BUTLER HOSPITAL

a Care New England Hospital

2016 Community Health Needs Assessment

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Our Commitment to Community Health

Butler Hospital is a major brain science research and teaching hospital for psychiatric and movement and memory disorders. As Rhode Island's only private, nonprofit psychiatric and substance abuse hospital for adolescents, young adults, adults and seniors, Butler is focused on advancing the understanding of brain-based illnesses and on developing innovative treatments to improve the lives of people who suffer from them. Worldwide, Butler is recognized as a pioneer in conducting cutting-edge research as the flagship psychiatry hospital for The Warren Alpert Medical School of Brown University.

Care New England Health System, the not-for-profit parent organization, founded in 1996, is a trusted organization that fuels the latest advances in medical research, attracts the nation's top specialty-trained doctors, hones renowned services and innovative programs, and engages in the important discussions people need to have about their health and end-of-life wishes. Care New England is helping to transform the future of health care, providing a leading voice in the ongoing effort to ensure the health of the individuals and communities we serve.

Backed by a broad range of care—primary care, surgery, cardiovascular care, oncology, psychiatry, behavioral health, newborn pediatrics and the full spectrum of women's health services—CNE is reinventing the way health care is delivered, partnering with our patients to provide the best care possible while working to create a community of healthier people.

Care New England prides itself in its on-going efforts to assess community need and has always strived to respond with programs and interventions geared toward addressing these needs. Through targeted efforts, Care New England has worked to improve public health and the quality of life for the state and region. From staff involvement in community organizations to the role we play as educators for those aspiring to careers in health, from the sponsorship of community events to the everyday commitment of our health educators who lead a rich array of classes and programs at our institutions, we embrace our roles as advocates, teachers and good neighbors.

In support of Care New England's community benefit activities and to guide community health improvement efforts across the system, Care New England participated in a statewide comprehensive Community Health Needs Assessment (CHNA), led by the Hospital Association of Rhode Island (HARI), and its member hospitals. The 2016 CHNA builds upon our hospital's previous CHNA conducted in 2013. The assessment was conducted in a timeline to comply with requirements set forth in the Affordable Care Act (ACA), as well as to further the hospital's commitment to community health and population health management.

Mission

To be your partner in health.

Vision

To create a community of healthier people.

Values

Care New England's organizational values emphasize individual contributions and a team approach that foster:

Accountability • Caring • Teamwork

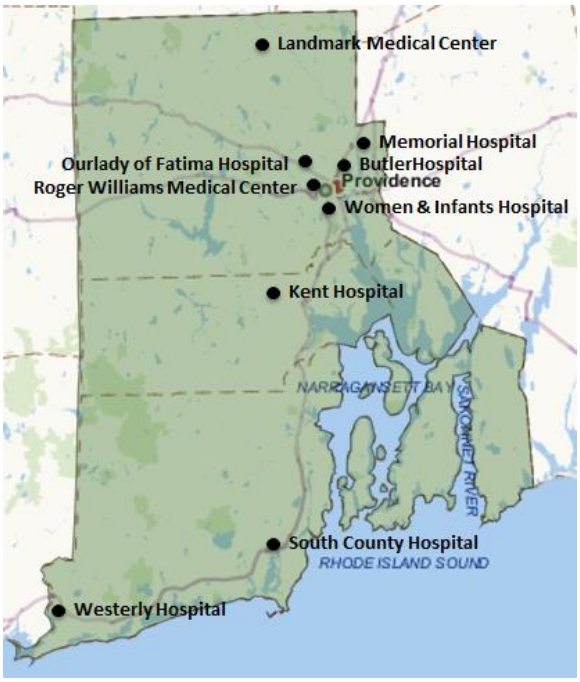
2016 CHNA Overview: A Statewide Approach to Community Health Improvement

Butler Hospital participated in a statewide Community Health Needs Assessment (CHNA) led by the Hospital Association of Rhode Island (HARI) and its member hospitals. Through a coordinated statewide effort, HARI and its hospital members worked with the Rhode Island Department of Health and local community partners to collect health data, gather feedback on regional and local health needs, and develop coordinated plans to address priority health needs across the state.

2016 CHNA Partners:

- The Hospital Association of Rhode Island
- Care New England Health System: Butler Hospital; Kent Hospital; Memorial Hospital of Rhode Island; Women & Infants Hospital of Rhode Island
- CharterCARE: Our Lady of Fatima Hospital; Roger Williams Medical Center
- Landmark Medical Center
- South County Health
- Westerly Hospital

Map of Rhode Island CHNA Partner Hospitals



Research Methodology

Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health trends and disparities across Rhode Island and within individual hospital service areas. Primary research methods were used to solicit input from key community stakeholders representing the broad interests of the community, including experts in public health and individuals representing medically underserved, low-income, and minority populations. Secondary research methods were used to gather existing statistical data to identify community health trends across geographic areas and populations.

Specific research methods:

- A Secondary Data Profile comprising indicators for each county and hospital service area compared to state and national benchmarks
- An analysis and comparison of Hospital Discharge Data including emergency room, observation, and inpatient usage
- Partner Forums with key representatives in each of the three counties served by the CHNA partners
- Focus Groups with behavioral health consumers and English and Spanish-speaking Latino/a residents

Leadership

The 2016 HARI CHNA was overseen by a Steering Committee of representatives from HARI and each member hospital as follows:

Liz Almanzor, Finance Director, Hospital Association of Rhode Island
Otis Brown, CharterCARE
Laurel Holmes, Westerly Hospital
Carolyn Kyle, Landmark Medical Center
Gina Rocha, Hospital Association of Rhode Island
Alex Speredelozzi, Care New England
Kellie Sullivan, Care New England
Stephany Valente, Care New England
Cynthia Wyman, South County Hospital

Ex officio: Michael Souza, President, Hospital Association of Rhode Island
Ana Novais, Rhode Island Department of Health

Research Partner

Baker Tilly assisted in all phases of the CHNA including project management, quantitative and qualitative data collection, report writing, and development of the Implementation Strategy.

Project Manager: Colleen Milligan, MBA
Lead Researcher: Catherine Birdsey, MPH

Alignment with Public Health

The CHNA Steering Committee actively sought feedback and coordinated research and planning efforts with the Rhode Island Department of Health (RI DOH) to ensure statewide efforts for community health improvement were aligned. In addition to cross-communication between the RI DOH and the CHNA Steering Committee, efforts were made to coordinate local research with the RI DOH Health Equity Zones (HEZ). Health Equity Zones receive funding through a RI DOH initiative with the CDC to address health disparities. Partner forums, focus groups and planning were conducted in coordination with and inclusion of the HEZ partners.

Community Engagement

Community engagement was a key component of the 2016 HARI CHNA. The CHNA included wide participation of public health experts and representatives of medically underserved, low income, and minority populations. The RI DOH and HEZ partners were included throughout the process to collect insights and provide access to underserved populations. A full listing of agencies represented in the CHNA research and planning is listed in Appendix A.

Prioritization of Community Health Needs

The Steering Committee correlated quantitative and qualitative data from the 2016 CHNA and compared with findings from the 2013 CHNA and RI DOH Community Health Improvement Plan to define statewide health priorities. In line with the 2013 CHNA and the RI DOH, the following community health issues were identified as priorities across the state.

- Behavioral Health
- Chronic Disease: Diabetes & Heart Disease
- Maternal & Child Health

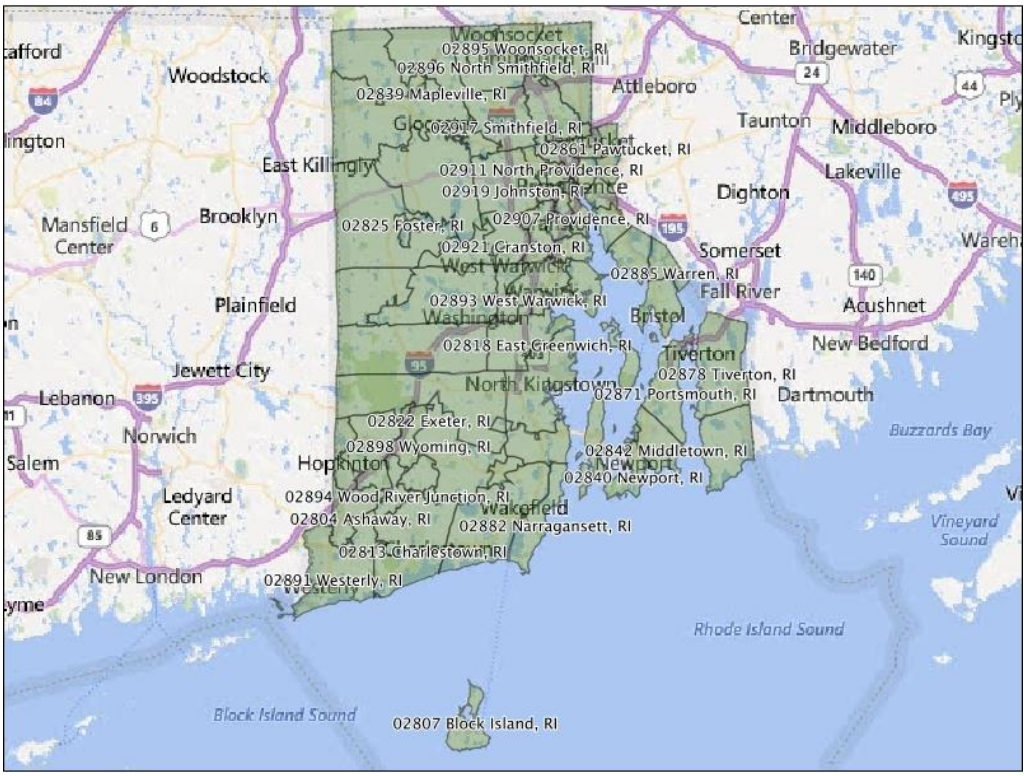
Development of a Community Health Improvement Plan

Each CHNA partner hospital developed an Implementation Plan that outlined the priority area(s) the hospital/health system would address and a three-year action plan to align community benefit activities with community health needs.

Board Approval and Adoption

The Care New England Board of Director adopted the 2016 CHNA Final Report and Implementation Plan on September 22, 2016. The documents are widely available to the public via the Butler Hospital website and the HARI RhodeIslandHealthcarematters.org portal.

Butler Hospital Service Area



Butler Hospital serves the entire state of Rhode Island as a provider of specialized assessment and treatment for all major psychiatric illnesses and substance abuse among adults, seniors, and adolescents.

Population Overview

The population across Rhode Island is primarily White; however, 20.2% of the population identifies as another race and 14% of the population identifies as Hispanic/Latino. The median age of residents is increasing and is projected to be 41.3 by 2020. The median household income, in aggregate, is higher among Whites and Asians compared to Blacks/African Americans and Hispanics/Latinos.

2015 Population Overview

	Rhode Island
White	79.8%
Asian	3.3%
Black or African American	5.9%
Hispanic or Latino (of any race)	14.1%
Median Age	40.1
Median Income	$56,945

Source: The Nielsen Company, 2015

Butler Hospital Service Area Demographics

The following section outlines key demographic indicators related to the social determinants of health across Rhode Island. Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life, and are often the root cause of health disparity. Healthy People 2020 defines a health disparity as "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage." All reported demographic data are provided by ©2015 The Nielsen Company.

Language Spoken at Home

The languages spoken in the state mimic the racial characteristics. Seventy-nine percent of residents speak English and 11% speak Spanish as their primary language. Another 7.1% speak an Indo-European language.

Financial and Occupation Demographics

The state encompasses 416,126 housing units, 60.8% are owner-occupied and 39.2% are renter-occupied. The median home value for owner-occupied units is $252,604.

The median household income in the state is $56,945; however, income varies notably by race and ethnicity. The median income for Blacks/ African Americans and Hispanics/Latinos is $36,627 and $33,970 respectively.

2015 Population by Median Household Income

	Median Income
White	$61,419
Black or African American	$36,627
Asian	$55,406
Hispanic or Latino (of any race)	$33,970
Total Population	**$56,945**

Approximately 66% of residents age 16 years or over are in the workforce and 6.4% are unemployed, which is slightly higher than the national average of 5.5%. Of those working, 66.6% are for-profit private workers; 60.6% hold white collar positions.

Education Demographics

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Across the state, 14.5% of residents 25 years or over have less than a high school diploma, 27.5% have a high school diploma, and 31.2% have at least a bachelor's degree. Hispanic/Latino residents have notably lower educational attainment. Approximately 37% have less than a high school diploma and only 11.4% have a bachelor's degree or higher.

2015 Population by Educational Attainment

	Overall Population Percentage	Hispanic/Latino Population Percentage
Less than a high school diploma	14.5%	37.1%
High school graduate	27.5%	29.3%
Some college or associate's degree	26.8%	22.2%
Bachelor's degree or higher	31.2%	11.4%

*Educational attainment is not available for Blacks/African Americans or other racial groups

Poverty

The percentage of all families living in poverty is 9.4%; the percentage of families with children living in poverty is 7.3%. Poverty rates vary by zip code within Rhode Island; most notably 31.1% of families in 02907 (Providence) live in poverty.

Social Determinants of Health by Zip Code

Social determinants impact health for all individuals within a community, but populations most at risk for health disparities are highlighted below by zip code to allow Butler Hospital to focus its health improvement efforts where it can have the greatest impact.

Social Determinants of Health Indicators by Zip Code
(ordered by highest poverty levels)

	Black/ African American	Hispanic/ Latino	English Speaking	Families in Poverty	Families w/Children in Poverty	Single female Households w/ Children	Unemploy-ment	Less than HS Diploma
02907 Providence	21.9%	61.1%	31.6%	31.1%	24.9%	29.6%	13.1%	32.0%
02863 Central Falls	11.1%	65.0%	28.6%	28.2%	22.8%	26.3%	6.6%	46.1%
02909 Providence	14.0%	59.5%	35.8%	27.4%	21.5%	27.1%	11.1%	35.3%
02903 Providence	11.0%	17.9%	64.5%	24.1%	16.0%	15.4%	6.9%	21.8%
02905 Providence	17.6%	40.1%	51.0%	22.6%	20.1%	22.9%	12.0%	21.4%
02860 Pawtucket	20.0%	26.7%	53.2%	21.2%	16.8%	22.9%	7.9%	27.0%
02908 Providence	18.2%	39.4%	58.9%	20.7%	17.6%	24.1%	8.2%	23.4%
02895 Woonsocket	6.8%	16.3%	77.7%	19.1%	17.2%	20.4%	5.3%	21.1%
02841 Newport	17.1%	20.0%	88.6%	17.5%	15.0%	30.0%	4.6%	10.0%
02918 Providence	7.3%	9.4%	74.0%	16.4%	14.2%	20.2%	5.5%	18.4%
02904 Providence	12.2%	17.8%	76.0%	12.7%	10.3%	15.1%	7.4%	15.6%
02835 Jamestown	0.7%	2.2%	94.8%	10.3%	8.2%	5.7%	1.9%	1.9%
02914 East Providence	7.7%	6.9%	67.8%	9.4%	8.2%	15.4%	6.9%	25.7%
02920 Cranston	6.5%	16.0%	79.7%	8.6%	5.9%	10.9%	6.7%	15.2%
02893 West Warwick	2.5%	6.4%	86.7%	8.1%	7.1%	12.6%	6.6%	13.3%
02910 Cranston	6.6%	16.4%	73.9%	8.1%	5.4%	13.0%	7.2%	15.6%
02861 Pawtucket	6.8%	15.1%	75.5%	7.9%	5.4%	12.9%	7.3%	17.1%
02911 North Providence	5.2%	10.8%	83.7%	7.9%	5.5%	11.6%	5.7%	12.7%
02919 Johnston	2.4%	7.5%	84.9%	7.6%	4.9%	8.5%	5.4%	15.4%
02816 Coventry	0.7%	2.6%	94.2%	7.2%	6.2%	8.2%	8.7%	10.5%
02885 Warren	1.4%	2.5%	84.5%	7.2%	4.8%	10.6%	8.5%	13.2%
02852 North Kingstown	1.1%	3.3%	92.5%	7.1%	5.8%	9.3%	4.9%	6.6%
02838 Lincoln	2.9%	7.3%	87.8%	6.9%	3.9%	21.2%	3.8%	11.7%
02809 Bristol	1.0%	2.5%	84.5%	6.7%	2.7%	7.3%	5.1%	15.2%
02842 Middletown	5.2%	6.1%	86.3%	6.7%	6.2%	9.7%	6.1%	6.1%
02889 Warwick	1.8%	4.5%	91.4%	6.4%	3.6%	8.3%	6.6%	11.2%

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	Black/ African American	Hispanic/ Latino	English Speaking	Families in Poverty	Families w/ Children in Poverty	Single Female Households w/ Children	Unemploy-ment	Less than HS Diploma
02906 Providence	5.0%	6.8%	81.6%	6.0%	4.6%	9.8%	4.7%	5.9%
02840 Newport	6.6%	9.4%	88.4%	5.8%	4.2%	16.2%	4.4%	7.9%
02915 East Providence	3.7%	3.3%	90.4%	5.7%	3.8%	9.1%	5.7%	11.1%
02802 Lincoln	1.3%	3.1%	87.8%	5.6%	0.7%	7.8%	3.8%	8.9%
02813 Charlestown	0.4%	2.2%	96.8%	5.2%	4.8%	6.0%	4.2%	6.8%
02871 Portsmouth	1.7%	2.7%	92.8%	5.1%	2.7%	7.0%	5.3%	5.0%
02827 Coventry	0.6%	1.5%	95.7%	4.7%	3.9%	4.3%	5.1%	6.4%
02839 Burrillville	0.8%	1.3%	95.2%	4.7%	4.1%	7.8%	7.1%	14.3%
02865 Lincoln	1.9%	4.9%	88.8%	4.3%	2.8%	7.8%	4.8%	10.8%
02886 Warwick	1.8%	4.8%	88.6%	4.3%	2.5%	7.5%	5.6%	11.4%
02815 Clayville	0.4%	1.6%	94.2%	4.2%	2.8%	4.2%	8.2%	8.7%
02888 Warwick	2.3%	5.4%	88.2%	4.1%	2.9%	8.9%	7.1%	7.8%
02891 Westerly	1.1%	4.1%	89.4%	4.1%	2.8%	9.8%	6.5%	13.5%
02896 North Smithfield	0.6%	3.1%	92.6%	4.0%	2.7%	6.7%	3.3%	11.5%
02916 East Providence	4.6%	3.7%	84.2%	4.0%	3.3%	8.0%	4.9%	13.0%
02878 Tiverton	1.2%	1.6%	91.8%	3.9%	2.4%	7.0%	7.4%	11.7%
02837 Little Compton	1.0%	1.0%	97.2%	3.8%	1.5%	3.7%	6.2%	6.0%
02814 Glocester	0.4%	1.7%	95.5%	3.7%	3.1%	5.1%	3.7%	9.2%
02817 West Greenwich	1.0%	3.2%	95.1%	3.7%	2.9%	5.5%	8.0%	4.9%
02822 Exeter	1.4%	3.5%	96.1%	3.7%	3.5%	5.0%	4.8%	7.7%
02825 Foster	0.6%	1.5%	95.2%	3.7%	2.7%	4.4%	7.5%	8.4%
02818 East Greenwich	0.9%	2.5%	91.6%	3.5%	2.4%	5.9%	3.5%	4.2%
02831 Scituate	0.6%	2.1%	93.2%	3.5%	2.5%	5.7%	6.3%	7.6%
02874 North Kingstown	0.8%	2.2%	94.7%	3.5%	2.8%	5.7%	3.3%	4.4%
02882 Narragansett	0.9%	2.3%	95.1%	3.4%	1.6%	7.1%	2.6%	4.3%
02921 Cranston	1.3%	3.3%	88.4%	3.4%	1.7%	4.7%	5.9%	8.1%
02828 Smithfield	1.0%	2.0%	91.8%	3.3%	1.5%	4.7%	4.5%	6.5%
02830 Burrillville	0.3%	1.6%	94.8%	3.2%	3.0%	7.3%	7.1%	12.0%

