CharterCARE
HEALTH PARTNERS

2022 Community Health Needs Assessment

Community Research Consulting LLC

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Overview of the 2022 CHNA

Since 2011, the hospital members of the Hospital Association of Rhode Island (HARI) have collaborated every three years on a statewide community health needs assessment (CHNA). The goal of this collaboration is to identify common and unique challenges across Rhode Island to inform community health initiatives and ultimately advance health equity for all residents.

The CHNA findings continue to guide healthcare services and health improvement efforts, as well as serve as a community resource for grant making, advocacy, and to support the many programs provided by health and social service partners.

CHNA Leadership

The 2022 CHNA was convened by HARI and overseen by steering committee of HARI staff and representatives from each of its member hospitals as listed below. These individuals served as liaisons to their organizations and the communities served by their entities.

2022 CHNA Steering Committee Members
Gina Rocha, Hospital Association of Rhode Island, Vice President, Clinical Affairs
Otis Brown, CharterCARE, Vice President, Marketing & External Affairs
Donna Rubinate, CharterCARE, Chief Operating Officer
Lynne Driscoll, South County Health, Assistant Vice President of Community Health
Laurel Holmes, Westerly Hospital, Director of Community Partnerships & Population Health Carolyn Kyle, Landmark Medical Center, Director of Public Relations, Marketing & Physician Relations
Gail Robbins, Care New England, Senior Vice President of Planning & Finance
Holly Walton, Care New England, Senior Planning Analyst

Our Research Partner

HARI and its member hospitals contracted with Community Research Consulting to conduct the CHNA in collaboration with community partners across the state. CRC is a woman-owned business that specializes in conducting stakeholder research to illuminate disparities and underlying inequities and transform data into practical and impactful strategies to advance health and social equity. Our interdisciplinary team of researchers and planners have worked with hundreds of health and human service providers and their partners to reimagine policies and achieve measurable impact. Learn more about our work at buildcommunity.com.

Community Research Consulting LLC

Community Engagement

Community engagement is a key component to assessing and responding to community health needs. CHNA research included participation by representatives from the Rhode Island Department of Health, the Health Equity Zones (HEZ), health and social service providers, advocacy agencies, and other community partners. 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.

CHNA Methodology

The 2022 CHNA was conducted from July 2021 to May 2022 and included quantitative and qualitative research methods to determine health trends and disparities within the hospital service areas compared to health indicators across Rhode Island and the nation. Input was collected from community stakeholders, which was compared to analyses of 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, and health care utilization
- Key Informant Surveys and Interviews
- Community conversations with stakeholders
- Interviews with CharterCARE clinical leaders to align community health planning with population health management strategies

The 2022 CHNA conducted for CharterCARE encompassed the collective service area of its two hospitals: Our Lady of Fatima Hospital and Roger Williams Medical Center.

Community Health Priorities

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, CharterCARE collected feedback from community partners and sought to align with internal population health management strategies. CharterCARE will focus efforts on the following community health priorities over the next three-year cycle:

- Behavioral Health
- Chronic Disease
- Maternal and Child Health

Board Approval

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).

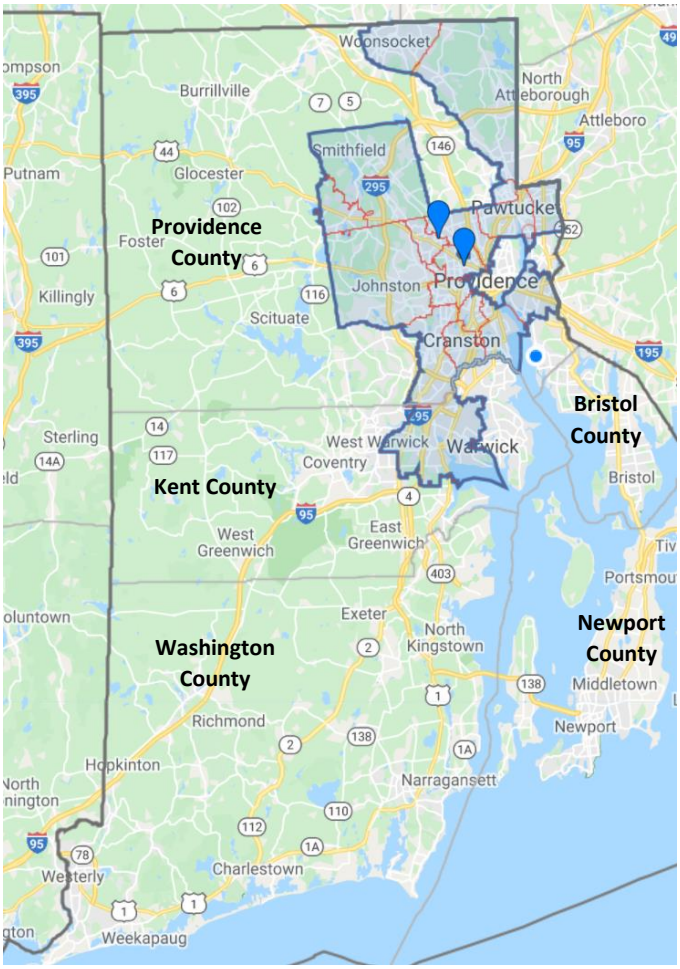
The CHNA Final Report and corresponding Community Health Improvement Plan (CHIP) were reviewed and approved by the CharterCARE Board of Directors. The report and plan are available for review and comment at chartercare.org. The findings will be used to guide the hospital's community benefit initiatives and engage local partners to collectively address identified health needs.

Service Area Description

For purposes of the CHNA, the Hospital Association of Rhode Island (HARI) and its member hospitals analyzed health and social trends for all of Rhode Island. Quantitative and qualitative data indicators for each of the state's five counties are included throughout the report. The member hospitals further defined their primary service area based on the zip codes of residence for the majority of patients seen at their facilities.

CharterCARE operates two hospitals in Providence County: Our Lady of Fatima Hospital and Roger Williams Medical Center. The hospitals are located within 2.5 driving miles of each other. CharterCARE identified a combined primary service area (PSA) for the two hospitals, comprising 18 zip codes spanning Providence County and Warwick in Kent County. Throughout the data report, findings for Providence and Kent County are highlighted in comparison to other Rhode Island counties and the nation. Findings by zip code and/or municipality for CharterCARE's PSA are provided as available.

