/dph/cwp/view.asp?a=3132&q=521462>

Connecticut Department of Public Health. (2013). *Vital statistics*. Retrieved from

[http://www.ct.gov/dph/cwp/view.asp?a=3132&q=394598&dphNav\\_GID=1601&dphNav\\_GID=1601](http://www.ct.gov/dph/cwp/view.asp?a=3132&q=394598&dphNav_GID=1601&dphNav_GID=1601)

Connecticut Department of Public Health. (n.d.). *Connecticut cancer incidence 2003-2007 by town*.

Retrieved from

[http://www.ct.gov/dph/cwp/view.asp?a=3129&q=389716&dphNav\\_GID=1601](http://www.ct.gov/dph/cwp/view.asp?a=3129&q=389716&dphNav_GID=1601)

Connecticut Department of Public Health. (n.d.). *Disease & injury surveillance*. Retrieved from

[http://www.ct.gov/dph/taxonomy/v4\\_taxonomy.asp?DLN=46973&dphNav=|46941|46973|](http://www.ct.gov/dph/taxonomy/v4_taxonomy.asp?DLN=46973&dphNav=|46941|46973|)

Connecticut Department of Public Safety. (2013). *Uniform crime reports: Publications & queryable statistics*. Retrieved from <http://www.dpsdata.ct.gov/dps/ucr/ucr.aspx>

Federal Bureau of Investigation. (n.d.). *Crime statistics*. Retrieved from

<http://www2.fbi.gov/ucr/cius2009/index.html>

U.S. Census Bureau. (2000). *Census 2000 gateway*. Retrieved from

<http://www.census.gov/main/www/cen2000.html>

U.S. Census Bureau. (2010). *American fact finder*. Retrieved from

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Census Bureau. (n.d.). *American fact finder*. Retrieved from

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

U.S. Department of Health and Human Services. (2012). *Healthy People 2020*.

Retrieved from <http://www.healthypeople.gov/2020/default.aspx>

U.S. Department of Health and Human Services. (2013). *The 2013 HHS poverty guidelines*. Retrieved from <http://aspe.hhs.gov/poverty/12poverty.htm>

## APPENDIX B: Prioritization Session Participants

Name	Organization
Paul Arbesman	Bristol Hospital Corporator
Linda Arbesman	Bristol Hospital Corporator
Len Banco, MD	Bristol Hospital Executive Leadership
Kurt Barwis	Bristol Hospital Executive Leadership
Jarre Betts	Main Street Community Foundation
Chris Boyle	Bristol Hospital
Ann Burch	Home Care
Pastor Tim Camerl	Beulah A.M.E.Zion church
Kimberly Carmelich	Bristol Hospital
Sara Castle	Imagine Nation Preschool Learning Center
Caren Chalfant	Home Care
Dennis Cleary	Wolcott Health Systems
Ken Cockayne	Bristol City Council
Karen Cornell	Bristol Hospital
Wendy DeAngelo	Wheeler Clinic
Jessica Dunn	Bristol Housing Authority
George Eighmy	Bristol Hospital Leadership Group
Karen Eisenhauer	Bristol Hospital
Gretchen E. Elder, MSW, LCSW	Continuum of Care, Inc
Jill Fitzgerlad	Office of Senator Jason Welch
Mary Lynn Gagnon	United Way of West Central Connecticut
Rev. Lisabeth Gustafson	Bristol Baptist Church
Rev. Bill Hawley	Plymouth Congregational Church
Pastor Beatrice Jones	Redeemers A.M.E.Zion church
Sheila Kempf	Bristol Hospital Leadership Group
Rev. Kristen J. Kleiman	The First Congregational Church United Church of Christ
Frank Kramer	Bristol City Council Candidate