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	Black/ African American	Hispanic/ Latino	English Speaking	Families in Poverty	Families w/ Children in Poverty	Single Female Households w/ Children	Unemploy-ment	Less than HS Diploma
02864 Cumberland	1.8%	5.5%	85.5%	3.1%	2.0%	7.5%	4.1%	10.7%
02917 Smithfield	1.4%	3.1%	90.1%	3.1%	0.9%	6.4%	5.8%	8.1%
02808 Hopkinton	1.4%	2.0%	94.0%	3.0%	2.7%	11.2%	4.0%	14.9%
02859 Burrillville	0.8%	2.8%	94.0%	3.0%	2.9%	8.8%	7.3%	11.9%
02879 South Kingstown	1.3%	2.5%	94.6%	2.9%	2.4%	7.9%	5.0%	5.6%
02898 Richmond	0.4%	2.4%	97.9%	2.8%	2.4%	5.2%	5.3%	9.5%
02857 Scituate	0.4%	1.2%	94.8%	2.7%	1.6%	5.3%	7.0%	7.6%
02812 Richmond	0.5%	1.4%	97.9%	2.5%	2.2%	4.4%	5.4%	9.5%
02858 Burrillville	0.3%	1.3%	95.2%	2.2%	2.2%	6.6%	7.1%	12.6%
02881 South Kingstown	5.9%	6.9%	86.4%	2.1%	1.7%	4.9%	5.7%	5.4%
02806 Barrington	0.6%	2.7%	91.0%	2.0%	1.6%	6.4%	4.5%	3.9%
02894 Richmond	0.4%	3.1%	97.8%	1.8%	1.8%	5.5%	4.9%	8.6%
02892 South Kingstown	1.0%	2.3%	95.7%	1.7%	1.1%	3.9%	5.2%	8.4%
02832 Hopkinton	0.4%	2.3%	97.1%	1.6%	1.6%	5.4%	2.8%	8.1%
02872 Portsmouth	1.0%	3.5%	89.9%	1.6%	1.6%	3.3%	2.7%	0.0%
02804 Hopkinton	0.9%	2.8%	96.9%	1.4%	1.3%	7.3%	2.3%	9.3%
02875 Richmond	0.4%	1.1%	98.0%	1.4%	1.4%	4.1%	5.2%	9.8%
02807 New Shoreham	0.7%	4.3%	96.5%	1.1%	1.1%	6.3%	5.3%	3.4%
02833 Hopkinton	0.5%	3.8%	96.8%	0.9%	0.9%	4.3%	2.4%	4.8%
02836 Richmond	0.8%	1.6%	97.5%	0.0%	0.0%	2.8%	4.9%	9.9%
02873 Hopkinton	0.5%	3.7%	96.8%	0.0%	0.0%	4.0%	1.9%	4.9%
02877 Exeter	2.5%	2.5%	96.1%	0.0%	0.0%	4.8%	6.0%	7.6%
02912 Providence	3.7%	9.2%	78.8%	0.0%	0.0%	12.5%	6.5%	3.7%
Rhode Island Average	**5.9%**	**14.1%**	**79.0%**	**9.4%**	**7.3%**	**12.1%**	**6.4%**	**14.5%**

Source: The Nielsen Company, 2015

Color Coding Guide
Within 2% points of the Rhode Island Average Exception: Unemployment cells are within 1% point of the Rhode Island Average
More than 2% points higher than the Rhode Island Average Exception: English Speaking cells are more than 2% points lower than the Rhode Island Average & Unemployment cells are more than 1% point higher than the Rhode Island Average

Statistical Health Data for the Butler Hospital Service Area

Background

Publicly reported health statistics were collected and analyzed to display health trends and identify health disparities across the service area. The following analysis primarily uses data available on the Rhode Island Healthcare Matters portal, an interactive data site developed through collaboration of the Hospital Association of Rhode Island, its members, and the Rhode Island Department of Health. A full listing of public health indicators available through the portal can be found at www.rihealthcarematters.org. A full listing of all public health data sources can be found in Appendix B.

Public health data focuses on the state of Rhode Island and each of its five counties. National standards, when referenced, are drawn from the same source as the state and/or county statistic to which it is compared. Data from Butler Hospital's 2013 CHNA, including Behavioral Risk Factor Surveillance System (BRFSS) data, are also incorporated to provide trending analysis.

Healthy People 2020 (HP 2020) goals are national goals created by the U.S. Department of Health and Human Services to set a benchmark for all communities to strive towards. Healthy People goals are updated every ten years and progress is tracked throughout the decade. Comparisons to Healthy People 2020 goals are included where applicable.

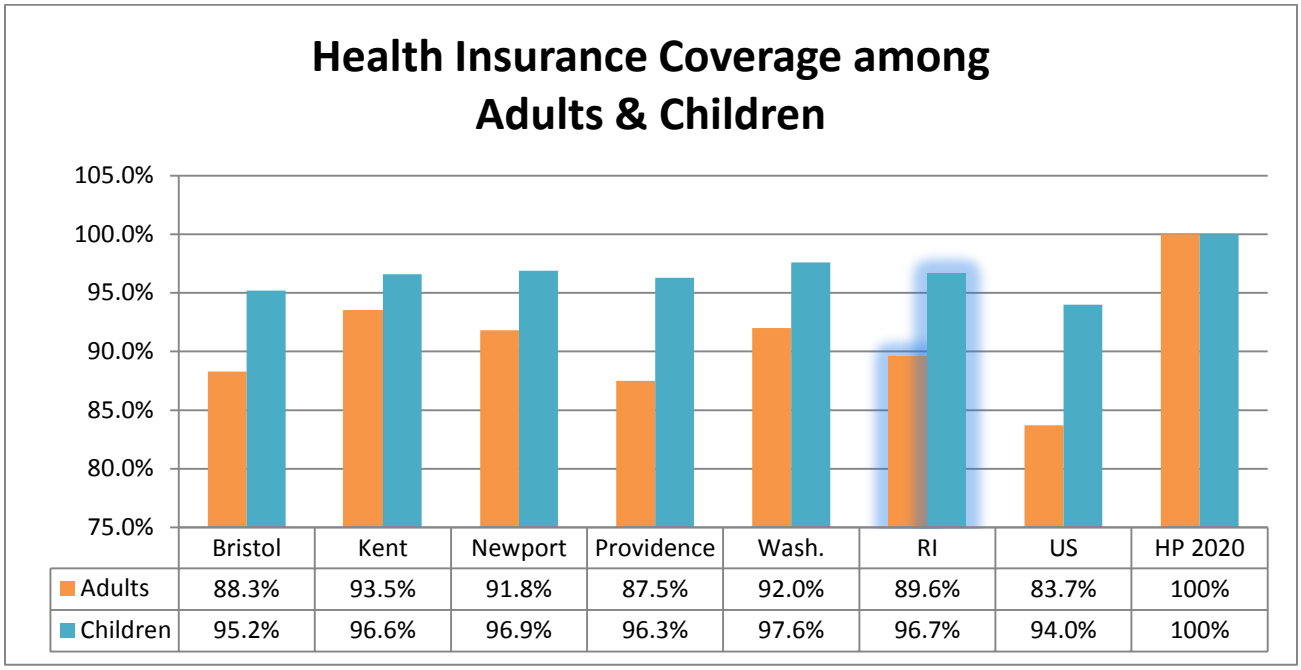
Access to Health Services

Approximately 90% of Rhode Island adults (ages 18 to 64 years) have health insurance. The percentage is higher than the national average (83.7%), and represents an increase from 2013 (89.8%). Adults ages 25 to 34 years are the least likely to be insured (83.6%).

Healthy People 2020 Goal = 100% of adult and children insured

Rhode Island = 89.6% adults; 96.7% children insured

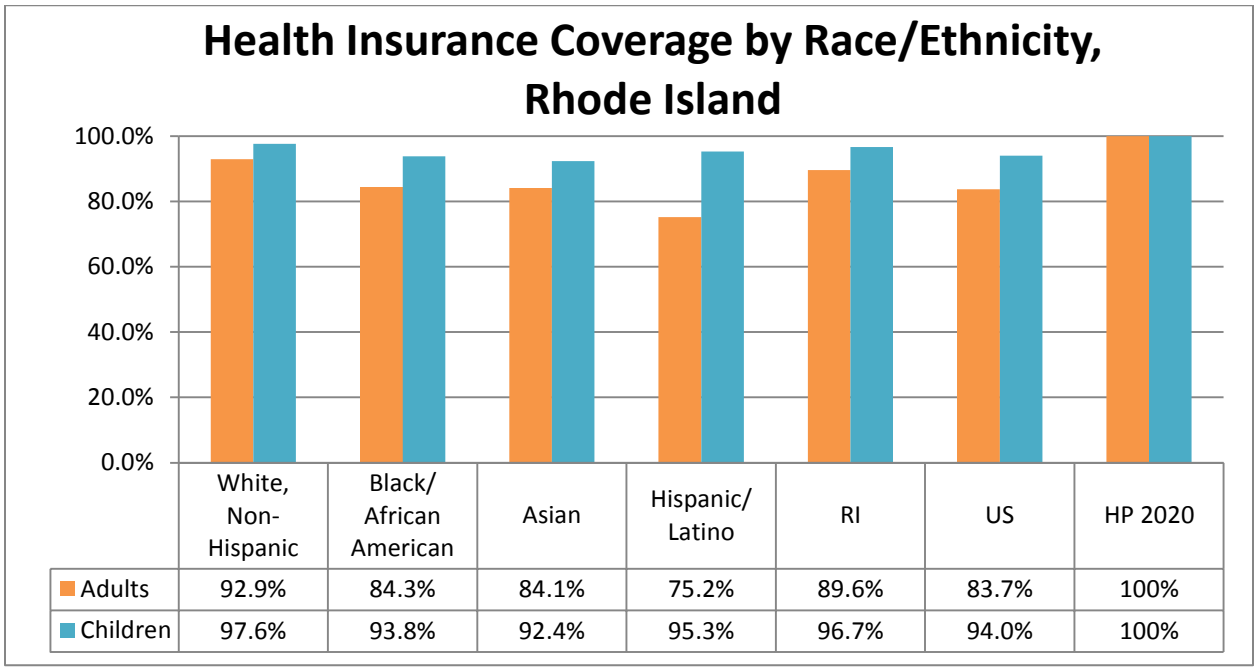
The percentage of Rhode Island children with health insurance (96.7%) is also higher than the nation (94%), and represents an increase from 2013 (94.6%). The Healthy People 2020 goal is 100% of all adults and children be insured by 2020.



	Bristol	Kent	Newport	Providence	Wash.	RI	US	HP 2020
Adults	88.3%	93.5%	91.8%	87.5%	92.0%	89.6%	83.7%	100%
Children	95.2%	96.6%	96.9%	96.3%	97.6%	96.7%	94.0%	100%

Source: American Community Survey, 2014*
*Bristol data represents a 2011-2013 average due to availability

Minority racial and ethnic groups in Rhode Island have lower health insurance rates than the White, Non-Hispanic population, most notably only 75.2% of Hispanic/Latino adults are insured and only 92.4% of Asian children are insured.



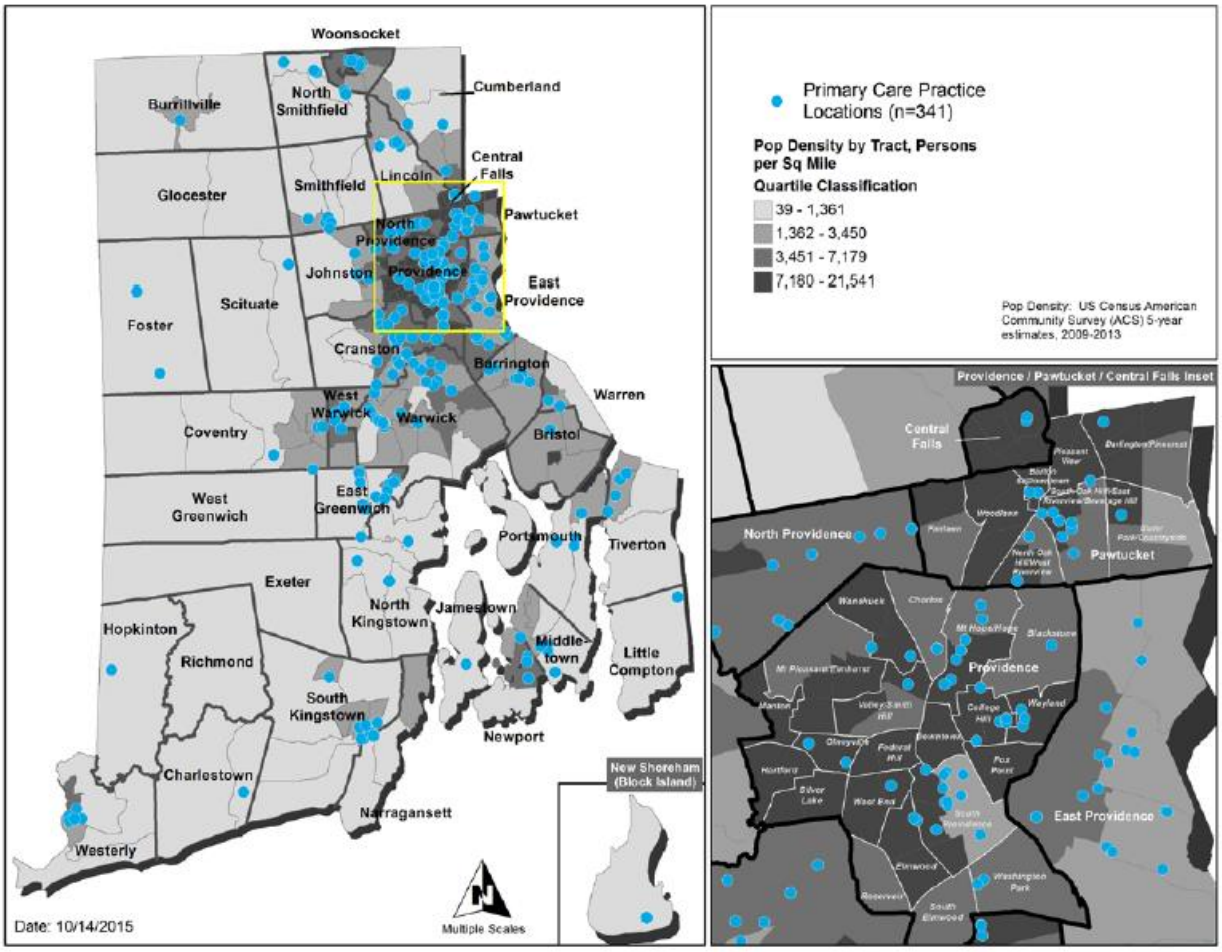
	White, Non-Hispanic	Black/ African American	Asian	Hispanic/ Latino	RI	US	HP 2020
Adults	92.9%	84.3%	84.1%	75.2%	89.6%	83.7%	100%
Children	97.6%	93.8%	92.4%	95.3%	96.7%	94.0%	100%

Source: American Community Survey, 2014

BRFSS data from the 2013 CHNA found that 15.8% of Rhode Island adults could not see a doctor due to cost barriers. The national average was 17%.

Access to Primary Care

A total of 803 primary care physicians were identified in Rhode Island in 2014; however, based on their total number of hours worked per week, full-time equivalents equated to 602.7 physicians and a ratio of one physician for every 1,718.1 Rhode Islanders. The following figure and table illustrate the location of primary care practices (n=341) layered over population density and the primary care physician ratio by town.