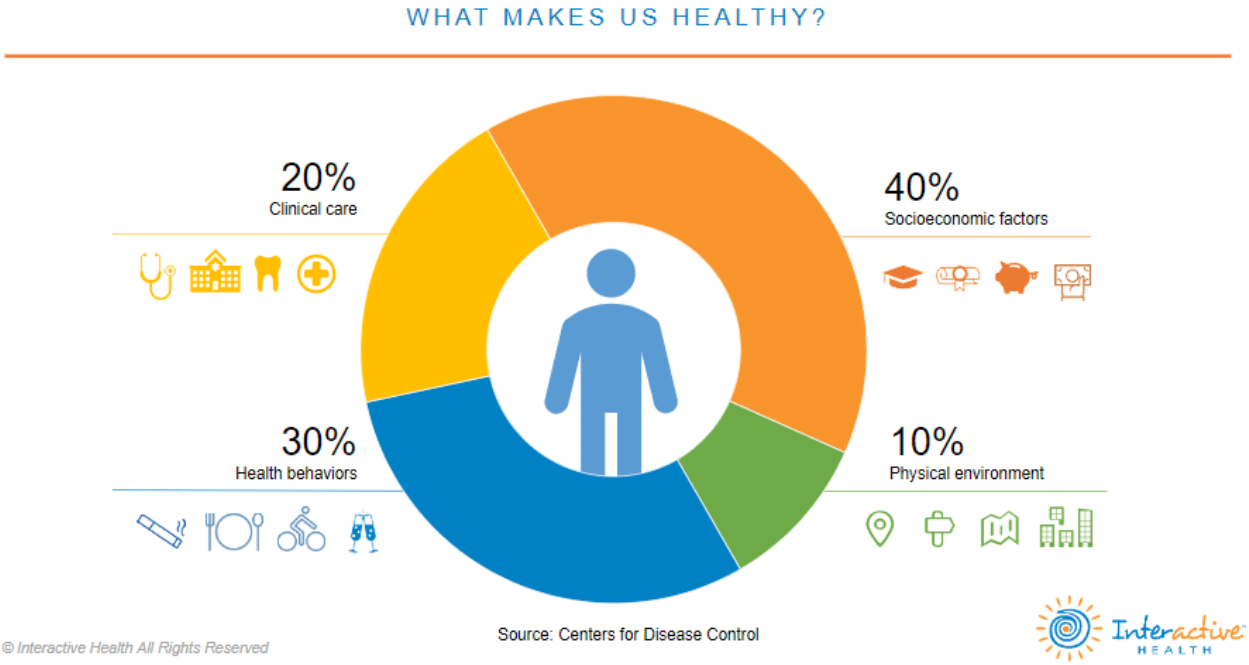
CharterCARE Primary Service Area



Social Determinants of Health: The connection between our communities and our health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health risks and outcomes. Healthy People 2030, the CDC's national benchmark for health, recognizes SDoH as central to its framework, naming "social and physical environments that promote good health for all" as one of the four overarching goals for the decade. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context.

The mix of ingredients that influence each person's overall health profile include individual behaviors, clinical care, environmental factors, and social circumstance. While health improvement efforts have historically targeted health behaviors and clinical care, as this graph shows, **50% of every person's health profile is determined by a combination of socioeconomic factors and physical environment.** Therefore, the portions of our communities that have positive socioeconomic factors and a health-promoting physical environment tend to be healthier than those who have negative socioeconomic factors and a poor physical environment. This difference results in disparity.



Understanding Health Equity

As a whole, the state of Rhode Island compares favorably to national averages for socioeconomic and health indicators. However, not all people in our community experience these positive health outcomes. A closer look at health and socioeconomic indicators by geography and population illuminates wide disparities among racial and ethnic populations and those with lower incomes. The data illustrate the critical importance of **social determinants of health** as root causes of health disparities.

The impact of SDoH is evident among distinct communities, as shown in the table below. In the CharterCARE PSA, issues of health and social inequities are most evident in the core city zip codes of 02907 and 02909 in Providence and 02863 in Central Falls. Within these zip codes, residents experience significant disparate socioeconomic and health outcomes that disproportionately affect people of color.

Health and Social Inequities in the CharterCARE PSA

	Central Falls 02863	Providence 02907	Providence 02909	Providence County	Rhode Island
Demographic & Socioeconomic Indicators (2015-2019)					
Non-White population	51.5%	63.1%	52.4%	27.1%	19.5%
People in poverty	30.2%	28.3%	29.9%	15.2%	12.4%
No high school diploma	35.1%	28.4%	24.3%	14.2%	11.2%
Uninsured	17.1%	10.6%	10.2%	5.4%	4.5%
Housing stock built pre-1980	86.8%	78.7%	86.3%	78.5%	73.5%
Health Indicators					
Adults with recent dental care (2018)	48.4%	53.6%	54.6%	67.0%	71.8%
Adult obesity (2018)	37.0%	35.4%	33.8%	29.6%	27.5%
Youth overweight/obesity* (2019)	50.0%	33.0%	33.0%	NA	31.0%
Adult diabetes (2018)	14.7%	14.6%	12.2%	10.7%	9.6%
Children with lead poisoning (2020)*	7.2%	6.7%	6.7%	NA	3.8%
COVID-19 fully vaccinated* (May 4, 2022)	72.5%	69.2%	69.2%	NA	82.4%
Overdose death rate* (2014-2020)	35.3	39.79	39.79	NA	NA

*Data are reported by city/town and may not align with zip code boundaries.

COVID-19 Demonstrated Inequities

The COVID-19 pandemic both highlighted and deepened socioeconomic and health inequities. Across Rhode Island, COVID-19 case rates were highest among Black/African American and Latinx residents. The COVID-19 death rate was nearly two times higher for Latinx than Whites, and nearly 50% higher for Black/African Americans. In addition to health impact, economic indicators, including unemployment and food insecurity, skyrocketed as a result of the pandemic. Average unemployment was 9.4% in Rhode Island and 10.2% in Providence County in 2020 compared to a national average of 8.1%. The percentage of food insecure residents statewide increased from 9.5% in 2019 to 13.1% in 2020. While 2021 data indicate Rhode Island communities are recovering economically from the pandemic, the long-term financial and psychological implications for residents should continue to be monitored.

Priority Health Needs

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, CharterCARE collected feedback from community partners and sought to align with internal population health management strategies. CharterCARE will focus efforts on the following community health priorities over the next three-year cycle:

- Behavioral Health
- Chronic Disease
- Maternal and Child Health

Behavioral Health

Rhode Island overall has better access to mental health providers compared to the national average. As of 2020, the rate of mental health providers across the state exceeded the national rate by more than 160 points. Providence County has the highest rate of providers in the state, although low-income residents continue to be underserved.

In 2019, the Rhode Island Executive Office of Health and Human Services conducted a review of the behavioral health system to determine gaps in services and access in the state. The review found that the state has several capacity challenges to address including both gaps in key service lines and a shortage of linguistically and culturally competent providers, that together disproportionately negatively impact communities of color. Service gaps, indicating the service does not exist in the state, include mobile mental health crisis treatment and mobile MAT for adults, and community step down, transition age youth services, and residential treatment for eating disorders for children. Moderate and significant service shortages exist across the care continuum for adults and children.

The growth of existing mental health providers in Rhode Island reflects an increase in demand for services. Consistent with the nation, more than 1 in 10 adults across Rhode Island report frequent mental distress. Kent and Providence counties report the highest proportion of adults with frequent mental distress in the state. Rhode Island youth also have greater demand for mental health services. Statewide, from 2016 to 2020, the number of youths awaiting psychiatric inpatient admission increased from 212 to 795. The number of ED visits and hospitalizations due to suicide attempts also increased. As of 2019, 14.7% of Rhode Island high school students reported an attempted suicide compared to 8.9% nationally.

Rhode Island has a higher prevalence of substance use disorder, including alcohol and opioid use disorder, than the nation. Consistent with the state, approximately 1 in 5 adults in Kent and Providence counties report heavy or binge drinking. From 2017 to 2019, the accidental drug overdose death rate for Rhode Island was nearly 10 points higher than the national death rate, with the highest reported death rates in Kent and Providence counties. Since the COVID-19 pandemic, there has been an increase in accidental drug overdose deaths statewide, from 308 in 2019 to 384 in 2020.

Among youth, the use of e-cigarettes continues to be of concern. In 2019, 30% of Rhode Island high school students reported currently using e-cigarettes, a 10-point increase from 2017, and a similar proportion as the nation overall (32.7%).

The COVID-19 pandemic had a significant impact on behavioral health for residents of all ages. Feedback collected in interviews with CharterCARE clinical leaders highlighted this need, noting wait lists for youth inpatient psychiatric services and higher demand for community-based outpatient options.

Chronic Disease

All Rhode Island counties meet the HP2030 goal of 92.1% for insured residents, and adults are generally more likely to access preventative care services than the national average. These findings contribute to fewer health risk factors and better health status overall among Rhode Island residents, although health outcomes vary widely across the five counties and correlate with existing differences in socioeconomic factors.

Residents of Kent and Providence counties have increased risk factors for chronic disease, including lack of physical activity and tobacco use, and higher prevalence and/or death rates due to chronic disease, including obesity, diabetes, heart disease, cancer, and respiratory disease. Chronic disease prevalence and death rates are generally in line with national averages, with few exceptions.

