



SOUTH COUNTY HEALTH
Advancing Care, Embracing Community

2019 Community Health Needs Assessment Final Report



**South County Health
Washington County, Rhode Island**

September 2019

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Our Commitment to Community Health

South County Health is the preeminent resource for health in Washington County, RI, and beyond. Supporting community-based initiatives that improve health, it encompasses four healthcare entities: South County Hospital, South County Home Health, South County Medical Group, and South County Surgical Supply.

Accredited by The Joint Commission, South County Hospital is an independent, non-profit, acute-care hospital offering a comprehensive range of advanced inpatient, outpatient and home health services delivered by highly trained professionals. Quality care is our primary goal.

At South County Health, we are stewards of your health. We want you to maintain or achieve optimal health so together, we can create a healthier, more vibrant community. South County Health is committed to its community and guided by the values of caring, respect, integrity, collaboration, stewardship and excellence. Our commitment to these values ensures you receive the highest quality healthcare in a setting designed with your comfort, convenience, privacy and well-being in mind.

Promoting wellness in the community is a key component of our vision. We believe the health of our community begins with education. Our goal is to provide you with accessible healthcare information, whether it is through the variety of programs and lectures we offer or this website.

To guide our community benefit and health improvement efforts across the community, since 2011 South County Health has participated with the Hospital Association of Rhode Island (HARI) and other member hospitals across Rhode Island to conduct a statewide comprehensive Community Health Needs Assessment (CHNA). The 2019 CHNA builds upon the 2013 and 2016 studies to monitor health status across the state and in local hospital communities. The CHNAs included a mix of statistical research and stakeholder input to collect and analyze health trends that impact the health of our community.

This report outlines findings from the 2019 CHNA and highlights strengths and opportunities across Washington County. The findings will be used to guide services at South County Health, as well as to serve as a community resource for grant making, advocacy, and to support the many programs provided by our community health and social service partners.

To learn more about South County Health's work to improve the health of our community, visit their SouthCountyHealth.org or contact [Kim O'Connell](#), Vice President, Strategy at South County Health.

Executive Summary of CHNA Findings

CHNA Leadership

The 2019 Hospital Association of Rhode Island (HARI) was conducted in collaboration with nine Rhode Island hospitals, including South County Health.

A steering committee of hospital and HARI representatives coordinated and oversaw the CHNA research and stakeholder engagement. Throughout the process, CHNA findings were shared with community partners for review and input to determine local health needs, areas of disparity, and opportunities for collaboration. Community health consultants assisted in all phases of the CHNA including project management, data collection and analysis, and report writing.

2019 HARI CHNA Steering Committee Members

Gina Rocha, Hospital Association of Rhode Island, Vice President, Clinical Affairs

Otis Brown, CharterCARE, Vice President, Marketing & External Affairs

Laurel Holmes, Westerly Hospital, Director of Community Partnerships & Population Health

Carolyn Kyle, Landmark Medical Center, Director of Public Relations, Marketing & Physician Relations

Kimberly O'Connell, South County Hospital, Vice President and Chief Strategy Officer

Gail Robbins, Care New England, Senior Vice President of Planning & Finance

Consulting Team

Colleen Milligan, MBA, Director, Healthcare Practice, Baker Tilly

Catherine Birdsey, MPH, CHNA Project Manager, Baker Tilly

Jessica Losito, BA, Research Consultant, Baker Tilly

CHNA Methodology

The 2019 CHNA was conducted from April 2018 to June 2019 and included quantitative and qualitative research methods to determine health trends and disparities within South County Hospital's service area compared to health indicators across Rhode Island and the nation. Primary study methods were used to solicit input from healthcare consumers and key community stakeholders representing the broad interests of the community. Secondary study methods were used to identify and analyze statistical demographic and health trends.

Specific CHNA study methods included:

- > An analysis of existing secondary data sources, including public health statistics, demographic and social measures
- > A Key informant survey
- > Focus groups and community discussions with local stakeholders to review CHNA findings and collect feedback
- > Prioritization of community health needs

The CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The findings will be used to guide South County Health's community benefit initiatives and engage local partners to collectively address identified health needs.

Community Engagement

Community engagement was an integral part of the CHNA research. In assessing the health needs of the community, input was solicited and received from persons who represent the broad interests of the community, as well as underserved, low income and minority populations. These individuals provided wide perspectives on health trends, expertise about existing community resources available to meet those needs, and insights into service delivery gaps that contribute to health disparities. Research and planning was conducted in coordination with the Rhode Island Department of Health and the local Health Equity Zones (HEZ) to promote collaboration across existing initiatives and reduce duplication of activities.

Summary Findings

As a whole, data indicators within Washington County positively lead the state in many measures of health and social status. The median income is the highest in the state and unemployment is the lowest in the state. Nearly half of the population have earned a bachelor's degree, and the percentage of racial and ethnic minorities earning degrees is consistently higher than the state and nation. Residents have fewer risk factors for disease and, overall, experience fewer chronic diseases. More residents have health insurance and a primary care provider when compared with the state and national averages. Overall life expectancy is among the highest in the state. There are lower death rates due to cancer, despite higher incidence rates, pointing toward regular preventive screening and early detection of disease.

As a whole, Washington County positively leads the state in many measures of health and social status

Areas of opportunity across the South County Hospital service area continue to be centered on behavioral health needs, the health and well-being of youth and young adults, the growing health and social needs among seniors, and reducing health and social disparities.

Behavioral Health Needs

Washington County is a designated Health Professional Shortage Area (HPSA) for mental healthcare. Quantitative and qualitative findings reinforce that residents find it challenging to access behavioral healthcare when they need it, particularly for children and adolescents. As reported by the Rhode Island Department of Health, statewide, 19% of children have a diagnosable mental health problem and in 2017, 55% of children ages 3 to 17 who needed mental health services had a problem obtaining care. Over the past decade, community stakeholders and organizations have been successful in illuminating these challenges. Through collaboration and collective impact we are beginning to address service delivery gaps and reduce stigma in seeking care.

Statewide, 55% of children who need mental health services, have a problem obtaining care

Substance abuse, particularly alcohol and opioid use, is prevalent in our community. Consistent with the state, the drug-induced death rate for Washington County is 50% higher than the national rate. From 2013 to 2018, 68 Washington County babies were born addicted to substances for a rate of 133.9 per 10,000 delivery hospitalizations; the overall state average during that time period was 96.1 per 10,000. In 2018, Washington County EMS made 103

The drug-induced death rate for Washington County is 50% higher than the national rate

opioid overdose-related runs, an increase from 91 runs in 2017. Westerly and Hopkinton were among the hardest hit by the opioid epidemic with death rates among the top 10 highest in the state for 2014-2018. To combat overdose deaths, more than 1,300 naloxone kits were distributed in 2018 alone.

Half of all driving deaths in Washington County are due to drunk driving

Alcohol consumption is widely accepted, which can also lead to abuse. About 21% of adults self-reported excessive or binge drinking, a higher percentage than the state (17%) and nation (18%). Half of all driving deaths in Washington County are due to drunk driving. Among high school students statewide, approximately 23% reported current use of alcohol.

Senior Health Needs

The median age within Washington County continues to be older than the state and the national averages, bringing increased emphasis on health and social needs among older residents. Approximately 1 in 10 seniors in Washington County live alone, contributing to social isolation and potentially exacerbating behavioral and physical health conditions. Local home health providers describe an increase in social and behavioral health needs among home-based seniors. Social activities are available through senior centers, libraries, and faith based organizations although wide variances in offerings between communities reduce broad benefit of services and reinforce disparities.

Washington County residents are older, bringing increased emphasis on health and social needs among seniors

Respiratory conditions including asthma and COPD are more prevalent across Washington County than other RI counties, and typically impact older adults at a higher rate. Washington County also has the highest reported average radon level in the state, which is a significant contributor to lung cancer. Washington County residents experience higher incidence of lung cancer, although death rates have remained stable.

Youth and Adolescent Health Needs

In addition to behavioral health needs, youth and adolescents are at-risk for respiratory disease and adverse childhood experiences. Washington County leads the state with 17% of children having been diagnosed with asthma, a key driver for school absenteeism. Across Rhode Island from 2012 to 2016, asthma was the primary diagnosis for 7,917 emergency department visits among children under age 18.

Adverse childhood experiences have significant negative impact on the mental, physical, and emotional development of children, and include various life events. Children in Block Island, Hopkinton, and Westerly are among the most likely in the state to experience events related to domestic violence and abuse or neglect.

While less adults and adolescents are smoking traditional cigarettes, e-cigarettes and vaping are on the rise. In 2017, 20% of high school students statewide reported current use of e-cigarettes. Parents and adolescents alike voiced needs for inexpensive social activities for youth, particularly in rural areas.

Health Equity

Perhaps of greatest concern, regardless of sharing the same community, not all residents share in the same opportunities for optimal health and wellness. Socioeconomic disadvantages, an aging community, increased behavioral health needs, and limited specialty providers contribute to wide health disparities for many residents. These inequalities are often subtle. Neighboring zip codes experience as much as a 10-year difference in average life expectancy. More children in select towns experience poverty while median household income for county residents is among the top 25 in the nation. Seniors who cannot drive or afford alternative transportation options take advantage of regional senior centers that provide vast life-enriching programming, while those who are limited by transportation cannot.

All residents do not share in the same opportunities for optimal health and wellness

With a neighborhood level view of data, we can see more clearly the areas and populations on which to focus health improvement efforts. Residents in the towns of Block Island, Bradford, Charlestown, Hopkinton, Westerly, and Wood River Junction experience more socioeconomic challenges that consistently carry through to health measures. Statistically, individuals and families in these communities experience higher chronic condition comorbidities, more behavioral health needs, domestic violence, poorer birth outcomes, and lower life expectancy.

Health Equity: the attainment of the highest level of health for all people

To promote *health equity*—the attainment of the highest level of health for all people—social disparities must be universally resolved while efforts to manage chronic health conditions, particularly behavioral health conditions, are proactively expanded through care delivery that optimizes compassion and values recipients and providers alike.

Community Health Priorities

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing health and crosscutting needs within communities. In determining the issues on which to focus efforts over the next three-year cycle, South County Health and its CHNA hospital partners solicited input from community partners and stakeholders to align efforts with existing initiatives headed by the Rhode Island Department of Health, the HEZs, and other community partnerships. Qualitative feedback was considered in conjunction with statistical health and socioeconomic data to identify trends and the impact of social determinants of health. Using this information, the CHNA Steering Committee adopted statewide community health priorities to be addressed independently and collaboratively by each hospital.

In line with the CHNA Steering Committee recommendations, South County Hospital will focus on the following health priorities for the 2019–2022 reporting cycle. Specific resources and services to address these priority needs are outlined in South County Hospital’s Implementation Plan.

South County Health Community Health Priorities for 2019-2022 Implementation Plan

Behavioral Health: improve access to behavioral healthcare and reduce stigma for those experiencing mental health and substance use disorders

Chronic Disease: meet the growing health and social needs of seniors to ensure equitable health outcomes regardless of socioeconomic status

Maternal and Child Health: improve the well-being of families

Board Approval

The South County Health board of directors reviewed and approved the 2019 CHNA Final Report in support of the hospital’s continued investment in the highest health needs of the communities we serve. A copy of the 2019 CHNA can be found on the South County Health website.

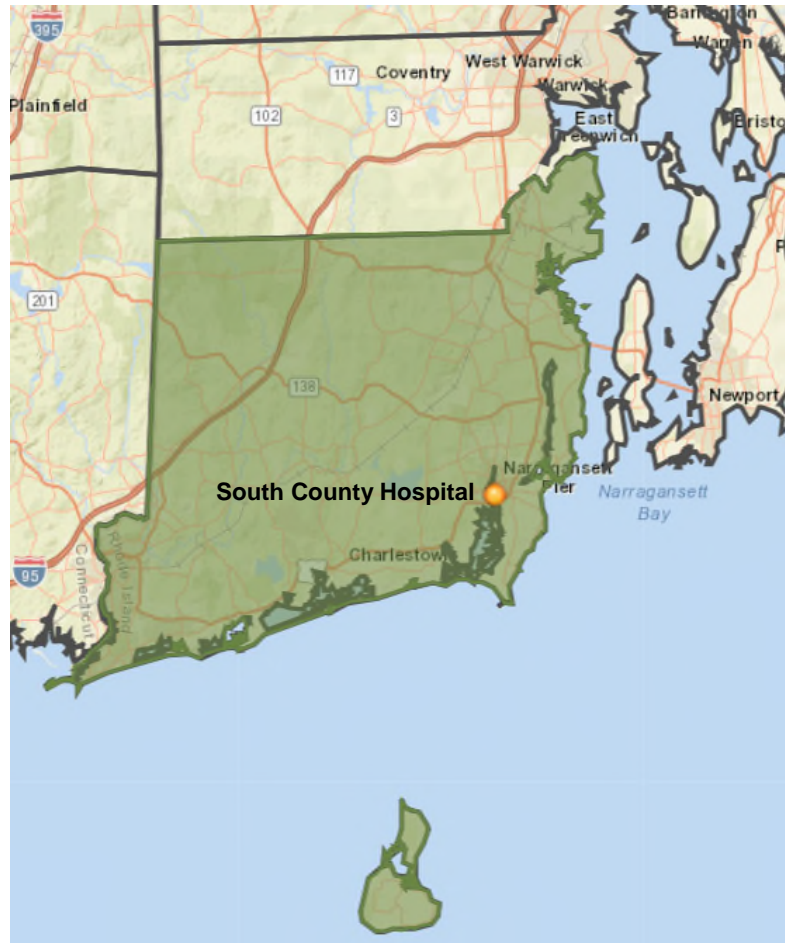
Full Report of CHNA Findings

The South County Health Service Area

For purposes of collaboration with HARI and its member hospitals on the 2019 CHNA, South County Health focused on its primary service area including all of Washington County. The map below depicts the service area.

South County Health Primary Service Area

Primary Service Area Zip Codes
02804, Ashaway
02807, Block Island
02808, Bradford
02812, Carolina
02813, Charlestown
02822, Exeter
02832, Hope Valley
02833, Hopkinton
02836, Kenyon
02852, North Kingstown
02873, Rockville
02874, Saunderstown
02875, Shannock
02877, Slocum
02879, Wakefield
02881, Kingston
02882, Narragansett
02891, Westerly
02892, West Kingstown
02894, Wood River Junction
02898, Wyoming



South County Health Service Area Demographic Data Analysis

Analyses of demographic and socioeconomic data is essential in understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work, and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**. Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, or environmental disadvantage.”

Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life

Washington County data are presented with all Rhode Island counties, the state, and national data sets to demonstrate broad trends and areas of strength and opportunity. Demographic analysis by zip code follow the county level analysis to provide a detailed view of population statistics. All reported data were provided by ESRI Business Analyst, 2018 and the US Census Bureau unless otherwise noted.

Population Trends

The 2018 population of Rhode Island is 1,067,528. The state population is expected to continue growing through 2023. Washington County is the second smallest county in Rhode Island. The county experienced slow growth between 2010 and 2018 and the population is projected to decrease slightly through 2023. Consistent with Washington County, the population within the South County Health Service Area has had slow growth and is expected to decline by 2023.

Population Growth

	2018 Population	% Growth 2010-2018	% Growth 2018-2023
Bristol County	49,418	-0.9%	-0.2%
Kent County	167,033	0.5%	0.6%
Newport County	84,539	2.0%	0.9%
Providence County	637,835	1.8%	1.5%
Washington County	128,703	1.4%	-0.2%
Rhode Island	1,067,528	1.4%	1.1%

Source: ESRI, 2018

South County Health Primary Service Area Population Growth

2018 Population	% Growth 2010-2018	% Growth 2018-2023
128,703	1.4%	-0.2%

Across the state, and consistent with the nation, the population that identifies as White is projected to decrease through 2023, while the percentage of residents identifying as Asian, Black/African American, and/or Latinx is projected to increase. In Rhode Island this trend is due in large part to the older age of the White population compared to those of other races and ethnicities. Fewer White women in Rhode Island are in their childbearing years compared to minority women.

Rhode Island has a higher median resident age than the nation. The median age of Washington County residents is higher than the state and nation, equating to a higher proportion of seniors living within Washington County when compared to the state and the nation.

2018 Population Overview by Race, Ethnicity, and Primary Language

	Asian	Black or African American	White	Latinx (any race)	Primary Language Other than English*
Bristol County	2.2%	1.2%	93.7%	3.2%	12.1%
Kent County	2.6%	1.9%	91.1%	5.1%	8.7%
Newport County	1.9%	4.3%	88.0%	6.3%	10.3%
Providence County	4.4%	9.5%	68.7%	23.4%	30.5%
Washington County	2.0%	1.4%	92.6%	3.4%	6.4%
Rhode Island	3.6%	6.5%	77.8%	15.9%	21.6%
United States	5.7%	12.9%	70.0%	18.3%	21.2%

Source: ESRI, 2018 *Data are reported for 2012-2016 based on most recent records available.

Population by Race/Ethnicity as a Percentage of Total Population (Projected Change)

	Asian		Black/African American		White		Latinx	
	2010	2023	2010	2023	2010	2023	2010	2023
Bristol County	1.4%	2.9%	0.8%	1.5%	95.7%	92.1%	2.0%	4.3%
Kent County	2.0%	3.1%	1.5%	2.3%	93.4%	89.3%	3.2%	6.7%
Newport County	1.6%	2.1%	3.5%	4.7%	90.2%	86.4%	4.2%	8.1%
Providence County	3.7%	5.0%	8.5%	10.3%	73.4%	65.4%	18.8%	27.0%
Washington County	1.6%	2.2%	1.2%	1.5%	93.8%	91.7%	2.4%	4.3%
Rhode Island	2.9%	4.0%	5.7%	7.2%	81.4%	75.2%	12.4%	18.6%

Source: ESRI, 2018

2018 Population by Age

	14 years and under	15-24 years	25-34 years	35-54 years	55-64 years	65+ years	Median Age
Bristol County	14.6%	14.6%	10.5%	24.3%	15.8%	20.3%	45.1
Kent County	15.0%	10.5%	12.4%	26.9%	15.7%	19.6%	44.9
Newport County	14.4%	12.9%	11.3%	24.8%	15.5%	21.2%	45.3
Providence County	16.7%	15.2%	14.2%	24.9%	12.9%	16.1%	38.1
Washington County	14.0%	16.4%	10.0%	23.8%	16.3%	19.5%	44.4
Rhode Island	15.8%	14.4%	13.0%	25.1%	14.1%	17.6%	40.7
United States	18.6%	13.3%	13.9%	25.3%	13.0%	16.0%	38.3

Source: ESRI, 2018

2018 Senior Population by Age Bands

	65+ years	75+ years	85+ years
Bristol County	20.3%	9.4%	3.5%
Kent County	19.6%	8.6%	3.1%
Newport County	21.2%	9.2%	3.1%
Providence County	16.1%	7.2%	2.7%
Washington County	19.5%	7.9%	2.6%
Rhode Island	17.7%	7.8%	2.8%
United States	16.0%	6.6%	2.0%

Source: ESRI, 2018

Demographic Indicators by Zip Code*

	White	Black/ African American	Latinx	18-24	25-34	35-44	45-54	55-64	65+
Washington County	92.6%	1.4%	3.4%	12.9%	10.0%	10.2%	13.6%	16.3%	19.5%
02891, Westerly	91.3%	1.1%	4.2%	6.6%	10.8%	11.3%	14.2%	15.9%	22.5%
02833, Hopkinton	95.9%	0.5%	3.6%	6.1%	10.6%	12.0%	15.9%	16.4%	21.8%
02807, Block Island	95.9%	0.8%	4.2%	6.7%	7.1%	11.3%	14.2%	18.1%	28.5%
02808, Bradford	93.6%	1.1%	2.2%	8.1%	12.0%	12.0%	16.1%	15.1%	14.0%
02804, Ashaway	93.8%	0.9%	2.8%	7.1%	11.4%	11.1%	15.8%	16.7%	18.2%
02832, Hope Valley	95.9%	0.5%	2.4%	6.8%	10.8%	12.1%	16.5%	17.3%	16.6%
02813, Charlestown	94.1%	0.5%	2.3%	6.0%	10.0%	10.2%	14.2%	19.1%	24.1%
02892, West Kingston	93.9%	0.9%	2.3%	6.6%	10.4%	12.1%	15.5%	17.1%	18.7%
02894, Wood River Junction	95.6%	0.5%	3.7%	6.9%	11.9%	11.9%	17.3%	17.6%	15.8%
02898, Wyoming	96.0%	0.6%	2.5%	6.8%	10.3%	13.8%	16.9%	16.0%	14.8%
02812, Carolina	95.3%	0.5%	1.4%	6.2%	11.9%	13.1%	16.5%	16.7%	12.8%
Rhode Island	77.8%	6.5%	15.9%	10.9%	13.0%	11.7%	13.3%	14.1%	17.7%

*Cells highlighted in yellow are more than 2% points higher than the county statistic, but not necessarily statistically significant.

Economic Measures

The median household income for Rhode Island slightly exceeds that of the nation and there are fewer individuals and children living in poverty than in the nation in general. However, a greater proportion of Rhode Island households receive Food Stamp/SNAP benefits compared to the nation. A higher percentage of families accessing Food Stamp/SNAP benefits is a potentially positive finding because it means that supportive services are accessible, but it may also indicate greater food insecurity across the state.

The median household income for all counties except Providence exceeds the state and national comparisons. Washington County has the highest median household income in the state, but the second highest overall poverty rate.

Washington County has the highest median household income in the state, but the second highest overall poverty rate

Median Household Income and Poverty Indicators

	Median Household Income	People in Poverty	Children in Poverty	Households with Food Stamp/SNAP Benefits
Bristol County	\$77,309	7.0%	6.7%	8.2%
Kent County	\$64,878	7.8%	8.9%	12.0%
Newport County	\$76,030	9.0%	11.5%	9.8%
Providence County	\$51,926	16.7%	24.4%	20.5%
Washington County	\$78,882	9.6%	10.1%	8.6%
Rhode Island	\$58,972	13.4%	18.9%	16.1%
United States	\$58,100	14.6%	20.3%	13.0%

Source: ESRI, 2018; US Census Bureau, 2013-2017

Rhode Island and the nation have equivalent white and blue collar work forces and unemployment rates. Washington County has a greater proportion of white collar workers compared to the state and the nation. Compensation for white collar workers tends to include benefits like private health insurance more often than it does for blue collar workers. Washington County also has a very low unemployment rate at 2.8%.

Population by Occupation and Unemployment

	White Collar Workforce	Blue Collar Workforce	Unemployment Rate
Bristol County	69.0%	31.0%	4.1%
Kent County	63.0%	37.0%	4.9%
Newport County	65.0%	35.0%	3.4%
Providence County	58.0%	42.0%	5.9%
Washington County	66.0%	34.0%	2.8%
Rhode Island	61.0%	39.0%	5.0%
United States	61.0%	39.0%	4.8%

Source: ESRI, 2018

Housing Measures

Homeownership and housing affordability are measures of economic stability. The median home values for Rhode Island and all five counties are higher than the national median. The Washington County median home value is among the highest in the state, and exceeds both the state and the nation.

Housing cost burden is defined by the US Census Bureau as spending more than 30% of household income on rent or mortgage expenses. Housing cost-burdened households are more likely to have difficulty affording other necessities like food, transportation, and medical care.

Half of all renters and about one-third of homeowners in Washington County are considered housing cost burdened. Despite a higher proportion of income going to housing, more people own their home in Washington County compared to other counties, the state, or the nation. The higher median income of the county likely contributes to this trend.

Half of all renters and about one-third of homeowners in Washington County are considered housing cost burdened

Population by Household Type and Housing Cost Burden

	Renter-Occupied	Renters Paying 30% or More of Income on Rent	Owner-Occupied	Median Home Value	Mortgages Costing 30% or More of Household Income
Bristol County	29.7%	53.5%	70.3%	\$330,000	31.7%
Kent County	29.9%	49.4%	70.1%	\$208,400	33.8%
Newport County	39.1%	47.4%	60.9%	\$352,900	35.3%
Providence County	47.1%	51.2%	52.9%	\$209,800	35.9%
Washington County	27.6%	50.3%	72.4%	\$315,100	32.2%
Rhode Island	40.3%	50.7%	59.7%	\$238,200	34.6%
United States	36.4%	51.1%	63.6%	\$184,700	30.8%

Source: US Census Bureau, 2012-2016

The Rhode Island Comprehensive Housing Production and Rehabilitation Act of 2004 and Rhode Island Low and Moderate Income Housing Act (Rhode Island General Laws 45-53) require that 10% of each municipality’s housing stock be "affordable." A total of 29 communities are covered by the Act; 10 are exempt due to their percentage of rental housing and/or current affordable housing inventory. The following table indicates the availability of low and moderate income housing for Rhode Island by target demographic.

Low and Moderate Income Housing (LMIH) Units by Target Demographic

	Total LMIH Units	Total Housing Units	LMIH Percent of Total	Elderly Housing Units	Family Housing Units	Special Needs Housing Units
Rhode Island	37,157	445,902	8.3%	19,631 (53%)	13,726 (37%)	3,800 (10%)

Source: State of Rhode Island Office of Housing and Community Development, 2017

Each year, the Rhode Island Coalition for the Homeless conducts a point-in-time study to identify individuals experiencing homelessness. The unduplicated statewide count is conducted on a single night in January. The study does not include individuals at risk of homelessness or those who are “couch surfing.”

In 2018, 1,101 people across Rhode Island were identified as homeless, including 747 single adults and 354 persons in families. Of the single adults, nearly 75% were in emergency shelters and 19% were in transitional housing. Family households were more evenly split between emergency shelters (51%) and transitional housing (48%). Single adults were more likely than persons in families to be unsheltered.

Homeless Point in Time Count

	Single Adults		Persons in Families	
	Count	Percent	Count	Percent
Emergency Shelter	557	74.6%	182	51.4%
Transitional Housing	141	18.9%	170	48.0%
Unsheltered	49	6.6%	2	0.6%

Source: Rhode Island Coalition for the Homeless, 2018

Homeless Point in Time Count by Subpopulation

	Chronically Homeless		Veterans		Youth	
	Count	Percent	Count	Percent	Count	Percent
Emergency Shelter	247	93.6%	37	35.9%	40	72.7%
Transitional Housing	0	0.0%	63	61.2%	14	25.5%
Unsheltered	17	6.4%	3	2.9%	1	1.8%

Source: Rhode Island Coalition for the Homeless, 2018

The vast majority (94%) of the chronically homeless population were in emergency shelters; 6% were unsheltered. Veterans were the most likely to be in transitional housing (61%), while youth were the most likely to be in emergency shelters (73%).