---

John Leone	Bristol Hospital Board of Directors
Deanna Lia	Region 6 - Meriden, New Britain
Lexie Mangum	NAACP
Eileen M. McNulty, MSW	Bristol Youth Services
Thomas H. Morrow	Bristol Community Organization
Charles Motes, Jr., MS, MPH, RS	Bristol Burlington Health District
Marie O'Brien	Bristol Hospital Board of Directors
Lori Powell	St. Vincent Depaul Mission of Bristol, Inc
Susan Scully	Wolcott Chamber of Commerce
Jeffrey Shelton, MD	Bristol Hospital Medical Staff
Bethany Spada	Bristol Hospital
Susan Sadecki, MBA	Main Street Community Foundation
Linda Urbanski	Bristol Hospital Leadership Group



## COMMUNITY HEALTH NEEDS ASSESSMENT

### IMPLEMENTATION STRATEGY

#### BACKGROUND

The Backus Health System led a comprehensive **Community Health Needs Assessment (CHNA)** to evaluate the health needs of its service area defined as New London and Windham Counties, Connecticut.

The purpose of the CHNA was to gather information about local health needs and behaviors to ensure Backus community health improvement initiatives and community benefit activities are aligned with community need. The assessment examined a variety of community, household and health statistics to portray a full picture of the health and social determinants of health in the Backus Health System service area.

#### *The primary goals of the CHNA were to:*

- **Provide a baseline measure** of key health indicators
- **Guide health policy** and health strategies
- **Offer a platform** for collaboration among community groups
- **Identify** community health needs
- **Establish benchmarks** and monitor health trends
- **Assist** with community benefit requirements

The study included research conducted in 2009-10 and 2012-13.

#### *Research components included:*

- **Statistical Secondary Data Profile** of New London/Windham Counties
- **A household telephone survey** with 461 community residents focused on the Ancillary Service Area, to augment study of 1,109 households focused on the Primary and Secondary Service Areas in 2010
- **Key Informant Interviews** with 49 community stakeholders
- **Focus group discussions** with 24 healthcare consumers

Backus engaged Holleran Consulting, a research and consulting firm based in Lancaster, Pennsylvania, as its research partner.

Since the Backus Health System extends beyond the walls of the hospital, and serves communities throughout New London and Windham Counties, Backus initiated a CHNA in 2013 to enhance existing data that was gathered as part of a 2010 study.

The datasets are used in tandem, and provide a full, comprehensive picture of the Eastern Connecticut region. Further, data is now easily comparable to gold standard studies and national benchmarks, such as the Robert Wood Johnson Foundation County Health Ranking, and Healthy People 2020. All study components will be made available to the public; the new, enhanced data will be useful to a wider audience, including agencies throughout the region.

The complete study will be used as a baseline to measure the impact of programs and services offered.

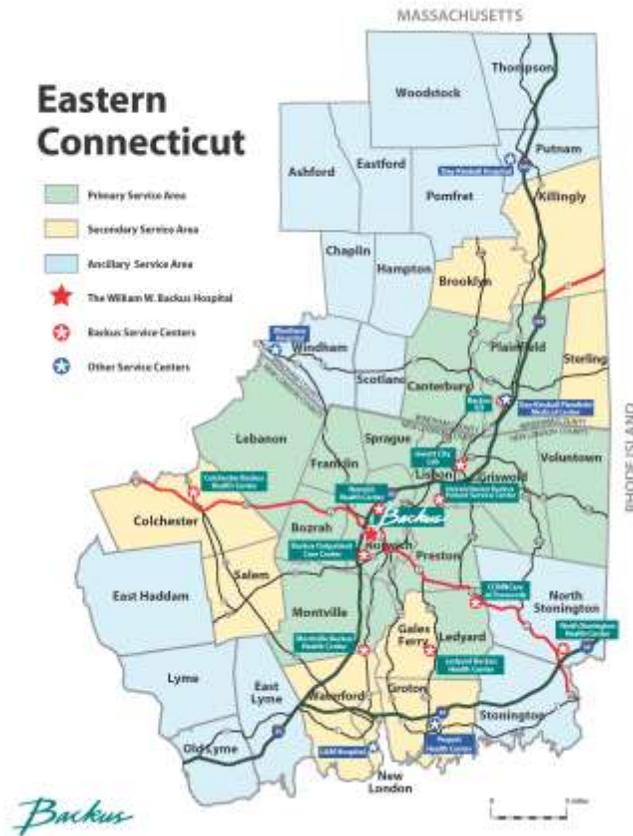
The CHNA research was reviewed by Backus and its Advisory Task Force, which included Backus leadership, Public Health experts, and agencies representing medically underserved and vulnerable communities. A review of the research findings and a facilitated Prioritization Session was held with community partners to identify priority needs within the community. Backus reviewed feedback from the Prioritization Session, along with its current services and programs, resources and areas of expertise, and other existing community assets, to determine what identified needs it would address, and those it would play a support role in addressing.