Kent County residents experience notable cancer disparities in comparison to other Rhode Island residents. The county has the highest cancer incidence and death rates in the state and exceeds national rates. Analysis of common cancer types suggests that lung cancer is a top contributor to cancer morbidity and mortality in Kent County and is likely a result of both higher smoking rates among adults and potential exposure to radon. Prostate cancer death is also elevated in Kent County compared to other counties and should be further explored.

Rhode Island is an aging community, with a growing proportion of older adults that exceeds national averages. In both Kent and Providence counties, approximately three-quarters of older adult Medicare beneficiaries manage two or more chronic conditions. Consistent with the state, the percentage of older adults living alone is increasing, likely increasing social isolation and impeding effective chronic illness management. Financial strains also impact the health of Kent and Providence county older adults and their ability to effectively manage chronic health conditions. Approximately 9% of Kent County older adults and 12% of Providence County older adults live in poverty, the highest proportions in the state.

Maternal and Child Health

Consistent with overall population demographics, the majority (68.4%) of births in Rhode Island in 2020 occurred to people residing in Providence County. Kent County had the second highest proportion of births at 14%. Approximately 65% of newborns in 2020 screened positive for one or more risk factors associated with poor developmental outcomes. Infants born in the core cities experience more risk factors, with nearly 75% born to low-income families, 60% born to single mothers, and 22% born to mothers without a high school diploma.

Rhode Island overall reports better birth outcomes than the nation, but these outcomes are not consistent across counties or racial and ethnic groups. Consistent with having higher reported risk

factors, Providence County and the core cities experience more negative birth outcomes compared to other areas of the state. Notably, 79.5% of pregnant people in the core cities receive first trimester prenatal care and 77% report breastfeeding compared to 87% and 77% respectively in other areas of the state. Across Rhode Island, in both core cities and the remainder of the state, the percentage of pregnant people receiving first trimester prenatal care and/or breastfeeding declined in recent years; breastfeeding declined nearly 10 percentage points in the core cities from 2012-2016 to 2015-2019.

Across Rhode Island, Black/African Americans experience notable birth disparities related to prenatal care and premature and low birth weight births. These disparities have contributed to higher infant and maternal mortality rates among Black/African Americans. From 2015-2019, the infant mortality rate for Black/African Americans statewide was nearly three times higher than for Whites. Nationally, Black/African Americans have a maternal death rate that is 2.5 times higher than for Whites.

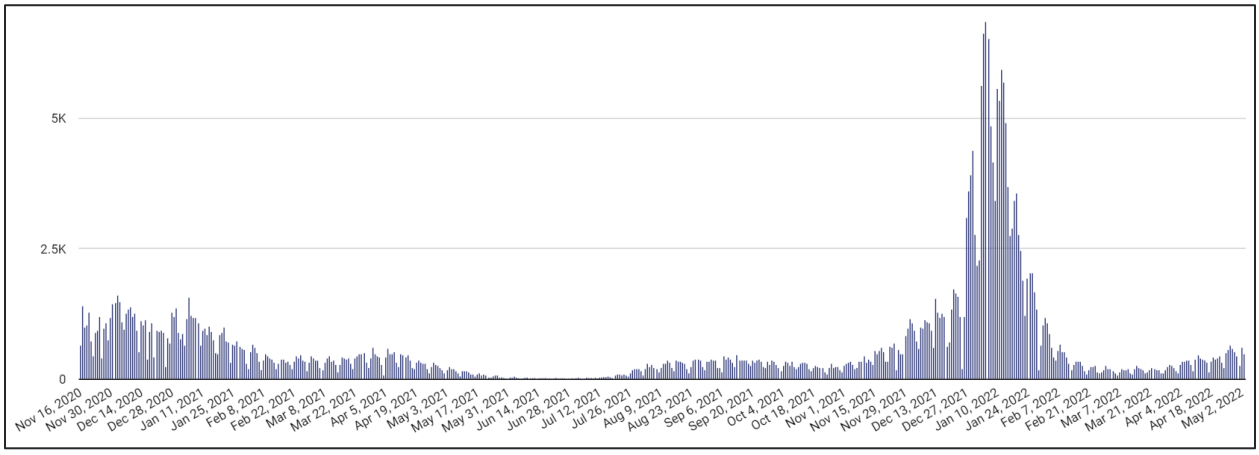
A full summary of statistical data findings for the CharterCARE primary service area follows.

COVID-19 Impact on Rhode Island Communities

COVID-19 is the name of the disease caused by the SARS-CoV-2 virus. "CO" stands for corona, "VI" for virus, and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. Some refer to COVID-19 as simply “COVID.” COVID infection and presence in a community is typically measured by case incidence, which looks at the number of daily new cases per 100,000.

When calculating case incidence, an important part of understanding how COVID is affecting certain communities is to analyze the demographics of the community. The COVID pandemic has highlighted health disparities along racial, ethnic, and economic lines in the United States. As reported by the CDC, “COVID-19 data shows that Black/African American, Hispanic/Latino, American Indian and Alaska Native persons in the United States experience higher rates of COVID-19-related hospitalization and death compared with non-Hispanic White populations. These disparities persist even when accounting for other demographic and socioeconomic factors.”

Rhode Island was hit early by the COVID-19 pandemic but was able to quickly recover due to social distancing mandates, intensive testing, and contract tracing efforts. In summer 2020, Rhode Island was leading the nation for testing. Despite its early success, Rhode Island was not spared from the wave of new COVID cases in fall 2020. The Delta variant of COVID initiated a new wave of COVID cases in summer 2021 despite readily accessible vaccines. The Omicron variants added to the community spread, and while more easily spread, have caused less fatalities and severe cases than previous variants.

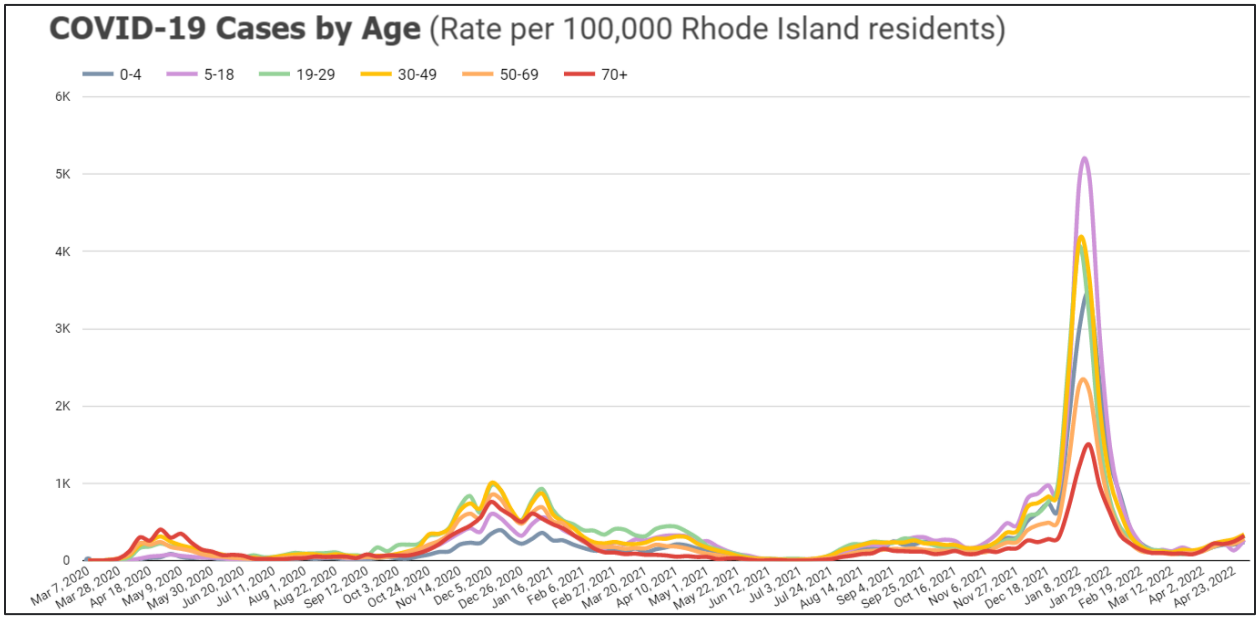


Source: Rhode Island Department of Health

COVID has affected all age groups. While older adults were among the earliest and hardest hit by COVID, more recent data shows that youth and young adults are leading new cases. Youth and younger adults have been less likely to be fully vaccinated for COVID than older adults.