The Rhode Island Department of Health defines homeless children as children under age 18 who stayed at homeless shelters, domestic violence shelters, or transitional housing facilities with their families. Across Rhode Island in 2017, 539 families with 998 children stayed at a homeless shelter or other emergency housing facility. Children comprised 22% of all homeless individuals in Rhode Island, 51% of whom were under age six. The following tables depict homeless children identified by public schools during the 2016-2017 school year.

Homeless Children Identified during the 2016-2017 School Year

	Total Student Enrollment	Number of Children Identified as Homeless
Four Core Cities	41,419	444
Remainder of Rhode Island	91,811	770
All of Rhode Island	142,142	1,245

Source: Rhode Island Department of Health, 2016-2017

Education Measures

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Rhode Island has a greater proportion of residents attaining a bachelor’s degree or higher and fewer residents who do not complete high school when compared to the nation. Washington County exceeds both the state and the nation for higher educational attainment. Nearly half of Washington County residents have a bachelor’s degree or higher compared to one-third of residents statewide.

Nearly half of all Washington County residents have a bachelor's degree or higher compared to one-third of residents statewide

Population (25 Years or Over) by Educational Attainment

	Less than a High School Diploma	High School Graduate/GED	Bachelor’s Degree or Higher
Bristol County	7.9%	20.3%	49.5%
Kent County	7.1%	28.0%	34.5%
Newport County	5.7%	22.1%	48.5%
Providence County	14.2%	29.6%	30.0%
Washington County	5.2%	22.2%	47.5%
Rhode Island	10.9%	27.4%	35.3%
United States	12.3%	27.0%	31.8%

Source: ESRI, 2018

The following tables profile the key social determinants of health of poverty and educational attainment by race and ethnicity. Across Rhode Island, minority populations are likely to be impacted by adverse social determinants of health when compared to Whites.

While Washington County is less diverse than other counties within the state, socioeconomic disparities are consistent across Black/African American and Latinx residents.

Poverty Rates by Race and Ethnicity

	White		Black/African American		Latinx	
	Count	Percent	Count	Percent	Count	Percent
Bristol County	2,808	6.4%	301	47.6%	127	11.2%
Kent County	12,342	8.2%	191	8.2%	778	11.7%
Newport County	5,680	8.0%	563	23.0%	872	20.8%
Providence County	61,249	13.8%	14,887	25.4%	42,541	32.8%
Washington County	10,166	9.0%	532	33.9%	546	17.3%
Rhode Island	92,245	11.2%	16,474	25.1%	44,864	31.0%

Source: US Census Bureau, 2012-2016

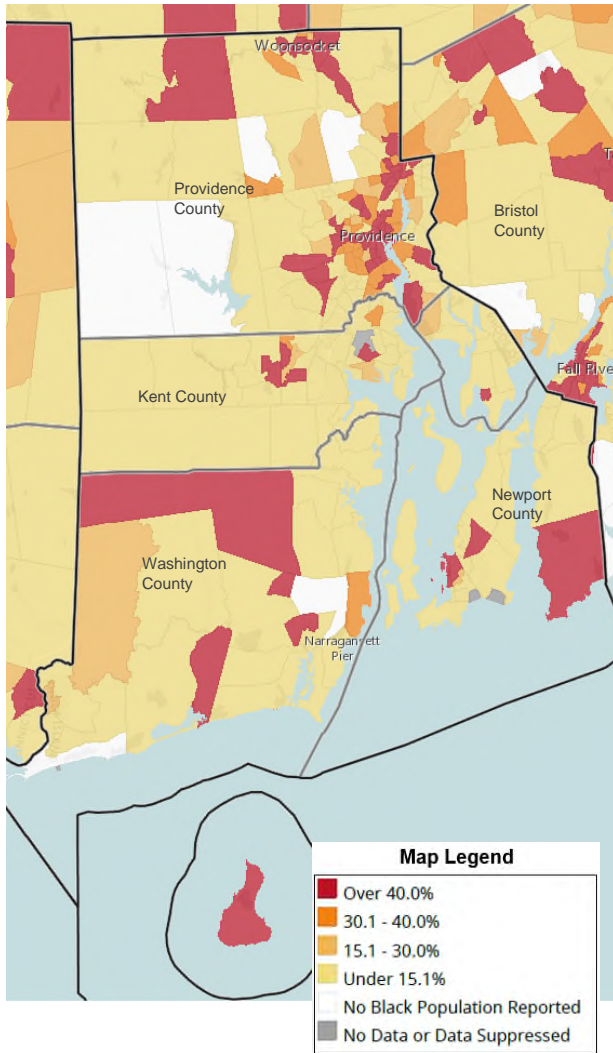
Bachelor's Degree or Higher by Race and Ethnicity

	White		Black/African American		Latinx	
	Count	Percent	Count	Percent	Count	Percent
Bristol County	15,194	46.2%	174	43.1%	290	45.3%
Kent County	35,497	31.4%	605	33.3%	1,001	28.8%
Newport County	25,242	46.1%	594	34.3%	700	33.8%
Providence County	96,947	29.3%	6,553	18.4%	7,615	10.8%
Washington County	36,661	45.3%	242	30.1%	614	37.6%
Rhode Island	209,541	34.2%	8,168	20.2%	10,220	13.1%

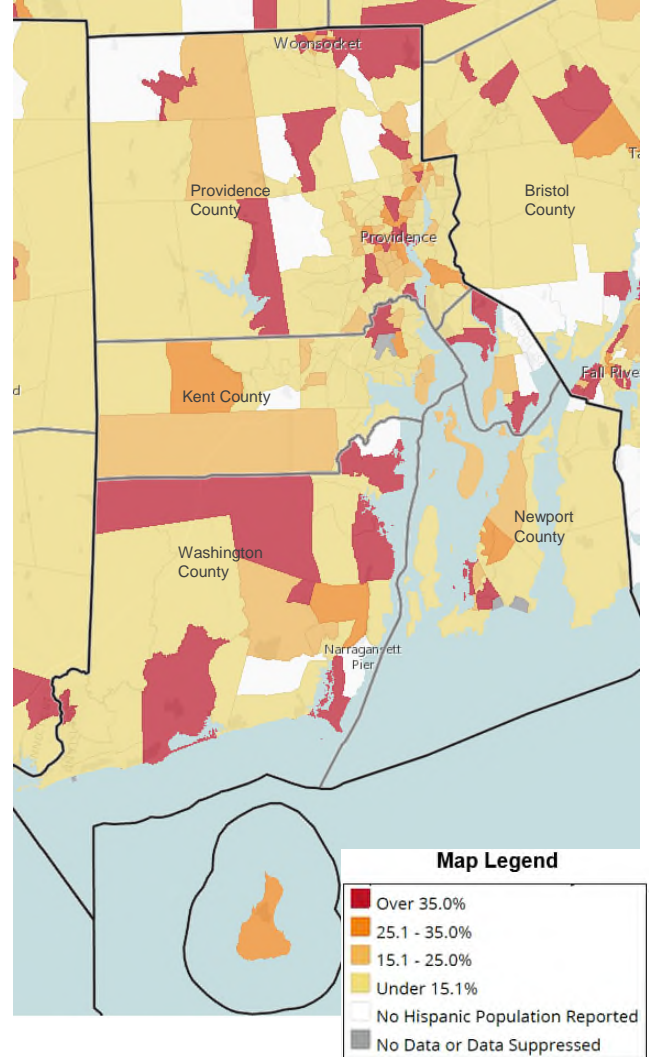
Source: US Census Bureau, 2012-2016

The following maps further illustrate poverty rates among Black/African American and Latinx residents, pinpointing areas of disparity by census tract.

Black/African American Population Below the Poverty Level by Census Tract



Latinx Population Below the Poverty Level by Census Tract

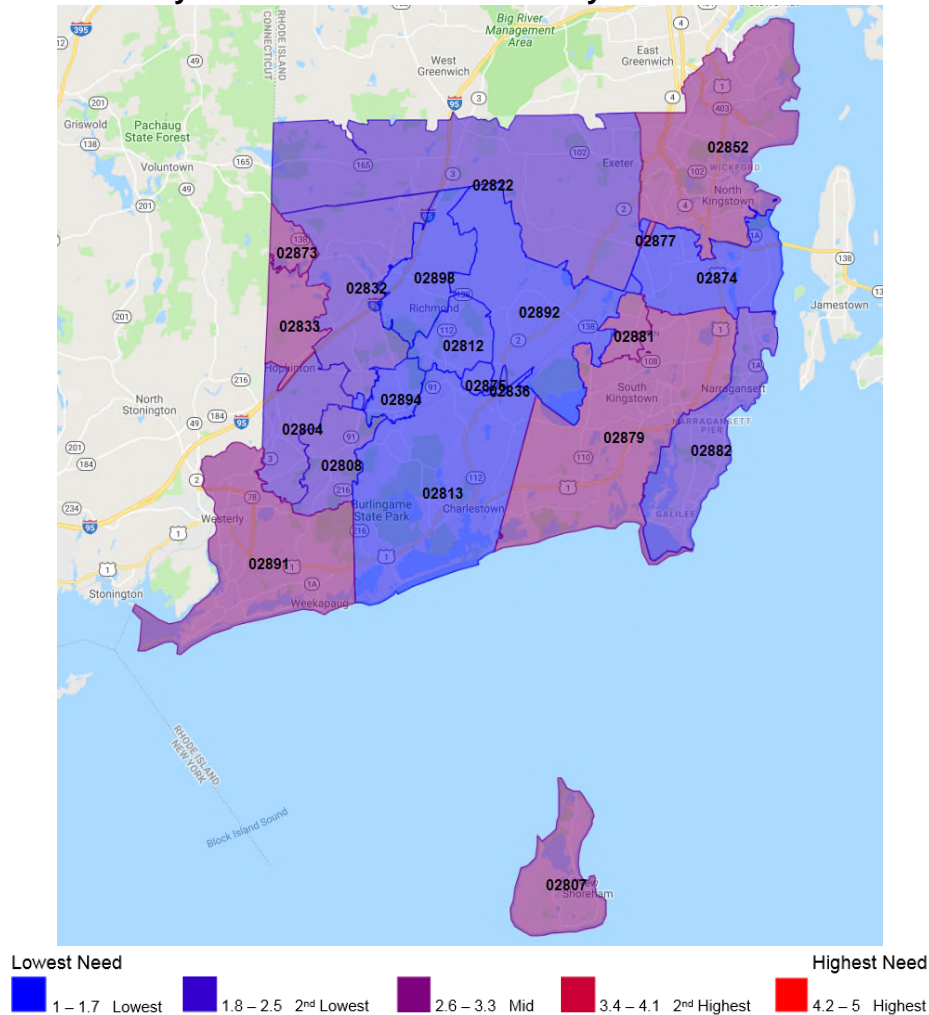


Washington County Zip Code Analysis

Zip code of residence is one of the most important predictors of health disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level. The CNI scores zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on 2015 data indicators for five socio-economic barriers:

- > Income: Poverty among elderly households, families with children, and single female-headed families with children
- > Culture/Language: Minority populations and English language barriers
- > Education: Population over 25 years without a high school diploma
- > Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- > Housing status: Householders renting their home

Community Need Index for South County Health’s Service Area



The weighted average CNI score for Washington County is 2.3, indicating lower overall community need. However, a deeper view of zip codes across the service area demonstrates that not all residents experience the same health and social equity.

The following tables list the social determinants of health that contribute to zip code CNI scores and are often indicative of health disparities. Zip codes are shown in comparison to the county and the state, and are presented in descending order by CNI score. Cells highlighted in **yellow** are more than 2% points higher than the county statistic, but not necessarily statistically significant.

Social Determinants of Health Indicators by Zip Code

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unemployment	Less than HS Diploma	Without Health Insurance	CNI Score
Washington County	9.9%	8.6%	10.1%	6.4%	2.8%	5.2%	5.1%	2.3
02891 (Westerly)	11.5%	13.7%	18.5%	9.5%	3.3%	7.8%	6.3%	2.8
02881 (Kingston)	19.3%	5.3%	4.1%	11.7%	2.7%	3.5%	3.8%	2.6
02879 (Wakefield)	10.2%	8.6%	9.6%	5.4%	2.8%	4.3%	4.8%	2.6
02877 (Slocum)*	0.0%	0.0%	NA	8.3%	0.0%	0.0%	0.0%	2.6
02873 (Rockville)	6.8%	12.6%	0.0%	6.9%	0.7%	8.3%	10.3%	2.6
02833 (Hopkinton)	6.1%	12.9%	57.9%	6.7%	0.6%	8.5%	10.2%	2.6
02807 (Block Island)	4.0%	0.7%	30.8%	7.4%	1.7%	2.7%	15.4%	2.6
02852 (North Kingstown)	9.9%	10.3%	14.0%	7.3%	3.5%	4.3%	4.4%	2.6
02808 (Bradford)	7.1%	5.4%	13.5%	4.7%	2.6%	16.7%	6.1%	2.2
02882 (Narragansett)	14.8%	4.6%	1.3%	4.6%	1.7%	2.6%	4.1%	2.0
02804 (Ashaway)	6.6%	3.9%	7.5%	3.0%	1.7%	3.7%	6.6%	1.8
02832 (Hope Valley)	4.7%	10.5%	4.9%	3.5%	2.4%	5.9%	4.7%	1.8
02822 (Exeter)	10.4%	12.2%	3.7%	6.2%	3.1%	8.5%	7.6%	1.8
02892 (West Kingston)	3.5%	2.3%	7.4%	3.4%	2.5%	5.8%	6.4%	1.6
02813 (Charlestown)	7.5%	6.0%	10.4%	3.9%	3.6%	5.3%	4.5%	1.6
02894 (Wood River Junction)	12.7%	11.0%	0.0%	1.2%	7.2%	3.9%	7.6%	1.4
02875 (Shannock)	1.8%	1.8%	0.0%	1.5%	0.5%	2.0%	3.2%	1.4
02898 (Wyoming)	4.8%	5.1%	0.0%	4.9%	3.1%	7.9%	4.4%	1.4
Rhode Island	14.1%	16.1%	18.9%	21.6%	5.0%	10.9%	8.0%	3.1

*The 2018 estimated population of 02877, Slocum is 13. Data for the zip code is reported as available.

Social Determinants of Health Indicators by Zip Code (continued)

	HHS in Poverty	HHS Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unemployment	Less than HS Diploma	Without Health Insurance	CNI Score
Washington County	9.9%	8.6%	10.1%	6.4%	2.8%	5.2%	5.1%	2.3
02874 (Saunderstown)	3.9%	2.3%	1.2%	4.7%	1.4%	1.7%	3.1%	1.2
02836 (Kenyon)	1.5%	1.5%	NA	2.0%	0.0%	2.0%	2.9%	1.2
02812 (Carolina)	3.5%	3.2%	0.0%	1.5%	1.0%	2.0%	3.7%	1.2
Rhode Island	14.1%	16.1%	18.9%	21.6%	5.0%	10.9%	8.0%	3.1

Demographic Indicators by Zip Code

	White	Black/ African American	Latinx	18-24	25-34	35-44	45-54	55-64	65+
Washington County	92.6%	1.4%	3.4%	12.9%	10.0%	10.2%	13.6%	16.3%	19.5%
02891 (Westerly)	91.3%	1.1%	4.2%	6.6%	10.8%	11.3%	14.2%	15.9%	22.5%
02881 (Kingston)*	81.9%	6.1%	8.1%	73.4%	4.1%	3.6%	3.8%	4.2%	4.9%
02879 (Wakefield)	91.6%	1.4%	2.7%	7.0%	10.5%	10.8%	14.0%	17.0%	21.7%
02877 (Slocum)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.5%	30.8%	0.0%
02873 (Rockville)	95.8%	0.4%	3.8%	5.9%	10.9%	12.1%	15.9%	16.3%	20.9%
02833 (Hopkinton)	95.9%	0.5%	3.6%	6.1%	10.6%	12.0%	15.9%	16.4%	21.8%
02807 (Block Island)	95.9%	0.8%	4.2%	6.7%	7.1%	11.3%	14.2%	18.1%	28.5%
02852 (North Kingstown)	93.3%	1.3%	3.7%	7.2%	10.4%	10.4%	15.0%	17.4%	20.0%
02808 (Bradford)	93.6%	1.1%	2.2%	8.1%	12.0%	12.0%	16.1%	15.1%	14.0%
02882 (Narragansett)	94.9%	1.0%	2.5%	22.8%	9.0%	7.6%	10.6%	16.3%	22.0%
02804 (Ashaway)	93.8%	0.9%	2.8%	7.1%	11.4%	11.1%	15.8%	16.7%	18.2%
02832 (Hope Valley)	95.9%	0.5%	2.4%	6.8%	10.8%	12.1%	16.5%	17.3%	16.6%
02822 (Exeter)	94.5%	1.4%	3.7%	8.0%	11.1%	11.5%	14.7%	19.0%	17.8%
02892 (West Kingstown)	93.9%	0.9%	2.3%	6.6%	10.4%	12.1%	15.5%	17.1%	18.7%
02813 (Charlestown)	94.1%	0.5%	2.3%	6.0%	10.0%	10.2%	14.2%	19.1%	24.1%
Rhode Island	77.8%	6.5%	15.9%	10.9%	13.0%	11.7%	13.3%	14.1%	17.7%

*Zip code 02881, Kingston is the location of the University of Rhode Island, which likely impacts population demographics.

Demographic Indicators by Zip Code (continued)

	White	Black/ African American	Latinx	18-24	25-34	35-44	45-54	55-64	65+
Washington County	92.6%	1.4%	3.4%	12.9%	10.0%	10.2%	13.6%	16.3%	19.5%
02894 (Wood River Junction)	95.6%	0.5%	3.7%	6.9%	11.9%	11.9%	17.3%	17.6%	15.8%
02875 (Shannock)	95.5%	0.4%	1.8%	6.3%	11.9%	13.3%	16.1%	16.8%	12.6%
02898 (Wyoming)	96.0%	0.6%	2.5%	6.8%	10.3%	13.8%	16.9%	16.0%	14.8%
02874 (Saunderstown)	95.0%	0.9%	2.3%	8.2%	10.0%	10.3%	15.6%	17.9%	16.4%
02836 (Kenyon)	95.7%	0.5%	1.0%	5.8%	11.5%	13.0%	16.8%	17.3%	12.5%
02812 (Carolina)	95.3%	0.5%	1.4%	6.2%	11.9%	13.1%	16.5%	16.7%	12.8%
Rhode Island	77.8%	6.5%	15.9%	10.9%	13.0%	11.7%	13.3%	14.1%	17.7%

Statistical Analysis of Health Indicators

Background

Health indicators were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, and maternal and child health. Data were compiled from secondary sources including the Rhode Island Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Surveillance System (YRBSS), and the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources is provided in Appendix A.

Health data focus on county-level reporting which is generally the most recent and most consistent data available. Health data for the counties are compared to state and national averages and Healthy People 2020 (HP 2020) goals, where applicable, to provide benchmark comparisons. Healthy People is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

Age-adjusted rates are referenced throughout the reporting to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The BRFSS is a telephone survey of residents age 18 or over conducted nationally by states as required by the CDC. A consistent survey tool is used across the US to assess health risk behaviors, prevalence of chronic health conditions, access to care, preventive health measures, among other health indicators. BRFSS results included within this report were provided by the Rhode Island Department of Health.

The YRBSS is a school-based survey conducted by the CDC every other odd year to monitor priority health risk behaviors among youth. YRBSS findings are reported for youth in grades 9-12 by county.

The most recent data available at the time of this study were used unless otherwise noted.

Access to Healthcare

Rhode Island counties are shown in rank order for clinical care, as reported by the University of Wisconsin County Health Rankings & Roadmaps program. The rankings are based on a number of indicators, including health insurance coverage and provider access. Washington County continued to be ranked as the second highest county for clinical care measures. The overall rank order is consistent with the 2015 reporting.

2018 Clinical Care County Health Rankings

#1 Bristol County (#1 in 2015)

#2 Washington County (#2 in 2015)

#3 Newport County (#3 in 2015)

#4 Kent County (#4 in 2015)

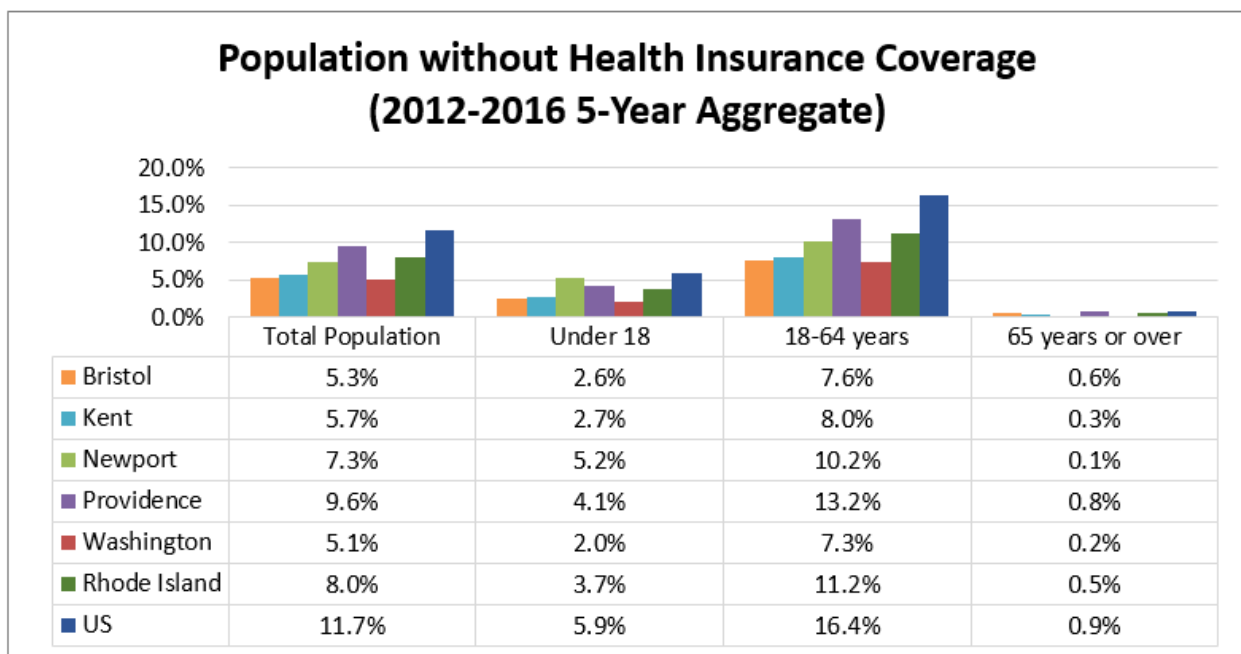
#5 Providence County (#5 in 2015)

Health Insurance Coverage

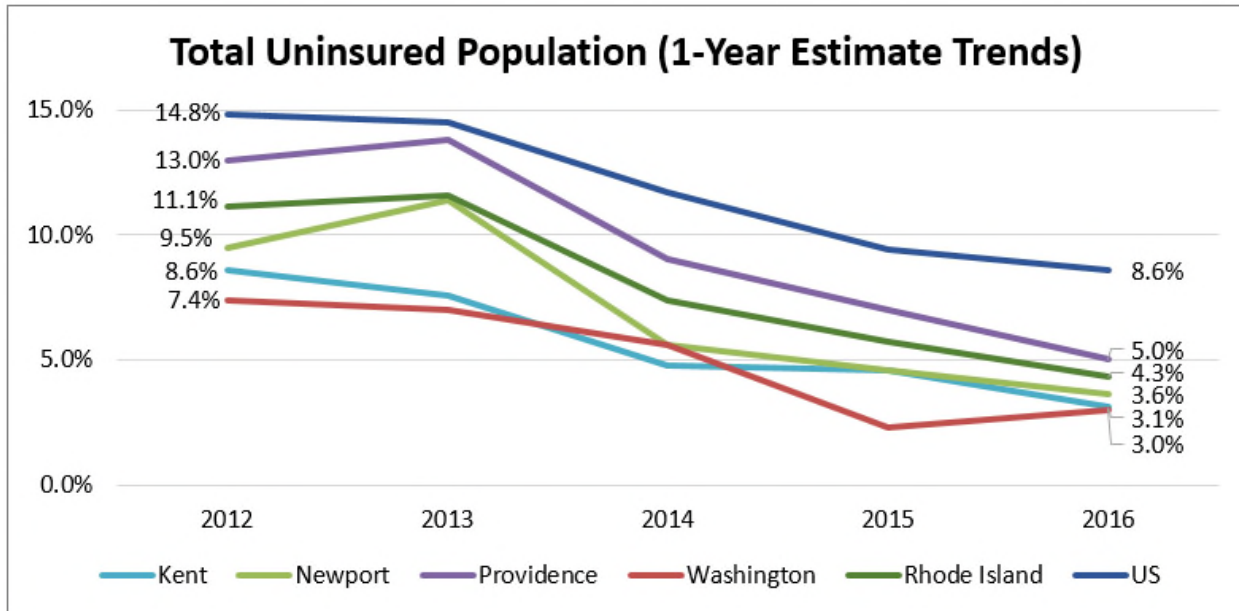
The State of Rhode Island has fewer uninsured residents compared to the nation, however, no counties meet the Healthy People 2020 goal of having 100% of all residents insured. Washington County has the fewest uninsured residents under age 65.

Over the past five years, the percentage of uninsured residents has decreased. Washington County has the fewest uninsured residents under age 65.

Over the past five years, the percentage of uninsured residents declined, though there was a slight increase between 2015 and 2016 in Washington County.