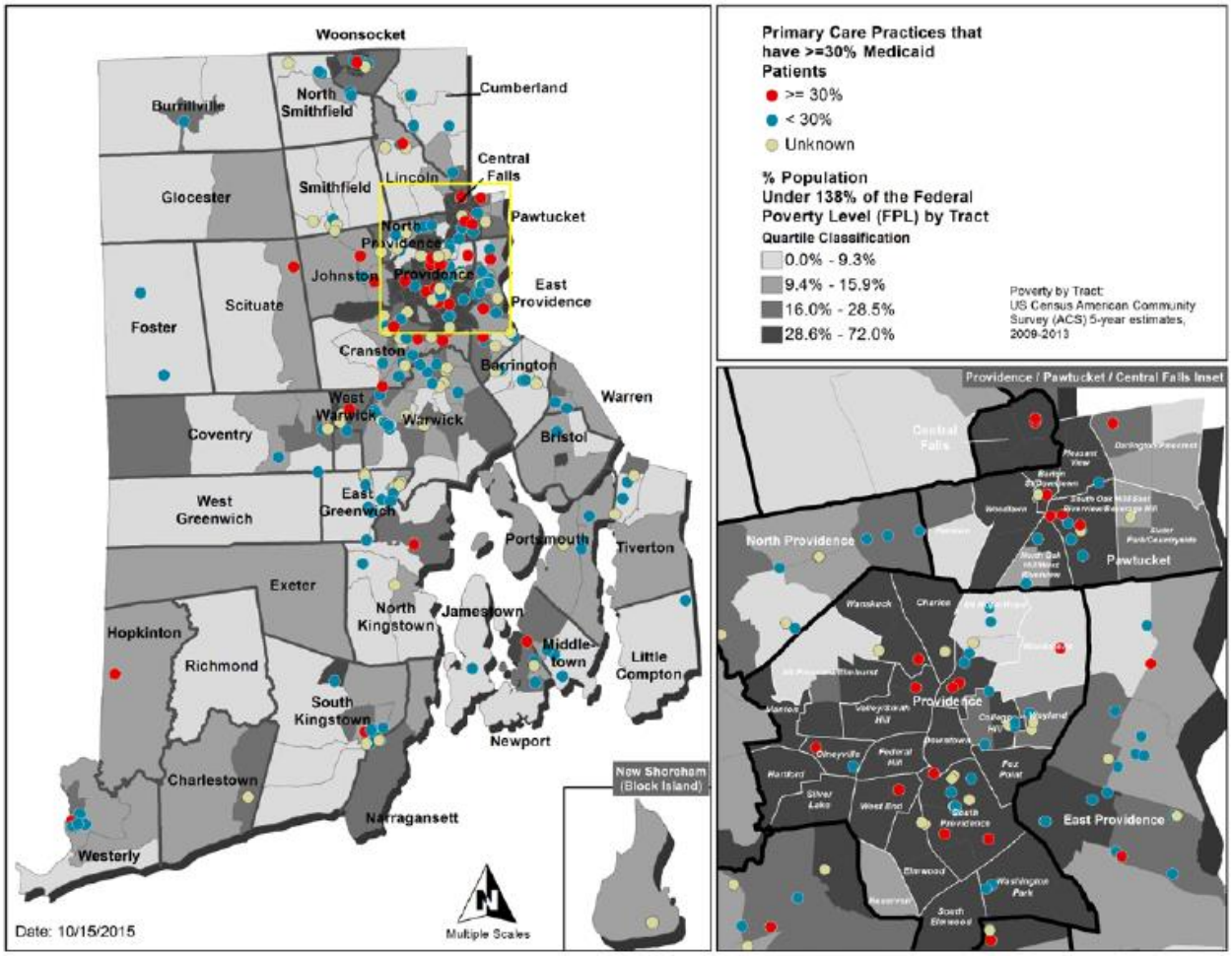
Source: Rhode Island Department of Health Statewide Health Inventory, 2015

Primary Care Physician Ratio by Rhode Island Town

Town	Ratio	Town	Ratio
Mt Pleasant/Elmhurst	19,072.0	Narragansett	1,901.4
Darlington/Pinecrest	14,139.2	Newport	1,849.7
Scituate	13,348.4	Providence	1,826.9
Little Compton	11,633.3	Cranston	1,821.4
Charlestown	9,776.3	Warwick	1,808.3
Slater Park/Countryside	9,539.0	Charles	1,805.1
Burrillville	8,669.4	Smithfield	1,708.1
Central Falls	6,593.4	Cumberland	1,662.7
Foster	4,287.4	North Smithfield	1,588.6
Jamestown	3,676.6	North Providence	1,506.1
West Warwick	3,663.3	Bristol	1,444.9
Warren	3,323.8	Pawtucket	1,315.5
Elmwood	3,288.8	South Kingstown	1,212.9
Pleasant View	3,257.8	Barrington	1,135.4
West End	3,250.3	Olneyville	1,021.5
Blackstone	3,207.5	Washington Park	935.8
Tiverton	3,147.8	Lincoln	895.9
Coventry	2,999.4	College Hill	887.4
Hopkinton	2,905.0	East Providence	863.6
North Kingstown	2,877.1	New Shoreham	836
Wayland	2,788.6	Mt Hope/Hope	791.4
Valley/Smith Hill	2,527.6	Wanskuck	544.7
Woonsocket	2,476.3	North Oak Hill/West Riverview	404.1
Portsmouth	2,196.9	Barton St/Downtown	300.3
Westerly	2,051.9	East Greenwich	290.1
Middletown	1,984.3	South Providence	278
Johnston	1,934.0	South Oak Hill/East Riverview/Beverage Hill	260.2

Source: Rhode Island Department of Health Statewide Health Inventory, 2015

In Rhode Island in 2014, 81% of primary care practices saw at least one Medicaid patient, but less than 20% of practices had a patient population that was at least 30% covered by Medicaid. The following figure displays primary care practices with 30% or more of their patient population covered by Medicaid layered over the percent of the population under 138% of the federal poverty level.

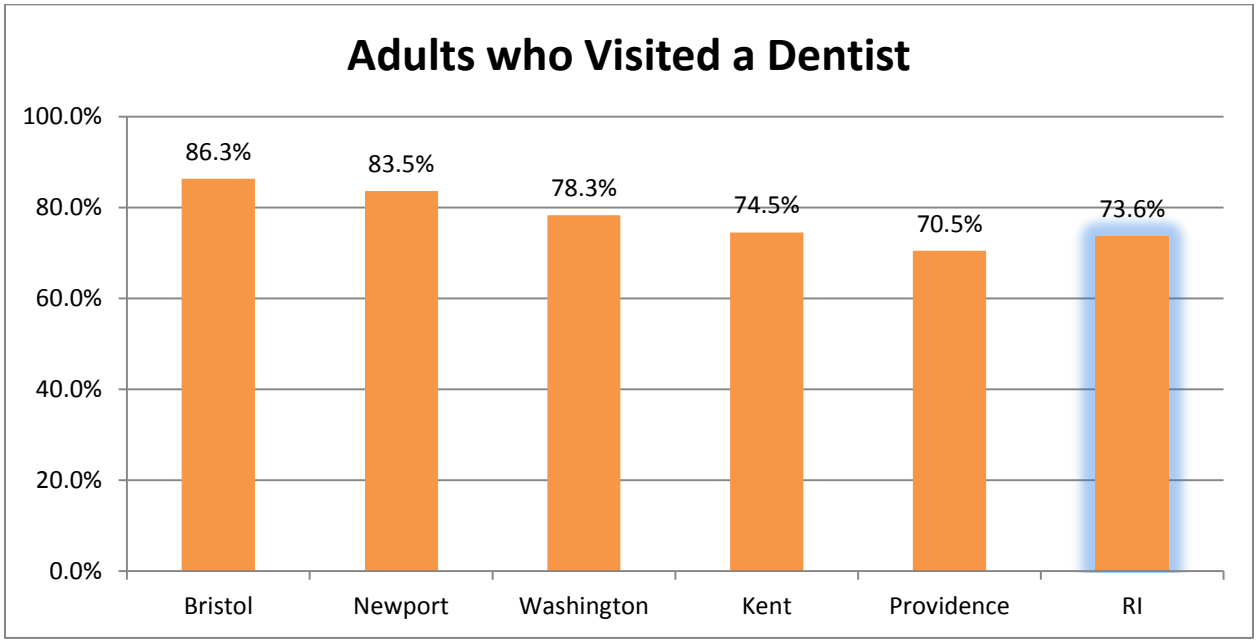


Source: Rhode Island Department of Health Statewide Health Inventory, 2015

Access to Dental Care

The dental provider rate across Rhode Island is 61 per 100,000. The rate is lowest in Bristol County (37 per 100,000) and highest in Newport County (90 per 100,000).

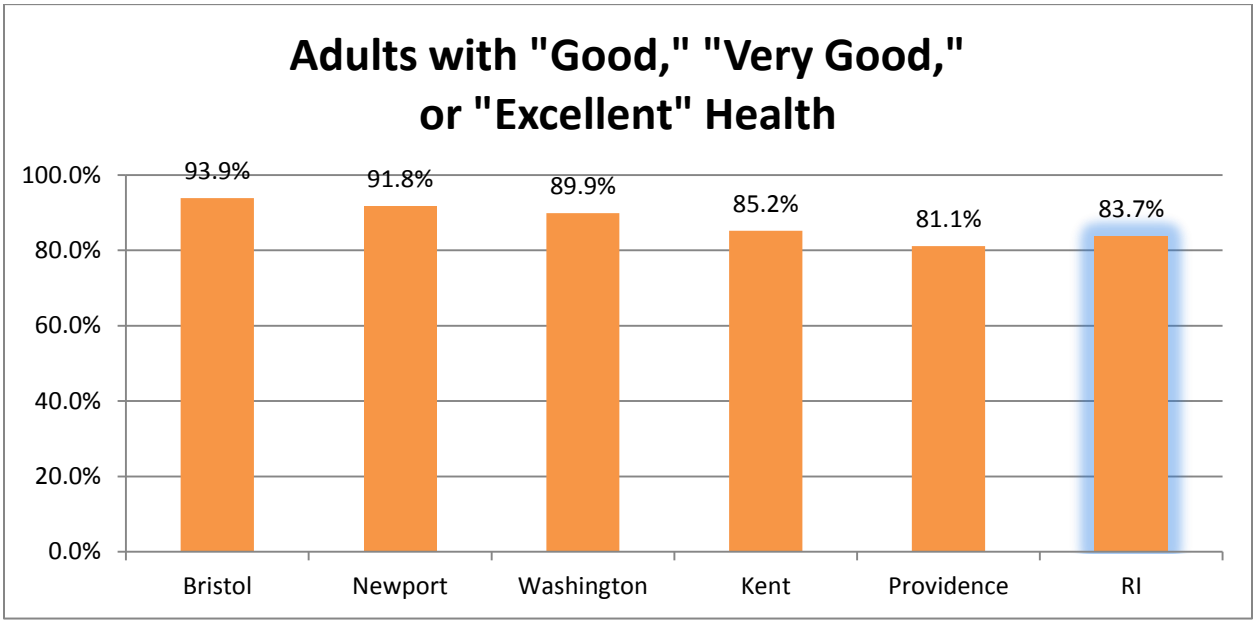
Approximately 74% of adults in Rhode Island report visiting a dentist. Providence County adults are the least likely to visit a dentist (70.5%). Bristol County adults are the most likely to visit a dentist, despite having the lowest dental provider rate. Percentages are not comparable to past years of data due to changes in methodology.



Source: Behavioral Risk Factor Surveillance System, 2010 & 2012

Overall Health Status

Overall health status is measured by self-reported indicators, life expectancy, and premature death. Approximately 84% of Rhode Island adults report having good, very good, or excellent health, an increase from 82.6% in 2011. Adults report an average of 3.5 days of poor physical health and 3.6 days of poor mental health over a 30 day period, which is equitable to the national averages of 3.7 days and 3.4 days respectively.



Source: Behavioral Risk Factor Surveillance System, 2010 & 2012

The areas of Pawtucket, Central Falls, and Providence are noted for having greater health disparities due to poorer social determinants of health. The following table depicts the percentage of adults who were affected by poor physical and/or mental health on eight to 30 days during the past month.

Mental/Physical Health Affected 8 to 30 Days in Past Month

	Percentage
02863, Central Falls	33.5%
02907, Providence	30.2%
02909, Providence	28.6%
02860, Pawtucket	28.0%
02903, Providence	26.4%
02904, Providence	25.2%
02908, Providence	23.3%
02905, Providence	20.6%
02861, Pawtucket	16.8%
02906, Providence	13.8%

Source: The Nielsen Company, 2015

Life expectancy is higher in Rhode Island than the nation. In addition, life expectancy in all five counties exceeds the nation. Life expectancy increased slightly for males from the 2009 report of 76.5 years, but remained the same for females.

Life expectancy in Rhode Island is higher than the national average

Premature death measures the years of potential life lost or years of death before age 75. The premature death rate is lower in Rhode Island than the nation. In addition, all five counties have a lower premature death rate than the nation.

Life Expectancy & Premature Death per 100,000

	Bristol	Kent	Newport	Provid.	Wash.	**RI**	**US**
Life Expectancy							
Males	77.7	76.3	78.1	76.3	77.4	**76.7**	**75.0**
Females	82.6	80.6	82.9	81.2	82.6	**81.4**	**79.8**
Premature Death	3,890.9	6,458.2	4,729.9	6,124.2	4,939.3	**5,808**	**6,622**

Source: Institute for Health Metrics and Evaluation, 2010 & County Health Rankings, 2010-2012

Health Behaviors

Individual health behaviors, including smoking, excessive drinking, physical inactivity, and obesity, have been shown to contribute to or reduce the chance of disease. The prevalence of these health behaviors is provided below, compared to national averages and the Healthy People 2020 goals.

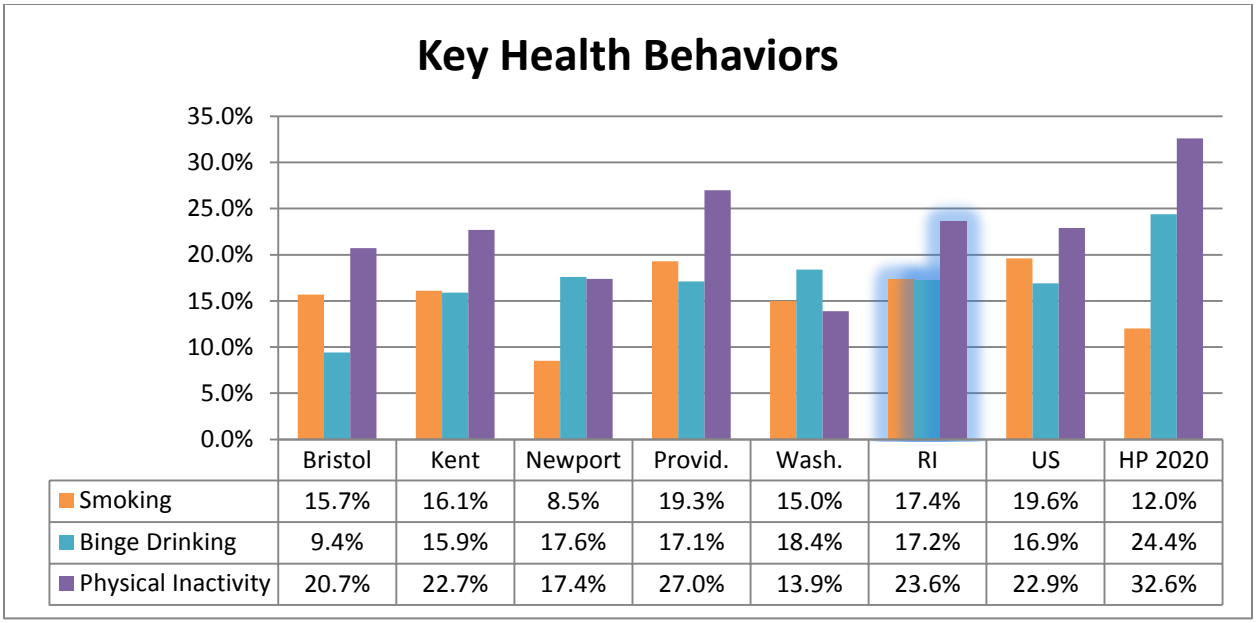
Rhode Island adults smoke less compared to the nation

White youth are twice as likely to smoke compared to Black/African American or Hispanic/Latino youth

Rhode Island adults are less likely to smoke, but more likely to binge drink and be physically inactive when compared to the nation. However, rates for binge drinking and physical inactivity meet Healthy People 2020 goals and percentages for all behaviors decreased from 2011. The percentage of binge drinking decreased by 2.5 points, smoking and physical inactivity decreased by 2.6 points.

According to *Rhode Island Department of Health Minority Health Facts 2015*, White adults are more likely to binge drink (18.8%) compared to Black/African American (13.4%) and Hispanic/Latino (17.7%) adults. In addition, White youth are more likely to smoke (12.9%) compared to Black/African American (6.3%) and Hispanic/Latino (6.5%) youth.

More Rhode Island adults report binge drinking compared to the nation. White adults have the highest rates.



	Bristol	Kent	Newport	Provid.	Wash.	RI	US	HP 2020
Smoking	15.7%	16.1%	8.5%	19.3%	15.0%	17.4%	19.6%	12.0%
Binge Drinking	9.4%	15.9%	17.6%	17.1%	18.4%	17.2%	16.9%	24.4%
Physical Inactivity	20.7%	22.7%	17.4%	27.0%	13.9%	23.6%	22.9%	32.6%

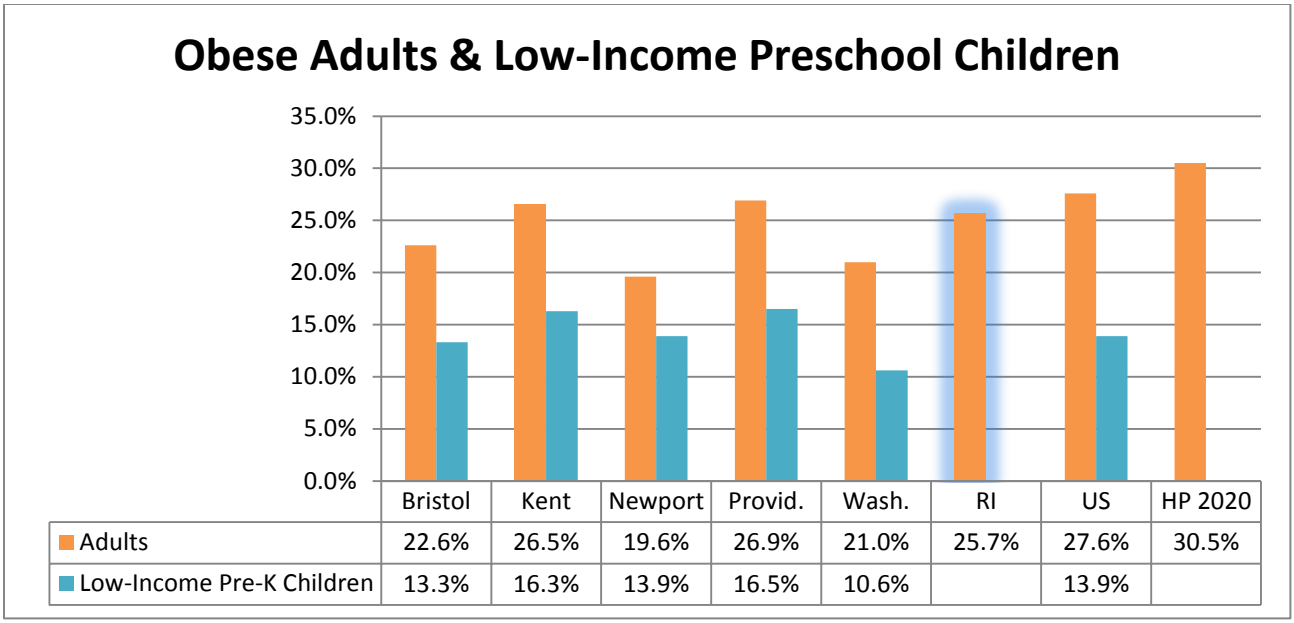
Source: Behavioral Risk Factor Surveillance System, 2010 & 2012

Overweight and Obesity

The percentage of overweight and obese adults and children is a national epidemic. In Rhode Island, the percentage of overweight or obese adults (62.9%) and obese adults (25.7%) remained steady from the 2013 CHNA. The percentage of obese adults meets the Healthy People 2020 goal; however, according to *Rhode Island Department of Health Minority Health Facts 2015*, obesity rates are higher for Black/African American and Hispanic/Latino adults (32.3% and 28.6% respectively).

The overall Rhode Island adult obesity rate meets the HP 2020 goal; however rates among Black/African American and Hispanic/ Latino adults are higher than the goal

An obesity percentage for low-income preschool children is not reported for Rhode Island. Among Rhode Island counties, Kent and Providence have the highest percentage of obese children (16.3% and 16.5% respectively) and Washington County has the lowest percentage of obese children (10.6%). The children represented by this indicator are ages 2 to 4 years and participate in federally funded health and nutrition programs.



Source: Behavioral Risk Factor Surveillance System, 2010 & 2012 & US Dept. of Agriculture, 2009-2011
*Obesity data for low-income Pre-K children is not available for Rhode Island or Healthy People 2020

Overweight and obesity are also affected by access to nutritious food. In Rhode Island, 14.4% of all residents and 21.7% of children were food insecure in the last year. Food insecurity is defined as being without a consistent source of sufficient and affordable nutritious food. The percentages in Rhode Island are lower than the nation. The overall percentage decreased 0.3 points from 2012, but the child food insecurity rate increased by 0.4 points.