The US Food and Drug Administration authorized the Pfizer-BioNTech COVID Vaccine for children aged 5-11 on October 29, 2021. As of May 4, 2022, 38% of youth aged 5-9, 60% of youth aged 10-14, and 70% of youth aged 15-18 were fully vaccinated.

COVID will be a leading cause of death for Rhode Islanders in 2020. As of May 4, 2022, more than 3,500 Rhode Islanders had died from COVID. Older adults aged 70 or older accounted for 77% of deaths.



Source: Rhode Island Department of Health

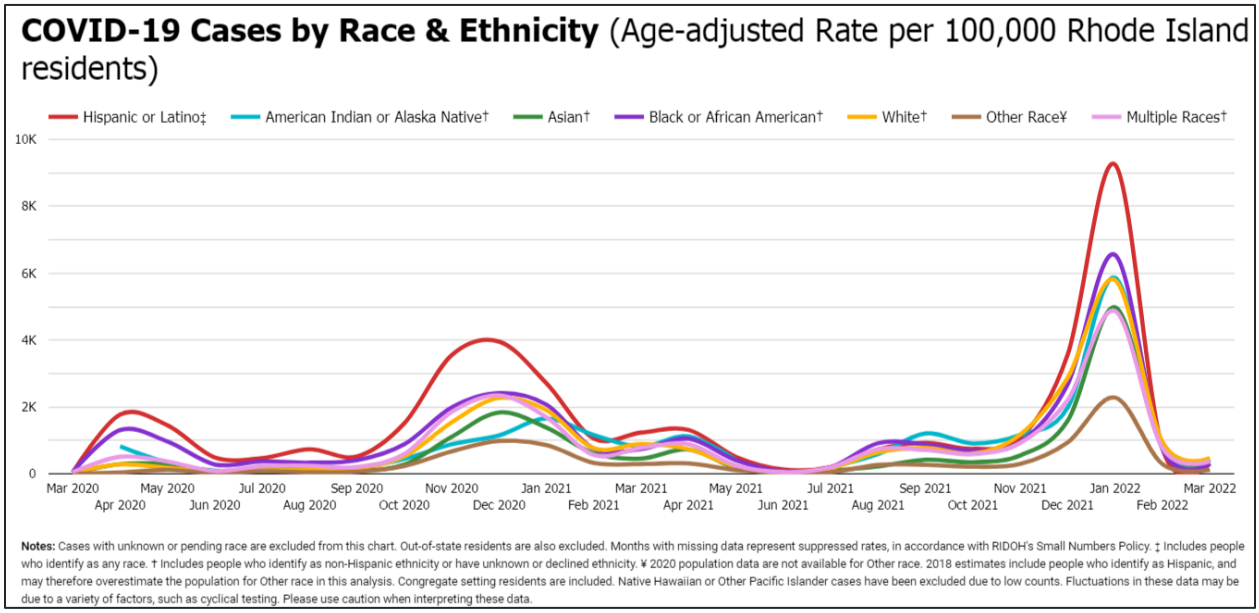
Statewide COVID-19 Cases and Deaths by Age Group

Age Group	Cases Total = 354,294		Deaths Total = 3,540	
	Count	Percent of Total	Count	Percent of Total
0-4	15,050	4%	<5	--
5-9	21,218	6%	0	0%
10-14	22,772	6%	<5	--
15-18	20,855	6%	0	0%
19-24	37,591	11%	<5	--
25-29	30,609	9%	8	<1%
30-39	57,584	16%	28	1%
40-49	45,808	13%	70	2%
50-59	44,718	13%	220	6%
60-69	30,931	9%	487	14%
70-79	15,260	4%	819	23%
80+	11,843	3%	1,902	54%

Source: Rhode Island Department of Health, May 4, 2022

Consistent with national trends, COVID-19 cases and death rates were disproportionately higher among Black/African American and Latinx Rhode Islanders. The COVID-19 death rate was nearly two times higher for Latinx than Whites, and nearly 50% higher for Black/African Americans. Across Rhode Island, Black/African American residents were the least likely of any racial or ethnic group to be fully

vaccinated, estimated at 65% of the population. This trend is consistent across the nation and is reflective of systemic inequities in access to care, as well as mistrust in healthcare systems.



Source: Rhode Island Department of Health

Statewide COVID-19 Cases and Deaths by Race and Ethnicity

Race or Ethnicity	Cases Total = 354,294		Deaths Total = 3,540	
	Count	Age-Adjusted Rate per 100,000	Count	Age-Adjusted Rate per 100,000
White	166,738	23,261	2,490	188
Latinx origin (any race)	70,581	38,978	297	301
Black or African American	18,927	27,981	154	269
Asian	6,658	16,936	63	227
Multiple race	5,301	22,075	<5	--
Other race	5,110	8,911	9	28
American Indian or Alaska Native	1,012	22,439	6	116
Native Hawaiian or Other Pacific Islander	225	NA	0	0

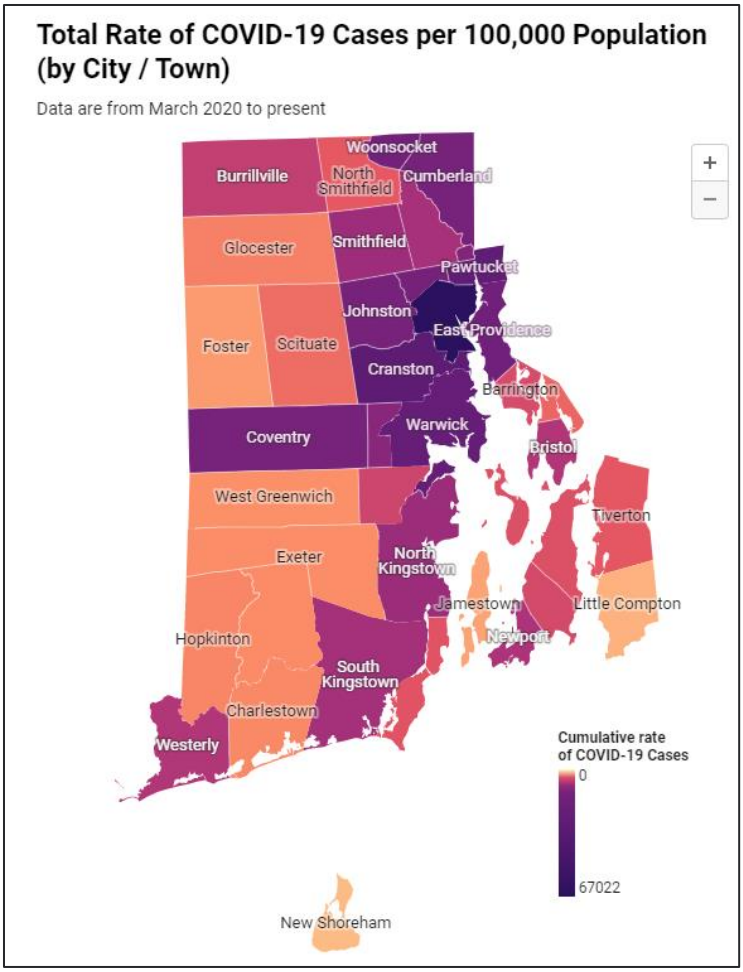
Source: Rhode Island Department of Health, May 4, 2022

Statewide COVID-19 Vaccination by Age and Race and Ethnicity

	Fully Vaccinated
Age Group	
5-9	38%
10-14	60%
15-18	70%
19-24	62%
25-29	63%
30-39	74%
40-49	76%
50-59	81%
60-69	94%
70-79	100%
80+	83%
Race and Ethnicity	
Native Hawaiian or Other Pacific Islander	100%
American Indian or Alaska Native	80%
Asian	77%
Latinx origin (any race)	70%
White	67%
Black or African American	65%

Source: Rhode Island Department of Health, May 4, 2022

Providence County communities, particularly the core cities, have been among the most impacted by COVID-19. Central Falls, located in CharterCARE's PSA, had the highest rate of COVID-19 cases of any city or town in the state. As of May 4, 2022, approximately 72.5% of Central Falls residents had been fully vaccinated compared to the statewide average of 82%. Of note, vaccination rates for all communities within CharterCARE's PSA fall below the statewide average.