## **BACKUS HEALTH SYSTEM SERVICE AREA**

The Backus Health System defines the communities it serves as Primary, Secondary and Ancillary Service Areas.

The Primary and Secondary Service Areas are defined utilizing percentage of hospital inpatient discharges.

Backus leaders included an “Ancillary” service area encompassing all remaining towns in New London and Windham Counties to get a true picture of health for the region. Pieces of the Health System, including outpatient health centers, and a full service 24/7 satellite emergency department, touch patients residing in all towns in Eastern Connecticut.



## SELECTION OF THE COMMUNITY HEALTH PRIORITIES

On January 23, 2013, Backus hosted a Prioritization Session with hospital and community representatives to review the research findings and prioritize the key issues for adoption and inclusion in the Backus Implementation Plan.

***The objectives of the half-day strategic planning session were to:***

- **Provide an overview** of recently compiled community health data and highlight key research findings
- **Initiate discussions** around key health issues and prioritize based on select criteria
- **Brainstorm goals** and objectives to guide the Backus Implementation Plan
- **Examine the Backus Health System’s role** in addressing community health priorities

A total of 25 individuals attended the strategic planning session, including experts in public health, representatives of underserved populations, health and social services agencies, and other community stakeholders. A full list of attendees is included below.

<b>Name</b>	<b>Agency</b>
Thomas Reynolds	United Way
Nancy Cowser	United Community & Family Services
Jillian Corbin	St. Vincent DePaul Soup Kitchen
Lee-Ann Gomes	Norwich Human Services
Kelcey Johnson	United Community & Family Services
Yolanda Bowes	United Community & Family Services
John Wong	Chinese American Cultural Association
Beverly Goulet	Norwich Human Services
Gregory Allard	American Ambulance
Patrick McCormack	Uncas Health District
Cindy Arpin	Uncas Health District
Bethany Duval	Plainfield School Nurse Coordinator
Kathy Sinnett	APRN, Norwich Public Schools
Michele Devine	South Eastern Regional Action Council
Deborah Monahan	Thames Valley Council for Community Action
David Yovaisis	Thames Valley Council for Community Action
Scott Sjoquist	Mohegan Sun Tribal Health Director
Dee Boisclair	Backus Home Health Care
Sue Starkey	Northeast District Department of Health
Robert Mills	Norwich Community Development Corporation
Shawn Mawhiney	Backus Hospital
Alice Facente	Backus Hospital
Lisa Cook	Backus Hospital
Janette Edwards	Backus Hospital

Holleran facilitated an open group discussion for attendees to share what they perceived to be the needs and areas of opportunity in the region. This included a discussion of overlapping issues, root

causes of health, and the ability for regional health and human services providers to effectively address the various needs. After some consolidation and a considerable amount of dialogue, a list was developed by the attendees. The list was considered a “master list” of needs to be evaluated as potential priority areas for community health improvement activities. The list is presented in alphabetical order:

- Access to Care (physician ratio/insurance, cultural competency, other barriers, hospitalizations)
- Built Environment
- Infectious Disease
- Mental Health: Depression and Anxiety
- Obesity and Related Chronic Conditions (diabetes management)
- Preventative Health (mammograms, pneumonia vaccinations, oral health, seatbelts)
- Respiratory Disease: Asthma/Lung Cancer (smoking)
- Substance Abuse

### Prioritization of Community Issues

To further identify the most urgent priority areas, participants were asked to rank the master list. The participants were provided with information regarding the prioritization process, criteria to consider when evaluating key areas of focus, and other aspects of health improvement planning, such as goal setting and developing strategies and measures.

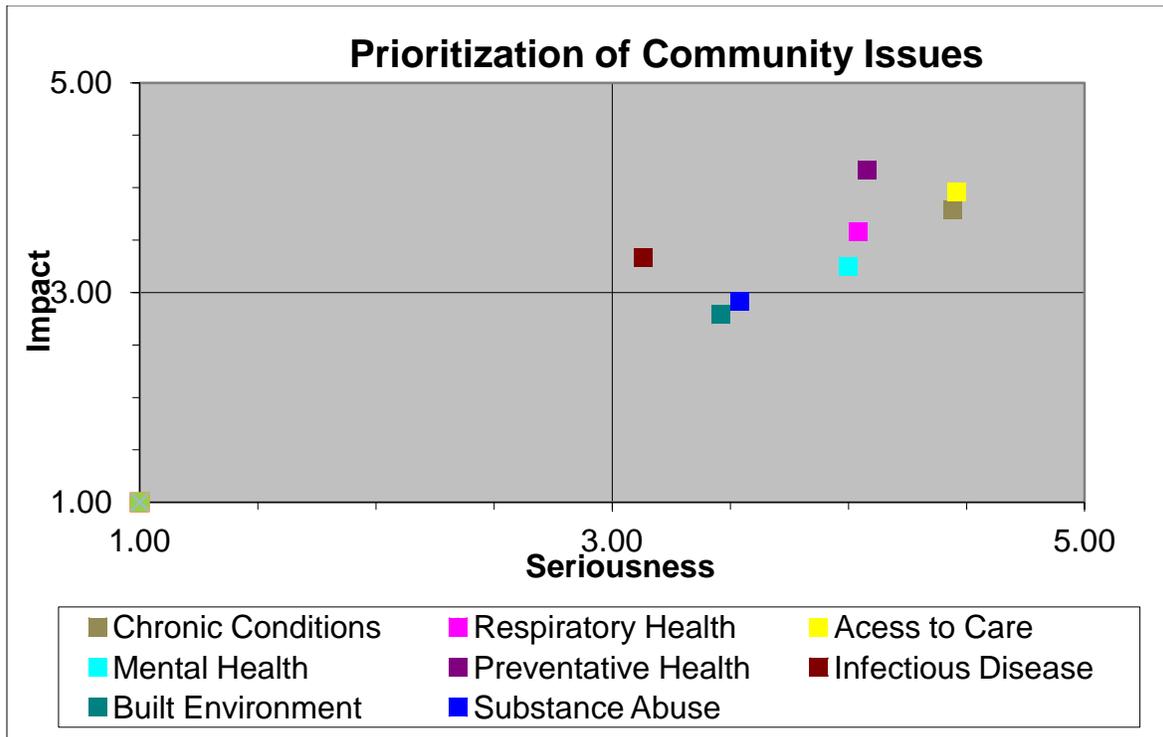
Participants were asked to rate each need based on two criteria: seriousness of the issue and the ability to impact the issue. Respondents were asked to rate each issue on a 1 (not at all serious; no ability to impact) through 5 (very serious; great ability to impact) scale. The ratings were gathered instantly and anonymously through a wireless audience response system. The following tables reveal the results of the voting exercise.