Percentage of Food Insecure Residents

	All Residents	Children
Bristol	11.9%	16.9%
Kent	13.0%	20.0%
Newport	13.5%	19.8%
Providence	15.8%	23.7%
Washington	12.1%	18.7%
Rhode Island	**14.4%**	**21.7%**
United States	**15.1%**	**23.7%**

Source: Feeding America, 2013

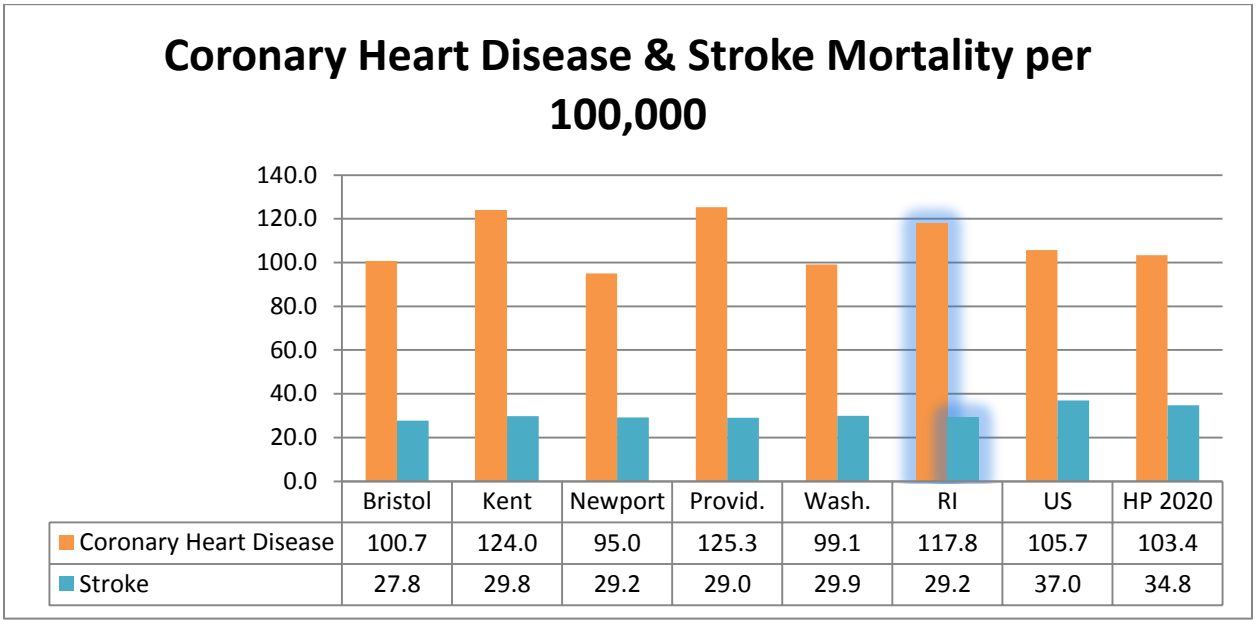
Chronic Diseases

Chronic disease rates are increasing across the nation and are the leading causes of death and disability. Chronic diseases are often preventable through reduced health risk behaviors like smoking and alcohol use, increased physical activity and good nutrition, and early detection of risk factors and disease.

Heart Disease and Stroke

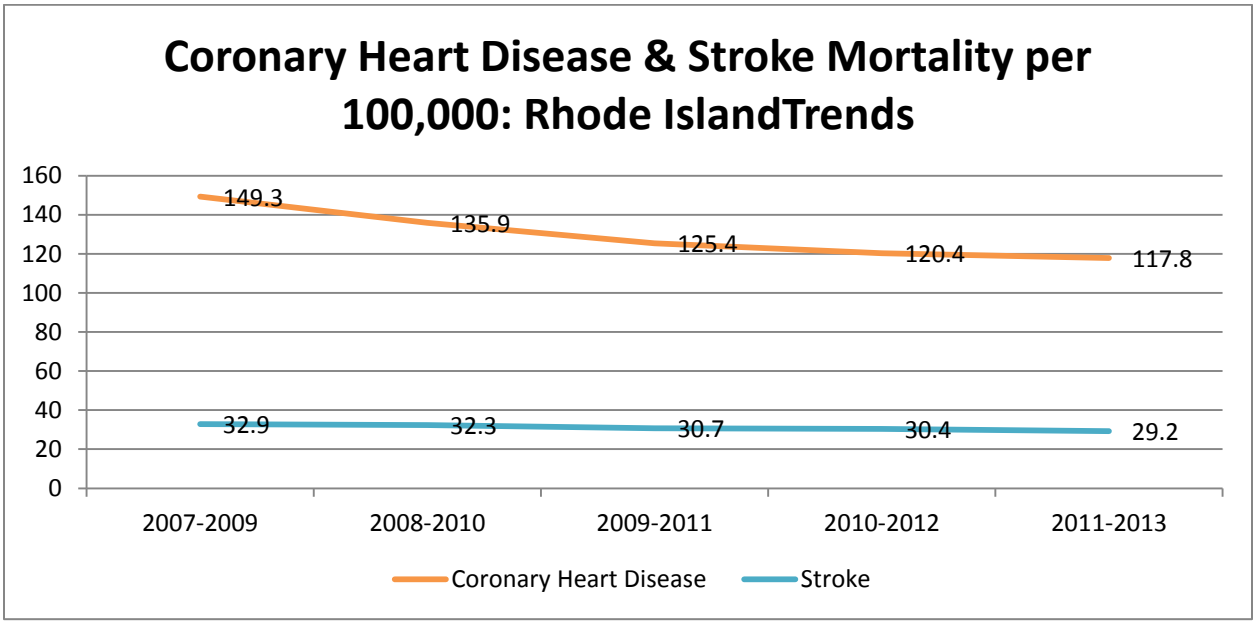
Heart disease is the leading cause of death in the nation. Rhode Island has a higher coronary heart disease death rate compared to the nation and Healthy People 2020, but a lower stroke death rate. Both rates have declined over the past five reporting cycles.

The Rhode Island heart disease death rate is higher than the nation and the HP 2020 goal, but is declining



	Bristol	Kent	Newport	Provid.	Wash.	RI	US	HP 2020
Coronary Heart Disease	100.7	124.0	95.0	125.3	99.1	117.8	105.7	103.4
Stroke	27.8	29.8	29.2	29.0	29.9	29.2	37.0	34.8

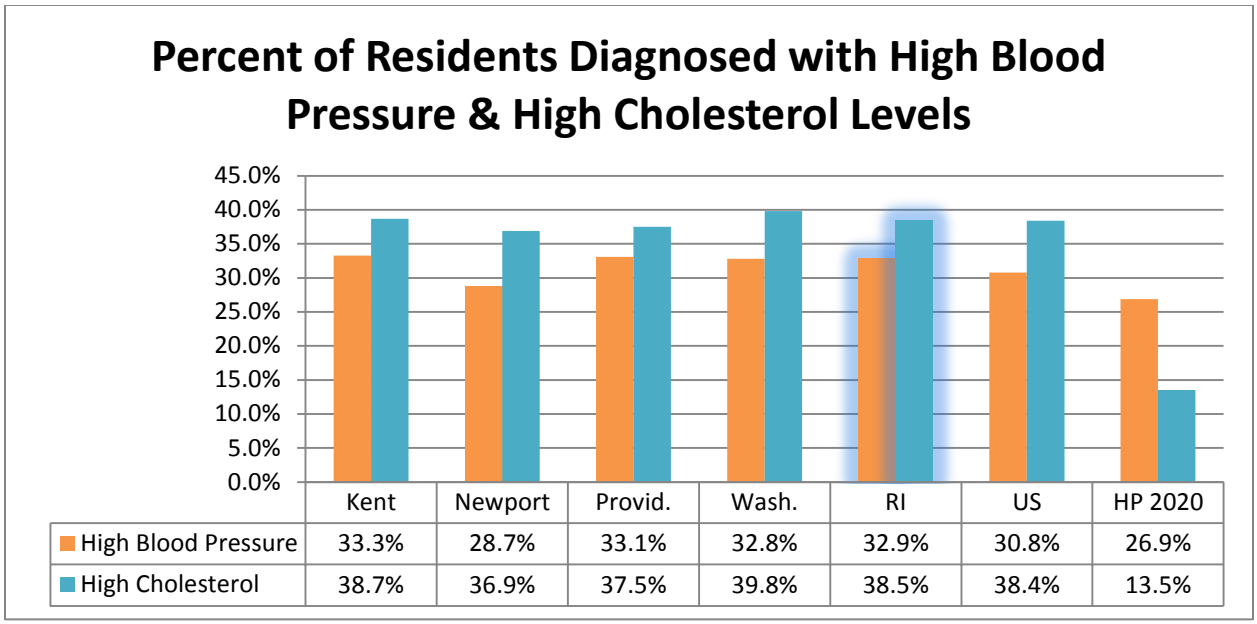
Source: Centers for Disease Control and Prevention, 2011-2013



Source: Centers for Disease Control and Prevention

Heart Disease is often a result of high blood pressure and high cholesterol, which can result from poor diet and exercise habits. The table below shows that Rhode Island adults are more likely to have high blood pressure and high cholesterol compared to the

nation and Healthy People 2020 goals. Kent and Washington County adults have some of the highest rates for both indicators.



	Kent	Newport	Provid.	Wash.	RI	US	HP 2020
High Blood Pressure	33.3%	28.7%	33.1%	32.8%	32.9%	30.8%	26.9%
High Cholesterol	38.7%	36.9%	37.5%	39.8%	38.5%	38.4%	13.5%

Source: Behavioral Risk Factor Surveillance System, 2009 & 2011
*Data for Bristol County is not available.

Cancer

Cancer is the second leading cause of death in the nation behind heart disease. Cancer incidence rates are declining in Rhode Island for breast, colorectal, lung, and prostate cancer. Prostate cancer experienced the greatest rate decrease (24.3 points).

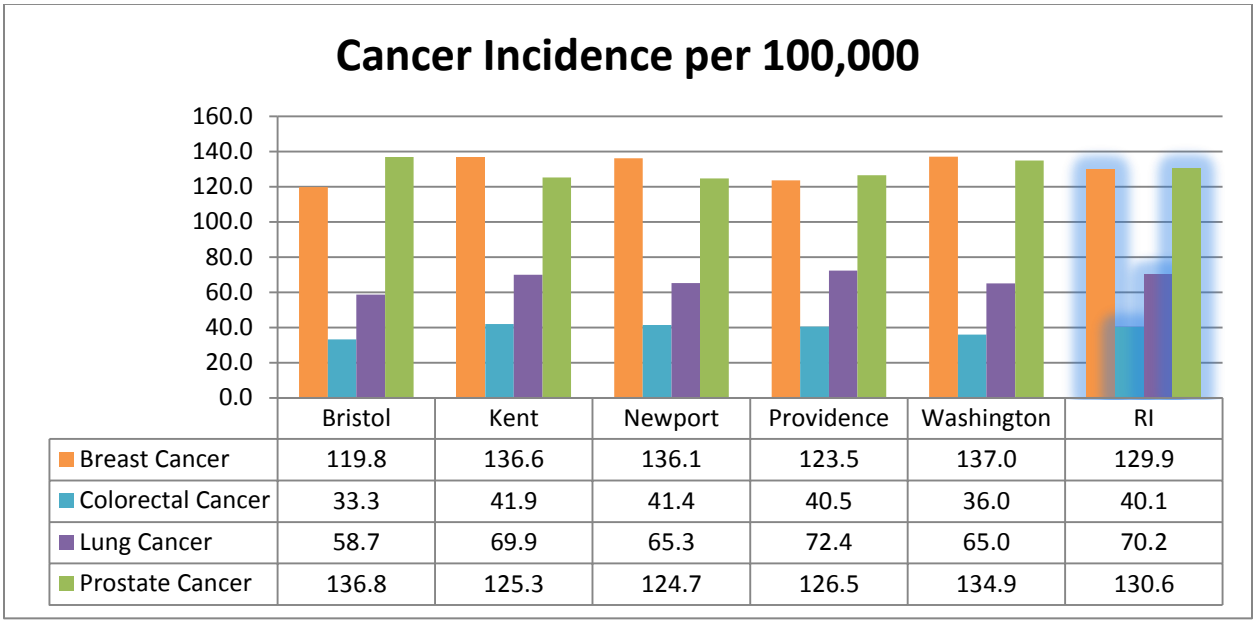
Cancer screenings are essential for early diagnosis and preventing mortality. Colorectal cancer screenings are recommended for adults age 50 years or over. Across Rhode Island, 74.7% of adults have had a colorectal cancer screening. Mammograms are recommended for women age 50 years or over to detect breast cancer. Across Rhode Island, 83.5% of women have had a mammogram. Screening rates for both cancer types are highest in Bristol and Washington Counties and lowest in Providence County.

Cancer Screenings

	Colorectal Cancer Screening	Mammogram in Past Two Years
Bristol	79.8%	87.2%
Kent	79.3%	82.6%
Newport	74.6%	83.4%
Providence	69.6%	83.2%
Washington	84.7%	83.5%
Rhode Island	**74.7%**	**83.5%**

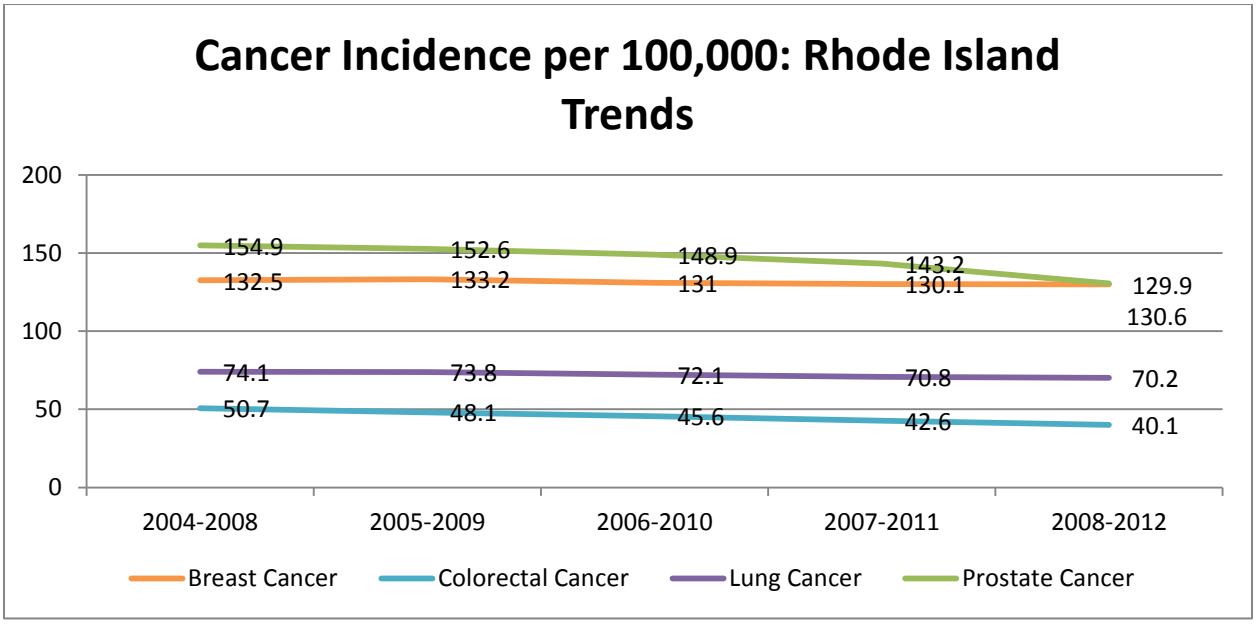
Source: Behavioral Risk Factor Surveillance System, 2010 & 2012

Presented below are the incidence and death rates for the most commonly diagnosed female cancers: breast (female), colorectal, lung, and prostate (male).



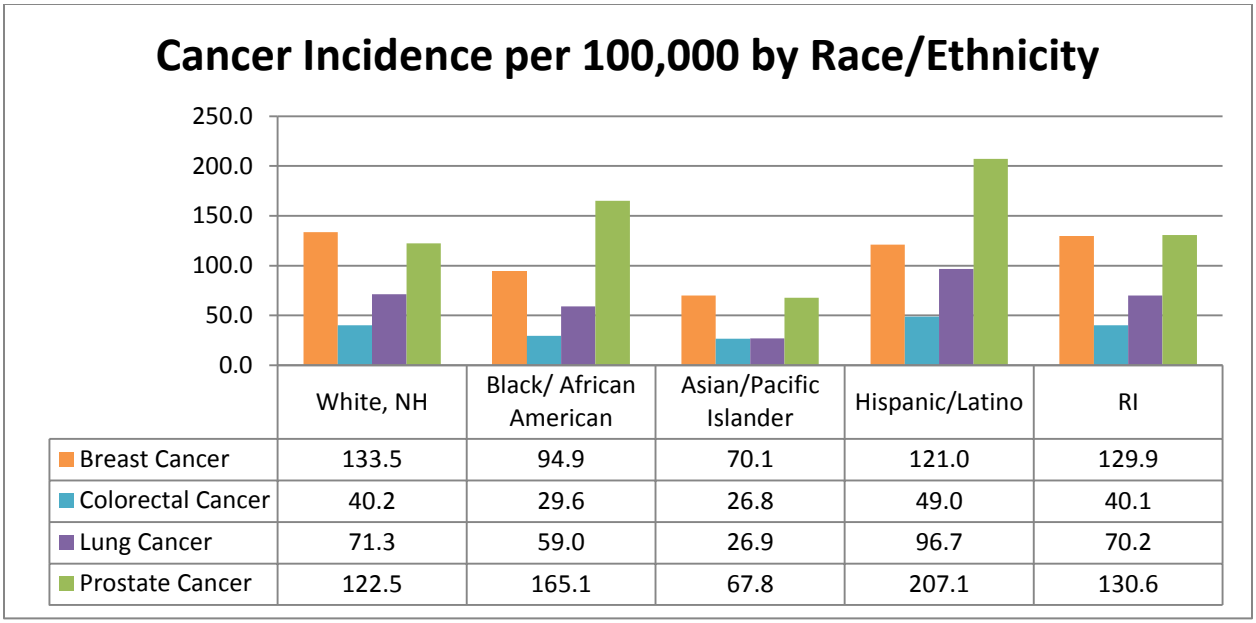
	Bristol	Kent	Newport	Providence	Washington	RI
Breast Cancer	119.8	136.6	136.1	123.5	137.0	129.9
Colorectal Cancer	33.3	41.9	41.4	40.5	36.0	40.1
Lung Cancer	58.7	69.9	65.3	72.4	65.0	70.2
Prostate Cancer	136.8	125.3	124.7	126.5	134.9	130.6

Source: National Cancer Institute, 2008-2012



Source: National Cancer Institute

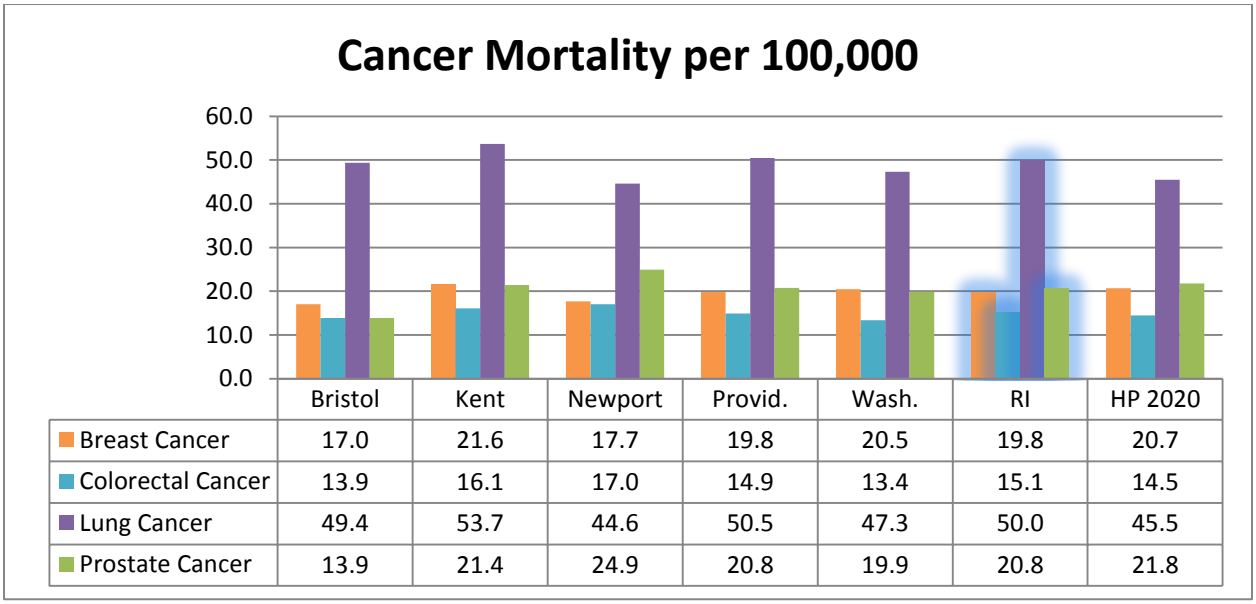
Cancer incidence rates in Rhode Island are declining, but racial and ethnic disparities exist. White, Non-Hispanic women have the highest rate of breast cancer, followed by Hispanic/Latina women. Hispanics/Latinos and White, Non-Hispanics also have higher rates of colorectal and lung cancer. The rate of prostate cancer among Hispanics/Latinos is more than 1.5 times the state rate.