Source: Rhode Island Department of Health, May 4, 2022

COVID-19 Cases, Deaths, and Vaccination by CharterCARE PSA Municipality

	Total Cases	Case Rate per 100,000	Total Deaths	Death Rate per 100,000	Population Fully Vaccinated
Central Falls	9,492	48,973	35	181	72.5%
Cranston	29,476	36,302	214	264	73.4%
Cumberland	11,058	31,912	106	306	74.4%
East Providence	15,457	32,576	244	514	71.2%
Johnston	10,800	36,942	199	681	73.0%
North Providence	11,691	36,018	159	490	72.1%
Pawtucket	27,071	37,726	182	254	66.4%
Providence	67,022	37,352	678	378	69.2%
Smithfield	7,720	35,691	174	804	71.3%
Warwick (Kent County)	23,493	28,975	253	312	76.8%
Woonsocket	14,230	34,257	266	640	59.1%

Source: Rhode Island Department of Health, May 4, 2022

Service Area Population Trends

Demographics

Since 2010, Rhode Island saw a smaller increase in population (+4.3%) than the US overall (+7.4%). Population growth occurred in all Rhode Island counties, with the largest growth in Providence County.

Based on 2015-2019 estimates, 11 out of 18 zip codes comprising the CharterCARE service area saw population growth. Providence zip code 02907 saw the largest population growth at +14%. Providence zip codes 02909 and 02908, located in the western portion of the city saw the largest population decline of -6.3% and -3.1% respectively. Roger Williams Medical Center is located in zip code 02908.

2020 Total Population

	Total Population	Percent Change Since 2010
Bristol County	50,793	+1.8%
Kent County	170,363	+2.5% ↑
Newport County	85,643	+3.3%
Providence County	660,741	+5.4% ↑
Washington County	129,839	+2.3%
Rhode Island	1,097,379	+4.3%
United States	331,449,281	+7.4%

Source: US Census Bureau, Decennial Census

2015-2019 Total Population by CharterCARE PSA Zip Code

	Total Population	Percent Change Since 2010
02907, Providence	31,294	+14.0% ↑
02910, Cranston	22,387	+6.6% ↑
02904, Providence	30,613	+4.3% ↑
02864, Cumberland	34,797	+4.2% ↑
02905, Providence	26,174	+3.8% ↑
02917, Smithfield	14,139	+2.7% ↑
02860, Pawtucket	46,363	+2.6% ↑
02911, Providence	15,921	+2.2% ↑
02919, Johnston	29,307	+1.8% ↑
02895, Woonsocket	41,603	+1.0% ↑
02863, Central Falls	19,411	+0.1% ↑
02920, Cranston	37,165	-1.0% ↓
02828, Greenville	7,592	-1.5% ↓
02886, Warwick (Kent County)	28,776	-1.7% ↓
02861, Pawtucket	25,622	-2.1% ↓
02914, East Providence	21,487	-2.2% ↓
02908, Providence	36,314	-3.1% ↓
02909, Providence	40,809	-6.3% ↓

Source: US Census Bureau, American Community Survey

Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and healthcare needs. The age distribution of Rhode Island is older than the nation in all counties except Providence. The median age of Providence County is approximately 37 years compared to 44-45 years in other counties. **In all counties except Providence, 1 in 5 residents are age 65 or older, a higher proportion than both the state overall and the nation.**

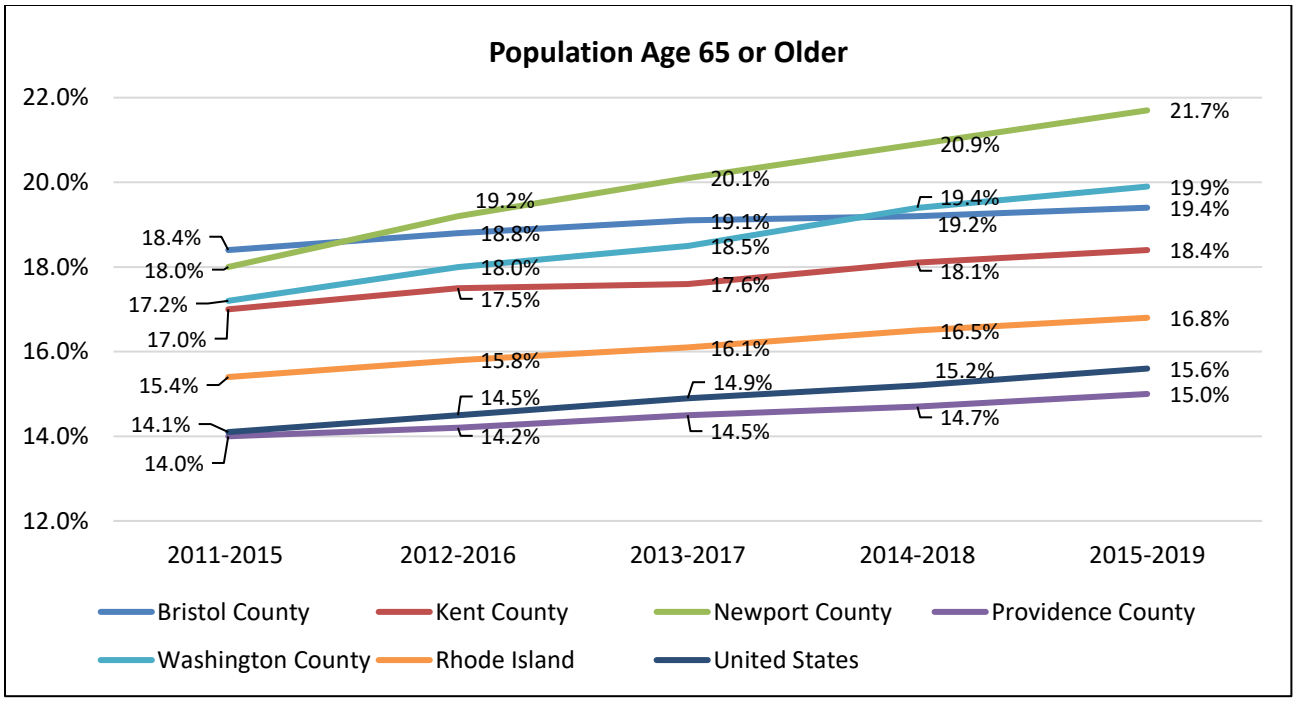
The proportion of older adult residents increased across the state, with the largest increase in Newport County, followed by Washington County. Among older adults age 65 or older, the 65-74 age category saw the greatest increase in recent years, largely due to the aging of the baby boomer generation. This finding supports that the need for older adult health and support services is likely to continue in the coming years.

The CharterCARE PSA is primarily located in Providence County and is generally younger than the rest of the state. **In nine PSA zip codes, youth comprise approximately 1 in 4 residents; eight of these zip codes are located in core cities reinforcing the potential impact of upstream, preventative initiatives.** Older adult populations are concentrated in non-core city zip codes, with the highest proportions in Greenville 02828 (23.3%), Warwick 02886 (20.8%), and Cranston 02920 (20.0%).