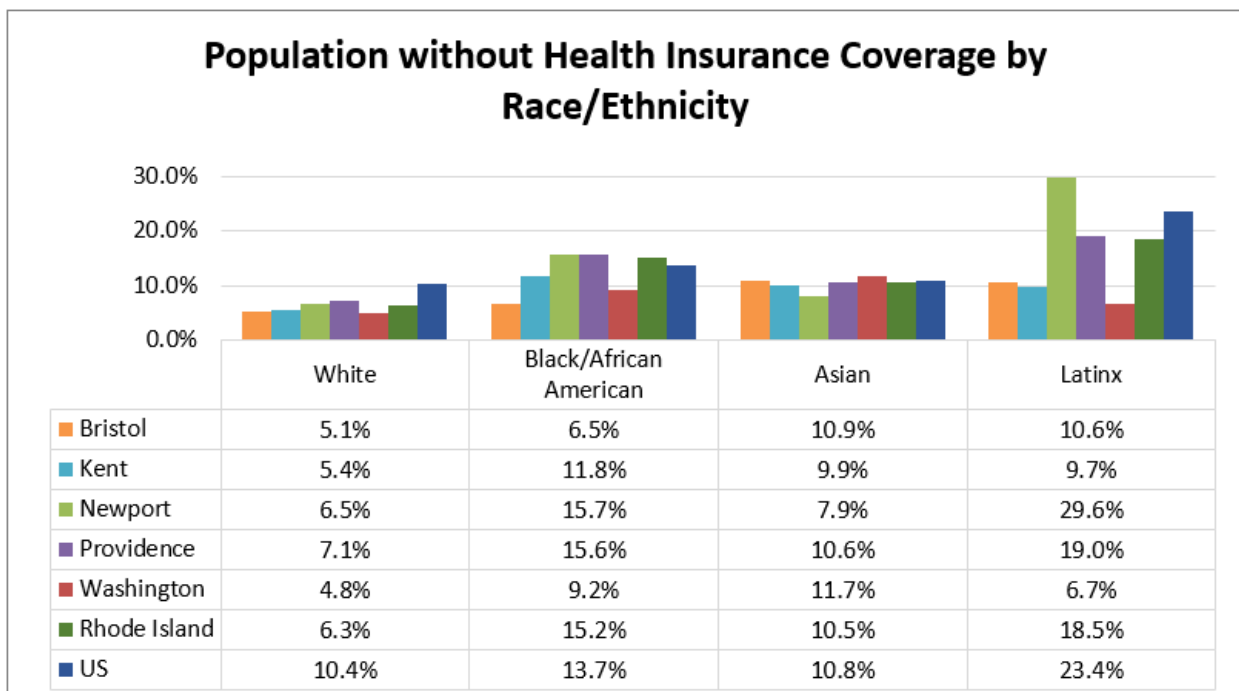


Source: US Census Bureau, 2012-2016



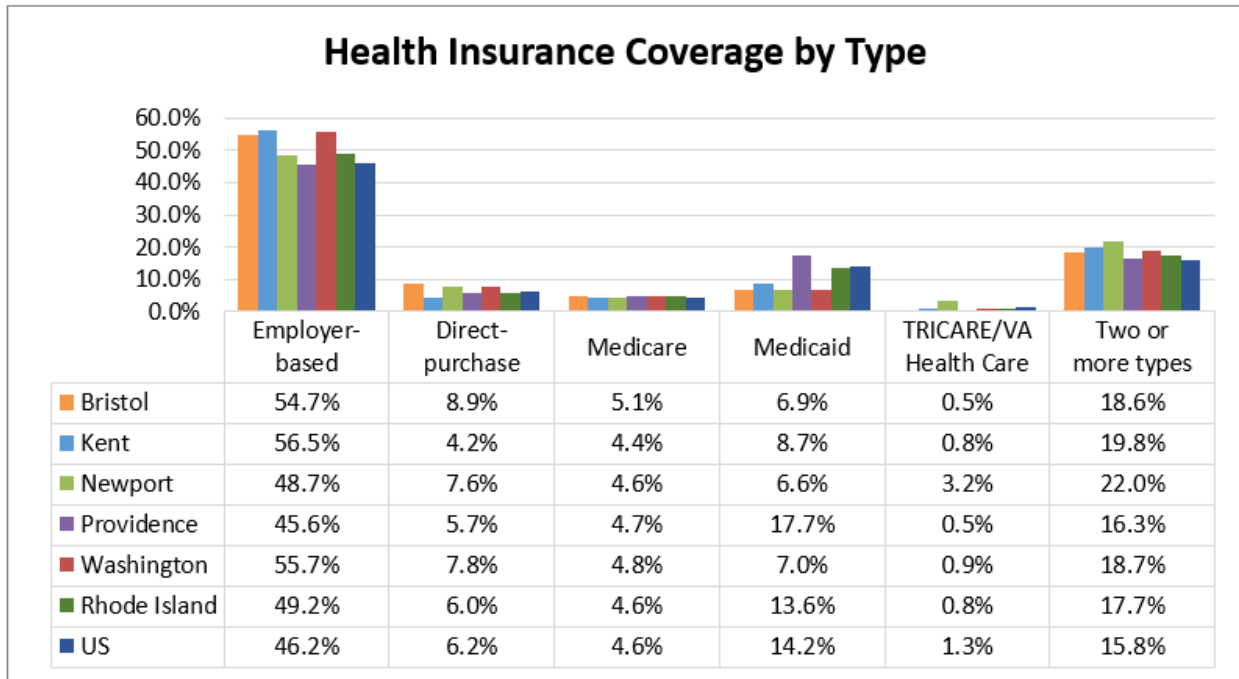
Source: US Census Bureau, 2012-2016

*The Bristol County uninsured rate is only reported as a five-year aggregate based on data availability.



Source: US Census Bureau, 2012-2016

Uninsured percentages across Rhode Island and the nation are highest among Latinx residents. In Washington Counties, the percentage uninsured is highest among Blacks/African Americans and Asians respectively. Employer based health insurance is the most common coverage.



Source: US Census Bureau, 2012-2016

Provider Access

Provider rates are measured as the number of providers in an area per 100,000 people, and are measured against state and national benchmarks for primary care physicians, dentists, and mental healthcare providers. Primary care physicians include non-federal, practicing physicians under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare.

All Rhode Island counties have a higher primary care physician rate than the nation, indicating a greater number of providers per person and potential for greater access to care. The Washington County rate declined 2 points from 2011 to 2015.

All counties have a higher provider rate than the nation. From 2011 to 2015, the Washington County provider rate declined 2 points.

Rhode Island has a lower dentist provider rate than the nation, indicating fewer dentists per person. The dentist provider rate increased 3-4 points from 2012 to 2016 across Rhode Island and in Washington County.

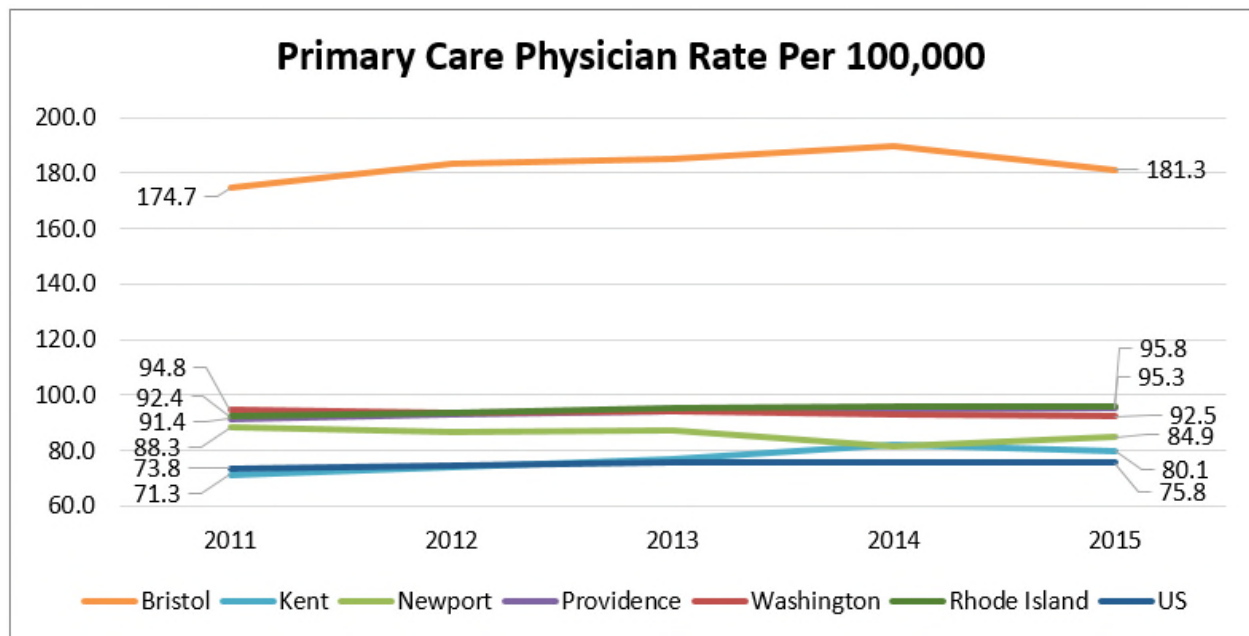
Rhode Island has a higher mental health provider rate than the nation. The provider rate increased more than 50 points statewide from 2014 to 2017 and more than 30 points in Washington County. These findings indicate overall improved access to care based on the number of providers per population, but may not account for specialty provider shortages, including psychiatrists and psychologists. The rates do not reflect insurance programs participation or open patient panels.

The mental healthcare provider rate increased by more than 30 points in Washington County between 2014 and 2017

Provider Rates per 100,000
(Green = Higher than the State or Nation; Red = Lower than the State or Nation)

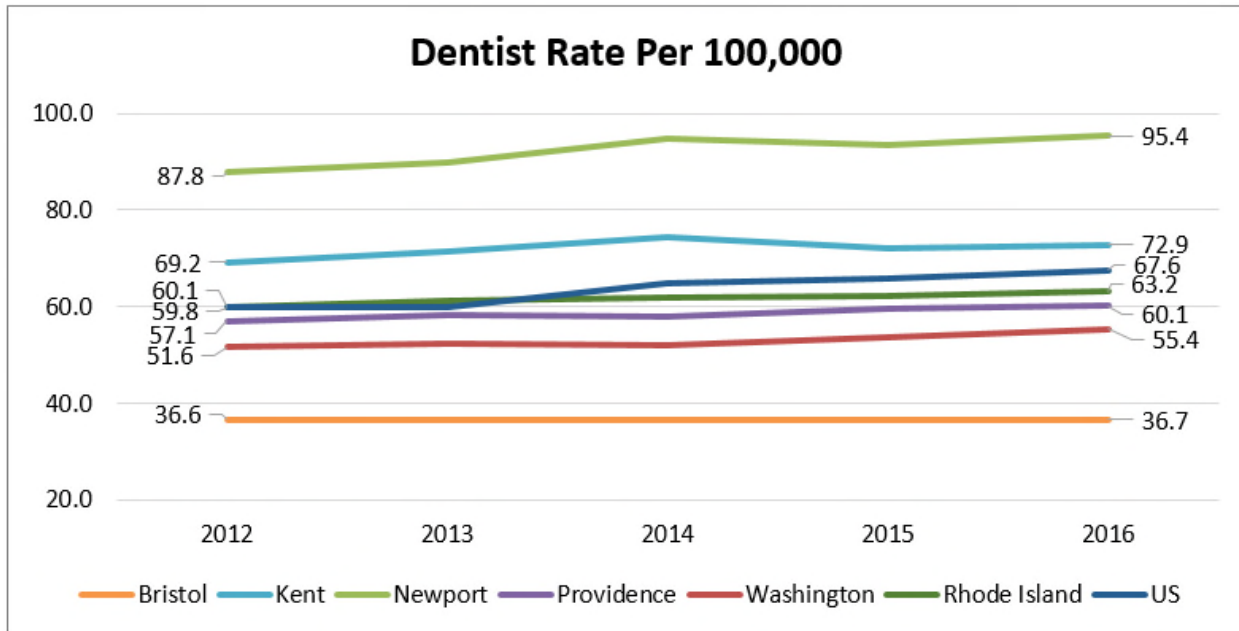
	2015 Primary Care Physician Rate	2016 Dentist Provider Rate	2017 Mental Health Provider Rate
Bristol County	181.3	36.7	185.5
Kent County	80.1	72.9	281.3
Newport County	84.9	95.4	302.0
Providence County	95.3	60.1	433.0
Washington County	92.5	55.4	285.1
Rhode Island	95.8	63.2	370.2
United States	75.8	67.6	212.8

Source: Health Resources & Services Administration, 2015 & 2016; Centers for Medicare and Medicaid Services, 2017

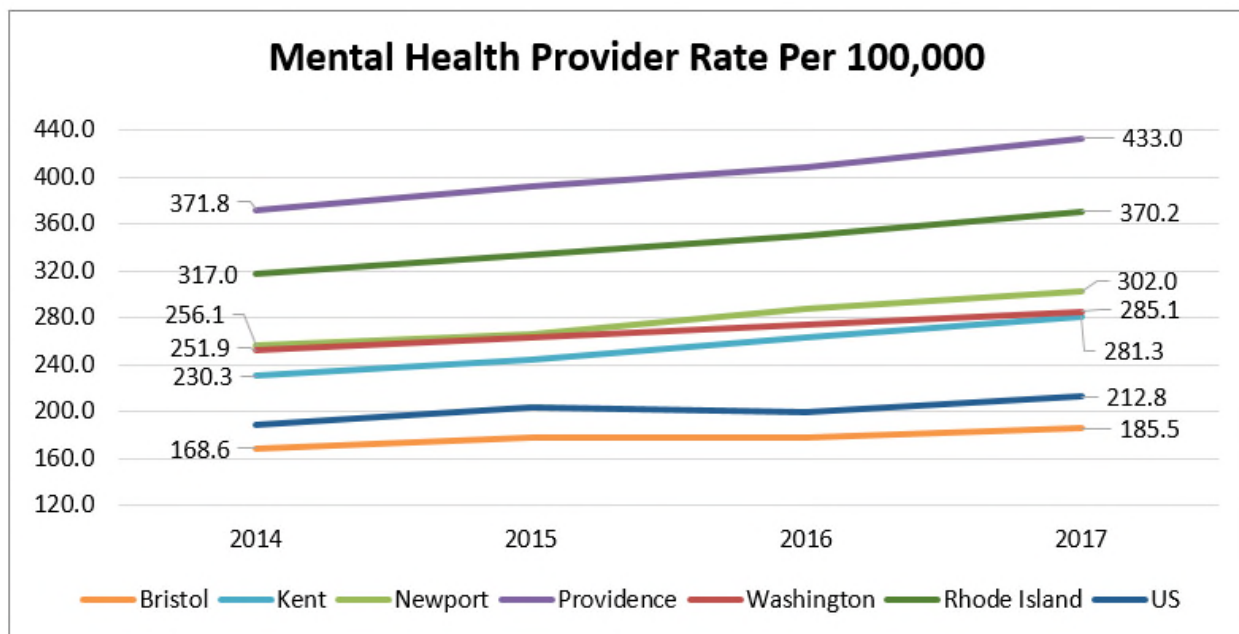


Source: Health Resources & Services Administration, 2011-2015

*Primary care physicians are identified based on the county in which their preferred professional/business mailing address is located. Rates do not take into account providers that serve multiple counties or satellite clinics.



Source: Health Resources & Services Administration, 2012-2016



Source: Centers for Medicare and Medicaid Services, 2014-2017

*An error occurred in the County Health Rankings method for identifying mental health providers in 2013. Data prior to 2014 are not shown.

The Health Resources & Services Administration is responsible for designating geographic areas as Health Professional Shortage Areas (HPSAs) for primary, dental, and mental healthcare. Shortage areas are determined based on a defined ratio of total health professionals to total population. Washington County is a mental healthcare HPSA. New Shoreham or Block Island is also a primary care HPSA. The following HPSAs are located within Rhode Island:

Washington County is designated as a Health Professional Shortage Area for mental healthcare

Health Professional Shortage Areas in Rhode Island

Newport County:

- All of Newport County: Mental health HPSA
- Newport/Middletown Area: Dental health HPSA for low-income populations

Providence County:

- All of Providence County: Mental health HPSA for low-income populations
- Four Core Cities (Central Falls, Pawtucket, Providence, and Woonsocket): Primary care and dental health HPSA for low-income populations

Washington County:

- All of Washington County: Mental health HPSA
- New Shoreham: Primary care HPSA

Routine Healthcare Access

Health insurance coverage and provider availability can impact the number of residents who have a primary care provider and receive routine care. Rhode Island adults are more likely to have a usual primary care provider and receive routine checkups, and are less likely to consider cost as a barrier to receiving care.

Washington County adults are more likely to have a personal doctor and receive routine care

**Adult Routine Healthcare Access
(Green/Red = Higher than the State or Nation)**

	Has a Personal Doctor	Received a Routine Checkup within the Past 2 Years	Unable to See a Doctor within the Past Year due to Cost
Bristol County	92.7%	96.9%	6.7%
Kent County	88.7%	94.1%	5.9%
Newport County	87.5%	89.2%	6.5%
Providence County	86.0%	91.8%	12.3%
Washington County	90.2%	90.5%	8.7%
Rhode Island	87.2%	92.0%	10.3%
United States	77.1%	83.6%	12.0%

Source: Centers for Disease Control and Prevention, 2016; Rhode Island Department of Health, 2016

Overall Health Status

Rhode Island counties received the following health outcomes rankings, as reported by the University of Wisconsin County Health Rankings & Roadmaps program. Health outcomes are measured in relation to premature death (before age 75) and quality of life. Washington County ranks #3 in the state for health outcomes. Measures for residents’ physical health, overall health status, and premature death are more favorable than the state and nation, but more residents report poor mental health days than the national average, which contributes to the ranking. The rankings are unchanged since 2015.

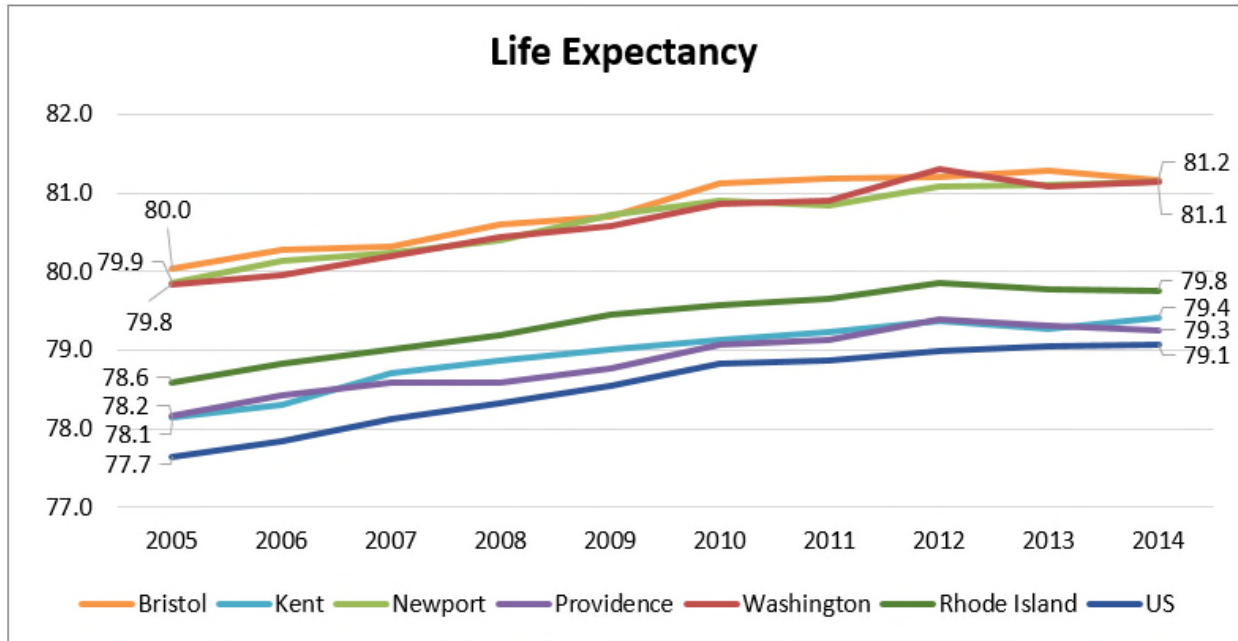
<p>2018 Health Outcomes County Health Rankings</p> <p>#1 Bristol County (#1 in 2015)</p> <p>#2 Newport County (#2 in 2015)</p> <p>#3 Washington County (#3 in 2015)</p> <p>#4 Kent County (#4 in 2015)</p> <p>#5 Providence County (#5 in 2015)</p>

Health Outcomes Indicators
(Green = Lower than the State or Nation; Red = Higher than the State or Nation)

	Premature Death Rate per 100,000	Adults with “Poor” or “Fair” Health Status	30-Day Average - Poor Physical Health Days	30-Day Average - Poor Mental Health Days
Bristol County	4,599	10.2%	3.4	3.7
Kent County	6,042	11.9%	3.6	4.1
Newport County	4,484	11.0%	3.3	3.5
Providence County	6,284	16.5%	4.0	4.4
Washington County	5,424	11.3%	3.4	3.9
Rhode Island	5,920	14.8%	3.8	4.3
United States	6,700	16.0%	3.7	3.8

Source: National Center for Health Statistics, 2014-2016; Centers for Disease Control and Prevention, 2016

Life expectancy increased across the state and all counties by approximately one year from 2005 to 2014. Washington County overall has one of the highest life expectancies (81.1 years).



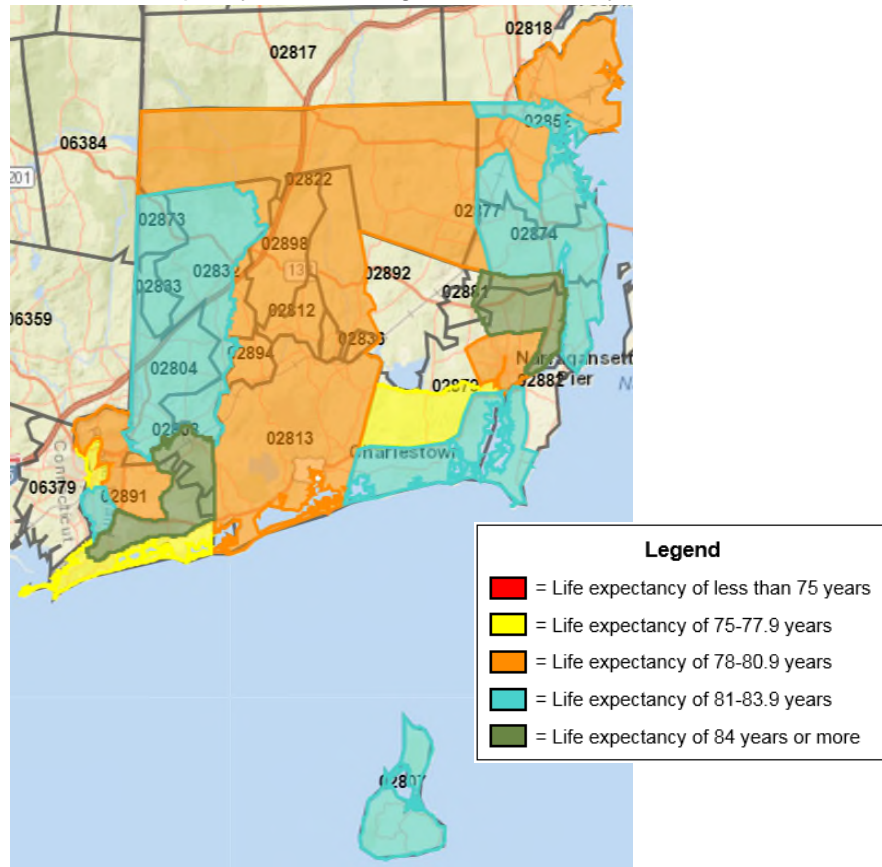
Source: Institute for Health Metrics and Evaluation, 2005-2014

The following map depicts life expectancy by census tract (CT) within Washington County, as available. Data are provided by the US Small-area Life Expectancy Estimates Project, a partnership of the National Center for Health Statistics, the Robert Wood Johnson Foundation, and the National Association for Public Health Statistics and Information Systems. All data are reported as a five-year aggregate for 2011-2015.

Within Rhode Island, Bristol, Newport, and Washington Counties have the greatest overall life expectancy of 75 years or greater. Within Kent and Providence Counties, several areas have an average life expectancy of less than 75 years. These areas are concentrated in the core cities in Providence County and West Warwick in Kent County, where residents experience greater socioeconomic disparity and potential for health disparity.

Washington County Life Expectancy by Census Tract

Areas of Disparity: South Kingstown, Westerly



Health Behaviors

Health behaviors may increase or reduce the likelihood of disease or early death. Individual health behaviors include risk factors like smoking and obesity, or health promoting behaviors like exercise, good nutrition, and stress management. The prevalence of these health behaviors is provided below, with benchmark comparisons, as available.

Tobacco Use

Overall smoking rates among adults declined across the state and within Washington County by more than 2% points from 2012 to 2016. Washington County adults are less likely to smoke (12.7%) when compared to the state (14.4%) and nation (17%), and this percentage nearly meets the Healthy People 2020 goal of 12%.

**Smoking among Adults from the 2016 CHNA to Present
(Green = Decrease of More than 2 Points; Red = Increase of More than 2 Points)**

	2012	2016
Bristol County*	15.7%	12.5%
Kent County	16.1%	17.3%
Newport County	8.5%	15.0%
Providence County	19.3%	15.4%
Washington County	15.0%	12.7%
Rhode Island	17.4%	14.4%
United States	17.0%	17.0%
Healthy People 2020	12.0%	12.0%

Source: Centers for Disease Control and Prevention, 2012 & 2016; Healthy People 2020

*Bristol County data is reported for 2010 due to data availability. A change in methods occurred in 2011 that may affect the validity of comparisons to prior years.

E-cigarette use surpassed traditional cigarette use among teens. According to the Rhode Island Department of Health, in 2017, 26% of Rhode Island high school students reported using a form of tobacco (cigarettes or cigars, smokeless tobacco, or e-cigarettes) on at least one day during the past 30 days. In 2017, 20% of high school students reported current use of e-cigarettes, while 6% of students reported current use of traditional cigarettes.

20% of RI high school students reported current use of e-cigarettes in 2017

Smoking among High School Students from the 2016 CHNA to Present

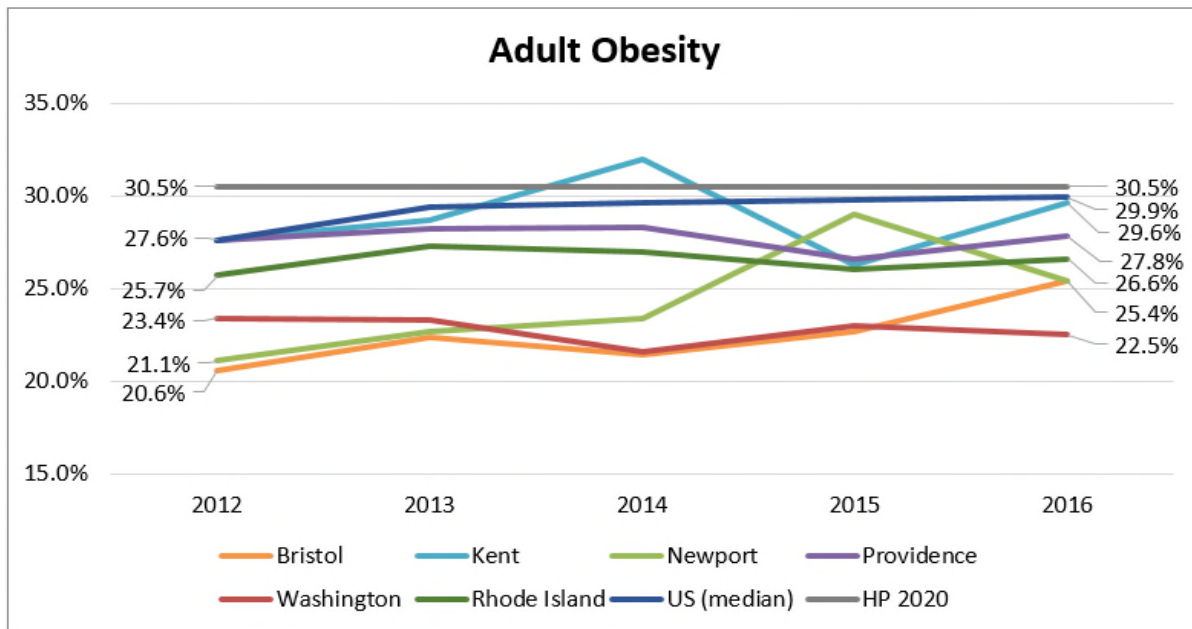
	2013	2017
Rhode Island	8%	6%
United States	16%	9%

Source: Rhode Island Department of Health; Centers for Disease Control and Prevention, 2013 & 2017

Additional data related to substance use among youth is included within the Youth Behavioral Health section of this report on page 57.