	White, NH	Black/ African American	Asian/Pacific Islander	Hispanic/Latino	RI
Breast Cancer	133.5	94.9	70.1	121.0	129.9
Colorectal Cancer	40.2	29.6	26.8	49.0	40.1
Lung Cancer	71.3	59.0	26.9	96.7	70.2
Prostate Cancer	122.5	165.1	67.8	207.1	130.6

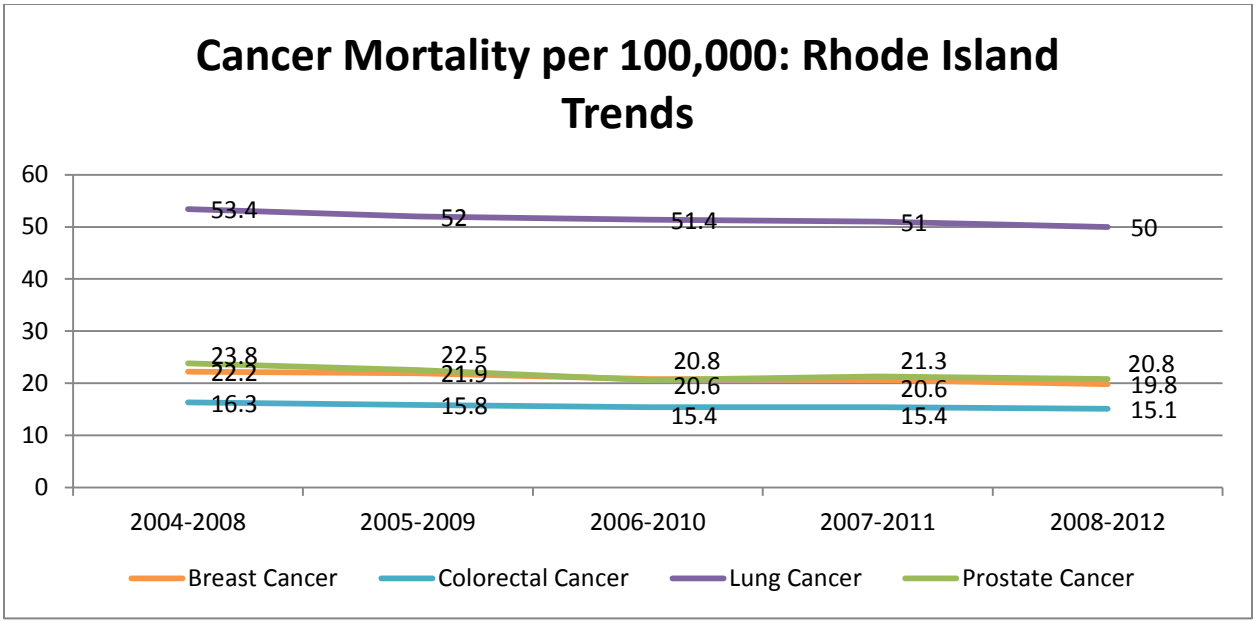
Source: National Cancer Institute, 2008-2012

Rhode Island meets the Healthy People 2020 goals for breast, colorectal, and prostate cancer. Death rates are declining for all reported cancer types.



	Bristol	Kent	Newport	Provid.	Wash.	RI	HP 2020
Breast Cancer	17.0	21.6	17.7	19.8	20.5	19.8	20.7
Colorectal Cancer	13.9	16.1	17.0	14.9	13.4	15.1	14.5
Lung Cancer	49.4	53.7	44.6	50.5	47.3	50.0	45.5
Prostate Cancer	13.9	21.4	24.9	20.8	19.9	20.8	21.8

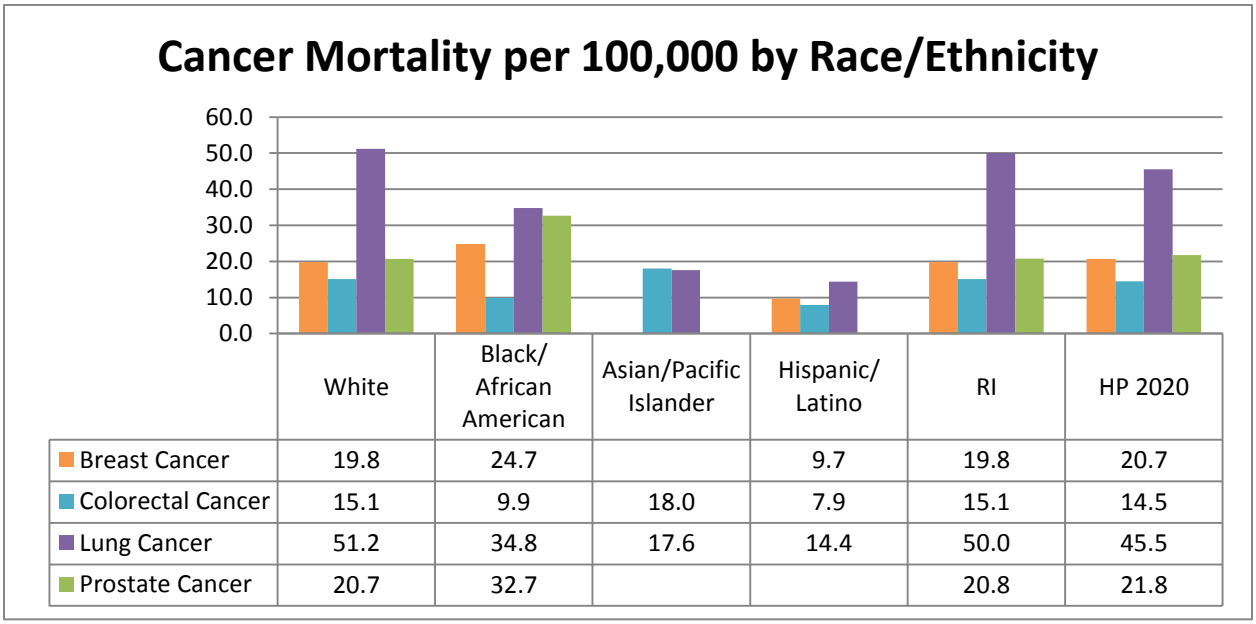
Source: National Cancer Institute, 2008-2012



Source: National Cancer Institute

The breast cancer death rate is higher among Black/African American women compared to White women. Black/African American women have a lower breast cancer incidence rate compared to White women, meaning that even though fewer Black/African American women develop breast cancer, more of them die from the condition.

Black/African American men have an elevated prostate cancer incidence rate compared to the state and the highest prostate cancer death rate.



	White	Black/ African American	Asian/Pacific Islander	Hispanic/ Latino	RI	HP 2020
Breast Cancer	19.8	24.7		9.7	19.8	20.7
Colorectal Cancer	15.1	9.9	18.0	7.9	15.1	14.5
Lung Cancer	51.2	34.8	17.6	14.4	50.0	45.5
Prostate Cancer	20.7	32.7			20.8	21.8

Source: National Cancer Institute, 2008-2012
*Breast and/or prostate cancer mortality data is not available for Asians/Pacific Islanders and Hispanics/Latinos

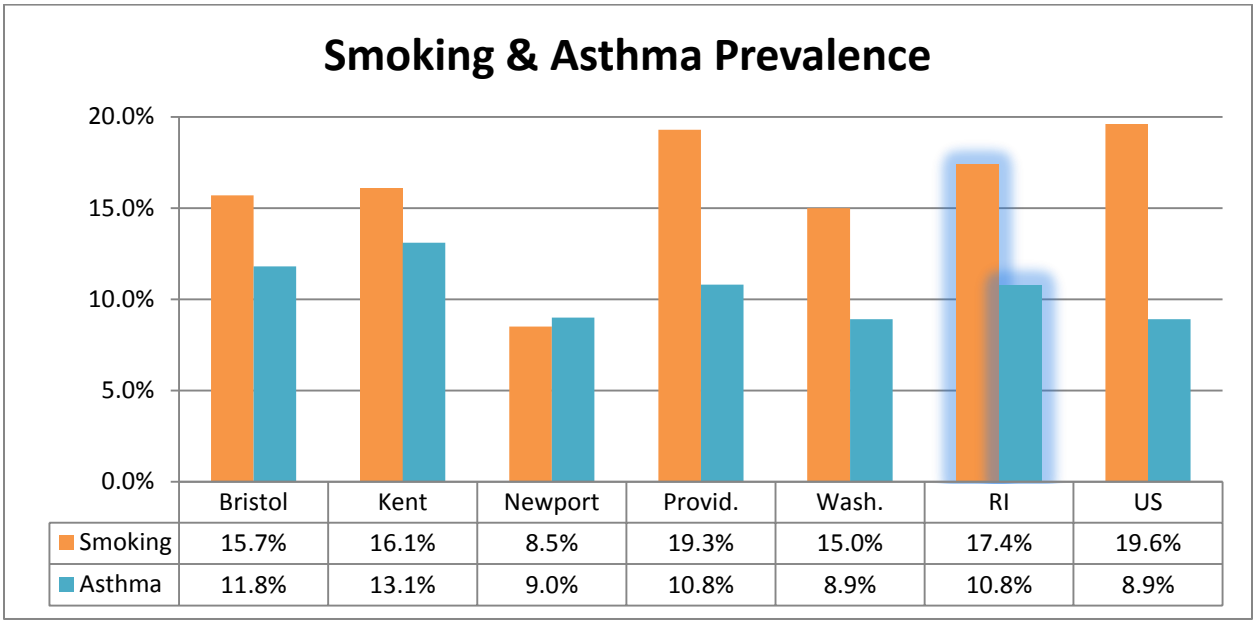
Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third most common cause of death in the nation. CLRD encompasses diseases like chronic obstructive pulmonary disorder, emphysema, and asthma.

Across Rhode Island, 10.8% of adults have asthma. The percentage is higher when compared to the nation, but declined from the 2013 CHNA report of 11.9%.

More adults and children in Rhode Island have asthma compared to the nation

Butler Hospital's 2013 CHNA BRFSS study found that 18.2% of children in Rhode Island have asthma. The percentage is higher than the national comparison (13.4%).



	Bristol	Kent	Newport	Provid.	Wash.	RI	US
Smoking	15.7%	16.1%	8.5%	19.3%	15.0%	17.4%	19.6%
Asthma	11.8%	13.1%	9.0%	10.8%	8.9%	10.8%	8.9%

Source: Behavioral Risk Factor Surveillance System, 2010 & 2012

Smoking cigarettes contributes to the onset of CLRD. In Rhode Island, 17.4% of adults, 2% of middle school students, and 9% of high school students smoke cigarettes.

2013-2014 Youth Cigarette Use in Rhode Island

	Cigarette Use	
	Middle School	High School
Rhode Island	**2%**	**9%**

Source: Rhode Island Kids Count Factbook, 2015

Diabetes

Diabetes is caused either by the body's inability to produce insulin or effectively use the insulin that is produced. Diabetes can cause a number of serious complications. Type II diabetes, the most common form, is largely preventable through diet and exercise.

Approximately 10% of Rhode Island adults have been diagnosed with diabetes, which is equitable to the nation, but represents an increase from 7.8% in the 2013 CHNA.

The percent of Rhode Islanders who have Diabetes increased from 7.8% to 9.8% since the 2013 CHNA

The diabetes mortality rate in Rhode Island (15.7 per 100,000) is lower than the nation and remained steady from the 2013 CHNA. Mortality rates are highest in Providence and Kent Counties.

Diabetes Prevalence & Mortality

	Diabetes Prevalence	Diabetes Mortality per 100,000
Bristol	3.6%	11.3
Kent	11.6%	16.1
Newport	7.0%	11.9
Providence	10.0%	17.0
Washington	7.3%	14.1
Rhode Island	**9.8%**	**15.7**
United States	**9.7%**	**21.3**

Source: Behavioral Risk Factor Surveillance System, 2010 & 2012 & Centers for Disease Control and Prevention, 2011-2013

Senior Health

Seniors face a number of challenges related to health and well-being as they age. They are more prone to chronic disease, social isolation, and disability. The following table notes the percentage of Medicare Beneficiaries 65 years or over who have been diagnosed with a chronic condition.

Chronic Conditions

The percentage of Medicare Beneficiaries with a chronic condition is typically higher than the nation.

Chronic Conditions among Medicare Beneficiaries 65 Years or Over

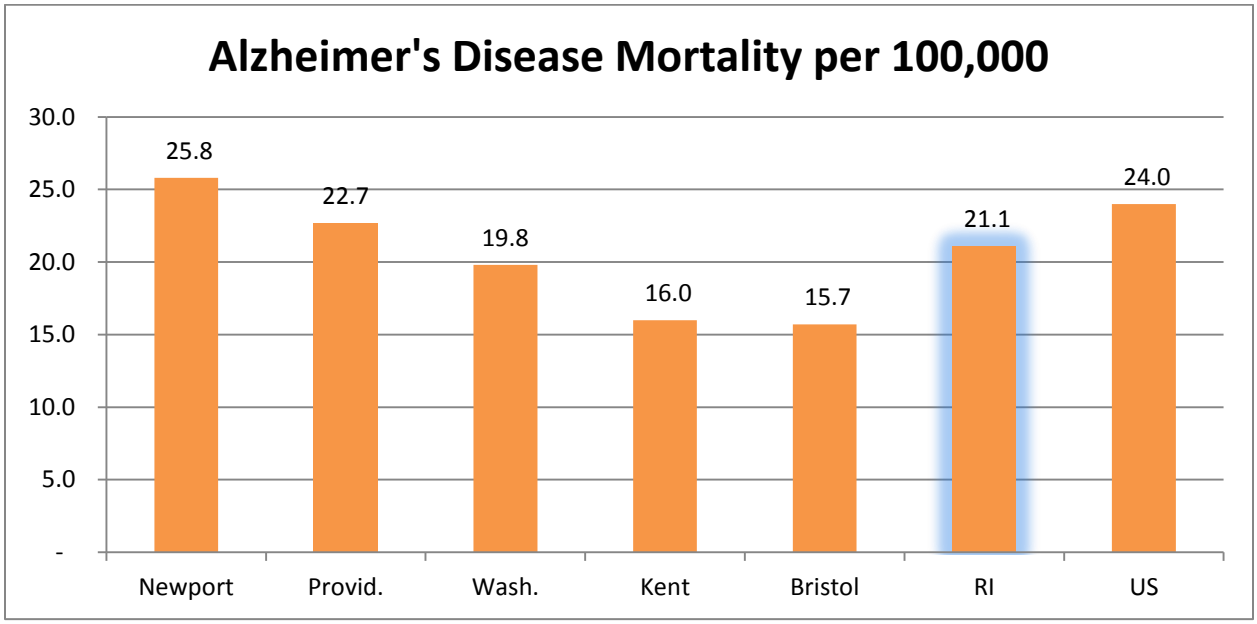
	Bristol	Kent	Newport	Provid.	Wash.	**RI**	**US**
Alzheimer's Disease	11.6%	12.1%	10.7%	13.4%	12.1%	**12.5%**	**11.4%**
Asthma	5.1%	6.1%	4.3%	6.2%	4.9%	**5.7%**	**4.3%**
Cancer	10.9%	11.2%	10.8%	10.4%	10.4%	**10.6%**	**9.1%**
Depression	13.4%	16.1%	13.3%	16.0%	12.1%	**15.0%**	**12.7%**
Diabetes	24.0%	27.2%	23.4%	28.7%	22.4%	**26.6%**	**27.4%**
Hypertension	60.8%	65.2%	60.4%	65.4%	61.4%	**63.9%**	**59.1%**
High Cholesterol	54.8%	56.5%	51.6%	55.1%	52.8%	**54.5%**	**48.0%**
Coronary Heart Disease	26.5%	34.3%	27.0%	31.3%	30.3%	**30.9%**	**31.1%**
Stroke	3.6%	4.5%	4.6%	4.1%	3.6%	**4.1%**	**4.1%**

Source: Centers for Medicare & Medicaid Services, 2012

Alzheimer's Disease

According to the National Institute on Aging, "Although one does not die of Alzheimer's disease, during the course of the disease, the body's defense mechanisms ultimately weaken, increasing susceptibility to catastrophic infection and other causes of death related to frailty."

The age-adjusted death rate due to Alzheimer's disease in Rhode Island is lower when compared to the nation. The rate decreased over the past four reporting cycles.