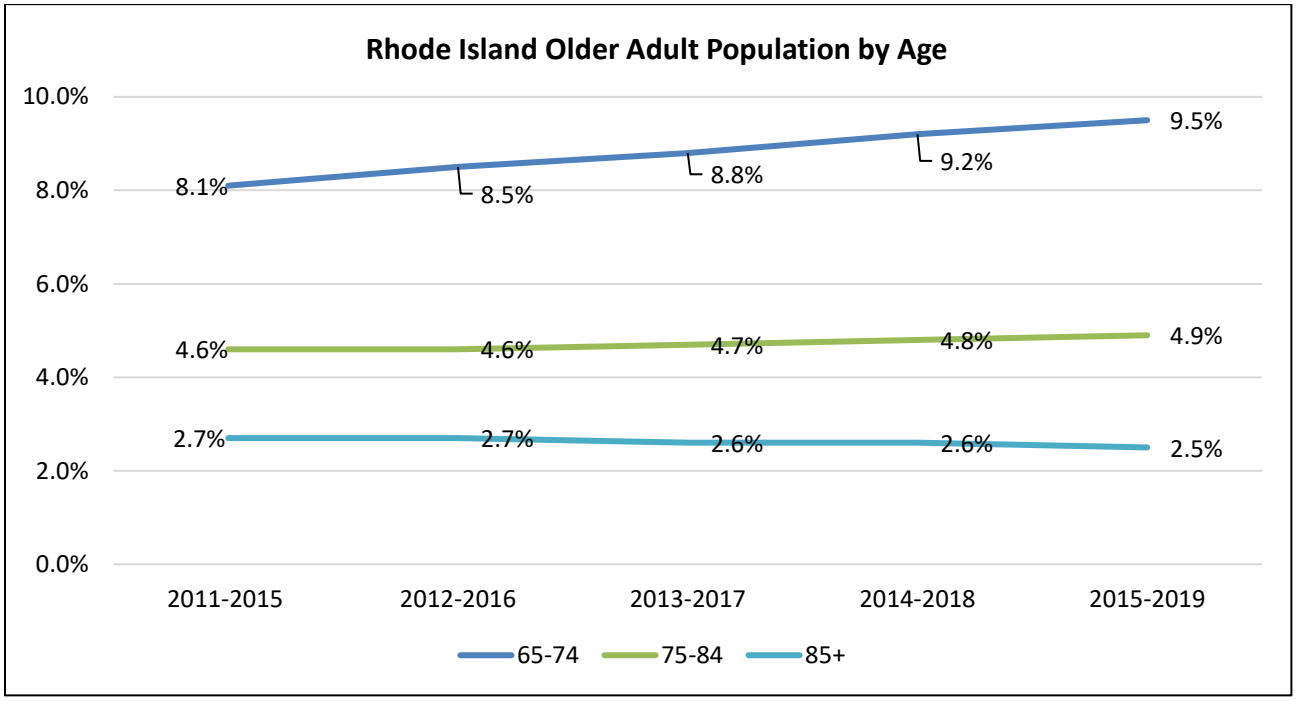
2015-2019 Population by Age

	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median Age
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
Bristol County	19.1%	10.9%	10.3%	10.4%	14.4%	15.6%	19.4%	44.3
Kent County	19.0%	7.2%	13.1%	12.1%	14.7%	15.6%	18.4%	43.9
Newport County	17.1%	9.4%	12.6%	10.7%	13.6%	14.9%	21.7%	45.2
Providence County	20.7%	10.9%	15.2%	12.2%	13.1%	12.9%	15.0%	37.4
Washington County	16.8%	14.6%	9.3%	9.6%	13.6%	16.1%	19.9%	44.6
Rhode Island	19.6%	10.7%	13.7%	11.7%	13.5%	13.9%	16.8%	39.9
United States	22.6%	9.4%	13.9%	12.6%	13.0%	12.9%	15.6%	38.1

Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

2015-2019 Age Characteristics by CharterCARE PSA Zip Code

	Youth (under 18) Population	Older Adult (65+) Population
02907, Providence	28.4%	9.2%
02863, Central Falls	27.9%	7.2%
02909, Providence	26.7%	8.9%
02910, Cranston	23.6%	12.4%
02905, Providence	23.4%	12.3%
02860, Pawtucket	22.4%	12.3%
02904, Providence	22.2%	17.3%
02908, Providence	22.0%	10.7%
02895, Woonsocket	21.6%	13.7%
02864, Cumberland	19.9%	17.8%
02914, East Providence	19.5%	19.1%
02886, Warwick (Kent County)	18.7%	20.8%
02861, Pawtucket	18.4%	14.3%
02920, Cranston	18.3%	20.0%
02911, Providence	18.2%	15.3%
02919, Johnston	17.5%	19.7%
02828, Greenville	17.4%	23.3%
02917, Smithfield	14.3%	18.1%

Source: US Census Bureau, American Community Survey

Outside of Providence County, Rhode Island is less racially and ethnically diverse than the nation overall. In all counties except Providence, Whites comprise 90% or more of the population, a higher proportion than the nation (72.5%). **Within Providence County, proportionately more residents identify as Black/African American, multi-racial, and/or Latinx compared to both Rhode Island and the nation.**

Racial and ethnic diversity is increasing statewide, particularly for multi-racial and Latinx groups. **From 2011-2015 to 2015-2019, the proportion of the population identifying as multi-racial increased 18.3% and the proportion identifying as Latinx increased 13.5%.** The largest increase in multi-racial residents was seen in Providence County (+26%), followed by Bristol and Washington counties (+16%). The largest increase in Latinx residents was seen in Bristol County (+28%), followed by Kent County (+25%).

2015-2019 Population by Prominent Racial and Ethnic Groups

	White	Black or African American	Asian	Some Other Race*	Two or More Races	Latinx origin (any race)
Bristol County	94.2%	1.3%	2.1%	0.6%	1.8%	3.0%
Kent County	91.3%	1.9%	2.7%	1.4%	2.3%	5.0%
Newport County	89.0%	4.0%	2.0%	1.0%	2.5%	5.7%
Providence County	72.9%	9.9%	4.2%	8.3%	4.1%	22.8%
Washington County	92.9%	1.4%	1.9%	1.1%	2.0%	3.2%
Rhode Island	80.5%	6.8%	3.4%	5.5%	3.3%	15.4%
United States	72.5%	12.7%	5.5%	4.9%	3.3%	18.0%

Source: US Census Bureau, American Community Survey

*"Some other race" has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race.

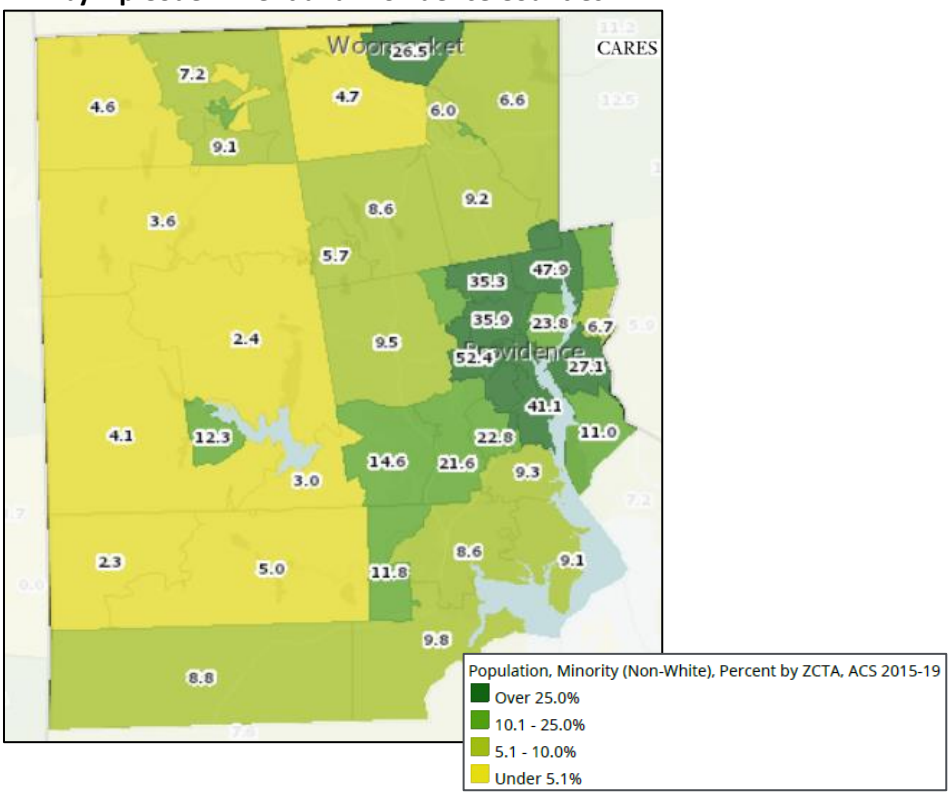
Population Change by Race and Ethnicity, 2011-2015 to 2015-2019