Adult Obesity

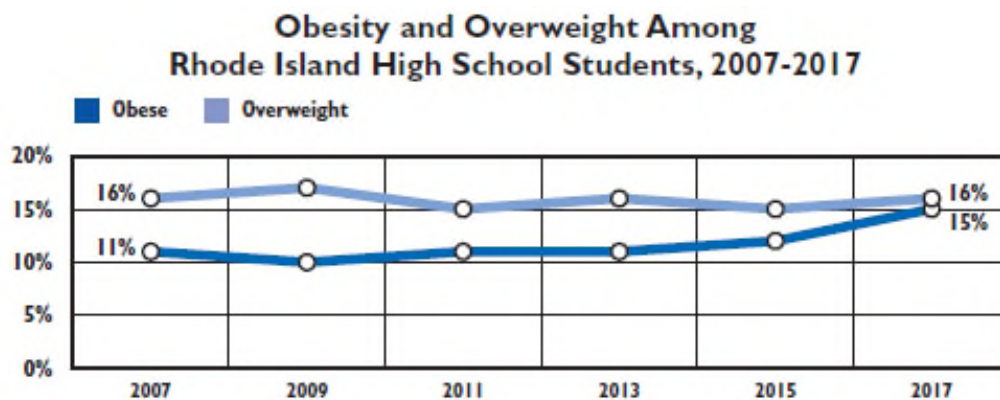
Obesity is associated with an increased risk of disease and mortality, as well as a reduced quality of life. Healthy People 2020 sets a goal of having no more than 30.5% of all adults obese. All Rhode Island counties have met the Healthy People 2020 goal, and fewer adults are obese when compared to national averages. However, current percentages still indicate that more than one in five adults living in Rhode Island are obese. Across Rhode Island, the percentage of obese adults increased since 2012.



Source: Centers for Disease Control and Prevention, 2002-2016; Rhode Island Department of Health, 2012-2016

Adolescent Obesity

In 2017, 15% of Rhode Island high school students were obese and 16% were overweight. The percentage of obese students increased since 2007, while the percentage of overweight students has remained consistent. A higher percentage of Latinx students (21%), males (17%), and Black/African American students (18%) were obese compared to their peers.



Source: Rhode Island Department of Health, 2007-2017

Physical Activity and Nutrition

Lifestyle habits such as regular exercise and good nutrition are important to maintaining health. Environments that foster these habits provide easy access to places where people can be active and obtain nutritious foods. Parks, gyms, pools, and recreation centers can encourage positive physical activity habits. Grocery stores, community gardens, farm stands, and mobile food markets make it easier for residents to obtain healthy foods.

Despite availability, other factors can influence residents' ability to access these resources. Transportation, neighborhood safety, times of operation, cost, and other factors present barriers for some residents to take advantage of existing community assets.

As an example, only 76% of Washington County residents live within close proximity of venues that promote physical activity; yet, the percentage of adults in Washington County that engage in physical activity is among the highest in the state. In contrast, Providence County residents are among the most likely to have access to physical activity venues, but the least likely to be physically active.

Residents in Providence County are more likely to experience higher socioeconomic needs, while residents in Washington County generally experience lower socioeconomic needs, which may account for the difference in physical activity, despite availability of resources.

Physical Activity (Green = Higher than the State or Nation; Red = Lower than the State or Nation)

	Access to Physical Activity Venues	Participate in Physical Activity in the Past Month
Bristol County	91.9%	77.8%
Kent County	94.0%	78.8%
Newport County	83.9%	81.7%
Providence County	94.0%	72.2%
Washington County	76.1%	80.7%
Rhode Island	91.0%	75.6%
United States	83.0%	76.9%

Source: Business Analyst, Delorme Map Data, ESRI, & US Census Tigerline Files, 2010 & 2016; Centers for Disease Control and Prevention, 2016; Rhode Island Department of Health, 2016

Food insecurity is defined as being without a consistent source of sufficient and affordable nutritious food. Food insecurity is reflective of a variety of socioeconomic factors including employment, income, access to healthy food options, transportation, housing, and other factors.

Residents of Washington County are less likely to be food insecure when compared to the state and the nation. Fewer children are eligible for free or reduced-price school lunch. Eligibility for free lunch includes households with an income at or below 130% of the poverty threshold, while eligibility for reduced-priced lunch includes households with an income between 130% and 185% of the poverty threshold.

**Food Insecure Residents
(Red = Higher than the State or Nation)**

	All Residents	Children
Bristol County	10.0%	13.8%
Kent County	10.4%	15.1%
Newport County	11.5%	15.4%
Providence County	13.2%	19.1%
Washington County	10.7%	15.2%
Rhode Island	12.1%	17.4%
United States	12.9%	17.5%

Source: Feeding America, 2016

**Children Eligible for Free or Reduced-Price School Lunch
(Red = Higher than the State)**

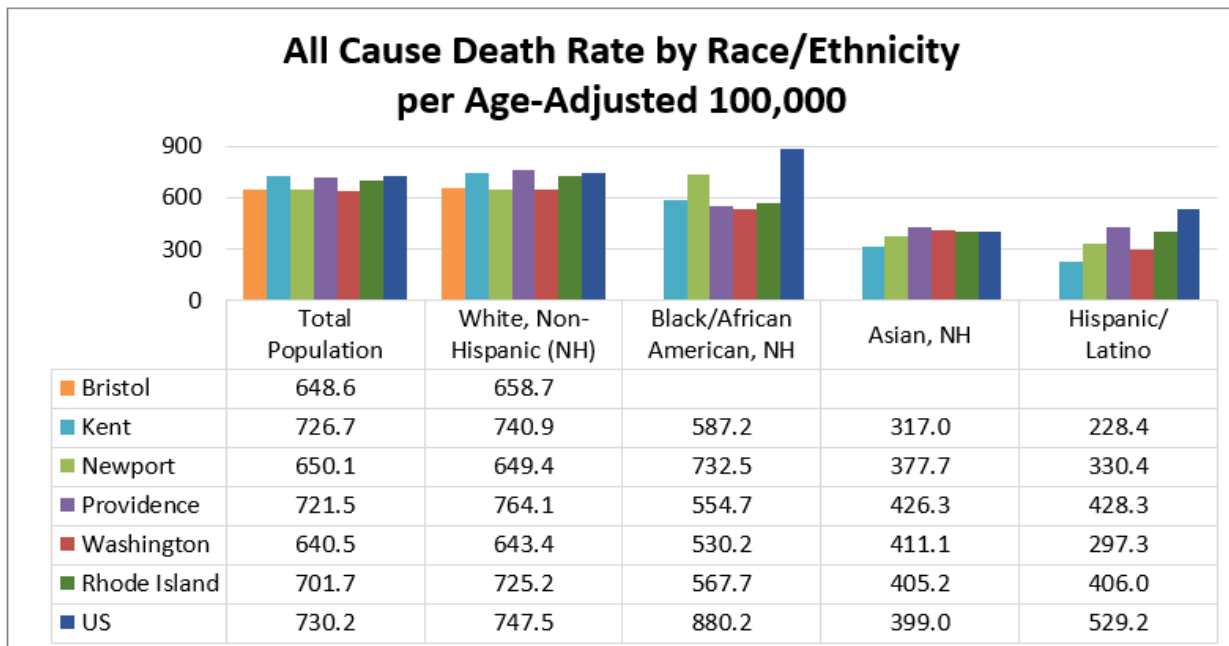
	Percent
Bristol County	19.5%
Kent County	31.6%
Newport County	31.8%
Providence County	58.6%
Washington County	23.2%
Rhode Island	47.0%

Source: National Center for Education Statistics, 2015-2016

Mortality

The following graph depicts the all cause age-adjusted death rate by county and race/ethnicity. The overall death rate for all Rhode Island counties is lower than the national rate. The death rate for Washington County is also lower than the state. Minority populations often experience higher death rates. This does not appear to be the case for the majority of Rhode Island and may be due to the small minority population and low death counts.

Minority populations often experience higher death rates. This does not appear to be the case for the majority of Rhode Island and may be due to the small minority population and low death counts.

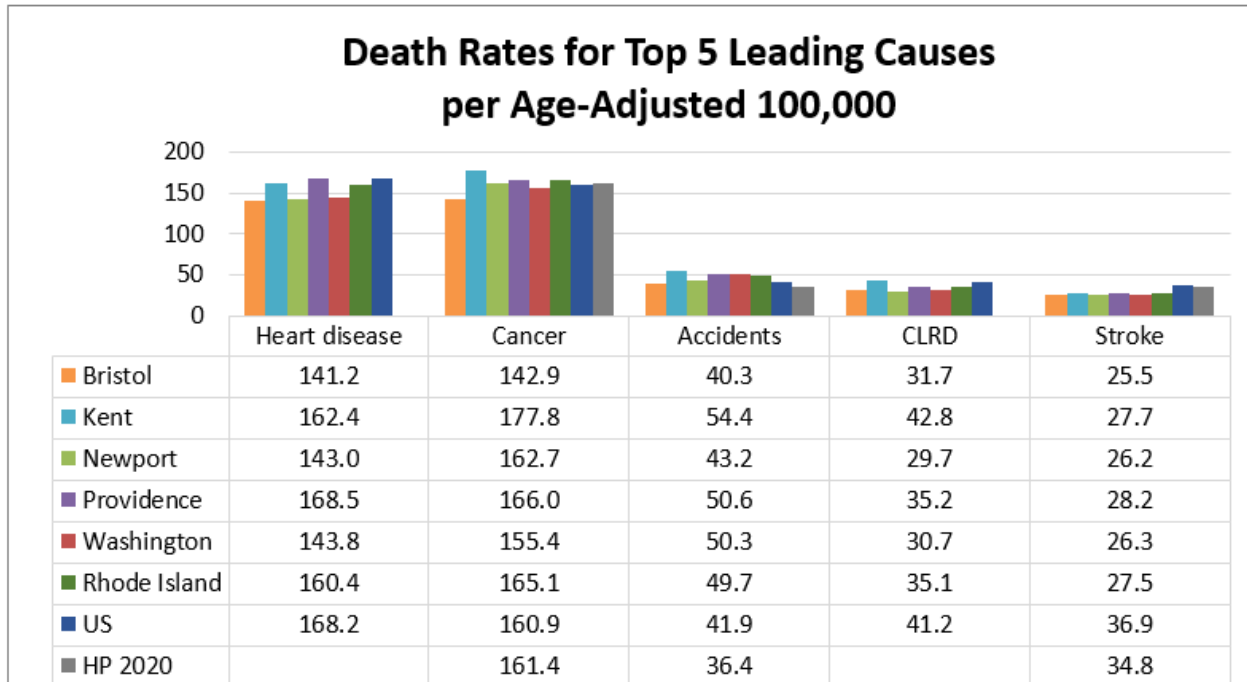


Source: Centers for Disease Control and Prevention, 2012-2016
 *Data for Bristol County are reported as available due to low death counts.

While heart disease remains the top cause of death in the nation, cancer is beginning to surpass heart disease as the top cause of death in some states, including Rhode Island. Cancer is the leading cause of death in all counties except Providence County, which has a higher rate of death due to heart disease.

The overall death rate for Washington County is lower than the state and the nation

Accidents are the third leading cause of death in Rhode Island. Rhode Island overall has a higher accidental death rate than the nation, and the state and all five counties exceed the Healthy People 2020 goal for accidental deaths. Accidental deaths in rank order from highest cause of death in Rhode Island include accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens), unspecified falls, accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, unspecified motor-vehicle accidents, and accidental poisoning by and exposure to alcohol. The following chart profiles death rates for the top five causes by county.



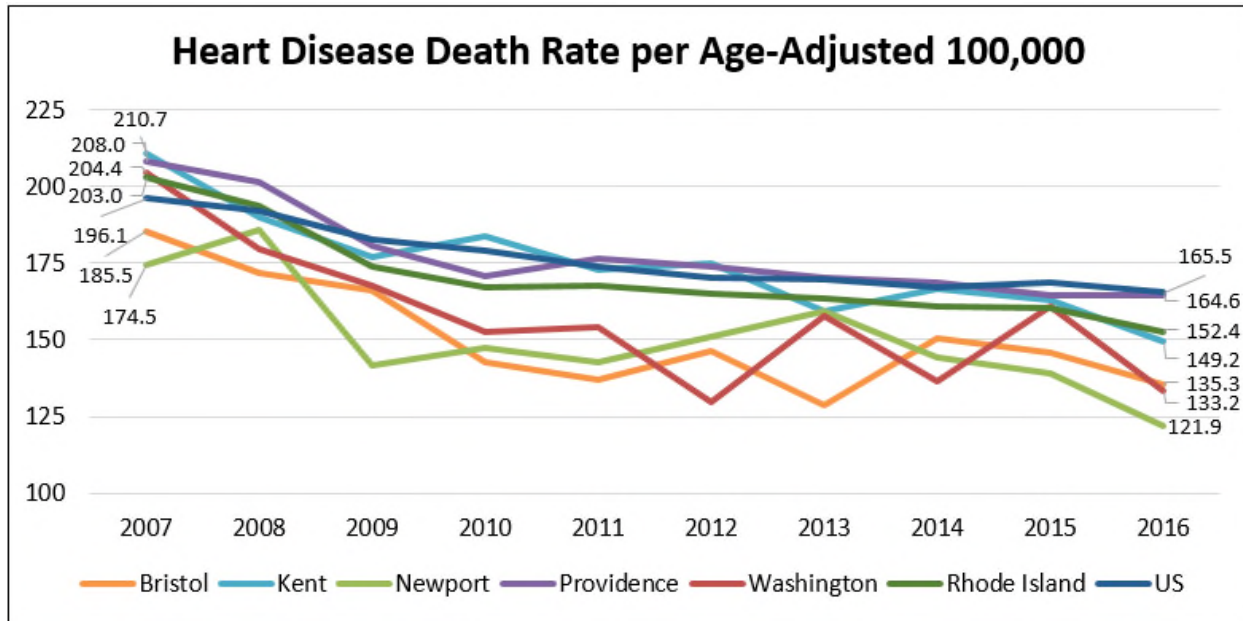
Source: Centers for Disease Control and Prevention, 2012-2016; Healthy People 2020

Chronic Diseases

Chronic diseases are among the most prevalent and costly health conditions in the United States. More than two-thirds of all deaths are caused by one or more of these five chronic diseases: heart disease, cancer, stroke, chronic obstructive pulmonary disease, and diabetes. Chronic diseases are often preventable through reduced risk behaviors like tobacco and alcohol use, increased physical activity and good nutrition, early detection of risk factors, and effective primary and community management of disease.

Heart Disease and Stroke

Between 2007 and 2016, death rates due to heart disease declined across the state and nation. Heart disease death rates for all five counties fall below the national rate. Death rates for all five counties except Providence also fall below the state rate.



Source: Centers for Disease Control and Prevention, 2007-2016

Across the nation, the heart disease death rate is highest among Blacks/African Americans. Rhode Island as a whole differs from the national trend with a higher rate of death among Whites. Race and ethnicity data are not reported for all counties due to low death counts.

Heart Disease Death Rates per Age-Adjusted 100,000 by Race and Ethnicity

	White, Non-Hispanic	Black/African American, Non-Hispanic	Latinx
Newport County	141.2	206.6	NA
Providence County	178.2	121.0	84.8
Rhode Island	165.4	126.8	80.6
United States	170.9	212.6	118.2

Source: Centers for Disease Control and Prevention, 2012-2016

*Data for Bristol, Kent, and Washington counties are not reported due to low death counts.

Hypertension and high cholesterol can lead to heart disease. A higher percentage of Rhode Island adults have hypertension when compared to adults across the nation. Washington County adults have the lowest prevalence of high cholesterol among Rhode Island counties.

Heart Disease Prevalence among Adults
(Green = Lower than the State or Nation; Red = Higher than the State or Nation)

	Hypertension	High Cholesterol
Bristol County	28.1%	38.8%
Kent County	36.5%	34.9%
Newport County	31.3%	34.4%
Providence County	32.5%	35.9%
Washington County	30.9%	33.7%
Rhode Island	32.4%	35.2%
United States	30.9%	36.3%

Source: Centers for Disease Control and Prevention, 2015; Rhode Island Department of Health, 2015

Coronary heart disease is characterized by the buildup of plaque inside the coronary arteries. Rhode Island as a whole does not meet the Healthy People 2020 goal for coronary heart disease death. Washington County has one of the lowest coronary heart disease death rates in the state; the rate is lower than all state and national indicators.

The Washington County coronary heart disease death rate is among the lowest in the state and lower than the nation

Several types of heart disease, including coronary heart disease, are risk factors for stroke. Rhode Island and all five counties meet the Healthy People 2020 goal for stroke death and have a lower rate of death than the nation.

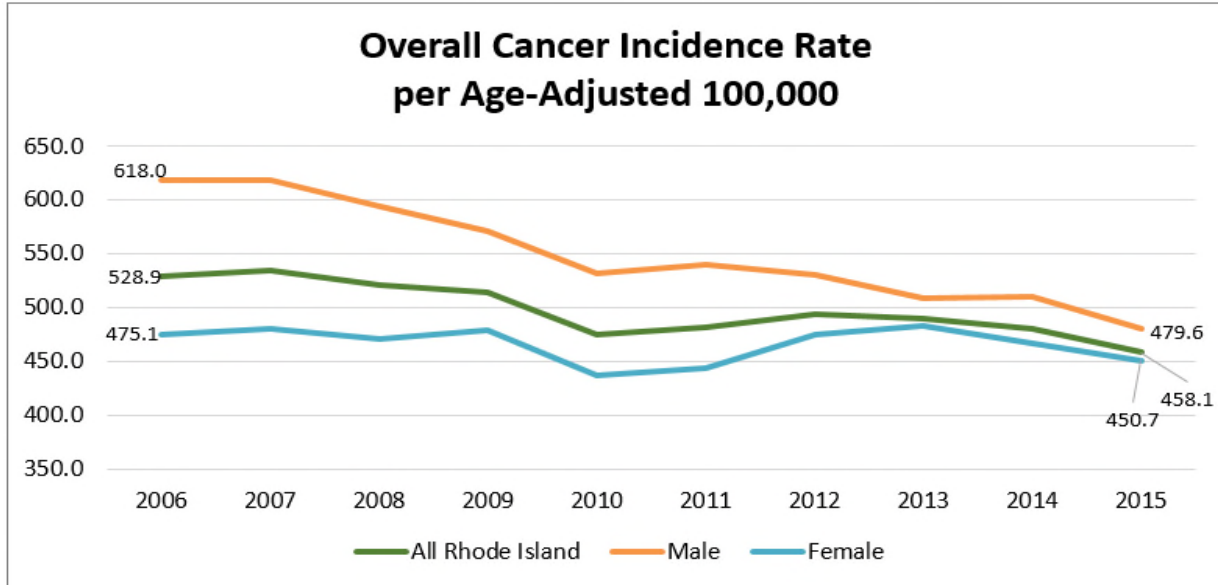
Coronary Heart Disease and Stroke Death Rates
(Green = Lower than State or National Benchmarks;
Red = Higher than State or National Benchmarks)

	Coronary Heart Disease Death per Age-Adjusted 100,000	Stroke Death per Age-Adjusted 100,000
Bristol County	97.0	25.5
Kent County	115.4	27.7
Newport County	89.0	26.2
Providence County	117.1	28.2
Washington County	93.2	26.3
Rhode Island	110.1	27.5
United States	99.6	36.9
Healthy People 2020	103.4	34.8

Source: Centers for Disease Control and Prevention, 2012-2016; Healthy People 2020

Cancer

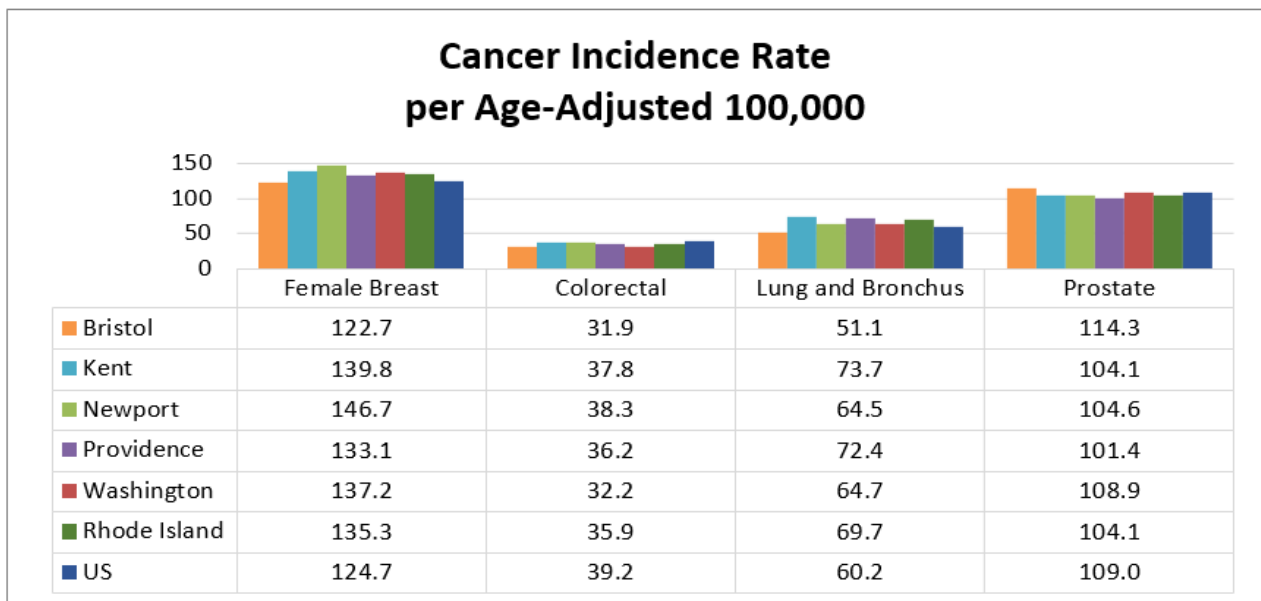
Cancer is the second leading cause of death in America, and although often treatable, it is a significant contributor to morbidity. Within Rhode Island, the age-adjusted overall incidence of cancer among men outpaces that for females.



Source: Rhode Island Department of Health, 2006-2015

Presented below are the incidence rates for the most commonly diagnosed cancers: breast (female), colorectal, lung, and prostate (male). Rhode Island outpaces the nation for breast and lung cancer incidence. Washington County has a higher incidence of breast cancer.

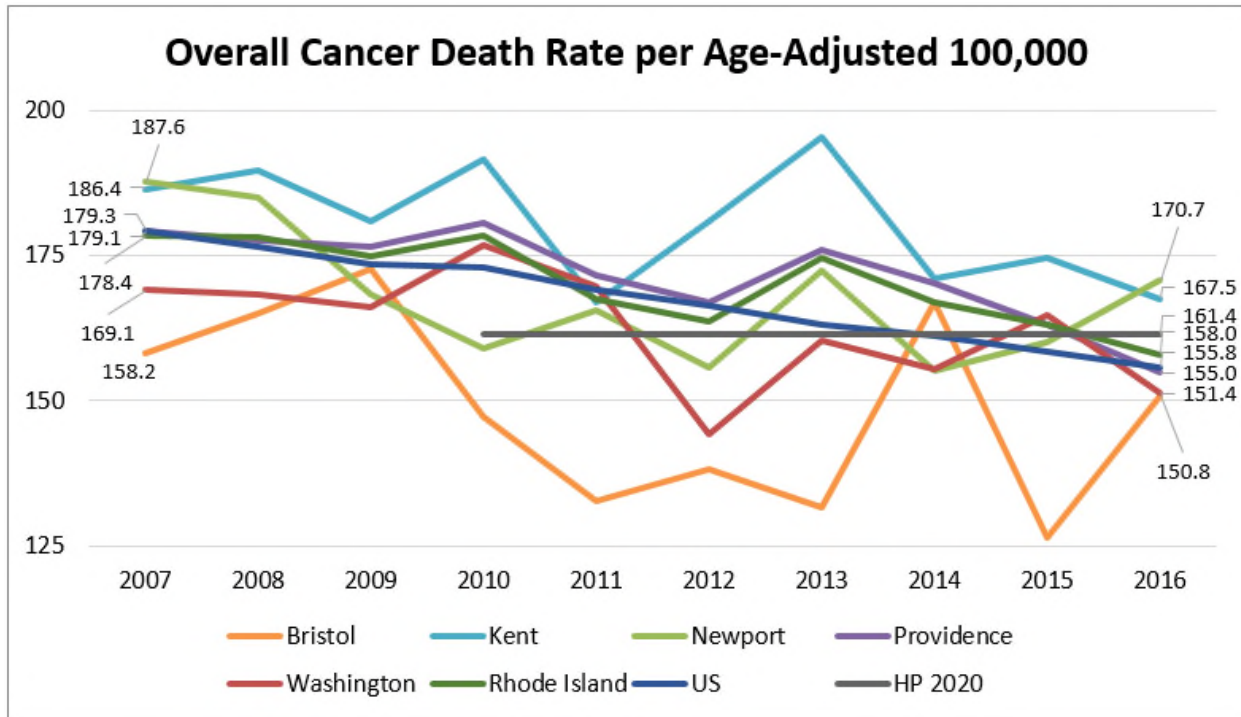
Rhode Island overall has higher incidence rates for female breast cancer and Washington County follows this trend



Source: Centers for Disease Control and Prevention, 2011-2015

Cancer death rates among Rhode Island counties have been variable over the past decade, but current rates are lower than at the beginning of the decade. Death rates for all counties except Kent and Newport meet the Healthy People 2020 goal of 161.4 per age adjusted 100,000 people.

Cancer death rates declined over the past decade; Washington County meets HP2020 goals for all cancer death rates



Source: Centers for Disease Control and Prevention, 2007-2016

Across the nation, Blacks/African Americans have a higher rate of cancer death than Whites. However, across Rhode Island, Whites have a higher death rate than Blacks/African Americans. Race and ethnicity data are not reported for all counties due to low death counts.