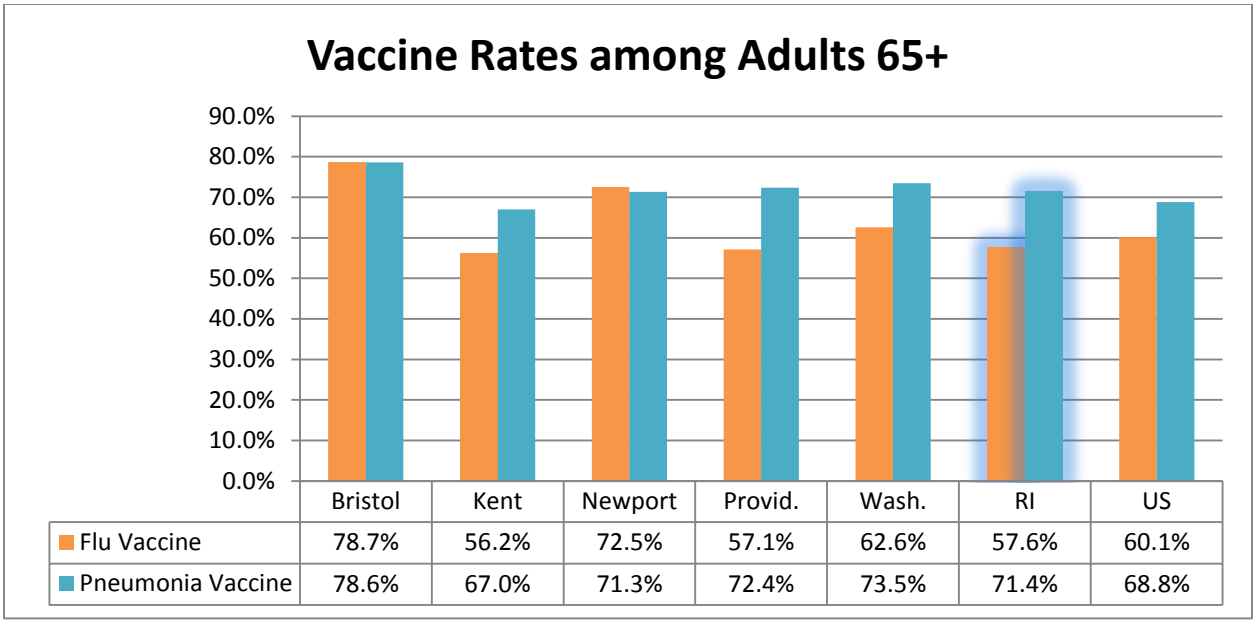


Source: Centers for Disease Control and Prevention, 2011-2013

Immunizations

The Advisory Committee on Immunization Practices recommends all individuals age six months or older receive the flu vaccine. However, the vaccine is a priority for older adults. The flu vaccination rate increased from the 56.6% to 57.6% since the last CHNA. The pneumonia vaccine is also recommended for adults age 65 years or older. The pneumonia vaccination rate decreased from 73.1 % to 71.4% since the last CHNA.

The number of Rhode Island seniors who receive the flu vaccine increased, but pneumonia vaccine rates decreased



	Bristol	Kent	Newport	Provid.	Wash.	RI	US
Flu Vaccine	78.7%	56.2%	72.5%	57.1%	62.6%	57.6%	60.1%
Pneumonia Vaccine	78.6%	67.0%	71.3%	72.4%	73.5%	71.4%	68.8%

Source: Behavioral Risk Factor Surveillance System, 2008, 2010, & 2012

Behavioral Health

Behavioral health encompasses both mental health and substance abuse conditions. Diagnosis, treatment, and comorbidity with chronic diseases are having an increasing impact on residents, patients, and the healthcare system. According to the September 2015 *Rhode Island Behavioral Health Project Report* by Truven Health Analytics, Rhode Island children and adults experience poorer mental health and substance abuse outcomes than residents in other New England states. Adult residents in Rhode Island are more likely to be hospitalized for mental health and substance use disorders. The following section analyzes measures related to feelings of depression, mental health diagnoses, mental health deaths, and provider access in Rhode Island.

Mental Health

Rhode Island adults report an average of 3.6 poor mental health days per 30-day period, which is in line with the nation and the 2013 CHNA. However, the 2013 CHNA found that 36.5% of adults had little interest or pleasure in doing things on at least one day over a two week period and 22% of adults have been diagnosed with a depressive disorder; both percentages exceed national averages.

Despite reporting poorer mental health, the suicide rate among Rhode Island residents meets the Healthy People 2020 goal and decreased from the 2013 CHNA (11.0 per 100,000).

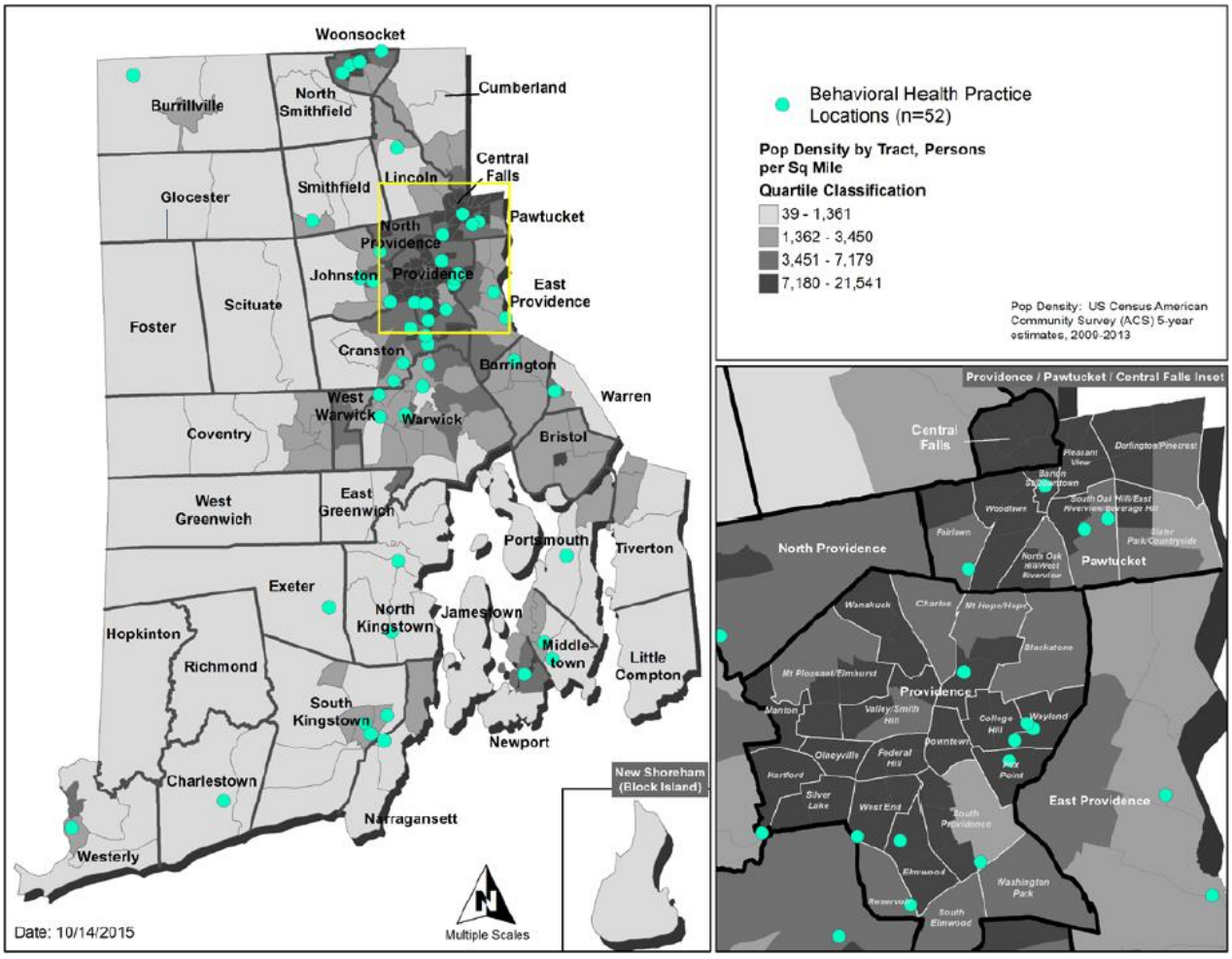
Mental Health Measures

	Poor Mental Health Days	Suicide per 100,000	Mental Health Provider Ratio
Bristol	2.9	N/A	541:1
Kent	4.0	10.5	397:1
Newport	3.0	11.0	354:1
Providence	3.7	9.1	257:1
Washington	3.2	13.9	366:1
Rhode Island	**3.6**	**10.2**	**298:1**
United States	**3.4**	**12.5**	**529:1**
HP 2020	**N/A**	**10.2**	**N/A**

Source: Behavioral Risk Factor Surveillance System, 2010 & 2012 & Centers for Disease Control and Prevention, 2011-2013 & County Health Rankings, 2012

Behavioral Health Providers

There are 52 licensed behavioral health clinics in Rhode Island. In 2014, the median number of patients seen across all clinics was 566. The following figure illustrates the location of the clinics layered over population density. Behavioral health providers are most available in Providence and Kent Counties.



Source: Rhode Island Department of Health Statewide Health Inventory, 2015

Substance Abuse

Substance abuse includes both alcohol and drug abuse. In Rhode Island, 17.2% of adults report binge drinking, 41.4% of driving deaths are due to alcohol-impaired driving, and the drug poisoning death rate is 16.4 per 100,000. The percentage of binge drinkers is higher than the nation, but meets the Healthy People 2020 goal and decreased from the 2013 CHNA (19.7%). The percentage of driving deaths due to alcohol-impairment exceeds the nation by more than 10%, but also decreased from the 2013 CHNA (42%). The rate of drug poisoning deaths increased 1.8 points from 14.6 per 100,000 in 2011.

R.I. deaths due to DUI exceed the nation by more than 10%

Drug poisoning deaths increased 1.8 points since 2011

Substance Abuse Measures

	Binge Drinking	Percent of Driving Deaths due to DUI	Drug Poisoning Deaths per 100,000
Bristol	9.4%	28.6%	11.7
Kent	15.9%	47.3%	18.9
Newport	17.6%	50.0%	10.3
Providence	17.1%	38.0%	17.5
Washington	18.4%	43.8%	13.2
Rhode Island	**17.2%**	**41.4%**	**16.4**
United States	**16.9%**	**30.6%**	**N/A**
HP 2020	**24.4%**	**N/A**	**N/A**

Source: Behavioral Risk Factor Surveillance System, 2010 & 2012 & County Health Rankings, 2006-2012 & 2009-2013

The *Rhode Island Behavioral Health Project Report* reported that Rhode Island residents have the highest rate of death due to narcotics and hallucinogens in comparison to other New England states. The rate is also higher than the national average. In addition, residents are more likely to be hospitalized for mental and substance use disorders and have unmet mental health care needs in comparison to other New England states. The hospitalization rate is 26% higher than Massachusetts (second highest in New England) and 150% higher than Vermont.

Youth Behavioral Health

An increasing number of youth are affected by behavioral health issues. *Rhode Island Kids Count* reported that in 2013, 2,737 youth were hospitalized across five hospitals with a primary diagnosis of mental disorder. The number of hospitalizations represents an increase of 53% from 2003. The report identified the top diagnoses for inpatient care as depressive disorders (41%), bipolar disorders (38%), anxiety disorders (12%), and adjustment disorders (5%). Rhode Island adolescents age 12 to 17 years are more likely to have major depressive episodes, and young adults age 18 to 24 years are more likely to have serious psychological distress, when compared to other New England states and the nation.

Suicide is another concern among youth. In 2013, 14% of Rhode Island high school students reported attempting suicide and there were 916 emergency department visits and 406 hospitalizations among youth 13 to 19 years for suicide attempts. A total of 24 youth in Rhode Island died due to suicide between 2009 and 2013.

14% of Rhode Island high school students reported attempting suicide

Substance abuse is affecting more youth in Rhode Island. The following table depicts substance abuse data among middle school and high school students by town in Washington County. In general, adolescents age 12 to 17 years in Rhode Island have higher rates of illicit drug use when compared to other New England states and the nation.

2013-2014 Youth Substance Abuse in Rhode Island

Alcohol Use		Marijuana Use		Prescription Drug Use		Cigarette Use	
Middle School	High School	Middle School	High School	Middle School	High School	Middle School	High School
6%	**26%**	**7%**	**34%**	**3%**	**12%**	**2%**	**9%**

Source: Rhode Island Kids Count Factbook, 2015

Maternal and Child Health

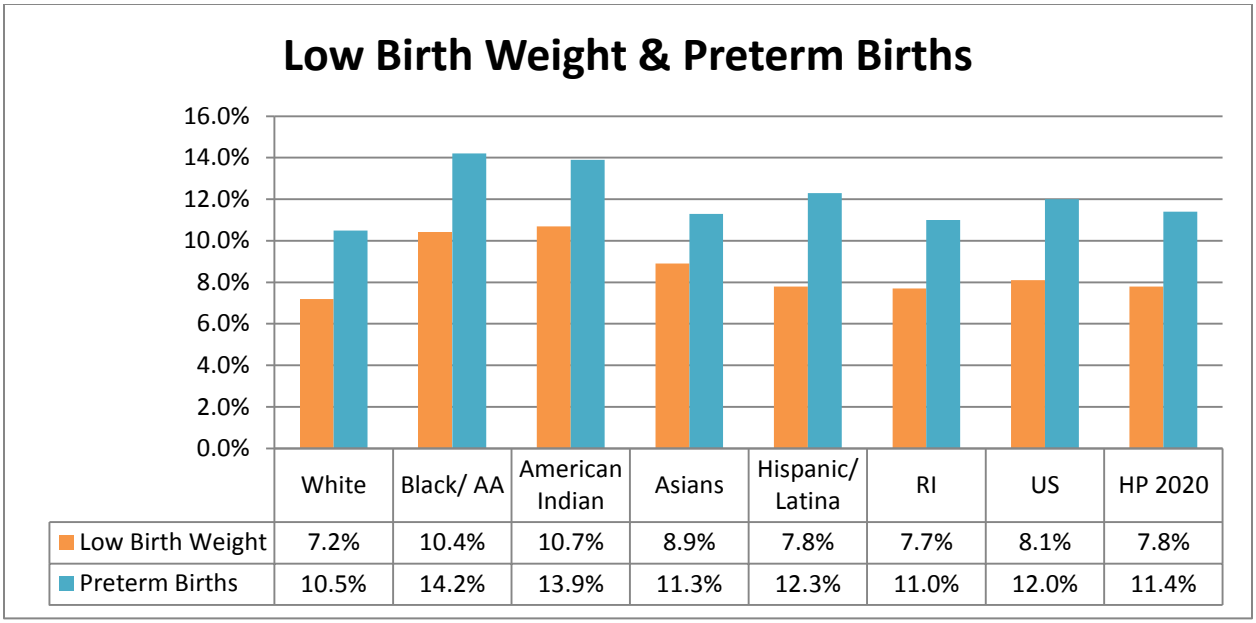
Prenatal & Infant Health

Maternal and child health is measured by a number of indicators, including low birth weight and preterm births. Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. It is often a result of premature birth, fetal growth restrictions, or birth defects. The percent of Rhode Island infants born with low birth weight is lower than the national average, meets the Healthy People 2020 goal, and represents a decrease from the last CHNA (7.9%).

Premature births are births that occur earlier than the 37th week of pregnancy. They often lead to infant death. The percent of Rhode Island infants born prematurely is also lower than the national average, meets the Healthy People 2020 goal, and represents a decrease from the last CHNA (11.4%).

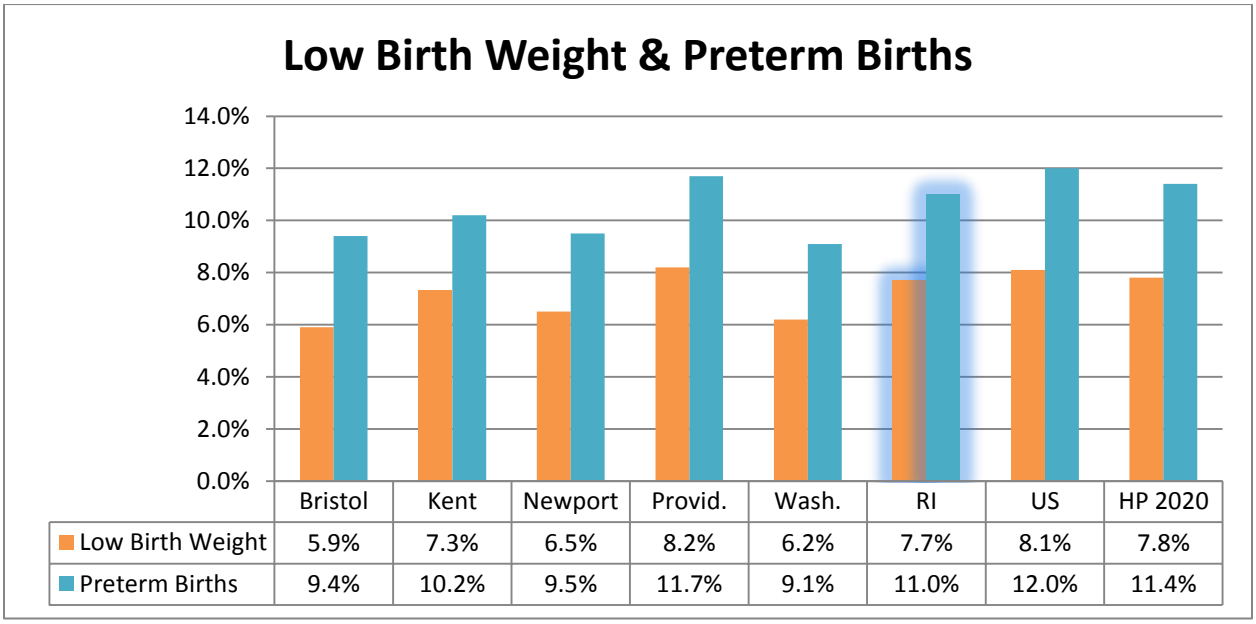
Black/African American and American Indian/Alaska Native mothers have the highest low birth weight and preterm birth rates

White mothers in Rhode Island are less likely to have low birth weight and premature babies than mothers of other racial and ethnic groups. Black/African American and American Indian/Alaska Native mothers have the highest low birth weight and preterm birth rates. Asian and Hispanic/Latina mothers also have higher rates compared to White women.



	White	Black/ AA	American Indian	Asians	Hispanic/ Latina	RI	US	HP 2020
Low Birth Weight	7.2%	10.4%	10.7%	8.9%	7.8%	7.7%	8.1%	7.8%
Preterm Births	10.5%	14.2%	13.9%	11.3%	12.3%	11.0%	12.0%	11.4%

Source: Health Indicators Warehouse, 2007-2013



	Bristol	Kent	Newport	Provid.	Wash.	RI	US	HP 2020
Low Birth Weight	5.9%	7.3%	6.5%	8.2%	6.2%	7.7%	8.1%	7.8%
Preterm Births	9.4%	10.2%	9.5%	11.7%	9.1%	11.0%	12.0%	11.4%

Source: Health Indicators Warehouse, 2007-2013

Rhode Island Kids Count published additional indicators contributing to infant health. These indicators are presented below for Rhode Island. The percentage of mothers receiving prenatal care in the first trimester and breastfeeding increased from the 2010 report of 84.1% and 61% respectively. The infant mortality rate decreased from a rate of 7.1 per 1,000.