	White	Black or African American	Asian	Some Other Race	Two or More Races	Latinx origin (any race)
Bristol County	-2.0%	+4.5%	+24.8%	+135.2%	+16.0%	+27.7%
Kent County	-2.0%	+36.8%	+12.7%	-3.0%	+9.6%	+24.6%
Newport County	+0.5%	+14.2%	+12.4%	-33.9%	-27.4%	+10.7%
Providence County	+0.1%	+3.5%	+2.7%	-5.8%	+26.3%	+13.0%
Washington County	-0.9%	-6.4%	+7.4%	+33.2%	+15.9%	+12.3%
Rhode Island	-0.5%	+4.9%	+5.1%	-5.4%	+18.3%	+13.5%
United States	+1.0%	+3.3%	+10.4%	+20.1%	+13.9%	+7.8%

Source: US Census Bureau, American Community Survey

Within the CharterCARE PSA, racial and ethnic diversity is concentrated in the core cities. In Providence, 63.1% of residents in zip code 02909 and 52.4% of residents in zip code 02907 identify as non-White. Approximately 60% or residents in these two zip codes identify as Latinx and 15%-21% identify as Black/African American. Within Central Falls and Pawtucket, a similar percentage (48%-52%) of residents identify as non-White. In Central Falls, 66.4% of residents identify as Latinx. In Pawtucket, a similar percentage of residents identify as Latinx (30.6%) and/or Black/African American (23.1%). Woonsocket is less diverse than other core cities, but more diverse than the state overall; approximately 19% of residents identify as Latinx and 10% identify as Black/African American.

2015-2019 Non-White Population by Zip Code in Kent and Providence Counties



Many Roads Lead to Home

Rhode Island is home to proportionately more immigrants than the nation overall. While most residents were born in the US, a higher proportion were born in Puerto Rico or US Island Areas or are naturalized citizens. These findings are largely isolated to Providence County, where 1 in 10 residents is a naturalized citizen and approximately 8% are not a US citizen.

Within Providence County, nearly 1 in 4 residents identify as Latinx. Approximately half of foreign-born residents migrate from Latin American countries. In all other Rhode Island counties, the dominant regions of origin for foreign-born residents are Europe and Asia.

Nearly one-third of Providence County residents speak a primary language other than English. **Within the CharterCARE PSA, approximately 1 in 4 households in Providence zip codes 02907 and 02909 and Central Falls zip code 02863 are considered linguistically isolated, defined as persons who cannot speak English at least 'very well' or who do not live in a household where an adult speaks English 'very well'.**

2015-2019 Nativity and Citizenship Status

	US citizen, born in the US	US citizen, born in Puerto Rico or US Island Areas	US citizen, born abroad of American parent(s)	US citizen by naturalization	Not a US citizen	Speak Primary Language Other Than English
Bristol County	90.1%	0.0%	0.6%	6.9%	2.4%	11.6%
Kent County	92.9%	0.3%	0.6%	4.0%	2.2%	9.1%
Newport County	90.6%	0.6%	1.6%	3.9%	3.3%	9.5%
Providence County	78.5%	2.1%	1.0%	10.1%	8.4%	31.7%
Washington County	94.0%	0.2%	1.1%	3.1%	1.7%	6.2%
Rhode Island	84.0%	1.4%	1.0%	7.7%	5.9%	22.4%
United States	84.9%	0.6%	1.0%	6.7%	6.8%	21.6%

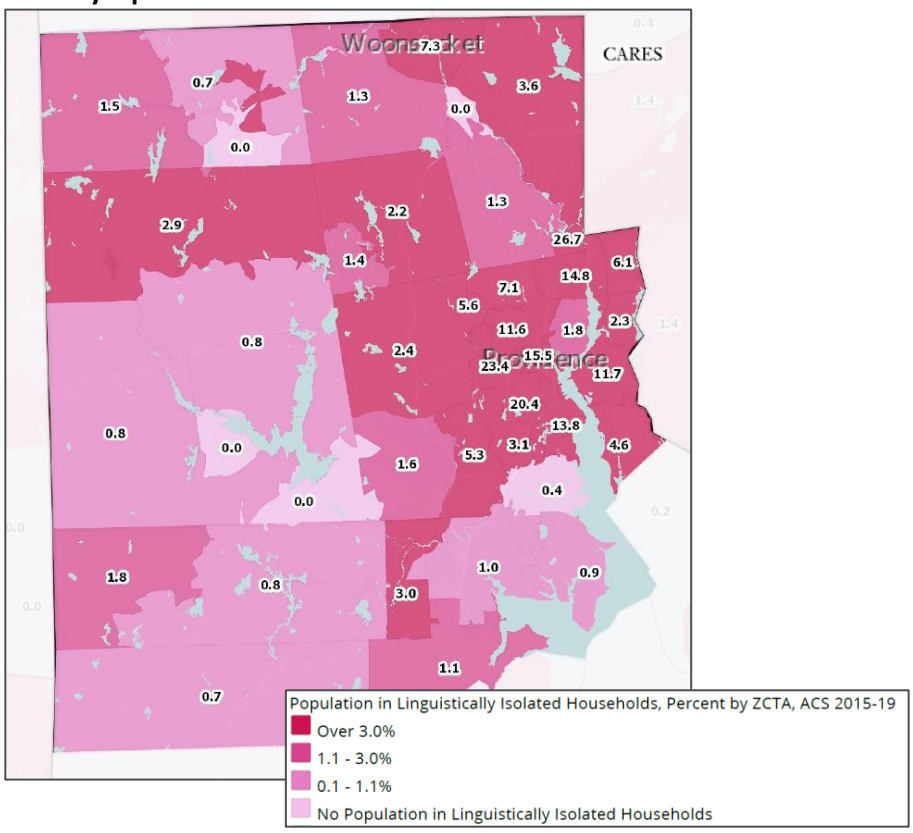
Source: US Census Bureau, American Community Survey

2015-2019 Foreign-Born Population by Region of Birth

	Latin America	Europe	Asia	Africa	Other
Bristol County	8.0%	67.1%	20.0%	1.1%	3.8%
Kent County	21.9%	33.8%	32.8%	7.6%	4.0%
Newport County	27.6%	43.1%	19.9%	4.3%	5.1%
Providence County	50.1%	16.6%	17.5%	14.3%	1.5%
Washington County	18.3%	37.5%	34.6%	4.8%	4.7%
Rhode Island	44.5%	21.4%	19.4%	12.6%	2.0%
United States	50.6%	10.8%	31.0%	5.1%	2.5%

Source: US Census Bureau, American Community Survey

2015-2019 Population in Linguistically Isolated Households by Zip Code in Kent and Providence Counties



Income and Work

Rhode Island overall has a higher median household income and lower poverty than the nation, but these factors vary widely by community, with notable disparities. The state's high median household income is due in part to excess wealth in Bristol and Washington counties, where the median household income exceeds $83,000 compared to a national median of approximately $63,000. In contrast, the median household income in Providence County is less than $60,000, and approximately 15% of all residents and 22% of children live in poverty.