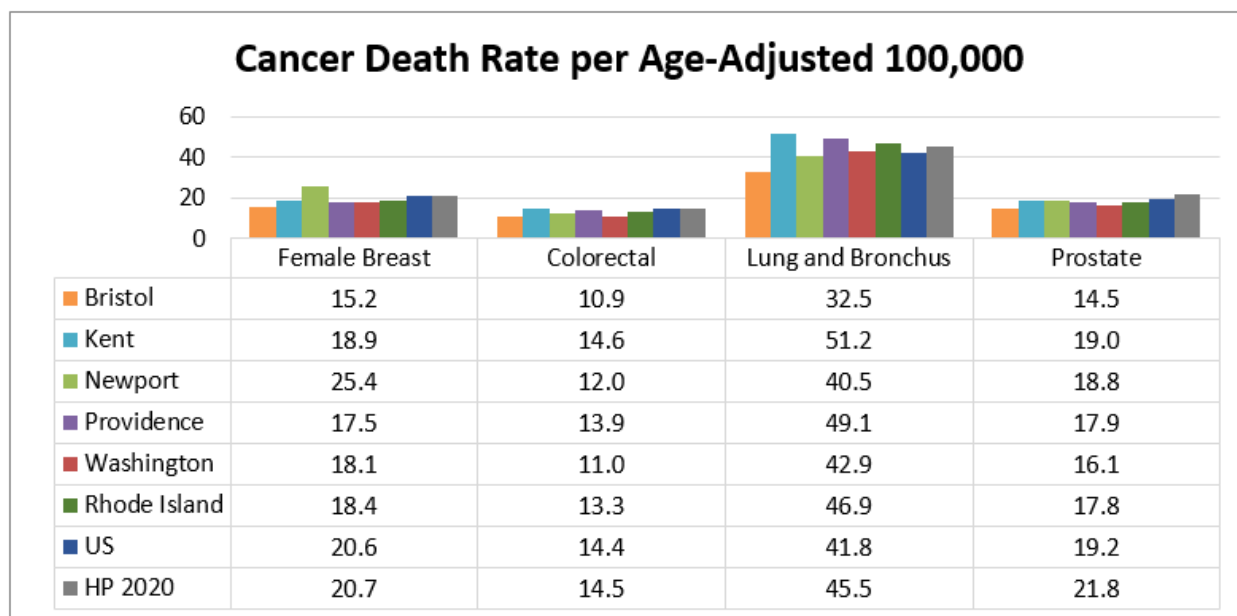
Cancer Death Rates by Race and Ethnicity

	White, Non-Hispanic	Black/African American, Non-Hispanic	Latinx
Newport County	162.0	189.7	NA
Providence County	178.2	114.8	94.7
Rhode Island	171.9	120.1	91.3
United States	165.7	190.0	112.6

Source: Centers for Disease Control and Prevention, 2012-2016

*Data for Bristol, Kent, and Washington counties are not reported due to low death counts.

Presented below are the death rates for the most commonly diagnosed cancers. Healthy People 2020 has set death rate goals for all four cancer types. Washington County meets all of the Healthy People 2020 goals.



Source: Centers for Disease Control and Prevention, 2012-2016

Rhode Island has higher reported incidence and death rates due to lung cancer than the nation. A potential contributor to higher rates is the prevalence of radon in homes across the state. Radon is a colorless and odorless gas produced from the decay of radium in rocks, soil, and water. It is the second leading cause of lung cancer. The Environmental Protection Agency recommends action to mitigate radon when testing shows radon levels of 4.0 pCi/L or higher. One in four homes in Rhode Island have radon levels at or above 4.0 pCi/L compared to the national average of one in 15 homes.

1 in 4 Rhode Island homes have radon levels that exceed EPA standards; compared to 1 in 15 homes nationally

The Environmental Protection Agency distinguishes counties by radon zones. The following table shows each county's radon zone, its average radon level, and the percentage of radon testing results above 4 pCi/L.

Washington County has the highest reported average radon level in the state

Average Reported Indoor Radon Levels

	Radon Zone	Average Radon Level (pCi/L*)	Radon Testing Results Above 4 pCi/L
Bristol County	Zone 3 (less than 2 pCi/L)	1.9	10.2%
Kent County	Zone 2 (2 to 4 pCi/L)	3.3	23.8%
Newport County	Zone 2 (2 to 4 pCi/L)	3.5	23.2%
Providence County	Zone 2 (2 to 4 pCi/L)	2.4	14.4%
Washington County	Zone 1 (greater than 4 pCi/L)	4.7	34.9%
Rhode Island	NA	4.3	NA

Source: Environmental Protection Agency, no date. *Picocuries per liter

Many forms of cancer, if identified early, can be successfully treated. Screening rates for three of the most common forms of cancer (cervical, breast, and prostate) are shown in the table below. Among Rhode Island females ages 21-65, more than 8 in 10 receive cervical cancer screenings. A similar percentage of females ages 50-74 receive breast cancer screenings. The prevalence of cervical and breast cancer screenings among females is higher in all Rhode Island counties compared to the nation. A higher percentage of Rhode Island males ages 40 or older receive prostate cancer screenings when compared to the nation, however, less than half of all males are screened.

More Washington County adults receive routine cancer screenings than the state or national averages

Adult Routine Cancer Screenings
 (Green = Higher than the State or Nation; Red = Lower than the State or Nation)

	Pap Test in Past Three Years (Ages 21-65)	Mammogram in Past Two Years (Ages 50-74)	PSA Test in Past Two Years (Ages 40+)
Bristol County	91.3%	96.5%	40.7%
Kent County	83.6%	83.9%	42.1%
Newport County	82.3%	85.1%	48.6%
Providence County	85.6%	84.9%	39.1%
Washington County	94.7%	86.1%	47.6%
Rhode Island	85.7%	85.5%	41.5%
United States	79.8%	77.6%	39.5%

Source: Centers for Disease Control and Prevention, 2016; Rhode Island Department of Health, 2016

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 (COPD), emphysema, and asthma, all of which contribute to lower quality of life and increased risk of early death. Washington County adults and children have a higher prevalence of asthma and/or COPD when compared to the state and nation.

Asthma and COPD are more prevalent in Washington County than in the state and the nation

CLRD Death Rates per Age-Adjusted 100,000 by Race and Ethnicity
 (Green = Lower than the State or Nation; Red = Higher than the State or Nation)

	Total Population	White, Non-Hispanic	Black/African American, Non-Hispanic	Latinx
Bristol County	31.7	32.6	NA	NA
Kent County	42.8	44.0	NA	NA
Newport County	29.7	30.2	NA	NA
Providence County	35.2	39.1	20.3	9.4
Washington County	30.7	31.0	NA	NA
Rhode Island	35.1	37.4	19.9	8.8
United States	41.2	46.3	29.7	17.8

Source: Centers for Disease Control and Prevention, 2012-2016

*Data by race/ethnicity is limited due to low death counts.

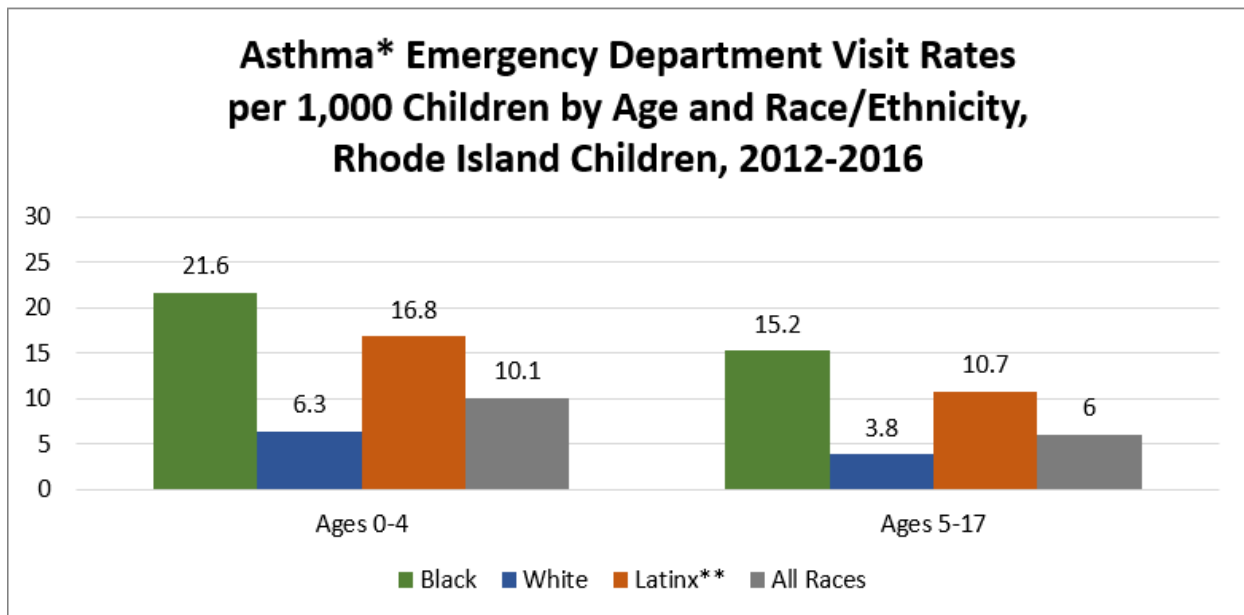
CLRD Prevalence

(Green = Lower than the State or Nation; Red = Higher than the State or Nation)

	Adults with Asthma (Current)	Children with Asthma (Ever)	Adults with COPD (Ever)
Bristol County	9.8%	6.0%	3.9%
Kent County	12.1%	10.3%	8.3%
Newport County	11.9%	15.5%	7.4%
Providence County	10.6%	14.7%	6.4%
Washington County	12.0%	16.9%	8.0%
Rhode Island	10.7%	13.6%	6.9%
United States	9.3%	NA	6.3%

Source: Centers for Disease Control and Prevention, 2016; Rhode Island Department of Health, 2016

Asthma is the most common chronic condition among children. Across Rhode Island from 2012 to 2016, asthma was the primary diagnosis for 7,917 emergency department visits among children under age 18. Black/African American and Latinx children had the highest rates of emergency department visits, as shown in the graph below. Children residing in the four core cities also had a higher rate of emergency department visits (12.2 per 1,000) compared to the remainder of the state (4.5 per 1,000).



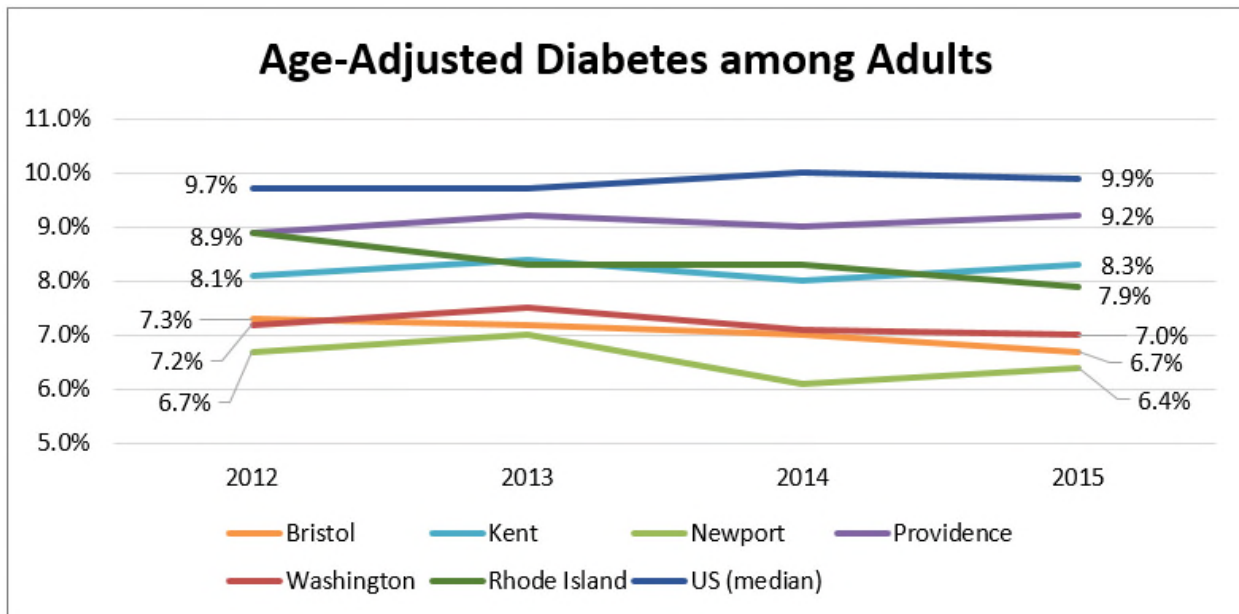
Source: Rhode Island Department of Health, 2012-2016

*Rates are for primary a diagnosis of asthma. **Latinx children can be of any race.

Diabetes

Diabetes is among the top 10 causes of death in the nation. Diabetes can cause a number of serious complications. Type II diabetes, the most common form, is largely preventable through diet and exercise. The percentage of adults in Rhode Island diagnosed with diabetes is less than the nation, and decreased over the past three years. Washington County measures have remained stable since 2012.

All Rhode Island counties have a lower prevalence of diabetes than the nation



Source: Centers for Disease Control and Prevention, 2012-2015

The Rhode Island death rate due to diabetes is lower than the national death rate. All Rhode Island counties except Providence also have a lower death rate than the nation. Across the state and nation, the diabetes death rate is highest among Blacks/African Americans compared to Whites and Latinxs.

Diabetes Death Rate per Age-Adjusted 100,000
 (Green = Lower than the State or Nation; Red = Higher than the State or Nation)

	Total Population	White, Non-Hispanic	Black/African American, Non-Hispanic	Latinx
Bristol County	17.0	16.7	NA*	NA*
Kent County	17.6	17.6	NA*	NA*
Newport County	11.5	11.4	NA*	NA*
Providence County	19.7	19.2	24.2	19.5
Washington County	14.8	14.5	NA*	NA*
Rhode Island	17.8	17.4	24.0	18.1
United States	21.1	18.6	38.6	25.6

Source: Centers for Disease Control and Prevention, 2012-2016

*Data by race/ethnicity is limited due to low death counts.

Senior Health

Chronic Disease Among Medicare Beneficiaries

Seniors face a growing number of challenges related to health and well-being as they age. People over 65 are more prone to chronic disease, social isolation, and disability. The following sections highlight key health indicators for the region’s senior population.

According to the CDC, “Among Medicare fee-for-service Beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending.”

The tables below note the percentage of Rhode Island Medicare Beneficiaries who have been diagnosed with a chronic condition. Cells highlighted in red represent percentages that are higher than state and national benchmarks.

Medicare Beneficiaries in Washington County have a lower prevalence of all reported chronic conditions except arthritis

The presence of chronic conditions among Medicare Beneficiaries varies by county. Medicare Beneficiaries in Washington County have a lower prevalence of all reported chronic conditions except arthritis.

**Chronic Conditions among Medicare Beneficiaries 65 Years or Over
(Red = Higher than the State or Nation)**

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	US
Alzheimer’s Disease	12.4%	12.0%	11.2%	12.4%	9.3%	11.7%	11.3%
Arthritis	30.5%	33.0%	29.3%	31.2%	32.9%	31.5%	31.3%
Asthma	8.7%	9.7%	9.0%	10.2%	7.7%	9.5%	7.6%
Cancer	10.6%	10.8%	10.8%	10.2%	10.2%	10.4%	8.9%
COPD	9.3%	12.4%	11.3%	12.1%	10.6%	11.7%	11.2%
Depression	16.2%	18.5%	16.9%	18.5%	14.5%	17.5%	14.1%
Diabetes	23.7%	27.0%	22.3%	29.3%	21.6%	26.6%	26.8%
Heart Failure	12.1%	14.7%	12.9%	15.2%	12.8%	14.3%	14.3%
High Cholesterol	51.9%	55.7%	51.9%	55.0%	51.7%	54.1%	47.8%
Hypertension	60.0%	63.7%	59.0%	64.1%	60.0%	62.6%	58.1%
Ischemic Heart Disease	24.9%	32.0%	25.0%	29.1%	27.4%	28.6%	28.6%
Stroke	3.9%	4.3%	5.7%	4.3%	3.9%	4.4%	4.2%

Source: Centers for Medicare & Medicaid Services, 2015

Number of Chronic Conditions among Medicare Beneficiaries 65 Years or Over

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	US
0 to 1 condition	29.9%	25.9%	31.1%	26.8%	30.5%	27.9%	32.3%
2 to 3 conditions	33.2%	31.3%	32.1%	30.8%	33.3%	31.6%	30.0%
4 to 5 conditions	22.0%	24.2%	21.2%	23.5%	21.9%	23.0%	21.6%
6 + conditions	14.9%	18.6%	15.6%	19.0%	14.3%	17.5%	16.2%

Source: Centers for Medicare & Medicaid Services, 2015

Regular screenings are essential for the early detection and management of chronic conditions. The following table analyzes diabetes and mammogram screenings among Medicare enrollees. Rhode Island and all five counties exceed national metrics for both screenings. Medicare enrollees in Washington County are more likely to receive annual hA1c tests for diabetes and mammograms than the state.

**Chronic Disease Screenings among Medicare Enrollees
(Green = Higher than the State or Nation)**

	Annual hA1c Test from a Provider (65-75 Years)	Mammogram in Past Two Years (67-69 Years)
Bristol County	89.0%	76.0%
Kent County	87.4%	68.7%
Newport County	87.0%	67.8%
Providence County	87.8%	65.3%
Washington County	88.0%	72.6%
Rhode Island	87.7%	67.9%
United States	85.0%	63.0%

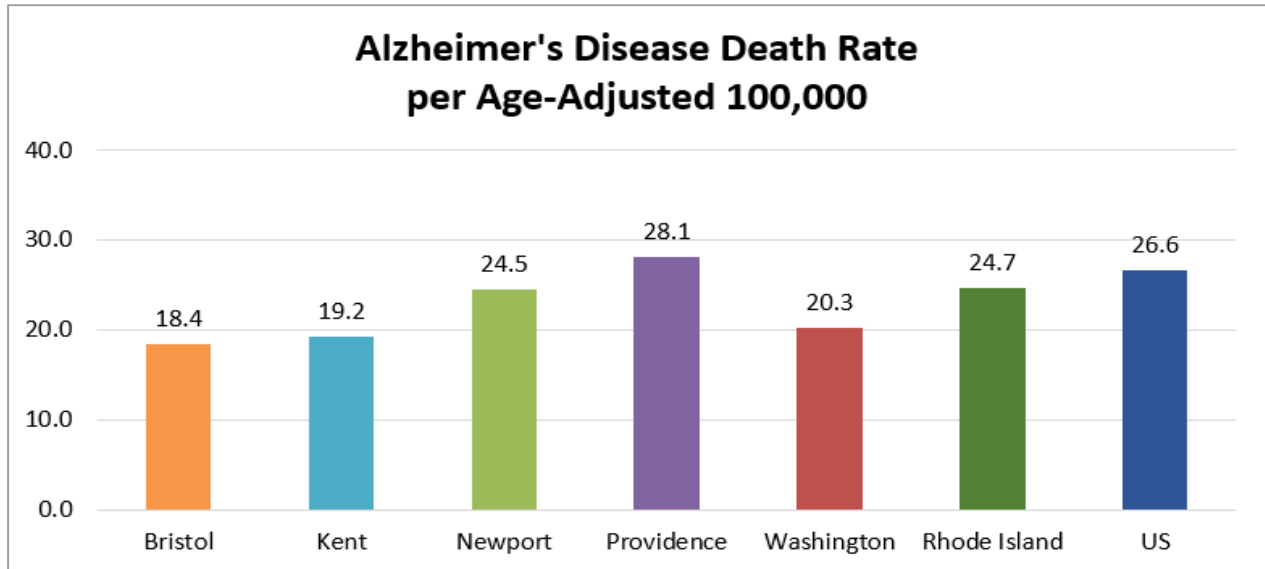
Source: Dartmouth Atlas of Healthcare, 2014

Alzheimer’s Disease

Alzheimer’s disease is currently the sixth leading cause of death in the United States. According to the National Institute on Aging, “Alzheimer’s disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and, eventually, the ability to carry out the simplest tasks. In most people with Alzheimer’s, symptoms first appear in their mid-60s. Estimates vary, but experts suggest that more than 5.5 million Americans, most of them age 65 or older, may have dementia caused by Alzheimer’s.”

Washington County has a lower rate of death due to Alzheimer’s disease than the state and nation

Washington County has a lower rate of death due to Alzheimer’s disease than the state and nation.

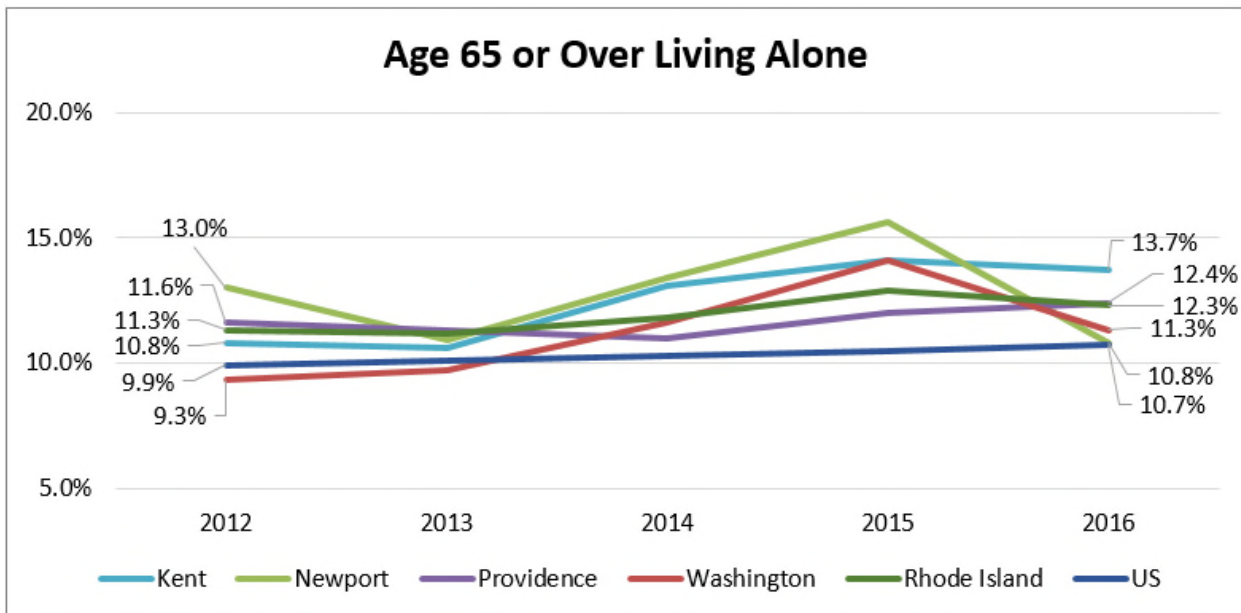


Source: Centers for Disease Control and Prevention, 2012-2016

Social Isolation Among Seniors

As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors age 65 or over who live alone. In Rhode Island, seniors are more likely to live alone than seniors across the nation. Washington County has fewer seniors living alone compared to the state, but the percentage exceeds the nation.

Approximately 1 in 10 seniors in Washington County live alone, slightly more than the nation



Source: US Census Bureau, 2012-2016

*Bristol County data is only available as a five-year aggregate based on data availability.

Behavioral Health

Mental Health

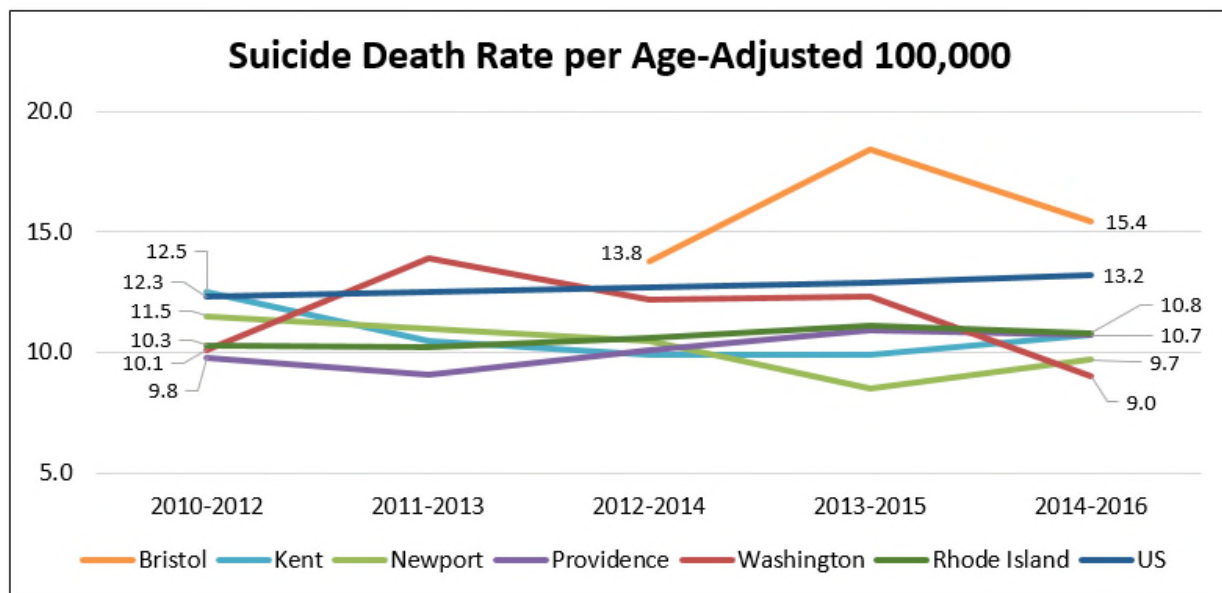
A higher percentage of Rhode Island adults have been diagnosed with a depressive disorder when compared to the nation. Nearly 20% of Washington County adults have ever been diagnosed with a depressive disorder, which also exceeds the nation. The Washington County suicide rate is on par with the state, lower than the nation, and meets the Healthy People 2020 goal. Consistent with most Rhode Island counties, the suicide rate declined over the past six years.