2009-2013 Infant Health by Maternal Characteristics

	Total Births	Births per 1,000 Girls 15-19 years	Delayed Prenatal Care*	Exclusively Breast Fed	Preterm Births	Infant Mortality per 1,000 Births
Rhode Island	**55,169**	**21.0**	**12.8%**	**64%**	**10.7%**	**6.6**

Source: Rhode Island Kids Count Factbook, 2015

*Percentage of mothers receiving initiating prenatal care in the second or third trimester

In addition, *Rhode Island Kids Count* published that in 2013, 76 babies were diagnosed with Neonatal Abstinence Syndrome (NAS). The equivalent rate is 72 per 100,000 births and represents nearly double the reported rate in 2006 (37.2 per 100,000 births).

Immunizations

The Advisory Committee on Immunization Practices recommends that all individuals age six months or older receive the flu vaccine. However, the vaccine is considered a priority for children ages six months to four years. The 2013 CHNA found that 73.2% of all children under 18 years of age received a flu vaccine.

In addition, the Advisory Committee on Immunization Practice recommends a series of vaccinations for all children age 19 months to 35 months. The series includes diphtheria, tetanus, polio, measles, etc. *Rhode Island Kids Count* found that 82% of Rhode Island children received the full series of vaccinations, the best in the nation. The report also found that 95% to 98% of kindergarten students received the five immunizations required for school entry.

Partner Forums with Key Stakeholders

Partner Forums were held on Oct. 21 and 23 in the Providence area. The first forum was held at Women & Infants Hospital in Providence. The second forum was held at Progreso Latino in Central Falls. The objective of the forums was to solicit feedback from representatives of key stakeholder groups about priority health needs including identifying underserved populations, existing resources to address the priority needs, and barriers to accessing services. The forum also served to facilitate collaboration to address community health needs while aligning community health improvement efforts between the HARI CHNA, the Rhode Island Department of Health State Improvement Plan, and the local Health Equity Zones (HEZ).

Facilitation

An overview of the current CHNA research findings related to health needs and disparities in the community was presented to the partners. The partners were then divided by priority area for small group discussion based on the services their organization provides and/or the populations they serve. The subgroups discussed underserved populations, barriers to optimal health for residents, existing community assets, service delivery gaps, and opportunities for collaboration around the priority needs.

The small group discussion began with identification of existing community assets to address the priority area. Partners named specific organizations, programs, and individuals in the community, populations served, and partners that provide services in support of the identified need. Group participants were then presented with a set of questions aimed at identifying gaps in services and opportunities for collaboration to address the priority area. The questions included:

- Are people aware of existing resources and services?
- What barriers keep residents from accessing existing programs/services/ initiatives?
- What populations are underserved or most at-risk?
- What programs/services/initiatives could help reach this population?
- Who are potential partners for outreach and service delivery?

An overview of participants' responses from each Partner Forum is outlined below.

Providence Partner Forum

October 21, 2015, 12-2:30 pm
Women & Infants Hospital, 100 Dudley Street #2, Providence

Partner Forum Participants:

Ann Bavone, Rhode Island Department of Health

Amy Blustein, Care New England

Rebecca Boxx, Children and Youth Cabinet

Laura Bozzi, Southside Community Land Trust

Carrie Bridges-Feliz, Resident

Ellen Cynar, City of Providence

Eddy Davis, Providence Recreation Department/HCO

Lisa Donohue, North Providence School Department

Suzanne Fortier, Care New England Philanthropy

Patti Haskins, St. Joseph's Health Center

Brooke Havens, CareLink

Donald Laliberte, Crossroads Rhode Island

Virginia Lopez, St. Joseph's Health Center

Leah Montalbano, CareLink

Mia Patriarca, Rhode Island Department of Health

Jennifer Rossi, Environmental Justice League

Tina Shepard, ONE Neighborhood Builders

Betsy Shimberg, Brown University

Denise Tamburro, Rhode Island Department of Health

Monica Tavares, Rhode Island Department of Health

Elizabeth Vachon, North Providence School Department

Doug Victor, Providence Police Department

Emily Westgate, Brown University

Behavioral Health: Mental Health & Substance Abuse

Barriers to Accessing Programs/Services/Initiatives

Most residents are aware of some behavioral health services but do not know the full breadth and scope of services available. Better communication and cross-referral would improve resident awareness of community resources. Other barriers that residents experience when accessing services include:

- Wait times for appointments
- Eligibility criteria to receive services (income, insurance, etc.)
- Lack of specialists, especially child psychiatrists and physicians with geriatric experience
- Stigma associated with behavioral health
- Lack of services, specifically home-based interventions and support groups
- Limited state funding for free or reduced cost services
- Lack of follow- through with discharge planning

Underserved or Most At-Risk Populations

The partners agreed that populations within the community are at higher risk for developing behavioral health issues and are less likely to receive necessary interventions. These populations include:

- Adults with serious and persistent mental illness
- Children with incarcerated parents
- Individuals under 65 years of age on Medicare
- The uninsured population
- Immigrants, especially undocumented immigrants
- Individuals at-risk for crisis
- Formerly incarcerated individuals
- Racial and ethnic minority groups

A greater number of individuals ages 55-69 who have behavioral health and other chronic conditions are being referred to nursing homes because they are unable to find adequate housing. Group homes are limited in their ability to deliver personal care to these individuals and as a result, they are pushed prematurely into nursing homes, which do not always have the expertise in managing behavioral health symptoms. A new housing model is required to address the needs of these individuals.

Recommendations to Improve Access for Underserved or At-Risk Populations

There is a lack of early intervention and prevention work in the community. Residents are not accessing health services until they are in crisis. Partners recommended using community health workers/community mental health workers and other outreach programming to reach individuals prior to crisis. They also recommended that all primary care settings adopt a standardized mental health screening tool to be used on all patients.

Identifying Collaborative Partners to Address Behavioral Health Needs

Partners named schools, faith-based communities, foundations, funders outside of Rhode Island, federal agencies, and others as potential partners to address health needs. Partners stressed that there is a shortage of state funding so organizations need to seek federal and national funding to fill the gap.

Partners brainstormed two unique partnership opportunities. 1) Collaboration between The Providence Center and the North Providence School District to better prepare students who receive services at The Providence Center to transition back into the traditional school setting. 2) Engaging well-known, well-respected community leaders to advocate, support, and raise awareness of behavioral health issues. Partners recognized that competition for funding, rather than collaboration, often makes creating partnerships challenging.

Chronic Disease: Prevention & Management

Barriers to Accessing Programs/Services/Initiatives

Communication to residents about existing resources can be improved by using diverse channels for communication to specific populations and stakeholder groups in the community. In addition to awareness of existing services, other barriers keep residents from accessing services, including:

- Socioeconomic factors (poverty, education, etc.)
- Transportation to services
- Lack of multilingual providers
- Lack of health literacy and communication with providers
- Availability/convenience of appointment times
- Safety concerns/crime inhibiting outdoor physical activity
- Program capacity (e.g. the ratio of community gardens to residents)
- Lack of services, particularly for nutrition education

Underserved or Most At-Risk Populations

The partners agreed the following populations are at higher risk for developing chronic disease and are less likely to receive necessary interventions:

- Individuals on Medicaid/Medicare
- Individuals without family to support the management of their condition(s)
- Low-income, urban populations
- Minority racial/ethnic populations
- School children without adequate family structure to support healthy behaviors
- Individuals with low access to healthy, affordable foods

Recommendations to Improve Access for Underserved or At-Risk Populations

The partners recommended a number of services and initiatives to meet the chronic disease needs of underserved or at-risk populations:

- Community infrastructure and policy to support free/low cost physical activity (e.g. bikeable/walkable communities and further integration of physical activity into the school day)
- Greater support for Providence Public School District's Wellness Coordinator in implementing healthy school policies and ensuring compliance
- Providing a full service grocery store to South Providence
- Advocating for a 100% match of SNAP and WIC benefits at farmers markets versus the current 40% match
- Development of additional community gardens and urban farms with gardening instruction provided to residents
- A fruit and vegetable prescription program for physicians and patients, coupled with nutrition education
- A full-scale marketing effort (mailers, radio, door-to-door canvasing, etc.) of available services to the community
- The development of a combined health clinic/grocery/farmer's market to increase healthy food access and nutrition education in the community
- Identify community activists and champions to instill ownership of the community, create mentorship opportunities, and promote awareness of services

Identifying Collaborative Partners to Address Chronic Disease Needs

The participants identified a potential partnership between the Southside Community Land Trust and low-income neighborhoods to support community gardens and subsidized gardening resources.

Maternal & Child Health

Barriers to Accessing Programs/Services/Initiatives

Participants said that providers are often unaware of existing resources and therefore do not educate their patients about services. In addition to a lack of information sharing in the community, partners identified these additional barriers:

- Transportation to services
- Lack of prenatal outreach
- Lack of a "one door" approach, residents need to go to many providers to receive many services as opposed to having one access point to help them connect to services

Underserved or Most At-Risk Populations

The partners agreed that the following populations are at higher risk for poorer outcomes related to maternal and child health:

- Families and children within the welfare system
- Undocumented immigrants
- Teenage mothers
- Non-English speaking residents
- Families with parents who are incarcerated
- Children with PTSD or other trauma symptom

Recommendations to Improve Access for Underserved or At-Risk Populations

Partners thought any program or service designed for underserved or at-risk populations should be community-driven; too many programs are perceived as coming from organizations and individuals "outside" of the community. Partners also stated that programs and services should implement place-based strategies and use representatives from the target population to help reach the community. Place-based strategies recognize that "place" matters and individuals do better when they live in vibrant and supportive communities. The goal of place-based strategies is to create communities of opportunity.

Identifying Collaborative Partners to Address Maternal & Child Health Needs

Partners stated that there is a need for more connection between small grassroots organizations and larger intermediary organizations like the Department of Health. These connections will support community collaboration toward like-minded goals without duplicating services. A shared referral system among providers to ensure access and create a "one door" approach to services was also recommended.

Pawtucket/Central Falls Partner Forum

October 23, 2015, 9-11:30 am
Progreso Latino, 626 Broad Street, Central Falls

Partner Forum Participants:

Rui Almeida, City of Central Falls

Melanie Andrade, Central Falls Housing Authority

Ami Awad, Progreso Latino

Bill Bentley, Blackstone Valley Community Action Program

Laura Bozzi, Southside Community Land Trust

Alberto DeBurgo, Central Falls Housing Authority

Joe Diaz, Memorial Hospital of Rhode Island

Carlos Domenech, Pawtucket Central Falls Development

Jordan Dunne, Pawtucket School Department Child Opportunity Zone

Melissa Flaherty, Pawtucket Housing Authority

Nancy Howard, Local Initiatives Support Corporation

Cezarina Jackson, Memorial Hospital of Rhode Island

Norma Lopez, Pawtucket Adult Education

Mary Parella, Pawtucket School Department Child Opportunity Zone

Bianca Policastro, Blackstone Valley Community Action Program

Cynthia Roberts, Rhode Island Coalition Against Domestic Violence

Gretchen Sloane, Memorial Hospital of Rhode Island

Caitlin Towey, Rhode Island Public Health Institute

Behavioral Health: Mental Health & Substance Abuse

Barriers to Accessing Programs/Services/Initiatives

Partners thought that most residents were aware of some services that address behavioral health needs, but most do not know about all of the existing community services. In addition to a lack of information, the partners noted that there is a lack of "one door" to access all programs. In addition, partners listed the following barriers that residents face in accessing services in the community:

- Transportation to services
- Pride in asking for help
- Stigma and anxiety associated with seeking help
- Concern for basic needs (e.g. housing) before health needs
- Lack of specialists for services and settings to receive care
- Out-of-pocket costs for care
- Lack of education/knowledge regarding behavioral health conditions
- Lack of cultural competency among mental health providers
- Lack of multilingual providers

Underserved or Most At-Risk Populations

The partners agreed that some populations within the community are at higher risk for developing behavioral health issues and are less likely to receive necessary interventions. The Hispanic/Latino population, in particular, was noted as underserved due to reduced awareness and acceptance of the behavioral health issues among the community and a lack bi-lingual and culturally competent providers. The following populations were also considered underserved or at-risk:

- Youth
- Homeless population
- Elderly population
- Undocumented immigrants
- Low-income residents

Recommendations to Improve Access for Underserved or At-Risk Populations

Partners said that school-based health clinics and community centers are the best venues to reach underserved or at-risk populations. School-based health clinics can offer mental health and medical services and community centers can be a "one-stop shop" for accurate information regarding services in the community.

Identifying Collaborative Partners to Address Behavioral Health Needs

Information sharing was suggested as an opportunity for collaboration. Promoting information about local programs, in addition to a list of behavioral health providers was suggested. Taking a community-centered approach, versus an agency-centered approach would improve dissemination of information to residents. Blackstone Community Health Center was noted as a potential partner to help promote community wide resources for behavioral health care.

Chronic Disease: Prevention & Management

Barriers to Accessing Programs/Services/Initiatives

While residents are likely aware of some of the community offerings that could help improve health, information could be more widely disseminated. Motivation and barriers to accessing services also keep residents from taking advantage of existing resources.

Barriers include:

- Availability of appointment times
- Transportation to services
- Lack of cultural competent/multilingual providers
- Out-of-pocket costs for care
- Safety/crime inhibiting outdoor physical activity
- Lack of city planning/design that supports physical activity

Underserved or Most At-Risk Populations

Males, particularly, those who are non-English speaking are seen as the most underserved or at-risk population. They are least likely to seek services until they reach a point of crisis. Individuals with low incomes and others who cannot easily access healthy foods are also at-risk for poorer health.

Recommendations to Improve Access for Underserved or At-Risk Populations

Participants recommended the following services that could help improve chronic disease among underserved or at-risk populations:

- Mobile farmer's markets at schools, housing developments, and other locations
- Promotion of Community Supported Agriculture programs and the Slater Hill Farmer's Market in low-income areas
- A language access plan for non-English speaking populations
- Home visits for at-risk populations to ensure adequate nutrition and physical activity and chronic disease management
- School- and work-based health programs
- A program allowing hospitals and physicians to provide services to patients in known and comfortable locations in the community to increase access

- An initiative to convert vacant lots into community gardens and provide education and resources to support gardeners
- Programs that employ community health workers that reflect the community demographics
- A walking school bus to increase physical activity among students, utilizing available walking trails and sidewalks
- An initiative to develop family fitness programs in housing developments

Identifying Collaborative Partners to Address Chronic Disease Needs

Partners discussed a number of ways to incorporate health into the community so that it is comfortable and relevant based on language and culture. Food access and community exercise programs were emphasized. They recommended an increase in community gardens, fruit and vegetable prescription programs, and farmer's markets. Partnerships between community groups and health providers to deliver exercise programs in the community were suggested to encourage physical activity.

Maternal & Child Health

Barriers to Accessing Programs/Services/Initiatives

Participants stated that many residents are not aware of all the services available to them due to a lack of publicity. In addition, a number of barriers exist when accessing services; transportation and housing are two of the biggest barriers. Participants said that bus fees are more expensive than Uber and only a few people in the community qualify for free passes.

Partners also stated that the struggle to meet basic needs, like housing, inhibits residents from accessing services. Affordable housing options in the community have a two to five year waiting period and there is no emergency housing. In addition, housing is often overpopulated and unsafe with absentee landlords.

Additional barriers to accessing services include:

- Undocumented citizen status
- Transportation to services
- A fear/mistrust of the healthcare system
- Poverty and out-of-pocket costs for care
- Lack of multilingual providers
- Social and emotional distress inhibiting ability to identify and navigate services

Underserved or Most At-Risk Populations

The partners agreed the following populations experience higher disparities related to maternal and child health outcomes:

- Minority racial/ethnic populations
- Teenagers, particularly those who have withdrawn from school
- Single mother households

Recommendations to Improve Access for Underserved or At-Risk Populations

Participants named the following organizations as existing or potential partners to improve maternal and child health outcomes:

- School districts to reach at-risk youth and disseminate information to families
- Community Health Centers
- Department of Human Services
- Children's Friend Day Care Center
- The City/Government to enact policy change around issues like breastfeeding and improve transportation through better sidewalks and biking paths

Identifying Collaborative Partners to Address Chronic Disease Needs

The partners brainstormed two unique partnerships that would aid the community:

1) Partner RIPTA with healthcare providers to create a healthcare route similar to the college bus routes.

2) Partner social service and advocacy groups with the city government to create safe and accessible walking and biking paths.

Identified Community Assets

Behavioral Health: Mental Health & Substance Abuse	
Community Asset	**Target Population(s) as Applicable**
12 Step Programs for Substance Misuse (Phoenix House, Oasis Center, CODAL, NAMI, RISAS)	
211 (United Way)	
Anchor Counseling	
Blackstone Valley Community Action Program	
Blackstone Valley Community Health Care	
Bradley Hospital (Lifespan) & Bradley School Solutions	
Butler Hospital's Young Adult Partial Program	
Central Falls Housing Authority/Planning & Economic Development	
Child Opportunity Zones (COZ)	
Colleges, Universities, K-12 Schools	
Community Center	
Community Mental Health Centers	
Day One	
Family Services of Rhode Island/Rhode Island Student Assistance Services	Students, Families
Gateway Healthcare: Mental Health First Aid	
Home-Based Team Services (Mobile Treatment Teams)	
House of Hope	
Kids Link (Butler Hospital & Gateway Healthcare)	Students, Schools
Office of the Mental Health Advocate	
PACE Rhode Island	Adults 55 years or older
Pawtucket Central Falls Development	
Peace Love Studio (Behavioral Health Awareness)	
PODOR Radio	Spanish-Speaking Population
Private Providers, including Primary Care	
Progresso Latino	
Rhode Island Department of Behavioral Healthcare; Children, Youth, and Families; Development Disabilities; Human Services	
Rhode Island Elder Mental Health and Addiction Coalition	
Rhode Island Parent Information Network	Parents of children with special health care needs
Rhode Island Public Transit Authority	
The Providence Center (Care New England)	Adults, Children, Families
The Samaritans	Suicide Prevention
Women & Infants Hospital	Women with post-partum depression
Youth Pride, Inc.	