Master List	Seriousness Rating (average)	Impact Rating (average)
Access to Care	4.46	3.96
Preventative Health	4.08	4.17
Chronic Conditions	4.44	3.79
Respiratory Health	4.04	3.58
Mental Health	4.00	3.25
Infectious Disease	3.13	3.33
Substance Abuse	3.54	2.92
Built Environment	3.46	2.79

The priority area that was perceived as the most serious was Access to Care (4.46 average rating), followed by Chronic Conditions (4.44 average rating). The ability to impact Preventative

Health was rated the highest at 4.17, followed by Access to Care with an impact rating of 3.96. The matrix below outlines the intersection of the seriousness and impact ratings. The scores are graphed below in Figure A1. The needs in the upper right quadrant are rated the most serious and with the greatest ability to impact.

**Figure A1: Results of Seriousness and Impact Voting**



**NEEDS THAT THE BACKUS HEALTH SYSTEM WILL ADDRESS**

Backus reviewed feedback from the Prioritization Session, along with its current services and programs, resources and areas of expertise, and other existing community assets, to determine which identified needs it would address.

*The following needs were identified by Backus as its priority areas for the following three-year cycle:*

- **Access to Care**
- **Preventative Health** (including chronic and infectious disease, respiratory health, and obesity)
- **Mental Health** (including substance abuse)

## STRATEGIES TO ADDRESS COMMUNITY HEALTH NEEDS

In support of the 2013 Community Health Needs Assessment, and ongoing community benefit initiatives, Backus plans to implement the following strategies to impact and measure community health improvement.

### Access to Quality Health Care

Backus supports the Institute for Healthcare Improvement's "Triple Aim" assertion that providing access to the right care, in the right setting, at the right time improves health status and outcomes.

By utilizing the quantitative and qualitative data gathered as part of the 2012-2013 Community Health Needs Assessment, Backus plans to enhance and increase access to care for vulnerable populations in Eastern Connecticut. Backus expects that by providing access to primary care in community-based settings, a reduction in Emergency Department utilization among affected populations will occur. Backus plans to leverage existing Access to Care programs and initiatives to meet this goal.

**GOAL: Increase access to quality health care for Eastern Connecticut residents, through the Backus Health System Access to Care program (a partnership with United Community & Family Services), and the My Health Direct system.**

#### OBJECTIVES:

- Increase the number of residents who have access to primary care providers
- Increase utilization of free and low cost health care services

#### KEY INDICATORS:

- #/% of adults who are connected to a medical home via My Health Direct
- #/% of adults who attend scheduled appointments through My Health Direct
- #/% of adults who have health coverage, after participating in the Access to Care program
- #/% of Emergency Department visits for non-emergency care, in those patients who participated in Access to Care or received a My Health Direct appointment
- #/% of hospital admissions or readmissions in those patients who participated in Access to Care or received a My Health Direct appointment

**BACKUS HEALTH SYSTEM STRATEGIES:**

- ***Identify and enroll uninsured individuals in health coverage programs***
- ***Assist individuals with no primary care provider with establishing a primary medical home.***
  - **Access to Care**, A partnership with the United Community and Family Services, which provides on-site screenings, during first and second shifts, at the Emergency Department, the Plainfield Backus Emergency Care Center, and the Backus Health Centers for Medicaid programs, the Supplemental Nutrition Assistance Program, Prescription Assistance Program, and other health and human services. The Access to Care program also provides education to patients regarding the importance of establishing a primary care medical home, and can create appointments for patients with a primary care physician.
  - **My Health Direct**, An online tool the Hospital subscribes to that allows hospital staff to create follow up appointments with community providers for patients post discharge from the Emergency Department, an inpatient unit, or an outpatient program. My Health Direct is used throughout the Backus Health System, including in the Emergency Departments, Care Management, Behavioral Health, the Cardiac Unit, the Mobile Health Resource Center Van, and the Backus CareVan.
- ***Provide free or reduced cost primary care services.***
  - **Partnerships with Generations Family Health Centers**, A fully-funded 501(c)3 Federally Qualified Health Center with locations throughout Eastern Connecticut.
  - **Partnerships with United Community & Family Services**, A 501(c)3 Federally Qualified Health Center look-alike, with locations throughout New London and Windham Counties.