About 20% of Washington County adults have ever been diagnosed with a depressive disorder

Mental Health Measures
(Red = Higher than State or National Benchmarks)

	Adults with a Depressive Disorder (Ever)	Suicide Rate per Age-Adjusted 100,000	Mental & Behavioral Disorders Death Rate per Age-Adjusted 100,000
Bristol County	20.9%	15.4	66.8
Kent County	22.1%	10.7	53.8
Newport County	20.4%	9.7	43.8
Providence County	23.1%	10.7	53.9
Washington County	19.5%	9.0	53.7
Rhode Island	22.3%	10.8	53.6
United States	17.4%	13.2	37.2
Healthy People 2020	NA	10.2	NA

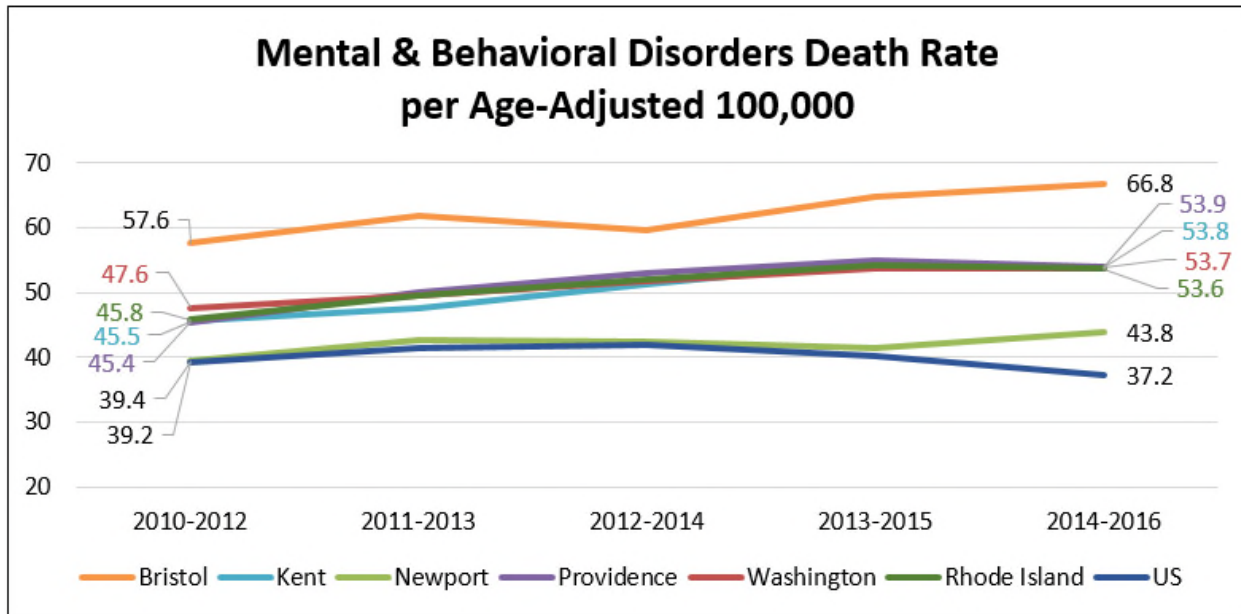
Source: Centers for Disease Control and Prevention, 2014-2016 & 2016; Healthy People 2020



Source: Centers for Disease Control and Prevention, 2010-2012 – 2014-2016

*Data for Bristol County are suppressed for years prior to 2012-2014 due to low death counts.

Mental and behavioral disorders span a wide range of disorders, including disorders due to psychoactive substance use, anxiety disorders, Schizophrenia and other delusional disorders, and mood or personality disorders. The disorders are not induced by alcohol and other psychoactive substances, but they may result from substance abuse. The mental and behavioral disorders death rate increased by four or more points over the past six years in all counties.



Source: Centers for Disease Control and Prevention, 2010-2012 – 2014-2016
 *Death rates for Kent, Providence, Washington counties, and Rhode Island are color-coded to distinguish trends.

Substance Use Disorder

The category of substance use disorder includes alcohol and drug use, including the use of prescription drugs outside of the prescribed use.

Excessive drinking includes binge drinking and heavy drinking. Across Rhode Island, approximately 17% of adults report excessive drinking. Among the five counties, the percentage of adults who report excessive drinking is higher than the state and the nation for all counties except Providence. Washington County has one of the highest percentages of excessive drinking among adults, and the highest percentage of deaths due to DUI.

Half of all driving deaths in Washington County are due to DUI; the highest percentage in the state

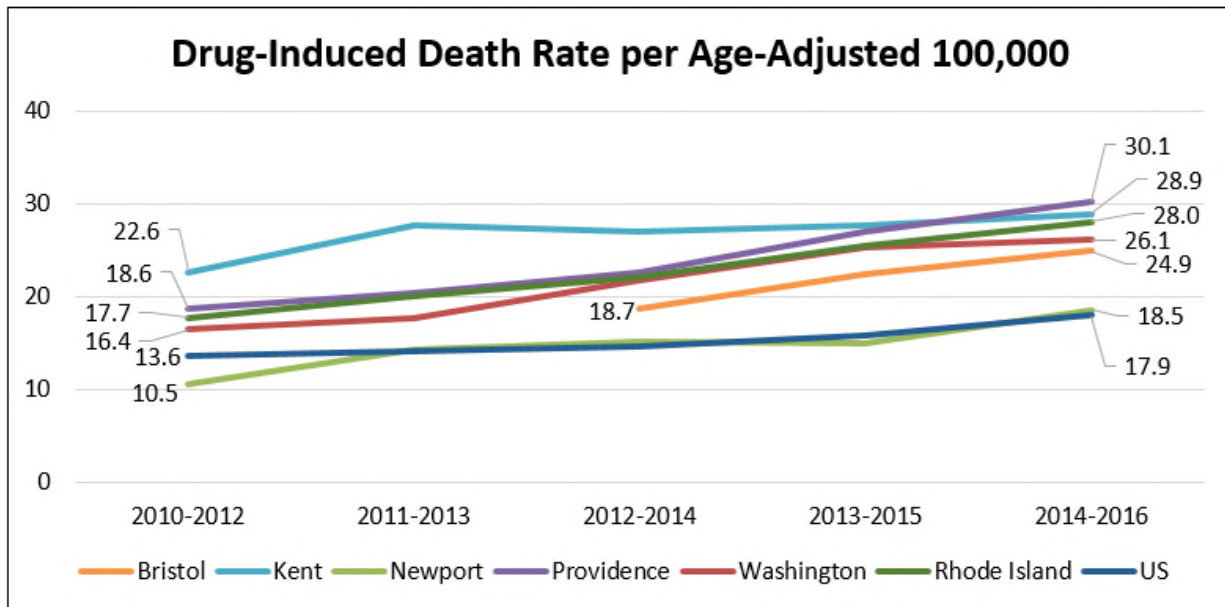
Drug-induced deaths include all deaths for which drugs are the underlying cause of death, including drug overdoses and deaths from medical conditions resulting from chronic drug use. The drug-induced death rate for Rhode Island is more than double the Healthy People 2020 goal. The death rate increased across all counties between 2010 and 2016.

The Rhode Island drug-induced death rate is more than double the Healthy People 2020 goal

**Substance Use Disorder Measures
(Red = Higher than National Benchmarks)**

	Excessive Drinking (Adults)	Percent of Driving Deaths due to DUI	Drug-Induced Death Rate per Age-Adjusted 100,000
Bristol County	19.4%	NA	24.9
Kent County	19.9%	43.1%	28.9
Newport County	23.8%	44.0%	18.5
Providence County	17.8%	34.5%	30.1
Washington County	21.4%	50.0%	26.1
Rhode Island	17.4%	39.1%	28.0
United States	18.0%	29.0%	17.9
Healthy People 2020	NA	NA	11.3

Source: Centers for Disease Control and Prevention, 2014-2016 & 2016; National Highway Traffic Safety Administration, 2012-2016; Healthy People 2020



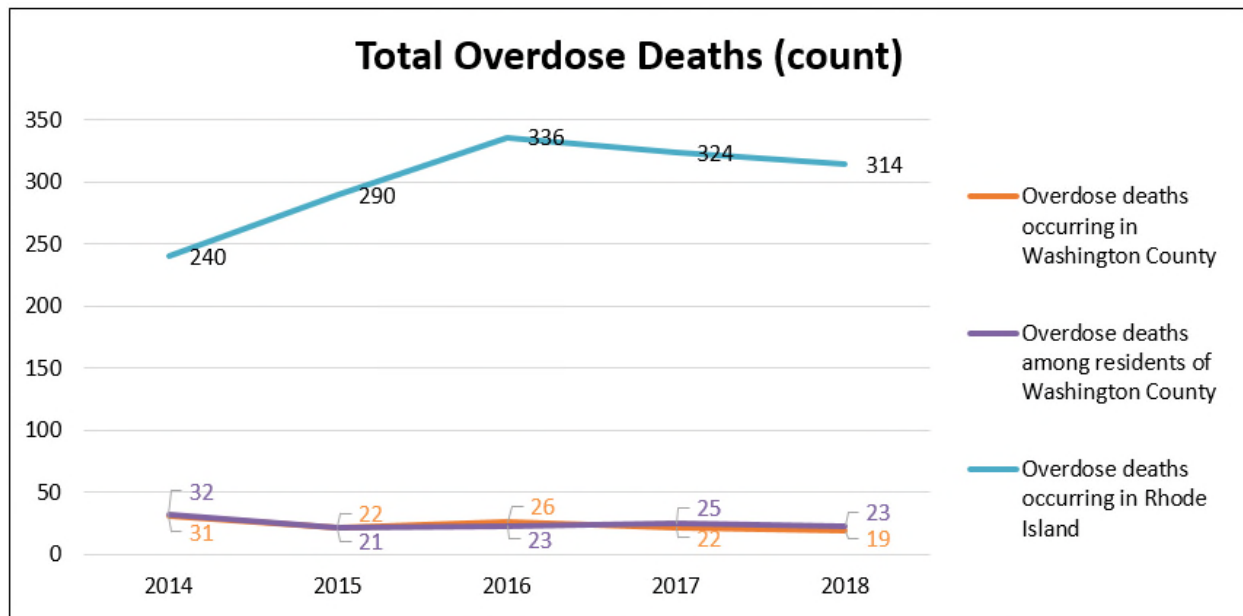
Source: Centers for Disease Control and Prevention, 2010-2012 – 2014-2016

*Data for Bristol County are suppressed for years prior to 2012-2014 due to low death counts.

In response to increasing overdose deaths across the state, Rhode Island implemented a data dashboard, PreventOverdoseRI.org, to track overdose deaths biannually. Per PreventOverdoseRI, “In 2014, over 240 Rhode Islanders lost their lives to overdose — that’s more than the number of people who died in car accidents, murders, and suicides combined.” In 2018, the number of overdose deaths increased to 314.

Although the number of deaths due to overdose in Washington County for a single year may appear to be a relatively small number, each incident has an impact on the community. The number of overdose deaths among Washington County residents has been stable over the past four years at approximately 21 to 25 deaths annually. Of note is that the number of overdose deaths occurring in Washington County has been decreasing and is lower than the number of deaths among residents, indicating that more residents are dying outside of the county.

The number of overdose deaths among Washington County residents has been stable, but the number of overdose deaths occurring in Washington County has declined



Source: Rhode Island Department of Health, 2014-2018

Accidental Drug Overdose Deaths in 2018

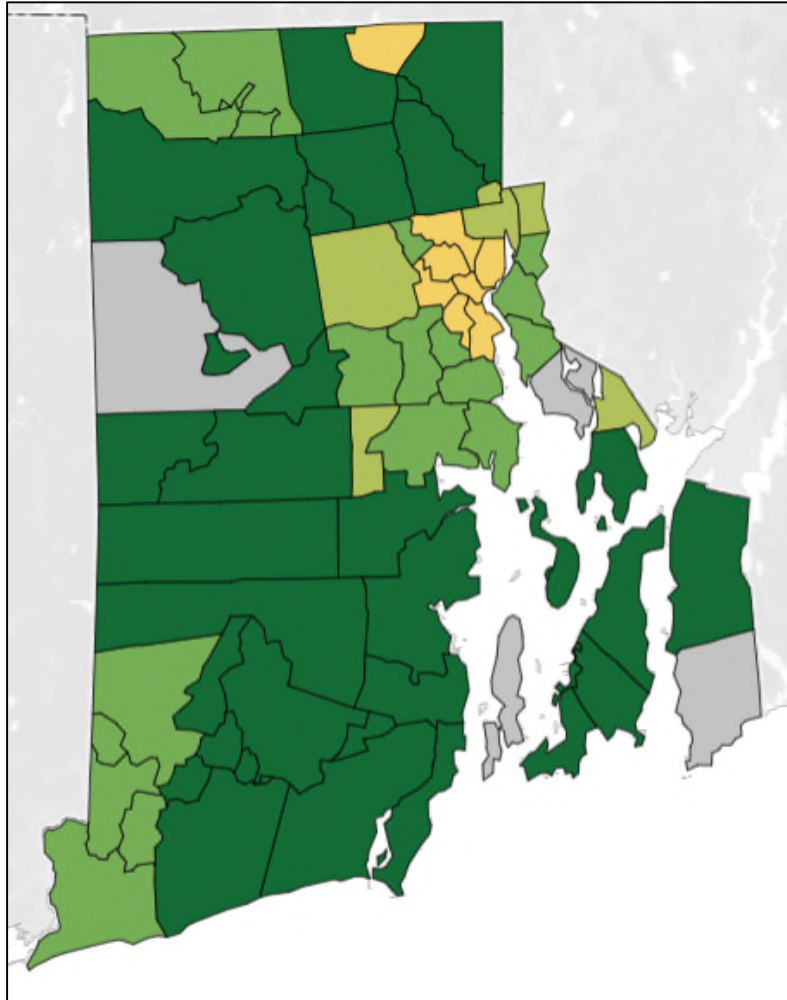
	Resident Rate per 10,000 Population
Washington County	1.8
Rhode Island	2.6

Source: Office of State Medical Examiners, Rhode Island Department of Health, Center for Health Data & Analysis, 2018

Overdose death data were analyzed as a five-year aggregate to illustrate more reliable counts and rates. The following map depicts overdose deaths per 100,000 population by city/town for 2014 to 2018. Towns in Washington County primarily had a rate of death due to overdose of 10-20 per 100,000 people. Westerly and Hopkinton had the highest rates of death in Washington County and the 9th and 10th highest rates of death statewide, respectively.

Westerly and Hopkinton had the 9th and 10th highest overdose death rates in the state, respectively, for 2014-2018

Overdose Death Rate per 100,000 by Rhode Island City/Town



Source: Rhode Island Department of Health, 2014-2018

Overdose Death Rate per 100,000 Legend

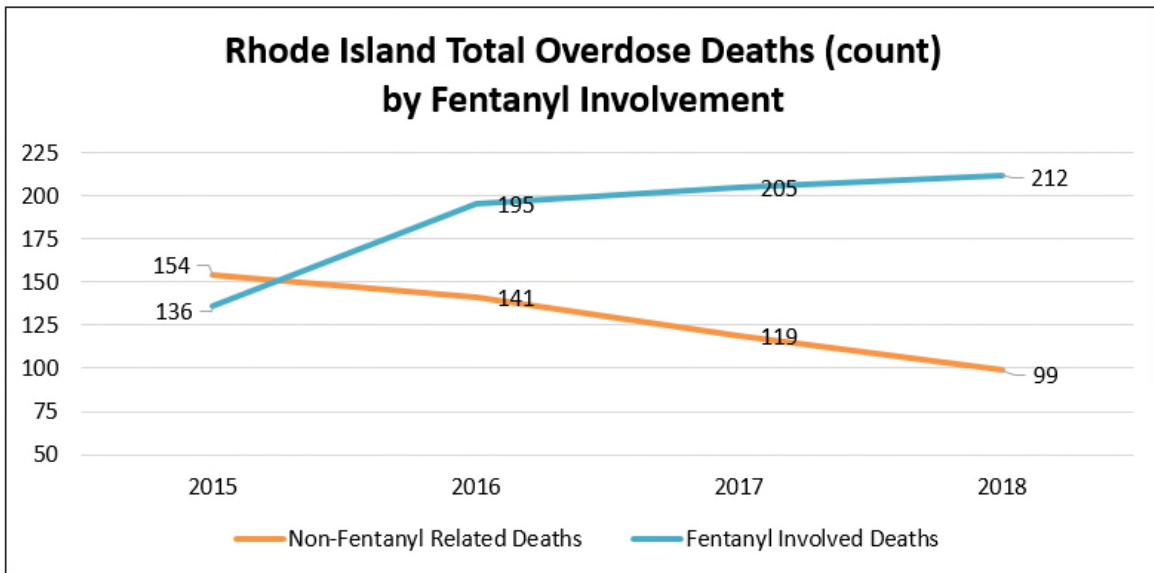
10 to 20	30 to 40	Rate Suppressed
20 to 30	More than 40	

Overdose Death Rate per 100,000 for Rhode Island Cities/Towns with Highest Death Rate, 2014-2018

	Death Rate
Woonsocket	48.6
Providence	44.7
Central Falls	37.2
West Warwick	34.9
Pawtucket	33.2
Johnston	32.0
Warren	32.0
Warwick	27.1
North Providence	26.2
East Providence	25.5
Westerly	24.6
Hopkinton	22.0

Source: Rhode Island Department of Health, 2014-2018

Fentanyl is a significant contributing factor in death from overdose. With the rise in the presence of fentanyl in illicit drugs, there has been a commensurate rise in the number of overdose deaths from opiates.



Source: Rhode Island Department of Health, 2015-2018

*From January to March 2019, there were 58 non-fentanyl related deaths and 13 fentanyl-involved deaths in Rhode Island.

In 2018, 1,365 Naloxone kits were distributed throughout Washington County to first responders, individuals, family members, and key community institutions such as libraries. A total of 115 kits were confirmed as used in Washington County in 2018.

The number of administered kits includes naloxone doses given by EMS, police, and friends or family members to individuals brought to an Emergency Department (ED) and reported through

Rhode Island’s 48-Hour Reporting System. They do not include unreported kits administered by community members, friends, and family.

Distributed Naloxone Kits by Year

	2016	2017	2018
Washington County	712	519	1,365
Rhode Island	6,341	7,798	16,771

Source: Rhode Island Department of Health, 2016-2018

Naloxone Administration by Year

	2016	2017	2018
Washington County	119	107	115

Source: Rhode Island Department of Health, 2016-2018

When EMS services use Narcan to revive a patient, they must report basic details regarding the location, characteristics of the person, and the amount of Narcan used. The following table lists the number of opioid overdose-related EMS runs in Washington County by year. The data demonstrates the impact of the increase in the presence of fentanyl in 2018.

Opioid Overdose-Related EMS Runs in Washington County by Year

	Total EMS Runs
2016	97
2017	91
2018	103

Source: Rhode Island Department of Health, 2016-2018

When the number of EMS calls per year is broken down by gender, men are two times as likely to overdose as women, consistent with the state overall. Statewide, the number of females who needed EMS services for an overdose increased annually.

Opioid Overdose-Related EMS Runs by Gender by Year

	Washington County		Rhode Island	
	Male	Female	Male	Female
2016	69%	31%	69%	31%
2017	77%	23%	69%	31%
2018	69%	31%	67%	33%
2019*	74%	26%	66%	34%

Source: Rhode Island Department of Health, 2016-2019

*Data are provided through April 2019.

The table below breaks down opioid overdose-related EMS runs by age for Washington County and Rhode Island for 2018 and 2019. The data indicate that overdose impacts people of all ages. The majority of people experiencing overdose in Washington County and Rhode Island are adults ages 25 to 34.

Opioid Overdose-Related EMS Runs by Age by Year

	Washington County		Rhode Island	
	2018	2019*	2018	2019*
15-24 years	17%	20%	11%	15%
25-34 years	38%	43%	34%	32%
35-44 years	15%	14%	22%	20%
45-54 years	14%	NA	15%	16%
55+ years	17%	NA	17%	16%

Source: Rhode Island Department of Health, 2018-2019

*Data are provided through April 2019. Data for adults age 45 or over are not available due to low counts.

The effects of Narcan are shorter than the effects of opiates. When Narcan wears off, in many cases, people return to the crisis state created by overdose. Therefore, every person experiencing overdose, even when revived with Narcan, should go to the ED.

The data below reflect overdose-related ED visits reported to R23-1-OPIOID, an anonymous, mandated reporting system. The towns of Westerly and Exeter are both in Washington County and had a rate of overdose-related ED visits of more than 400 per 100,000, among the highest in the state.

Exeter and Westerly had the 7th and 8th highest overdose-related ED visit rate in the state, respectively, for Feb. 2016-Apr. 2019

Overdose-Related ED Visits Rate per 100,000 for Rhode Island Cities/Towns with a Rate >400 per 100,000

	Visit Rate
Providence	793.5
Woonsocket	746.5
West Warwick	656.6
Pawtucket	594.9
Warwick	548.4
Cranston	495.0
Exeter	484.6
Westerly	478.2
Warren	412.6
Central Falls	401.7

Source: Rhode Island Department of Health, February 2016-April 2019

The BHDDH defines recovery residences as, “A sober, safe, and healthy living environment that promotes recovery from alcohol and other drug use and associated problems.” There are 40 certified recovery residences in Rhode Island, documented by RICARES (aka Rhode Island Recovery Community Organization). Uncertified

Only one licensed recovery residence is located in Washington County and serves males only

recovery residences are not listed or tracked by a state agency and are therefore not reflected in the data in this report. One licensed recovery residence is available in Washington County, and it serves males only.

Babies exposed to opiates in the womb, who present with symptoms of withdrawal after birth, have often been labeled as having neonatal abstinence syndrome (NAS). Because the symptoms of NAS often occur after the baby has been discharged from the hospital and are often difficult to identify, the incidence of NAS is difficult to accurately capture. Additionally, a diagnosis of NAS can be stigmatizing to mother, baby, and family, creating a barrier to pregnant women reporting NAS or accessing recovery support for their child.

**Neonatal Abstinence Syndrome
per 10,000 Delivery Hospitalizations**

	2013 – 2018 NAS Rate
Washington County	133.9
Rhode Island	96.1

Source: Rhode Island Department of Health, 2013-2018

Youth Behavioral Health

According to the Rhode Island Department of Health, 19% of statewide children ages 6 to 17 have a diagnosable mental health problem. At the time of the last CHNA, the Rhode Island Department of Health reported that in 2013, 2,737 youth were hospitalized across five hospitals with a primary diagnosis of mental disorder, an increase of 53% from 2003. The number of hospitalizations among children decreased from 2013 to 2016, but it is on the rise again, as shown in the graph below.

19% of Rhode Island youth ages 6-17 have a diagnosable mental health problem

**Emergency Care for Primary Diagnosis of Mental Disorder,
Children Under Age 18, Rhode Island, 2007-2016***



Source: Rhode Island Department of Health, 2007-2016

*Data reflect the number of visits or hospitalizations, not children. Children may have had more than one visit or hospitalization.

Child mental health services are often fragmented and/or unavailable in a timely manner. According to the Rhode Island Department of Health, in 2017, 55% of children ages 3 to 17 who needed mental health services had a problem obtaining care.

More than half of Rhode Island youth ages 3-17 who needed mental health services had trouble obtaining care

“In Federal Fiscal Year (FFY) 2017, 462 Rhode Island children and youth awaited psychiatric inpatient admission for an average of four days on medical floors at Hasbro Children’s Hospital. This is up from 212 children and three days in FFY 2016. Also during that time, an average of nine children per day were ready to leave the psychiatric hospital (up from the FFY 2016 average of six kids per day), but were unable due to a lack of step-down availability or there being no other safe placement (including at home).”

Bradley Hospital and Butler Hospital specialize in providing child psychiatric care. The following table shows the number of children under age 19 treated at either hospital by service type for FFY2017. The most common diagnoses among children treated in the inpatient setting were depressive disorders, anxiety disorders, adjustment disorders, bipolar disorders, and schizophrenia.

Children Under Age 19 Treated at Rhode Island Psychiatric Hospitals (FFY2017)

	Bradley Hospital General Psychiatric Services		Bradley Hospital Developmental Disabilities Program*		Butler Hospital Adolescent Psychiatric Services	
	# Treated	Average Length of Stay	# Treated	Average Length of Stay	# Treated	Average Length of Stay
Inpatient	791	21 days	116	38 days	509**	8 days
Residential	41	235 days	34	238 days	NA	NA
Partial Hospitalization	824	20 visits	102	20 visits	166	5 visits

Source: Rhode Island Department of Health, October 1, 2016-September 30, 2017

*The Bradley Hospital Developmental Disabilities Program offers specialized inpatient and residential services to children and adolescents who show signs of serious emotional and behavioral problems in addition to developmental disabilities.

**An additional 81 youth were treated in adult programs.

Young people who consistently feel depressed or sad may be at risk for self-harm and risky behaviors, including committing suicide. At the time of the last CHNA, the Department of Health reported that in 2013, 14% of Rhode Island high school students reported attempting suicide. In 2017, the percentage of students reporting an attempted suicide decreased to 11%. Between 2012 and 2016, 22 youth under the age of 20 died due to suicide.

The percentage of high school students reporting an attempted suicide decreased since the 2016 CHNA from 14% to 11%

Teen alcohol and drug use is both a symptom and a risk factor for increased injury, depression, and poor health. The following table depicts current substance use among Rhode Island high school students. The percentage of students reporting alcohol and marijuana use decreased

from the 2016 CHNA. Students are less likely to use alcohol or misuse prescription drugs compared to the nation, but more likely to use marijuana.

Current Substance Use among Rhode Island High School Students

	Alcohol Use	Marijuana Use	Prescription Drug Misuse
2013 Rhode Island	26%	34%	NA*
2017 Rhode Island	23%	23%	4%
2017 United States	30%	20%	14%

Source: Rhode Island Department of Health, 2013-2014 and 2017

*A change in methodology occurred between 2013 and 2017. A benchmark comparison is not reported.

Maternal and Child Health

Total Births and Teen Pregnancy

A total of 4,277 births occurred in Washington County between 2012 and 2016. Of the total births, approximately 88% were to White, non Hispanic mothers; 159 births were to teen mothers between the ages of 15 and 19.

Births in Rhode Island per 1,000 Females Ages 15-44, 2012-2016

	Total Births		Non-Hispanic White Births		Non-Hispanic Black Births		Latina Births	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Bristol County	1,690	36.8	1,535	34.0	21	144.8*	59	68.2
Kent County	7,853	53.5	6,830	46.5	124	43.9	466	69.3
Newport County	3,416	45.3	2,676	38.0	179	51.5	389	98.5
Providence County	36,351	53.6	17,219	36.2	3,910	59.2	11,625	81.2
Washington County	4,277	35.2	3,741	32.2	70	37.1	178	40.0
Rhode Island	53,756	50.1	32,143	37.6	4,309	57.9	12,729	80.0

Source: Rhode Island Department of Health, 2012-2016

*This rate is considered statistically unstable; please interpret with caution.

Teen Births (Ages 15-19) by County, 2012-2016

	Birth Count	Birth Rate per 1,000
Bristol County	45	4.5
Kent County	303	12.5
Newport County	112	8.2
Providence County	2,361	19.3
Washington County	159	5.5

Source: Rhode Island Department of Health, 2012-2016

Maternal and Infant Health Outcomes

Engaging in prenatal care early in pregnancy increases the chances that a mother and her baby will have a healthy pregnancy and a healthy birth. Entry into prenatal care after the first trimester can suggest barriers to care such as lack of information, lack of access to healthcare or transportation, or behavioral health barriers. Rhode Island and all five counties meet the Healthy People 2020 goal of 77.9% of mothers accessing prenatal care in the first trimester. Washington County leads the state for nearly all measures on prenatal care and birth outcomes.