Chronic Disease: Prevention & Management	
Community Asset	**Target Population(s) as Applicable**
Blackstone Valley Community Action Program	Low-Income Families
Blackstone Valley Community Health Care	
Community Gardens	West End, South Providence, Pawtucket
Community Health Network (referrals to self-management programs for diabetes, arthritis, smoking, etc.)	High Risk Chronic Disease Patients
Connect Care Choice Community Partners (4CP)	Medicaid, Medicare Dual Eligible with Chronic Health Needs
Farmers Market Incentive Programs/Farm Fresh Rhode Island	
Health Equity Zones (HEZ)	Olneyville & Providence Residents
Memorial Hospital of Rhode Island	
Partnership for Providence Parks	
Pawtucket Child Opportunity Zone (COZ)	Students
Pawtucket Housing	
Progresso Latino	
PODOR Radio	Spanish-Speaking Population
Rhode Island Coalition Against Domestic Violence	Domestic Violence Victims
Rhode Island Public Health Institute	
South Providence Development Initiatives (ONE Neighborhood Builders, City of Providence, Libraries)	
Southside Community Land Trust	
West Elmwood Housing	

Maternal & Child Health	
Community Asset	**Target Population(s) as Applicable**
Birth to Three Committee	
Blackstone Valley Community Action Program	
Blackstone Valley Community Health Care	Low-Income, Underinsured/ Uninsured, Minorities
Child Opportunity Zones (COZ)	
Childhood Lead Action Project	
Children's Friend Day Care Center	Low-Income Families
City Government	
Day Cares/Head Start/Early Childhood Development	Children Ages 0-5 Years
Department of Human Services	
Environmental Justice League	Oppressed and marginalized communities
Family Visiting Program (Department of Health)	
Farm Fresh Rhode Island	
Food Banks/Pantries	
Green & Healthy Homes	
Hospitals & Health Centers (HARI, Care New England, CharterCARE, The Providence Center, etc.)	
International Board Certified Lactation Consultants/Certified Lactation Counselors	Breastfeeding Women
Memorial Hospital of Rhode Island	
Mental Health Providers	
Nurse-Care Managers	
Pawtucket Soup Kitchen	Individuals in Need
Progresso Latino	
PODOR Radio	Spanish-Speaking Population
Providence Children & Youth Cabinet	
Ready to Learn Providence	
Rhode Island Department of Health	
Rhode Island Doula Collective	Pregnant Teens
School Districts & Staff (nurses, social workers, etc.)	
The Providence Center	
Universities/Students	
Women & Infants Hospital	
Youth Success Program	Teenage Families

Evaluation of Community Health Impact from 2013 CHNA Implementation Plan

Butler Hospital and other Care New England hospitals developed and implemented a system-wide plan to address community health needs that leverages resources across the system and employs the system's specialized services for behavioral health, maternal and child health, and cardiovascular and diabetes care.

Mental Health and Substance Abuse

Goal 1: Decrease morbidity from diabetes and heart disease among persons with mental illness, including substance abuse disorders.

Goal 2: Improve mental health by increasing access to appropriate, quality mental health services including substance abuse services.

Leveraging resources across the Care New England System, Butler Hospital focused on improving care coordination for patients with comorbid conditions. Our key initiatives included identifying and referring behavioral health patients without a primary care physician (PCP) to a PCP practice, including mental health screening as part of our coronary heart failure (CHF) program, and providing medication continuity in CNE emergency departments for psychiatric patients with diabetes and heart disease awaiting an inpatient psychiatric bed through our Safe Transitions program. Over the three year period, we were successful in referring 900 patients discharged from Butler Hospital to a PCP.

Other objectives included 1) expanding capacity to respond to patients awaiting psychiatric services in hospital emergency departments; 2) improving the transition for patients from emergency departments to inpatient care; 3) developing a partnership with a community provider to enhance continuum and improve access to community-based services; and 4) educating prenatal mothers and their families about risk factors for postpartum depression and resources available to assist with treatment.

Our key initiatives for this goal included providing online mental health screening; developing a patient-centered medical home model with integrated mental/physical health; and developing an affiliation agreement with The Providence Center to provide greater access to psychiatric care, including 24/7 presence in Care New England emergency departments.

Between January 1, 2013 and December 31, 2015, the online mental health screening tool hosted on Butler Hospital's website received 57,390 new visitors with an additional

1,737 people returning during this time period. Promotion of butler.org/healthscreening in communications and advertising brought 43,524 people directly to the page, and 13,866 visitors found the screening tool through another page on the web site. In all cases, the average period of time spent on the page (3:05) indicates visitors are completing the online mental health screening. The relevance and value of the tool to the community is proven with its ranking as the fourth highest traffic page on our website, only behind the homepage and employment opportunities.

Another key accomplishment is Care New England's work to improve youth behavioral health and postpartum depression among women. One initiative by Kent Hospital established a program within the City of Warwick to train city employees to be mentors for youth. The goal of the program is to increase youth confidence, self-esteem, and the desire to stay in school. Kent Hospital also provided school-based health education to instruct parents on the warning signs and treatment of substance abuse. CNE clinicians increased awareness of postpartum depression and provided information and education to residents as part of Rhode Island's Climb Out of Darkness event.

Care New England also hosted mental health support groups and education sessions and provided insurance enrollment assistance for uninsured patients to improve mental health wellbeing and access to care.

Heart Disease

Goal 1: Increase the number of women who are aware of their risk for heart disease.

Goal 2: Reduce heart disease through early identification, and early and appropriate treatment/management.

Our objectives included educating women about the benefits of healthy behavior and the risk factors for heart disease, increasing screenings for women who may be at higher risk for heart disease, and increasing the number of women who exclusively breastfeed their infants to impact the health of the infant and mother.

Community outreach, including education and screening, was conducted via activities across the Care New England System and communities, reaching hundreds of individuals. Initiatives included the Spirit of Women Day of Dance and the Women's Health Fair.

Other initiatives included support for the Rhode Island Free Clinic with physicians and allied health professionals, nutrition and weight management programs, and The Doctor Is In wellness lecture series at Memorial Hospital.

Care New England sought and received Baby Friendly designation for all birthing services at Women & Infants Hospital and Kent Hospital and increased efforts to encourage breastfeeding among mothers giving birth across the CNE system. A seven-day-a-week, nurse-staffed Warm Line supported the informational and educational needs of new and expectant mothers. A weekly peer support group facilitated by nurse educators and other staff for new parents and babies provided a safe nonjudgmental forum for women to bond with each other and their babies.

Fiscal Year 2013-2015 Warm Line Statistics

	FY 2013	FY 2014	FY 2015
Warm Line Calls	11,019	6,401	5,993
Spanish Language Calls	325	266	256
Post-Partum Call Backs	7,995	7,209	7,733
Physician Referrals	999	858	628
Warm Line Visits to Maternity Patients	2,889	7,029	7,763

To improve outcomes and self-management for patients with heart disease, we conducted congestive heart failure education and developed partnerships with PCPs and area skilled nursing facilities to reduce hospital readmissions.

Diabetes

Goal 1: Increase the number of people who are aware of the risk factors for diabetes.

Goal 2: Increase diabetes self-management education for people living with diabetes.

Our objectives were to 1) increase the proportion of persons with diabetes whose condition has been diagnosed; 2) increase community awareness of the risk factors for diabetes; and 3) lower readmissions rates for patients with diabetes-related complications.

The CNE Family Van served 1,800 clients to improve access to healthcare for medically underserved residents, including uninsured and under-insured. The van team provided education, screenings, and chronic disease self-management. Each client received applicable screenings for blood pressure, cholesterol, lipid profiles, body fat analysis, diabetes, and pregnancy testing, and follow-up education and referrals based on lab results. Efforts focused on populations that experience health disparities, including the Providence, Pawtucket, Central Falls, and Woonsocket communities.

The CNE Family Van also targeted senior Latino residents in subsidized housing units to provide diabetes education and support groups. The initiative aimed to identify undiagnosed individuals and improve self-management skills.

Care New England participates in community health fairs to promote health education and screenings. During the annual, two-day health fair for Electric Boat employees, all CNE hospitals participate, serving approximately 2,000 residents. Care New England also participates in the City of Warwick Health Fair, the WIH Family Van Health Fair, and others across the community.

Other accomplishments included creating standardized screening/testing across CNE facilities; sharing screening tests (with patients and primary care providers); educating women at-risk for or diagnosed with gestational diabetes; and developing a CIS initiative to measure patient outcomes. A pilot program included screening approximately 2,000 CNE employees for diabetes in 2013 and 2014.

Butler Hospital Implementation Plan for Community Health Improvement

Butler Hospital will employ the following goals, objectives, and strategies in working to meet its goals to improve the health of the communities it serves. Butler Hospital's full Implementation Plan for Community Health Improvement is available on request.

Priority Area: Behavioral Health

CNE Goals:

- Prevent opioid use addiction and opioid addiction in conjunction with other substances.
- Decrease morbidity and mortality from opioid use and opioid use with other substances.

Objectives:

- Increase awareness and knowledge among the public and health care professionals about opioid addiction, signs and symptoms of substance abuse, prevention, and existing addiction and recovery services.
- Increase the number of people who are identified with opioid addiction or are at-risk for opioid addiction and require treatment services.
- Increase the number of people who learn about the CNE Center of Excellence Addiction and Recovery Treatment Model and who seek out and are able to access treatment services.
- Improve staff cultural competence in delivering preventive and treatment services to those with opioid addiction or are at-risk for opioid addiction and in communicating with family members, significant others, friends, and the public about opioid addiction prevention and treatment, and related services and programs.
- Help reduce stigma associated with opioid addiction and other substance use disorders.

Strategies:

- Deliver education and outreach to build awareness in the multiple community audiences about opioid addiction to further prevention, improve care access, and lessen morbidity and mortality rates.

- Address opioid addiction in populations and communities where there is greatest disparity in outcomes and need.
- Align efforts the Governor's Overdose Prevention and Intervention Task Force Action Plan and 2016 Rhode Island opioid and substance use legislation.
- Increase awareness about Care New England's centralized intake for behavioral health.
- Continue to provide a free online screening tool and promote its use, particularly for substance use and opioid use disorder.
- Collaborate with Central Falls-Pawtucket HEZ in delivering Youth Mental Health First Aid training to students.
- Analyze and report on race and ethnicity in CNE emergency rooms of patients who present with overdose and substance use symptoms to identify disparities related to the opioid crisis.
- Assess need for expanding AnchorMORE and adding recovery coaches and develop further capacity as needed.
- Continue narcotics support groups and other self-help support groups, according to budget, and assess need for expansion.

Priority Area: Chronic Disease—Diabetes

Goals:

- Reduce the number of new cases of diabetes.
- Decrease morbidity and mortality from type 2 diabetes and diabetes-related conditions.

Objectives:

- Increase the public's awareness and knowledge of risk factors for prediabetes and diabetes.
- Increase the proportion of pre-diabetic people at risk for diabetes who have been screened and diagnosed.
- Increase the proportion of persons with diabetes whose condition has been diagnosed.
- Reduce disparities in screening, diagnosing, and treatment of diabetes.

- Promote healthy behaviors, including those related to diet and nutrition, to aide in reducing the risk factors for the development of diabetes among at-risk populations in underserved populations residing in CNE hospital service areas.

- Support persons at high risk for diabetes with modifying health behaviors, including healthy eating.

- Improve cultural competence among clinicians and staff in delivering preventive and treatment services to those at risk of acquiring type 2 diabetes or have type 2 diabetes and their families.

Strategies:

- Facilitate prediabetes and diabetes education, outreach, prevention, and screening in the community in CNE service areas through community events, health fairs, and related venues.

- Analyze and report on pre-diabetes and diabetes status of the CNE patient population over time.

- Facilitate increased prediabetes screening of CNE patients by CNE primary care providers.

- Perform outreach and education to CNE primary care providers on U.S. Preventive Services Task Force (USPSTF) Task Force recommendations for screening asymptomatic adults at risk for diabetes.

- Facilitate referral of patients with prediabetes to CDC approved diabetes prevention programs (DPP) that address risk factors such as diet and nutrition.

- Develop type 2 diabetes screening protocols or referral process for screening for at risk behavioral health inpatients and outpatients based on clinical criteria.

- Join the DPP Stakeholder Network.

- Continue Memorial Hospital collaboration with Pawtucket/Central Falls HEZ with regard to diabetes prevention and education, including activities related to health diet and nutrition.

- Assess the feasibility of offering the diabetes prevention program or similar programs to CNE employees.

- Partner with internal and/or external diabetes self-management programs for referral purposes for people with type 2 diabetes. Refer through the Community Health Network, RIDOH's centralized referral system, individuals eligible and

qualified for no-cost diabetes self-management programs and chronic disease self-management programs.

- Collaborate with Progreso Latino in establishing physical activity and other programs, such as healthy eating, designed to prevent diabetes.

- Support diabetes outreach and prevention activities by CNE hospitals, according to budget, such as the Family Van Program, the “Doctor Is In” wellness series, nutrition/weight management education, health fairs, and support groups.

- Evaluate and update diabetes outreach and educational materials, when necessary, to improve readability, comprehension, and cultural relevance.

Priority Area: Maternal Child Health

CNE Goals:

- Increase healthy pregnancies and improve birth outcomes for at-risk mothers and babies.

- Reduce the disparity in prenatal care, preterm births, low birthweight, and infant mortality among at-risk black/African American families.

Objectives:

- Increase the proportion of pregnant women who receive prenatal care during the first trimester of pregnancy and reduce barriers to accessing prenatal care services for at-risk women throughout pregnancy.

- Improve postpartum outcomes for mothers and babies, including infant mortality.

- Increase breastfeeding initiation and duration across all populations and work toward reducing barriers to breastfeeding.

- Improve the overall health of pregnant women.

Strategies:

Access

- Support continuity of health insurance coverage for postpartum women by facilitating referrals to health coverage navigators.

- Expand Family Van outreach services with pregnancy testing and related MCH education, information, and referral. Additionally, evaluate the prospect of adding breastfeeding support/education at Family Van sites.

- As feasible and beneficial, provide transportation to low-income pregnant women to and from prenatal care visits.

WIC Program

- Continue the WIC program at Women & Infants Hospital.
- Assess feasibility of partnership with WIC to develop and operate a Baby Café.
- Support established and new community-based WIC programming.

RIDOH and Community Collaboration

- Continue support for the Rhode Island Task Force on Premature Birth, a diverse coalition of community groups, government agencies, and health care partners working to reduce the rate of premature birth and the morbidity and mortality associated with premature birth in Rhode Island.
- Educate patients, families and communities about the importance of maternal child health, including prenatal and postnatal care.
- Increase referrals to and enrollment and retention in Rhode Island Department of Health evidence-based maternal child health programs, including the Nurse-Family Partnership Program and related evidence-based programs, for eligible women.
- Collaborate with the Department of Health to explore alternative financing opportunities that could support larger scale and saturation of maternal child health programs.

Breastfeeding

- Continue peer support group for new parents and babies, and provide breast feeding education.
- Continue supporting the Warm Line and RN/lactation consultants to new and expectant parents.
- Continue and further develop breastfeeding support groups for postpartum women in the hospital setting and in the community.
- Increase awareness of existing community resources for breastfeeding.

Screening

- Screen for tobacco, alcohol, and substance use and refer for services as appropriate.

Data

- Develop data resources to support goals and objectives.

Butler Hospital will employ its initiatives, services, and programs in working to meet its goals to improve the health of the communities it serves. Butler Hospital's full Implementation Strategy was attached to the Hospital's Form 990 and is available on the Hospital's website.

Board Approval and Adoption

The Care New England Board of Directors reviewed and approved the Butler Hospital report of the Community Health Needs Assessment and adopted the Implementation Plan to address the priority areas on September 22, 2016.

Care New England prides itself in its on-going efforts to assess community need and has always strived to respond with programs and interventions geared toward addressing these needs. Through targeted efforts, Care New England has worked to improve public health and the quality of life for the state and region. From staff involvement in community organizations to the role we play as educators for those aspiring to careers in health, from the sponsorship of community events to the everyday commitment of our health educators who lead a rich array of classes and programs at our institutions, we embrace our roles as advocates, teachers and good neighbors.

Care New England has more than 500 years of combined service to Rhode Island and southeastern Massachusetts, with three of its institutions each offering more than a century of service to this community. Care New England provides a wide range of complementary and coordinated programs and services, with multiple access points throughout the care continuum. Its strength is in the distinctive competencies of each of its member organizations, its affiliated partners, and in the relationships it has with the community.

Appendix A: Our Partners

HARI CHNA Steering Committee:

Liz Almanzor, Finance Director, Hospital Association of Rhode Island
Otis Brown, CharterCARE
Laurel Holmes, Westerly Hospital
Carolyn Kyle, Landmark Medical Center
Gina Rocha, Hospital Association of Rhode Island
Alex Speredelozzi, Care New England
Kellie Sullivan, Care New England
Stephany Valente, Care New England
Cynthia Wyman, South County Hospital

Ex officio: Michael Souza, President, Hospital Association of Rhode Island
Ana Novais, Rhode Island Department of Health

Providence Partner Forum Participants:

Ann Bavone, Rhode Island Department of Health
Amy Blustein, Care New England
Rebecca Boxx, Children and Youth Cabinet
Laura Bozzi, Southside Community Land Trust
Carrie Bridges-Feliz, Resident
Ellen Cynar, City of Providence
Eddy Davis, Providence Recreation Department/HCO
Lisa Donohue, North Providence School Department
Suzanne Fortier, Care New England Philanthropy
Patti Haskins, St. Joseph's Health Center
Brooke Havens, CareLink
Donald Laliberte, Crossroads Rhode Island
Virginia Lopez, St. Joseph's Health Center
Leah Montalbano, CareLink
Mia Patriarca, Rhode Island Department of Health
Jennifer Rossi, Environmental Justice League
Tina Shepard, ONE Neighborhood Builders
Betsy Shimberg, Brown University
Denise Tamburro, Rhode Island Department of Health
Monica Tavares, Rhode Island Department of Health
Elizabeth Vachon, North Providence School Department
Doug Victor, Providence Police Department
Emily Westgate, Brown University

Pawtucket/Central Falls Partner Forum Participants:

Rui Almeida, City of Central Falls
Melanie Andrade, Central Falls Housing Authority
Ami Awad, Progreso Latino
Bill Bentley, Blackstone Valley Community Action Program
Laura Bozzi, Southside Community Land Trust
Alberto DeBurgo, Central Falls Housing Authority
Joe Diaz, Memorial Hospital of Rhode Island
Carlos Domenech, Pawtucket Central Falls Development
Jordan Dunne, Pawtucket School Department Child Opportunity Zone
Melissa Flaherty, Pawtucket Housing Authority
Nancy Howard, Local Initiatives Support Corporation
Cezarina Jackson, Memorial Hospital of Rhode Island
Norma Lopez, Pawtucket Adult Education
Mary Parella, Pawtucket School Department Child Opportunity Zone
Bianca Policastro, Blackstone Valley Community Action Program
Cynthia Roberts, Rhode Island Coalition Against Domestic Violence
Gretchen Sloane, Memorial Hospital of Rhode Island
Caitlin Towey, Rhode Island Public Health Institute

Appendix B: Statistical Health Data References

County Health Rankings & Roadmaps. (2015). *Rhode Island*. Retrieved from http://www.countyhealthrankings.org/

Healthy People 2020. (2010). 2020 t*opics and objectives – objectives a-z.* Retrieved from http://www.healthypeople.gov/2020/topics-objectives

Nielsen Company. (2015). *Nielsen answers*. Retrieved from https://answers.nielsen.com/

Rhode Island Department of Health. (2015). *2015 Statewide health inventory utilization and capacity study*. Retrieved from http://www.health.ri.gov/data/healthinventory/

Rhode Island Health Care Matters. (2016). *Community dashboard*. Retrieved from http://www.rihealthcarematters.org

Rhode Island Kids Count. (2015). *2015 Rhode Island kids count factbook*. Retrieved from http://www.rikidscount.org/DataPublications/RIKidsCountFactbook.aspx

Truven Health Analytics. (2015). *Rhode Island behavioral health project: Final report*. Retrieved from http://www.eohhs.ri.gov/

United States Census Bureau, 2014 American Community Survey 1-Year Estimate. (n.d.). *Health insurance coverage status*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Department of Agriculture. (2015). *Food environment atlas*. Retrieved from http://www.ers.usda.gov/data-products/food-environment-atlas.aspx