**EXISTING COMMUNITY ASSETS AND RESOURCES:**

- Backus CareVan
- Backus Mobile Health Resource Center (MHRC)
- United Community & Family Services (UCFS)
- Generations Family Health Centers
- Thames Valley Council for Community Action (TVCCA)
- St. Vincent de Paul Place
- Uncas Health District (UHD)
- Northeast District Department of Health

## Preventative Health, including Chronic & Infectious Disease, Respiratory Health, and Obesity

Backus plays a leadership role in preventative health in Eastern Connecticut. Acknowledging chronic disease conditions that were identified in the CHNA, (Diabetes, Cardiovascular Disease, Lung Cancer, Asthma, Hepatitis C, and HIV/AIDS) and their relationship to diet, exercise, smoking, and other preventable risk factors, Backus will seek to reduce chronic conditions by focusing on education and awareness programs. A reduction in disease rates will likely not be seen in the initial three-year cycle, however, Backus expects that success in reducing the prevalence of residents who are at risk for chronic conditions and better managing current chronic conditions will positively impact chronic disease in the future.

**GOAL: Reduce risk factors that contribute to disease, and management for patients with a diagnosis of chronic disease.**

### OBJECTIVES:

- Reduce overweight and obesity rates in patients enrolled in a Backus Health System weight loss initiative
- Reduce prevalence of smoking among adults enrolled in a Backus Health System smoking cessation or prevention initiative
- Reduce Emergency Department visits for unmanaged chronic conditions including Asthma, Heart Failure, and Diabetes among individuals enrolled in a Backus Health System chronic disease management initiative

### KEY INDICATORS:

- #/% of patients who attend Backus Health System health improvement programs
- #/% ED/hospital admissions/readmissions for chronic conditions, among individuals enrolled in a Backus Health System Chronic Disease Management program
- #/% of individuals participating in free or reduced cost health screenings sponsored by the Backus Health System

### BACKUS HEALTH SYSTEM STRATEGIES:

- ***Provide education and opportunities to improve diet and increase physical activity***
  - **Healthy Community Initiative** — focusing on identifying uninsured individuals and families, providing health screenings, and mobile health care to improve access to care and the overall health of the community residents. Backus will partner with organizations like the United Way, the Mobile Food Pantry, and schools to build upon existing assets to reach residents through established resources and channels of communication.
  - **Backus StrongKids** — a pilot program in the local schools focusing on education on healthy eating and exercise.

- **Life Happens** — a collaborative program in a local technical high school with monthly presentations on physical and mental health topics, based on student survey results.
  - **Rx For Health** — a program that allows participating physicians to “prescribe” farmers’ market fare for children who are obese or at risk to be obese.
  - **Enjoy LIFE (Lifelong investment in Fitness & Exercise)** — a collaboration between Backus Hospital and Plainfield Recreation Department to promote healthy lifestyle changes for the people of Windham County.
  - **Medical Weight Loss Center and Wellness Program** — a 17-week comprehensive, multi-disciplinary approach to weight loss for those individuals seeking significant weight loss and lifestyle changes to improve long-term health and overall wellness. The program includes education and support from registered dietitians, physical therapists and behavioral health specialists. Participants receive one-on-one consults as well as 16, one-hour education classes.
- ***Provide education and opportunities to prevent and manage chronic disease***
- **Backus Hospital Heart Failure and Wellness Program** — designed to meet special needs of adult patients and families suffering from heart failure. The goal of the program is to prolong life and improve patient’s quality of life.
  - **Smoking Cessation** — a seven-week, eight-session course, ALA “Freedom from Smoking” cessation classes, offered six times per year.
  - **Asthma Initiative** — a program designed to teach participants management skills to keep their asthma under control, have fewer symptoms and gain a better quality of life.
  - **Outpatient Diabetes Self Management Program** — provides comprehensive care through a collaboration between a multi-disciplinary team and primary care provider. The goal is for the person with diabetes to be involved in the establishment of a management program based on the individual’s needs.
- ***Support preventative care programming through “hot-spotting” to determine health care conditions and utilization by geography***
- **Connecticut Hospital Association ChimeMaps**, Interactive GIS-mapping software used to evaluate hospital, health, and population data for the purposes of strategic planning and business development, community analysis and population health assessment. The *ChimeMaps* tool is used to provide targeted outreach in neighborhoods and communities, by analyzing hospital utilization for specific diagnoses. The tool gives Backus Health System the ability to address health needs proactively, providing preventative care to reduce the need for residents to seek care in an acute setting.