Washington County leads the state for nearly all measures on prenatal care and birth outcomes and meets Healthy People 2020 goals

Delayed prenatal care can contribute to low birth weight and preterm births. Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces, and is often a result of premature birth, fetal growth restrictions, or birth defects. Preterm birth is defined as birth before 37 weeks of pregnancy, and can contribute to infant death or disability. All Rhode Island counties meet the Healthy People 2020 goal for preterm births, and all counties except Providence meet the goal for low birth weight.

Breastfeeding is recommended to ensure healthy nutritional intake for babies and to promote bonding between mother and child. Washington County is the only county to meet the Healthy People 2020 goal for breastfeeding at the time of birth.

Maternal and Infant Health Indicators
(Green = Positive Finding Compared to State or National Benchmarks)

	Delayed Prenatal Care	Preterm Births	Low Birth Weight	Breastfeeding
Bristol County	12.4%	7.5%	5.7%	79.5%
Kent County	12.3%	8.3%	6.8%	75.5%
Newport County	11.6%	8.7%	6.8%	73.2%
Providence County	16.1%	9.4%	8.0%	72.7%
Washington County	8.5%	7.5%	6.2%	83.7%
Rhode Island	14.5%	9.0%	7.5%	77.0%
White	12.4%	6.4%	6.7%	NA
Latina	17.4%	8.1%	8.2%	NA
Black	21.9%	9.2%	11.3%	NA
Asian	26.5%	7.2%	13.1%	NA
Native American	15.6%	8.9%	10.3%	NA
Healthy People 2020	22.1%	9.4%	7.8%	81.9%

Source: Rhode Island Department of Health, 2012-2016

Analyzing maternal and infant health outcomes by town helps to illuminate disparities that can reflect wider health and social disparities among populations. The following tables depict maternal and infant health outcomes for Washington County towns in descending order of total births.

2012-2016 Washington County Infant Births by Maternal Characteristics and Town
Yellow = areas of opportunity

	Total Births	Births per 1,000 Girls 15-19 years	Delayed Prenatal Care	Breastfeeding at Time of Birth	Preterm Births	Low Birth Weight
North Kingstown	1,081	7.2	9.8%	85%	8.2%	7.0%
Westerly	873	18.6	6.0%	83%	5.5%	5.3%
South Kingstown	854	1.6^	9.1%	87%	7.7%	6.3%
Narragansett	330	NA (n=5)	8.2%	86%	6.7%	6.4%^
Richmond	307	11.2^	7.2%^	86%	9.1%	6.2%^
Hopkinton	288	NA (n=8)	9.7%	85%	8.0%	6.9%^
Exeter	246	10.7^	11.0%	85%	6.5%^	5.3%^
Charlestown	238	20.1^	5.9%^	83%	9.2%^	NA
New Shoreham	58	NA (n=1)	NA	87%	NA	NA
Rhode Island	53,752	15.0	14.5%	77%	9.0%	7.5%

Source: Rhode Island Department of Health, 2012-2016

^The data are statistically unstable and rates or percentages should be interpreted with caution

Charlestown and Westerly have the highest number of teen births at 20.1 and 18.6 respectively per 1,000 teens. Due to low counts, Charlestown data are statistically unstable and should be interpreted with caution. Both towns also have the lowest percentage of mothers (83%) who breastfeed, which could be related to the higher percentage of teen mothers.

About 10% of mothers in Exeter, North Kingstown, Hopkinton, and South Kingston do not receive prenatal care within the first trimester. Efforts focused on increasing access to prenatal care would be valuable in North Kingstown which has the highest number of births in the county and where birth outcomes for preterm and low birth weight babies are also among the highest. Charlestown, Richmond, South Kingstown, and Hopkinton also have more preterm or low weight births. Focused efforts on these towns will help promote health equity among maternal and child health measures.

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) have significant negative impact on the mental, physical, and emotional development of children, and contribute to risky health behaviors, poor health outcomes, and premature death. The following sections highlight the prevalence of several life events that may contribute to ACEs in children.

According to the 2018 Rhode Island Kids Count Factbook, “Children who are exposed to domestic violence are more likely to be victims of child abuse and neglect than those who are not.” In 2015, there were

About ¼ of Westerly and New Shoreham domestic violence incidents resulting in arrest had a child present at the time of the event

5,553 domestic violence incidents resulting in arrests in Rhode Island, an increase from 2014 and 2013. Approximately 27% of the incidents in 2015 had a child present; 40% of these incidents originated in the four core cities.

**Domestic Violence Incidents Resulting in Arrests: Top 10 Cities/Towns in Rhode Island
Shown in Descending Order by Number of Incidents**

	Total Domestic Violence Incidents	Total Incidents with Children Present	Percent with Children Present
Providence	942	290	31%
Pawtucket	764	204	27%
Woonsocket*	362	86	24%
Cranston	357	86	24%
Warwick	310	89	29%
East Providence	271	83	31%
Westerly	268	71	26%
New Shoreham	207	61	29%
North Providence	187	54	29%
Coventry	125	45	36%
Four Core Cities	2,215	621	28%
Rhode Island	5,553	1,549	28%

Source: Rhode Island Department of Health, 2015

*Data for Woonsocket are provisional.

The Rhode Island Department of Health defines child abuse and child neglect as follows.

- Child abuse includes physical, sexual, and emotional abuse.
- Child neglect includes emotional, educational, physical, and medical neglect, as well as a failure to provide for basic needs.

The Department of Health reported that, “In 2017 in Rhode Island, there were 2,404 indicated investigations of child abuse and neglect involving 3,357 children. About half (52%) of the victims of child abuse and/or neglect were young children under age six and one-third (34%) were ages three and younger.” An indicated investigation is defined as one in which there is substantial evidence of the alleged abuse or neglect.

Hopkinton and Westerly are among the top 10 cities or towns in Rhode Island for investigations of child abuse or neglect

Hopkinton and Westerly are among the top 10 cities or towns in Rhode Island for indicated investigations of child abuse or neglect.

**Indicated Investigations of Child Abuse or Neglect: Top 10 Cities/Towns in Rhode Island
Shown in Descending Order by Rate of Victims per 1,000 Children**

	Total Number of Indicated Investigations of Child Abuse or Neglect	Rate of Indicated Investigations per 1,000 children	Total Number of Victims of Child Abuse or Neglect	Rate of Child Abuse or Neglect Victims per 1,000 children
Woonsocket	226	22.9	355	35.9
Central Falls	104	18.4	174	30.8
Newport	77	18.9	114	27.9
West Warwick	87	15.1	149	25.9
Pawtucket	285	17.2	400	24.1
Providence	540	13.0	805	19.3
Hopkinton	29	15.7	34	18.4
Westerly	52	10.9	81	16.9
Bristol	45	12.4	57	15.7
Warren	19	9.8	27	13.9
Four Core Cities	1,155	15.7	1,734	23.5
Remainder of State	1,170	7.8	1,526	10.2
Rhode Island	2,404	10.7	3,357	15.0

Source: Rhode Island Department of Health, 2017

The following table shows the number of emergency department visits, hospitalizations, and deaths due to child abuse and/or neglect in Rhode Island. The number of emergency department visits due to child abuse/neglect declined from 2012 to 2016. The number of hospitalizations and deaths has been variable and accounted for 139 total hospitalizations and six child deaths from 2012 to 2016.

**Rhode Island Emergency Department Visits, Hospitalizations, and Deaths
Due to Child Abuse and/or Neglect**

	# of Emergency Department Visits*	# of Hospitalizations*	# of Deaths**
2012	153	25	1
2013	133	34	3
2014	102	44	1
2015	92	28	0
2016	79	8	1
Total	559	139	6

Source: Rhode Island Department of Health, 2012-2016. Data for 2015 and 2016 are provisional.

*The number of Emergency Department visits and the number of hospitalizations include both suspected and confirmed assessments of child abuse and neglect.

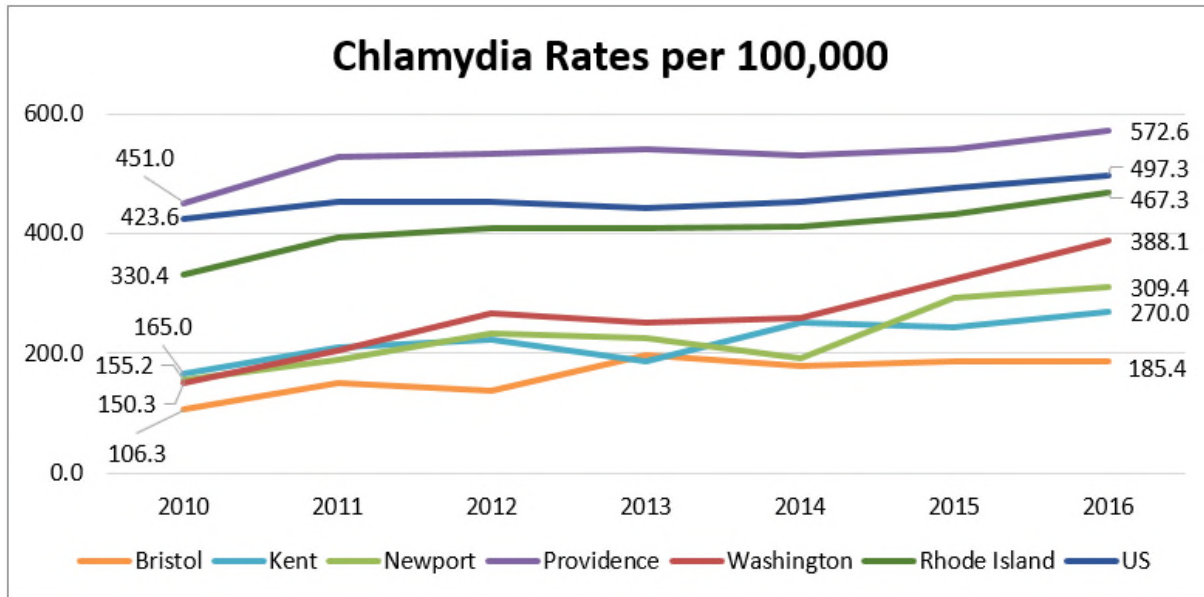
**Due to a change in data source, data for child deaths due to child abuse and/or neglect are only comparable with Factbooks since 2013.

Reportable Diseases

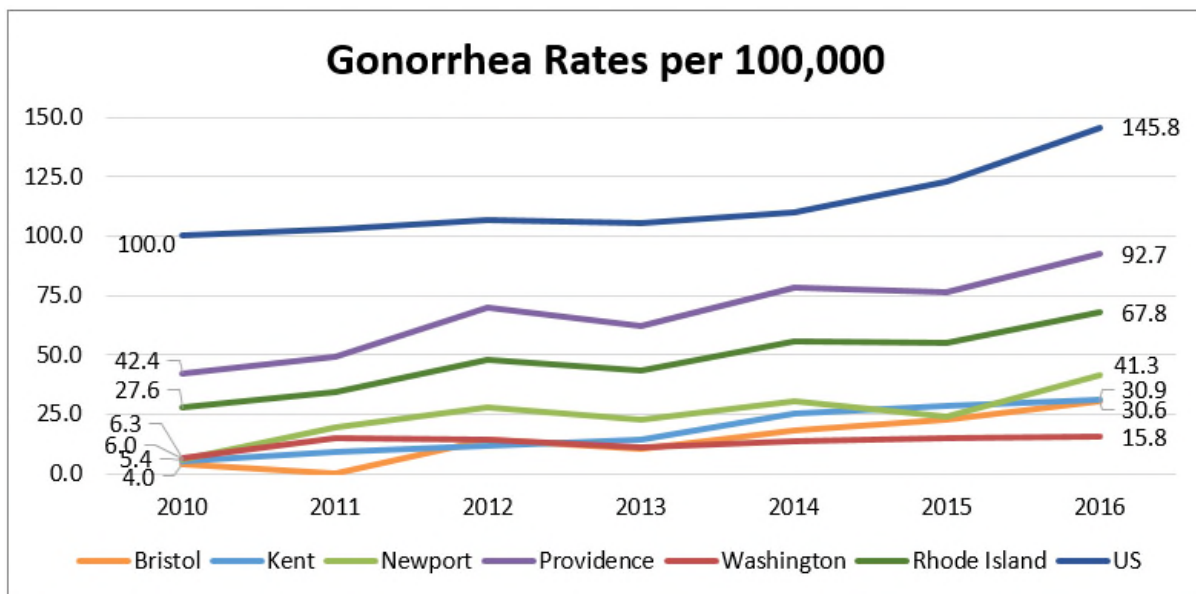
Sexually Transmitted Infections

The rate of infection of sexually transmitted infections (STIs) including chlamydia, gonorrhea, and HIV has been increasing across the nation since 2010. As highly communicable conditions, STIs require reporting to the CDC and state and local health bureaus upon detection. The rate of chlamydia and gonorrhea infections in Rhode Island fall below national infection rates, although both STIs have increased across all counties between 2010 and 2016.

Consistent with national trends, chlamydia and gonorrhea infection rates increased across all counties



Source: Centers for Disease Control and Prevention, 2010-2016



Source: Centers for Disease Control and Prevention, 2010-2016

The following table shows HIV prevalence for all five Rhode Island counties compared to the state and the nation. There are currently 2,357 people living with HIV in Rhode Island. Providence County is the only county with a higher HIV prevalence rate than the state and is similar to the national rate.

**2015 HIV Prevalence
(Green = Lower than the State or Nation)**

	HIV Prevalence per 100,000	HIV Cases
Bristol County	88.5	38
Kent County	100.2	143
Newport County	148.7	108
Providence County	346.1	1,863
Washington County	63.6	71
Rhode Island	259.5	2,357
United States	362.3	971,524

Source: Centers for Disease Control and Prevention, 2015

Child Lead Screening and Poisoning

The CDC estimates that at least four million households have children living in them that are being exposed to high levels of lead. Lead exposure increases the risk for central nervous system damage, slowed growth and development, and hearing and speech problems.

According to the Rhode Island Department of Health, 729 or 7% of statewide children eligible to enter kindergarten in fall 2019 who were screened for lead poisoning had elevated blood lead levels. The number of children with elevated blood lead levels has steadily declined in all areas of Rhode Island.

10% of screened children in core cities have elevated blood lead levels; Providence County has the oldest housing stock in the state, increasing the likelihood for lead paint exposure

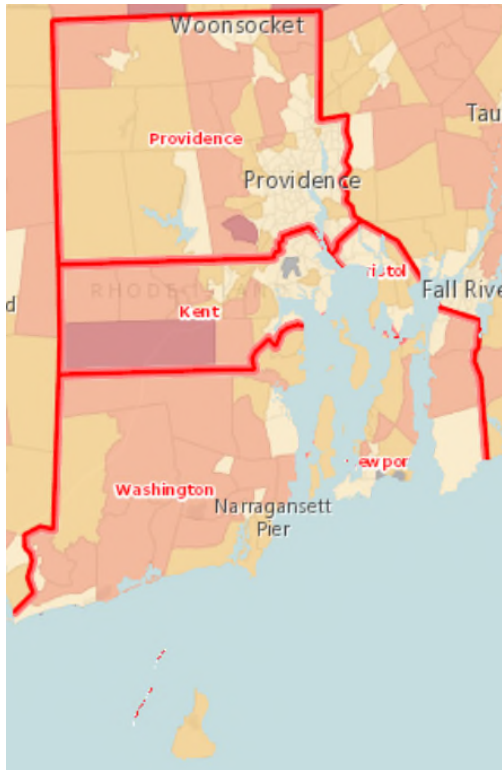
The following table depicts towns with a higher percentage of pre-kindergarten children with confirmed elevated blood lead levels compared to the state. All towns except Warren are located in Providence County.

Lead Poisoning among Children Eligible to Enter Kindergarten in Fall 2019

	Number Tested for Lead Poisoning	Confirmed Elevated Blood Lead Levels	
		Number	Percent
Providence	2,573	292	11.3%
Central Falls	300	32	10.7%
Pawtucket	841	73	8.7%
East Providence	469	40	8.5%
Warren	106	9	8.5%
Rhode Island	10,689	729	6.8%

Source: Rhode Island Department of Health, 2018

Lead paint was frequently used to paint the inside and outside of houses until 1978 when it was banned in the US due to its association with lead poisoning. As a result, homes built before 1978 are at risk of having lead paint inside, a leading exposure pathway for children. Housing stock in Rhode Island is older than that of the US with half of homes across the state built before 1960. Providence County has the oldest housing stock with nearly 60% of homes built before 1960.



Housing Units by Median Year Built and Census Tract, US Census Bureau 2012-16

- Newer than 1985
- 1976 - 1985
- 1966 - 1975
- Older than 1966
- No Data or Data Suppressed
- Report Area

Key Informant Survey Results

Background

A Key Informant Survey was conducted with community stakeholders to solicit information about community health needs. A total of 45 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; community planners; policy makers and elected officials; and others representing diverse populations including minority, low-income, and other underserved or vulnerable populations.

These “key informants” were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and recommendations for community health improvement.

Survey Participants

HARI and the CHNA hospitals solicited input from community partners across the state to participate in the survey. The table below shows the breakdown of participation by county. Many participants indicated that they served multiple counties. “Other” areas served as indicated by respondents included Bristol County in Massachusetts, the Blackstone Valley Region, and Pawtucket. A list of the represented community organizations and the key informants’ respective role/title is included in Appendix B. Key informant names are withheld for confidentiality.

Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Providence County	77.8%	35
Kent County	57.8%	26
Washington County	51.1%	23
Bristol County	44.4%	20
Newport County	33.3%	15
Other	11.1%	5

*Key informants were able to select multiple counties. Percentages do not add up to 100%.

Participants were asked to indicate if their organizations focused on any specific populations. About one-third of key informants indicated that they served all populations. As demonstrated in the table below, survey participants represent the interests of a broad mix of community stakeholders, including children and youth, families, low income/poor, racial and ethnic minorities, among other underserved populations. “Other” populations as indicated by respondents included domestic violence victims and survivors, individuals with substance use disorders, and individuals experiencing language and cultural barriers.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Children/Youth	60.0%	27
Families	60.0%	27
Low Income/Poor	60.0%	27
Women	51.1%	23
Latinx	48.9%	22
Seniors/Elderly	46.7%	21
Men	44.4%	20
Black/African American	37.8%	17
Immigrant/Refugee	37.8%	17
Uninsured/Underinsured	37.8%	17
Disabled	35.6%	16
Homeless	35.6%	16
Not Applicable (Serve All Populations)	31.1%	14
LGBTQ+ Community	28.9%	13
Asian/Pacific Islander	22.2%	10
American Indian/Alaska Native	17.8%	8
Other	8.9%	4

*Key informants were able to select multiple population groups. Percentages do not add up to 100%.

Health Perceptions

Choosing from a list of health issues, key informants were asked to rank order what they perceived as the top three health concerns impacting the population(s) they serve. An option for “other” was also provided. A following question asked participants to similarly rank order what they saw as the top three contributing factors to the health concerns they had indicated in the previous question. The top five responses for each question are depicted in the tables below. The tables are rank ordered by the number of informants that selected the issue within their top three choices.

More than one-third of informants saw mental health conditions as the No. 1 health concern in their community and 67% chose it among their top three community health concerns. Correlation between these data demonstrates more consensus around this issue than others on the list. More than 50% of informants selected substance abuse among their top three choices. Overweight/obesity and diabetes rounded out the top three health concerns with about 40% of informants' selecting these issues.

More than 37% of key informants saw mental health conditions as the No. 1 health concern; 67% chose it among their top three selections

Top Health Concerns Affecting Residents*

Rank	Health Concern	Informants Selecting as the No. 1 Health Concern		Informants Selecting Among Top 3 Health Concern	
		Percent	Count	Percent*	Count
1	Mental health conditions	37.2%	16	67.4%	29
2	Substance abuse	18.6%	8	53.5%	23
3	Overweight/Obesity	4.7%	2	41.9%	18
4	Diabetes	16.3%	7	39.5%	17
5	Other**	4.7%	2	14.0%	6
5	Cancers	0.0%	0	14.0%	6
5	Heart disease and stroke	0.0%	0	14.0%	6

*Key informants were able to select multiple health concerns. Percentages do not add up to 100%.

**Other responses: lead exposure, and affordable, healthy housing.

More than half (54.5%) of key informants saw poverty among the top three contributing factors to health concerns, with 25% selecting it as a the No. 1 contributor. There was less consensus among informants regarding other factors that most contribute to community health concerns. Health habits and ability to afford healthcare received the next highest votes after poverty.

Poverty was identified as the top contributing factor to community health concerns

Top Contributing Factors to Community Health Concerns

Rank	Contributing Factor	Informants Selecting as the No. 1 Contributor		Informants Selecting Among Top 3 Contributor	
		Percent	Count	Percent*	Count
1	Poverty	25.0%	11	54.5%	24
2	Health habits (diet, physical activity)	11.4%	5	29.5%	13
3	Ability to afford healthcare (doctor visits, prescriptions, deductibles, etc.)	13.6%	6	27.3%	12
4	Drug/Alcohol use	2.3%	1	22.7%	10
5	Stress (work, family, school, etc.)	6.8%	3	18.2%	8
5	Other**	4.5%	2	18.2%	8
5	Lack of preventive healthcare (screenings, annual check-ups)	2.2%	1	18.2%	8

*Key informants were able to select multiple contributing factors. Percentages do not add up to 100%.

**Other responses: Social determinants of health, sedentary lifestyles, too much screen time, racism, sexism, mental health outpatient services for children and adolescents not requiring home-based services, and inadequate Medicaid funding for care.

Key Informant Comments

Informants' were invited to provide freeform comments to expand upon their quantitative responses to the previous questions. Verbatim comments are included below.

- > *"...Planning efforts involving all stakeholders and communities should be strengthened to decrease duplication of effort, increase efficiencies across the state, maximize use of funding, and centralize systems of care. The current system is fragmented and confusing to patients, clients, community stakeholders, and providers."*
- > *"Progress is being made in some of these areas through the local Health Equity Zone (HEZ) and the work of many partners to increase access to healthy foods, exercise, asthma, recreation, etc."*
- > *"There is a large disparity between those who can and cannot afford healthcare. Those with Medicaid have increased barriers. However, more and more individuals who have private insurance are also finding it difficult to manage their health due to high premiums, deductibles, and co-pays. People are having to choose between paying rent, buying food, and costs associated with managing their healthcare."*
- > *"There is a dearth of community based care for mental health and substance abuse." [in Washington County]*
- > *"We need a greater focus on "health" over "healthcare." Specifically, being holistic and addressing trauma in our communities. Health equity and addressing social determinants of health require us to seek solutions across sectors with community engagement and direct investment in elements of social determinants of health."*
- > *"Children do not spend enough time with unstructured play outdoors. Most residents do not spend enough time outdoors in nature even though there are many places where they can do this. Stress permeates our culture and people do not learn strategies for managing stress and balancing their lives."*
- > *"In the nursing home community, the individuals we care for typically suffer from dementia or other age-related disability. Depression is also a chronic problem, because these individuals have experienced so much loss; the majority of them have outlived their spouse and/or friends. They have lost their independence, their good vision and hearing, their health, etc. It's a very challenging time of life, whether they receive care at home, in assisted living, or in a nursing facility. The state has sufficient nursing facility beds, but those facilities are financially starved due to Medicaid funding shortfalls. This means patients must be in semi-private rooms, and staff are too busy to provide the relaxed and friendly care they deserve. They receive good primary care, but there are SERIOUS shortfalls in dental and behavioral healthcare for nursing home residents."*
- > *"Washington County has pockets of poverty that are overshadowed by high income areas."*
- > *"There aren't enough providers because the reimbursement rates are so low and [rates] don't take into account the social factors contributing to missed appointments, etc."*

- > *“Families are facing multiple stressors. Availability of providers, the ability to pay, availability of alcohol and drugs, lack of adequate housing and transportation, limited educational level, low community connectivity, low understanding of effects of school truancy/absenteeism/academic failure on a child's future, long history of trauma in our communities.”*
- > *[In Washington County], “We have lost services in the last 10 years. We no longer have a true community mental health agency, but an off-shoot of Lifespan that has NO out-patient clinical services in place for children and adolescents other than in-home services which are needed by very few children. The insurance companies do not provide adequate reimbursement to providers, so many do not take insurance. The State of Rhode Island joined our community mental health services with Kent County and we no longer have a fulltime child and adolescent psychiatrist available. Ten years ago we had a full [complement] of children's services, including a partial hospital program. Now we overload the emergency rooms with patients....[they are] sent home with NO services and the problems continue!”*
- > *“The social and environmental determinants of health are the ground in which all of the health concerns occur. Hospitals should devote significant investment in the communities that are most affected by these determinants. Simply providing care when there are problems misses the point. The hospitals should support strategies, such as the Health Equity Zones, that are doing work in the community where 80-90% of health occurs. Healthcare is obviously critically important, but prevention is actually where we need to focus more of our resources. That is where we are going to address asthma, obesity, mental health concerns, diabetes, and other illnesses that are exacerbated and disproportionately affected by lack of employment, poor housing, etc., and fed by systemic racism.”*
- > *“The lack of specific ethnic data in certain categories, which may contribute to inaccurate generalization about health issues affect among Southeast Asians (SEA) in this state. A combination of cultural factors, including the violence and trauma-laden refugee experience following the Vietnam War, contributes to a higher risk of chronic illnesses and associated risk factors among SEA. A lack of ethnic-specific data collection and reporting on SEAs in Rhode Island makes it difficult to provide a clear snapshot of the health status of the SEA community. Areas such as mental health lack SEA specific data although the SEA refugee population has been historically afflicted with trauma and violence. However, data collected nationally and in other states show that the SEA community is disproportionately affected by cancer and hepatitis B and faces unique risks in term of heart disease. The majority of SEA health issues are associated with various barriers to healthcare access; low rates of preventative care to detect, monitor, and treat chronic and infectious diseases; and generally poor knowledge of important health issues.”*
- > *“Our community (East Bay) is very diverse economically and that makes it difficult to say that the region is served in any one way. Economics is the No.1 factor when it comes to the ability to meet the challenges of health concerns. That is not necessarily the same as*

poverty—it is the crunch of the working poor and lower level middle class. These families face increased stress that is a result of their economic situation that impacts food choices (e.g. fast food versus fresh food) that are not related to education or availability.”

Healthcare Access

Key informants were asked to rate their agreement to statements pertaining to access to care using a scale of (1) “strongly disagree” to (5) “strongly agree.”

Access to Healthcare Statements in Descending Order by Mean Score

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean Score
	(1)	(2)	(3)	(4)	(5)	
Residents have a regular primary care provider/doctor/practitioner that they go to for healthcare.	2.2%	20.0%	37.8%	33.3%	6.7%	3.22
Providers in the community are culturally sensitive to race, ethnicity, cultural preferences, etc. of patients.	2.2%	35.6%	33.3%	22.2%	6.7%	2.96
There are a sufficient number of providers that accept Medicaid/ Medical Assistance in the community.	11.1%	35.6%	35.6%	17.8%	0.0%	2.60
Residents have available transportation (public, personal, or other service) for medical appointments and other services.	8.9%	53.3%	22.2%	11.1%	4.4%	2.49
Residents have access to a consistent source of affordable healthy foods.	11.1%	57.8%	13.3%	13.3%	4.4%	2.42
There are a sufficient number of bilingual providers in the community.	15.6%	57.8%	20.0%	6.7%	0.0%	2.18

Access to adequate and timely health services is a key contributor to the health of a community. As shown in the table above, key informants were divided on a number of issues affecting residents’ access to care. Key informants were most affirmative with regard to residents’ access to a regular primary care provider. Survey respondents were most divided on the cultural sensitivity of providers with 38% disagreeing, 33% neutral, and 29% agreeing to the statement.

Key informants mostly disagreed or were neutral with regard to the number of Medicaid providers available in their communities. Only 18% “agreed” or “strongly agreed” that there were a sufficient number of providers that accept Medicaid. Most informants disagreed that residents had access to services {transportation (62%); healthy foods (69%) and bilingual providers (73%)}.

Provider Availability

Key informants were asked to rate their agreement to statements pertaining to the availability and accessibility of primary and specialty care providers using a scale of (1) “strongly disagree” to (5) “strongly agree.”

Healthcare Provider Availability and Accessibility

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean Score
Primary Care Services						
Residents receive care when they need it.	4.5%	27.3%	29.5%	31.8%	6.8%	3.09
There are a sufficient number of providers in the community.	14.0%	39.5%	11.6%	27.9%	7.0%	2.74
Specialty Care Services						
Residents receive care when they need it.	11.4%	38.6%	31.8%	18.2%	0.0%	2.57
There are a sufficient number of providers in the community.	20.9%	20.9%	27.9%	25.6%	4.7%	2.72
Dental Care Services						
Residents receive care when they need it.	11.4%	43.2%	27.3%	18.2%	0.0%	2.52
There are a sufficient number of providers in the community.	23.3%	20.9%	23.3%	30.2%	2.3%	2.67
Vision Care Services						
Residents receive care when they need it.	7.0%	30.2%	39.5%	23.3%	0.0%	2.79
There are a sufficient number of providers in the community.	4.8%	23.8%	40.5%	26.2%	4.8%	3.02
Mental Healthcare Services						
Residents receive care when they need it.	34.1%	38.6%	13.6%	13.6%	0.0%	2.07
There are a sufficient number of providers in the community.	34.9%	34.9%	18.6%	11.6%	0.0%	2.07
Substance Abuse Services						
Residents receive care when they need it.	20.5%	50.0%	11.4%	13.6%	4.5%	2.32
There are a sufficient number of providers in the community.	30.2%	39.5%	16.3%	11.6%	2.3%	2.16

Key informants were neutral or divided on many of the measures related to availability and accessibility of healthcare services. Most key informants took a neutral position on whether residents receive care when they need it, but the majority disagreed that there were a sufficient number of primary care providers in the community. With regard to specialty care, informants mostly disagreed that residents receive care when they need it, and mostly disagreed or were neutral that there were sufficient specialty providers in the community.

Key informants felt that residents do not receive dental care when they need it, and generally disagreed or were neutral as to sufficient providers available. Responses were similar with regard to vision care, with most informants indicating that residents do not receive care when they need it, while indicating neutral opinions on the availability of providers.

70% of key informants thought residents did not receive behavioral health services when they need it, and that there are not enough providers

The strongest consensus was with regard to mental healthcare and substance abuse services. Approximately 70% of informants “disagreed” or “strongly disagreed” that residents receive mental healthcare or substance abuse care when they need it and that there was not a sufficient number of these providers in the community.

Choosing from a list of specified reasons, key informants were asked to rank order what they perceived as the top three reasons that individuals who have health insurance do not receive regular care. An option for “other” was also provided. The top five responses are depicted in the table below and rank ordered by the number of informants that selected the reason among their top three choices.

Top Reasons Individuals with Health Insurance Do Not Receive Regular Care

Rank	Reason	Informants Selecting as the No. 1 Reason		Informants Selecting Among Top 3 Reasons	
		Percent	Count	Percent*	Count
1	Unable to afford care (copays, deductibles, prescriptions, etc.)	36.6%	15	61.0%	25
2	Challenges of navigating the healthcare system	12.2%	5	43.9%	18
3	Lack of transportation to access healthcare services	12.2%	5	34.1%	14
4	Awareness/Emphasis of preventive health measures	7.3%	3	29.3%	12
5	Providers not accepting insurance/new patients	4.9%	2	29.3%	12

*Key informants were able to select multiple reasons. Percentages do not add up to 100%.

“Unable to afford care” was selected as the No. 1 reason that insured individuals do not receive regular care with 37% selecting it as the No. 1 reason and 61% of respondents selecting it within their top three reasons. Higher consensus among this issue suggests that cost of care, not insurance access, is a larger barrier for residents to receive care.

37% of key informants identified “unable to afford care” as the top reason insured individuals do not receive regular care

“Challenges of navigating the healthcare system” was ranked second, above lack of transportation, awareness of preventive health measures, and providers accepting insurance or new patients. This ordering suggests that improving ease of accessing care could increase the frequency that residents access preventive care.

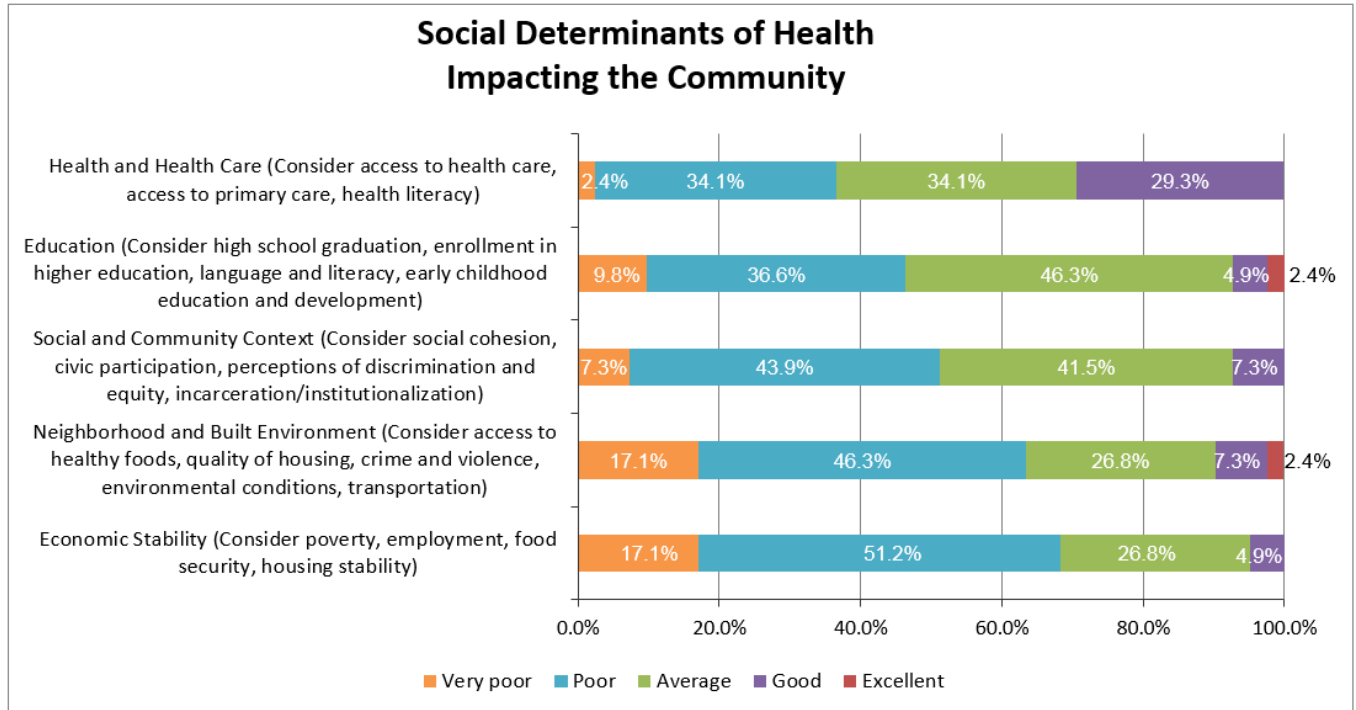
Social Determinants of Health

Healthy People 2020 defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, function, and quality of life outcomes and risks. Informants were asked to rate social determinants of health across five different dimensions: economic stability; education; health and healthcare; neighborhood and built environment; and social and community context using a scale of (1) “very poor” to (5) “excellent.”

The mean scores for each dimension are listed in the table below in rank order, followed by a graph showing the scoring frequency. Mean scores fell between 2.20 for “economic stability” and 2.90 for “health and healthcare,” with most respondents rating the listed social determinants as “poor” or “average.” Health and healthcare received the highest frequency of “good” scoring.

Social Determinants of Health Rating in Descending Order by Mean Score

Ranking	Social Determinant of Health	Mean Score
1	Health and Healthcare	2.90
2	Education	2.54
3	Social and Community Context	2.49
4	Neighborhood and Built Environment	2.32
5	Economic Stability	2.20



Survey participants were asked to provide insight into their scoring of the social determinants of health dimensions using a freeform response. Verbatim comments are listed below. As demonstrated by the comments, many key informants acknowledged a strong link between socioeconomic factors and health status.

- > *“Overall, Washington County looks good on most measures, except mental health where we stand out, i.e. suicide, binge drinking, motor vehicle accidents caused by impaired drinking, etc. Health disparities occur in small poverty pockets under the radar. Lack of transportation and social isolation in our rural suburban landscape affect residents' ability to have access to medical care, healthy foods, exercise, etc.”*
- > *“Even though there may be access to healthcare, fresh foods, and services in a given community, whether a family can take advantage of those depends on their unique situation. In some ways, families who have economic instability who live in places where there are lots of options are just as challenged as families who live in areas with no options.”*
- > *“Our organization has seen an increase in homelessness, food insecurity, and lack of transportation. Mental health challenges impact ability to work and manage day to day life.”*
- > *“My community suffers from a lack of available mental healthcare at all income levels; lack of transportation for low income residents; pockets of deep poverty hidden in a generally well off community; and a cultural acceptance of unhealthy eating habits and overweight. School meals are of a particular concern. They follow RIDE "guidelines" but in practice offer children a lot of prepackaged foods that look like less healthy products for sale in grocery stores. Companies are advertising unhealthy foods to children and*

families through school meals. The look alike products available in the grocery stores are high in sugar, sodium, and unhealthy fats and low in whole grains. They do not teach children and families about healthy eating habits.”

- > *“Isolation is the number one cause of depression in the elderly. Without access to transportation, social engagement, and in-home care, we will see a higher use of ER and hospital visits in part because of their depression and loneliness.”*
- > *“Addressing SDOH requires both a collective impact approach and hospitals as anchors leveraging their resources to engage in economic security, direct housing investments, and trauma-informed community development.”*

Community Resources

Key informants were asked what resources are missing in the community that could help residents optimize their health. Respondents could choose as many options as they thought applied. Nearly 75% of informants chose “mental health services and transportation options as the top missing resources within the community. Approximately 68% included multi-cultural or bilingual healthcare providers and 65% checked substance abuse services. Sixty percent of informants selected healthy food options as a missing resource within the community. Just over half of the informants indicated a need for housing or additional health and wellness education.

Top 10 Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	72.5%	29
1	Transportation options	72.5%	29
3	Multi-cultural or bilingual healthcare providers	67.5%	27
4	Substance abuse services	65.0%	26
5	Healthy food options	60.0%	24
6	Health and wellness education and programs	52.5%	21
6	Housing	52.5%	21
8	Outlets for physical activity (parks, rec centers, gyms, walking trails, etc.)	40.0%	16
9	Child care providers	35.0%	14
9	Dental care	35.0%	14

Specific comments from key informants related to missing resources in the community are included below. Transportation, housing, health equity, cultural competency, and promotion of community health workers and other evidence-based programs are discussed.

- > *“What are the barriers that keep people from spending more time in parks and other outdoor places? Perhaps it is knowledge that these places are there. Perhaps it is the lack of time. Perhaps there needs to be more organized groups that people can join for walking?”*

- > *“Resources present in the community should not be considered available/adequate unless they are affordable to the lowest-income residents and can be accessed without fear due to immigration status (or other similar factors).”*
- > *“Spanish is NOT the only bi-lingual challenge. And, with language comes cultural norms that are often not appreciated or respected by providers. One cannot trust a provider who makes the patient feel stupid or 'less than' because of lack of knowledge or exposure to the American system and way of life.”*
- > *“Bring more community health workers as key members of the health team, establishing the connections between community and clinic. Invest in evidence-based healthy life style programs available in the communities where the patients live.”*
- > *“In many areas of the state, transportation is the key factor. Most places do not have consistent transportation options. Hours of operation for healthcare is also challenging some times.”*
- > *“Affordable housing is a problem across the state and pressures are especially high in Washington County with economic pressures for student and tourist housing. Transportation is a significant issue with minimal public transportation available. Although the minority/multi-cultural/non-English speaking population is small, services for them are fairly nonexistent. Mental health services are hard to navigate and the full continuum of mental healthcare is not available in Washington County, i.e. no intensive outpatient programs, crisis care, etc. Families with children with behavioral health challenges have few supports available to them.”*

When asked how local and regional healthcare providers can better engage community members to achieve optimal health outcomes, respondents made recommendations for community collaboration; increased focus on prevention; and improved healthcare access. Specific recommendations from informants included:

- > Advocate for healthy meals, increased physical activity, and improved health education for students
- > Collaborate with and invest in the local Health Equity Zones
- > Employ community health workers to assist and support patients
- > Encourage coordination of care among providers
- > Engage with community non-profits to maximize efforts and collaboration
- > Improve healthcare access (evening hours with childcare provided, specialty care providers)
- > Partner with local community development and housing agencies
- > Promote cultural sensitivity by employing a multi-racial/multi-cultural staff
- > Provide prevention and wellness programs for community members

Washington County Community Conversations

Background

Facilitated discussions with community stakeholders were held in April 2019 across Washington County. Community stakeholders included senior living providers, senior residents, and social service providers, among others. Discussion topics focused on the needs of seniors, but also highlighted youth health concerns. The goals of the community conversations were to define barriers to accessing healthcare services; identify existing assets, gaps in services, challenges and successes in achieving outcomes; and to explore future opportunities to advance community health improvement.

Senior Health Needs Key Discussion Takeaways

Transportation

Lack of public transportation contributes to social isolation and delayed medical care among seniors. Senior living providers noted that transportation is starting to be addressed with programs such as Grandpa Uber, but seniors need to receive training to use smart phones and applications in order to access these services. Providers recommended conducting trainings in partnership with the senior centers.

Lack of public transportation contributes to social isolation and delayed medical care among seniors

The senior citizen bus and the Flex bus are two cost effective solutions for South Kingstown residents, but buses may not cross municipality lines to transport residents from outside the immediate area.

New transportation services need to account for physical disabilities among seniors. “We need more door-to-door versus street-to-street transportation.” “We don’t just want a cab for people who need physical assistance.”

Home Care and Home Health Services

Seniors want to maintain their independence, in their own home. When asked if they would prefer in-home services or a nursing home for care, the unanimous response among seniors was in-home services. However, both seniors and providers acknowledged that in-home services are limited. A lack of certified nursing assistants (CNAs) is one of the biggest barriers to establishing more in-home services.

Seniors prefer to age in their home; lack of community in-home services and cost are barriers

The cost of in-home care is a barrier to accessing services. “It’s hard to convince someone with a fixed income that they need nursing services that cost \$30-\$40 per hour.” “Seniors need someone to help with cleaning, food prep, shopping, but it’s out of their financial league.” Insurance coverage often does not pay for needed mobility devices (e.g. canes, walkers), home modifications, or medical alert systems.

Gaining access to seniors' homes to conduct assessments for needed services is also a barrier. "These are very independent people. It's hard to get people into their home." Social workers are the optimal resource to develop trusting relationships with seniors, and assist them with their social and medical needs, but there is a deficit of social workers in the county. Senior living providers recommended a volunteer community outreach program to fill the gap of social workers.

High Need Patients

Local health providers offer community health teams and nurse care managers to assist high acuity and complex patients, but the need is greater than the capacity of these providers. "We sometimes get 80 referrals in one month, and our team is small." Additionally, nearly all patients have a behavioral health comorbidity and there is a lack of senior behavioral health services in the county.

The need for services among high acuity and/or complex patients is greater than provider capacity

Senior living providers noted that the needs of high acuity patients are greater than standard medical care. "They need help scheduling appointments, meeting basic needs, support services, medication management, etc." Addressing social isolation among seniors is also an important component of the care plan. In-home services have the potential to improve patient outcomes and reduce medical costs through fewer readmissions.

Palliative care is often needed for seniors with serious illness, but the desire to maintain independence dissuades them from accessing these services. "There's a lot of fear of losing independence. We have to spin it that they get to be in palliative care, that it's a luxury." "The generation that is home now is of the mindset that these places are dirty and that they're just going to be abandoned. They still perceive what it was in their grandparents time."

Healthcare Costs

Health care costs, particularly prescription costs, are significant barriers to care. Premiums, deductibles, and copays are concerns, but prescription costs are a top reason for foregoing care or not following care instructions. Some senior residents skip medications or cut their pills in half to reduce costs. "We're seeing it across the patient population that they pick and choose their medication based on what they can afford. They take some of their meds."

Prescription costs are a top reason that seniors forego or delay care

The unknown cost of healthcare is frustrating for seniors. They struggle to receive cost estimates prior to procedures and have difficulty understanding their insurance benefits. Clearly itemized bills were preferred.

End of Life Conversations

End of life conversations are not proactively broached or managed by providers or patients. "We need to help patients make good decisions for their health." "It's not a comfortable conversation for healthcare providers, but patients can't make an appropriate

Proactive end of life conversations are needed to promote quality of life

decision if they don't have the information." For patients, accepting the reality of end of life is often the biggest barrier to having these conversations.

Senior living professionals noted that providers need to make regular attempts to have end of life conversations with their patients. These conversations need to be had at the patient level of understanding and potentially include family members. "A one-time presentation does not change anything, these conversations require a relationship." "It's a 30 to 60 minute conversation that needs to be repeated. Providers also need solid follow-up materials to the conversation." Primary care doctors, along with social workers embedded in the office, were seen as the ideal providers to conduct end of life conversations.

Family members, although well meaning, can impede end of life conversations and care. "We need to manage the wishes of the patient with the expectations of family members who are pushing for more time." Senior living providers noted that separate, tailored end of life conversations may be needed for patients versus family members.

Youth Health Needs

Key Discussion Takeaways

The following key themes impacting Washington County youth were identified by community stakeholders.

- > Washington County is a vacation community with seasonal renters and home owners. The changing population of the county creates an influx of youth throughout the year, requiring schools and health and social service providers to adjust their service offerings.
- > Opportunities for youth physical activities are limited in Washington County. The county lacks accessible greenspace and places for youth to gather and create social connections.
- > Most parents work full-time, limiting their ability to transport their children to afterschool activities and contributing to isolation and unsupervised time among youth.
- > School initiatives have been implemented to increase access and consumption of healthy foods. Additional outreach is needed to create consistent behaviors outside of school.
- > Youth have less unscheduled time or "free play" than previous generations. Research has shown that this trend may negatively impact emotional development and lead to anxiety and depression among other mental health challenges.
- > A cultural shift among youth is destigmatizing mental health and substance use issues. This positive shift may increase the likelihood of individuals seeking behavioral health services and improve health outcomes for individuals with behavioral health needs.

Evaluation of Community Health Impact from 2016 CHNA Implementation Plan for Community Health Improvement

In 2016, South County Health completed a CHNA and developed a supporting three-year Implementation Plan for community health improvement. The 2016 CHNA revealed that our community is greatly challenged by behavioral health - mental health and substance abuse - related issues. From a lack of treatment resources to growing addiction concerns, behavioral health is a key health concern for residents and has far-reaching effects on overall health and quality of life. South County Health made a commitment to focus community health improvement efforts on behavioral health as part of the 2016-2019 Implementation Plan.

The South County Health's 2016 Implementation Plan outlined specific goals, objectives, and strategies to address behavioral health needs. The plan leveraged resources across the hospital and the community, drawing on existing partnerships. The following section highlights the hospital's and community's approach to addressing behavioral health, and outcomes from the implemented action items.

Goal 1: Increase the awareness of signs and symptoms of behavioral health conditions and community resources.

Goal 2: Increase early identification and screening for behavioral health conditions in all care settings.

Goal 3: Increase access to appropriate, quality behavioral health service and improve self-management among patients.

Strategies Completed:

South County Health recognizes that good mental health is paramount in leading a healthy lifestyle. That's why we've integrated these services into our preexisting primary care practices. Behavioral health services are available to our South County Medical Group Primary Care and Center for Women's Health patients in East Greenwich, Wakefield, and Westerly. With the patient at the center of the care, our primary care physicians work with a licensed social worker to identify and treat specific needs.

We also provide screenings for a variety of disorders and conditions including:

- > Abuse
- > ADHD
- > Anxiety
- > Bipolar disorder
- > Depression
- > Domestic violence
- > Eating disorders
- > Postpartum depression
- > Post-Traumatic Stress Disorder
- > Social history
- > Substance abuse

South County Health is the backbone organization for Healthy Bodies, Healthy Minds, the local Health Equity Zone for Washington County. A key initiative of Healthy Bodies, Healthy Minds is behavioral health promotion, with a focus on Mental Health First Aid (MHFA). Just as CPR helps even those without clinical training assist an individual having a heart attack, MHFA teaches participants how to recognize when someone may be struggling with a mental health or substance abuse challenge as well as how to intervene when a person experiences a mental health crisis. Healthy Bodies, Healthy Minds offers several courses for Youth MHFA and Adult MHFA. The organization also maintains a website of available behavioral health articles and related activities: <https://bodiesminds.org/category/category-2/>.

South County Health also worked with various community partners across Rhode Island to support behavioral health goals, including:

- > Anchor Recovery Center
- > Butler Hospital
- > Gateway
- > Mental Health Association of Rhode Island
- > NAMI
- > Narragansett Prevention Partnership
- > Providence VA Medical Center
- > South Kingstown Partnership for Prevention
- > Suicide Prevention Resource Center
- > The Providence Center

2019 CHNA Priority Areas

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing health and crosscutting needs within communities. In prioritizing community health needs, South County Hospital representatives solicited input from community partners and stakeholders including HARI, Washington County Healthy Bodies Healthy Minds, the Rhode Island Department of Health, and other community partners and sought to align strategies with existing initiatives. Qualitative feedback was considered in conjunction with statistical health data to identify trends and illuminate the impact of social determinants of health.

Using this feedback and taking into account the hospital's expertise and resources South County Hospital determined to continue its leadership of South County Healthy Bodies, Healthy Minds Health Equity Zone to improve access to behavioral healthcare and reduce stigma for those experiencing mental health and substance use disorders. In response to the growing health and social needs among seniors in our community, we will explore new ways to deliver care and ensure equitable health outcomes regardless of socioeconomic status. As a Baby-Friendly Hospital, we will strive to deliver the best birth outcomes for mothers and babies and improve the well-being of families.

Community Health Priorities for 2019-2022 Implementation Plan

Behavioral Health: improve access to behavioral healthcare and reduce stigma for those experiencing mental health and substance use disorders

Chronic Disease: meet the growing health and social needs of seniors to ensure equitable health outcomes regardless of socioeconomic status

Maternal and Child Health: deliver the best birth outcomes for mothers and babies and improve the well-being of families

Board Approval

A body authorized by the South County Health Board of Directors reviewed and approved the 2019 CHNA Final Report on September 27, 2019. The report and plan are available for review and comment on the South County Health Website.

Appendix A: Public Health Secondary Data References

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Appendix B: Key Informant Survey Participants

A Key Informant Survey was conducted with 45 community representatives. The organizations represented by key informants and their respective role/title are listed below as required by IRS code 501(r) for the conduct of a Community Health Needs Assessment. Individual names are withheld for confidentiality.

Key Informant Organization	Key Informant Title/Role
Alpert Medical School and Kent Hospital	Clinical Professor of Family Medicine
Bayside Family YMCA	Operations Director
Blackstone Valley Community Health Care	Community Health Team Manager
Blackstone Valley Prevention Coalition	Regional Director
Brown University	Field Coordinator
Care New England	Senior Vice President, Planning and Finance
Care New England Primary Care and Specialty Services, Kent Hospital	Project Manager/Administrator
Catholic Social Services of Rhode Island	Secretary Catholic Charities & Social Ministry
Center for Southeast Asians	Executive Director
Childhood Lead Action Project	Executive Director
Community Care Alliance	Program Manager
Comprehensive Community Action, Inc.	CEO
Elmhurst Rehab & Healthcare Center	Vice President of Business Development
Elmwood and South Providence Neighborhood Crime Watch	Chair
Farm Fresh Rhode Island	Program Director- Community Access
Our Lady of Fatima Hospital	Associate Director/Advanced Education in General Dentistry Program
PACE Organization of Rhode Island	CEO
Pawtucket Child Opportunity Zone (COZ) (Pawtucket School Department)	Director
Rhode Island Coalition Against Domestic Violence	Empowerment Evaluator
Rhode Island Department of Health	Executive Director of Health
Rhode Island Department of Health	Health Equity Institute Director
Rhode Island Foundation	CEO
Rhode Island General Assembly	Senator
Rhode Island Health Care Association	President & CEO
Rhode Island Housing Resources Commission	Coordinator, Office of Community Development
Rhode Island Land Trust Council	Executive Director
Rhode Island Parent Information Network, Inc.	Director of Health Initiatives
Rhode Island Primary Care Physicians Corporation	President & CEO
Rhode Island Primary Care Physicians Corporation	CEO
Rhode Island Public Health Institute	Executive Director
Rhode Island Quality Institute	Founding President & CEO
South County Health	Volunteer
South County Health	Director, Orthopedic Service Line
South County Health - Healthy Bodies, Healthy Minds	Outreach Coordinator
South County Health - Healthy Bodies, Healthy Minds	Director
The Providence Center	Supervisor
The Providence Center	President & COO
The Providence Center	Vice President
Thundermist Health Center	Senior Director, Health Equity Initiatives
Town of Barrington, Rhode Island	Administrator, Spencer Trust
Tri County Community Action Agency	COO
United Way of Rhode Island	Ambassador
Warwick Police Department	Chief of Police
West Elmwood Housing	Executive Director
Women & Infants Hospital	President & COO