**EXISTING COMMUNITY ASSETS AND RESOURCES:**

- Backus CareVan
- Connecticut Hospital Association (CHA)
- Backus Mobile Health Resource Center (MHRC)
- Uncas Health District (UHD)
- United Community & Family Services (UCFS)
- Generations Family Health Centers
- Thames Valley Council for Community Action (TVCCA)
- St. Vincent de Paul Soup Kitchen
- New London County Food Policy Council
- Children First (Norwich, Griswold, Colchester)
- Parks and Recreation departments (Norwich, Griswold, Colchester, Plainfield, Sprague)
- Public School Systems (Norwich, Griswold, Colchester, Plainfield, Sprague)
- Northeast District Department of Health

## Mental Health and Substance Abuse

**GOAL: Improve the access to, and coordination of, mental health services and substance abuse treatment for residents of Eastern Connecticut.**

### OBJECTIVES:

- Improve collaboration between community agencies providing residential and outpatient substance abuse treatment programs
- Increase awareness and utilization of Access to Care and Prescription Assistance Programs among Emergency Department psychiatric clinicians
- Increase community outreach and education efforts focusing on mental health and substance abuse

### KEY INDICATORS:

- #/% of Emergency Department psychiatric patients who are referred to the Access to Care program by an Emergency Department psychiatric clinician prior to discharge
- #/% of psychiatric patients who are referred and accepted into regional substance abuse programs
- # of community education and outreach programs focused on mental health and substance abuse

### BACKUS HEALTH SYSTEM STRATEGIES:

- ***Increase collaboration between community agencies that offer residential and outpatient substance abuse treatment programs***
  - **Center for Mental Health** — an outpatient component of the full continuum of care in the Department of Psychiatric Services. Provides individual and group assessments and therapy sessions, as well as medication evaluation and treatment visits.
  - **Partial Hospitalization Program** — provides intensive psychiatric treatment to patients who are experiencing acute symptoms that require a highly structured environment in which to receive treatment. Partial hospitalization — which is offered for five hours a day, for up to five days per week — can follow a course of inpatient treatment, or to avoid inpatient treatment altogether.
  - **Inpatient Psychiatric Services** — an 18-bed unit that provides high quality inpatient services to individuals with any psychiatric disorder including major depression, schizophrenia, bipolar disorder, anxiety disorders, postpartum psychosis, as well as those with dual diagnosis of substance abuse and psychiatric illness.

- ***Reduce identified barriers to accessing mental health and substance abuse services for those patients being discharged from the Emergency Department***
  - **Access to Care** — a partnership with the United Community & Family Services, which provides on-site screenings, during first and second shifts, at the Backus Emergency Department, the Plainfield Backus Emergency Care Center, and the Backus Health Centers for Medicaid programs, the Supplemental Nutrition Assistance Program, Prescription Assistance Program, and other health and human services. The Access to Care program also provides education to patients regarding the importance of establishing a primary care medical home, and can create appointments for patients with a primary care physician.
  - **Prescription Assistance** — a service offered by United Community and Family Services through the Access to Care program, in addition to Generations Family Health Center, that assists low-income and uninsured patients enroll in prescription assistance programs to receive pharmaceuticals at no or low cost.
  - **Connecticut Hospital Association *ChimeMaps*** — interactive GIS-mapping software used to evaluate hospital, health, and population data for the purposes of strategic planning and business development, community analysis and population health assessment. The *ChimeMaps* tool is used to provide targeted outreach in neighborhoods and communities, by analyzing hospital utilization for specific diagnoses. The tool gives Backus the ability to address health needs proactively, providing preventative care to reduce the need for residents to seek care in an acute setting.
  - **Mental Health First Aid** — a 12-hour internationally recognized, interactive training course designed to give members of the public key skills to help someone who is developing a mental health problem or experiencing a mental health crisis. Mental Health First Aiders learn to apply a 5-step action plan to:
    - help someone through a panic attack
    - engage with someone who may be suicidal
    - support a person experiencing psychosis
    - help an individual who has overdosed
  
- ***Educate the community and reduce stigma associated with mental health and substance abuse through community outreach efforts***
  - **Life Happens** — a collaborative program in regional technical high school with monthly presentations on physical and mental health topics, based on student survey results.
  - **Tics and Tourette's in Teens and Children** — an educational program for parents focusing on recognition and treatment in youth.
  - **Thrive4Life** — a collaborative initiative with Norwich Public Schools to discuss mental health issues identified by a youth survey.

- **Evening Educational Seminars and Program** — various educational opportunities open to the public and free of charge focusing on anxiety, depression, and bullying.
  - **Autism Awareness in Public School Nurses and Staff** — workshops on identifying and managing Autism in school age children.
  - **Emergency Management of the Autistic Patient** — a workshop designed for Emergency Department clinical staff to become familiar with techniques to better manage autistic patients.
  - **Partnership with University of Connecticut Study** — coordination of local pediatric practices in Eastern Connecticut participating in an Autism Early Detection Study to evaluate the use of a new screening tool.
- ***Improve the discharge process and care coordination for homeless psychiatric patients by utilizing existing models within the region***
- **Primary Care at St. Vincent de Paul Place** — free primary care is offered at the St. Vincent de Paul Place Soup Kitchen every Monday in partnership with Generations Family Health Center.

#### **EXISTING COMMUNITY ASSETS AND RESOURCES:**

- Natchaug Hospital, including the Care Plus Program
- Stonington Institute
- SouthEastern Council on Alcohol and Drug Dependence (SCADD)
- Lebanon Pines
- SouthEastern Regional Action Council (SERAC)
- Norwich Hospitality Center
- SouthEastern Mental Health Authority (SMHA)
- Danielson Shelter
- St. James' Place, New London
- Reliance House

## **RATIONALE FOR COMMUNITY HEALTH NEEDS NOT ADDRESSED**

By focusing efforts the cross-cutting issues of **Access to Care, Preventative Health (including chronic and infectious disease, respiratory health, and obesity), and Mental Health (including substance abuse)**, the Backus Health System will take a comprehensive approach to addressing eight of the nine most urgent needs in the communities it serves. As with all Backus Health System programs, it will continue to monitor community needs and adjust programming and services accordingly.

Backus recognizes that there are a numerous partners in the community that can help to improve the identified health needs. In some cases, partners are better suited to lead the initiative to impact certain health needs. Such is the case with the built environment. Backus Health System will support ongoing and new efforts to improve the community's physical environment and infrastructure to improve safety, the transportation system, and create more opportunities for physical activity, but sees its primary role as allocating resources to address direct health needs for the community.

To secure commitment of support from community partner agencies, Backus will seek formal letters of support from community agencies that participated in the study. These letters of support verify that community partners are willing to work together to address the priority areas identified through the Needs Assessment, and acknowledge that Backus cannot address all concerns alone.