Excluding Providence County, Rhode Island children are less likely to live in poverty compared to their peers nationally. However, it is worth noting that approximately 1 in 10 children in Kent, Newport, and Washington counties live in poverty. In Washington County, 9.2% of children live in poverty, the third highest in the state, despite 56% of households earning $75,000 or more annually. This finding indicates a potential wealth gap, largely impacting families.

Within the CharterCARE service area, a positive finding is that consistent with the state and nation, poverty declined in Kent and Providence counties for both the overall population and youth. However, wide disparities in wealth continue to exist. **In Providence zip codes 02907 and 02909 and Central Falls zip code 02863, approximately 30% of the total population lives in poverty, double the county-wide percentage.** Pawtucket zip code 02860 and Woonsocket zip code 02895 also have elevated poverty at

approximately 1 in 5 individuals. Areas of higher poverty are consistent with communities with greater racial and ethnic diversity. While poverty largely declined among racial and ethnic minorities from the 2019 CHNA, it continues to be higher in comparison to Whites. In Providence County, approximately twice as many Black/African American and Latinx residents live in poverty as White residents.

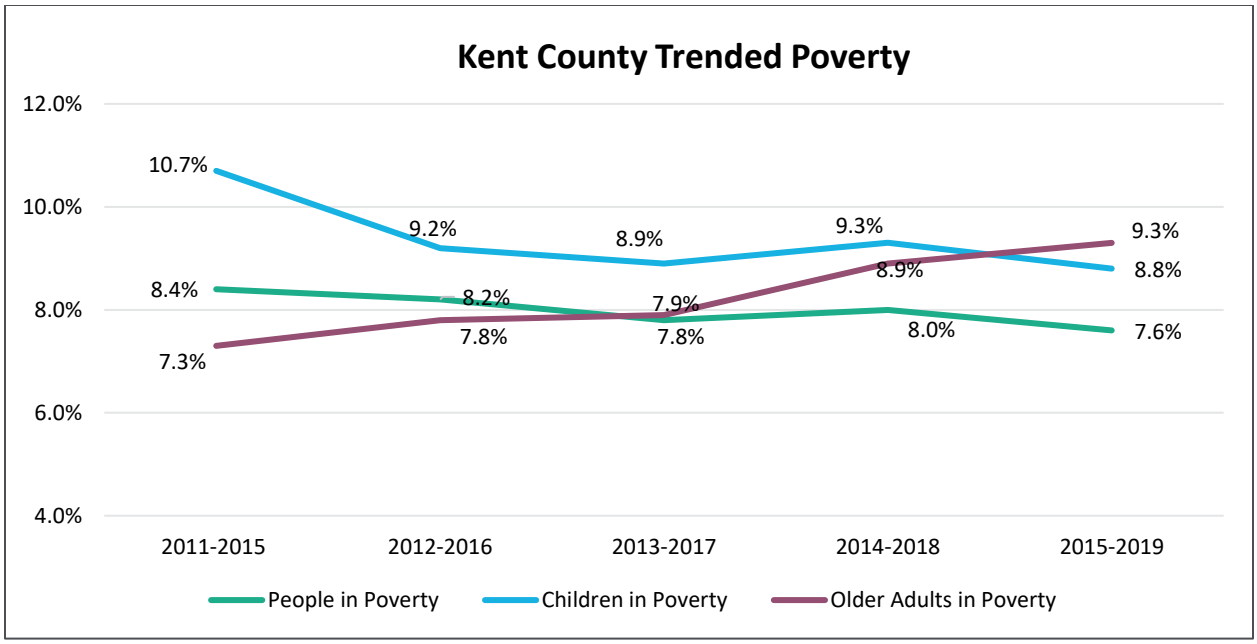
Of note, the Asian population increased 5.1% across Rhode Island over the past five years, and it was the only reported demographic to see higher poverty rates from the 2019 CHNA. Approximately 16% of Asians living in Rhode Island live in poverty compared to 13% reported at the time of the 2019 CHNA.

The COVID-19 pandemic had a significant impact on unemployment rates in Rhode Island, particularly in Providence County. The 2020 average unemployment rate for Rhode Island and Providence County was 9.4% and 10.2% respectively, compared to a national average of 8.1%. The state has since largely recovered, but long-term financial and psychological implications for residents should continue to be monitored.

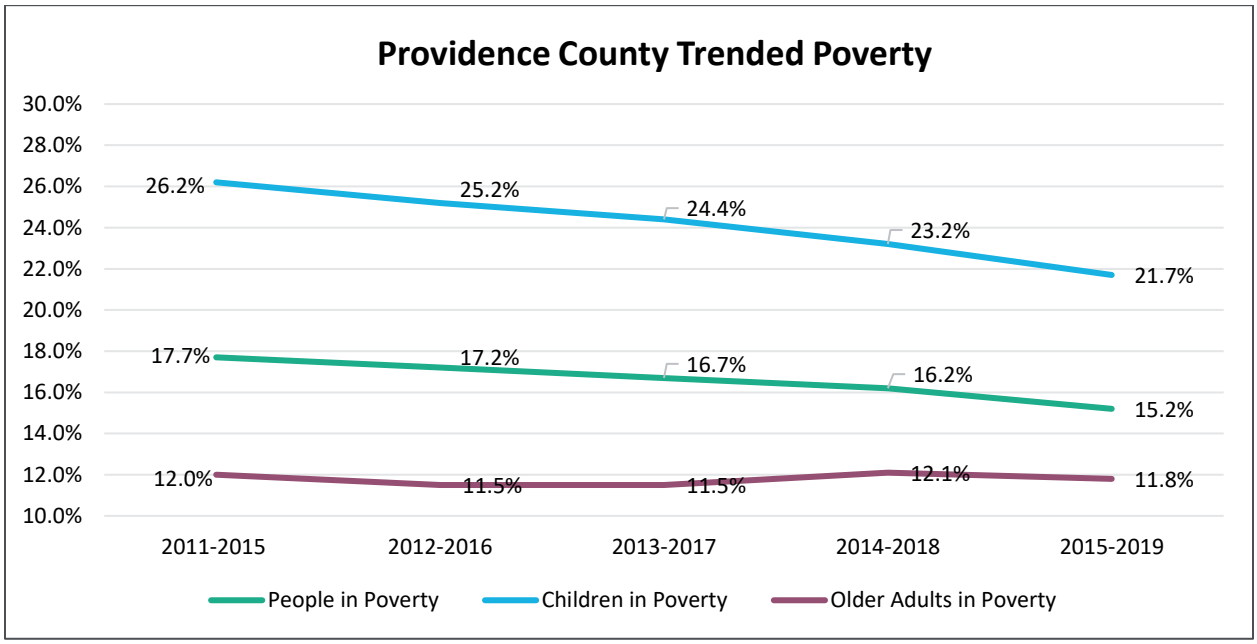
Economic Indicators

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Income and Poverty (2015-2019)							
Median household income	$83,092	$73,521	$79,454	$58,974	$85,531	$67,167	$62,843
People in poverty	7.5%	7.6%	8.7%	15.2%	8.6%	12.4%	13.4%
Children in poverty	6.6%	8.8%	10.6%	21.7%	9.2%	17.0%	18.5%
Older adults (65+) in poverty	5.4%	9.3%	7.2%	11.8%	5.7%	9.7%	9.3%
Households with SNAP* Benefits	8.2%	11.7%	9.1%	19.4%	7.6%	15.3%	11.7%
Unemployment							
2020 average	7.6%	8.7%	8.2%	10.2%	7.8%	9.4%	8.1%
May 2021	4.1%	4.9%	4.3%	5.1%	4.1%	5.5%	5.5%

Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics
*Supplemental Nutrition Assistance Program.

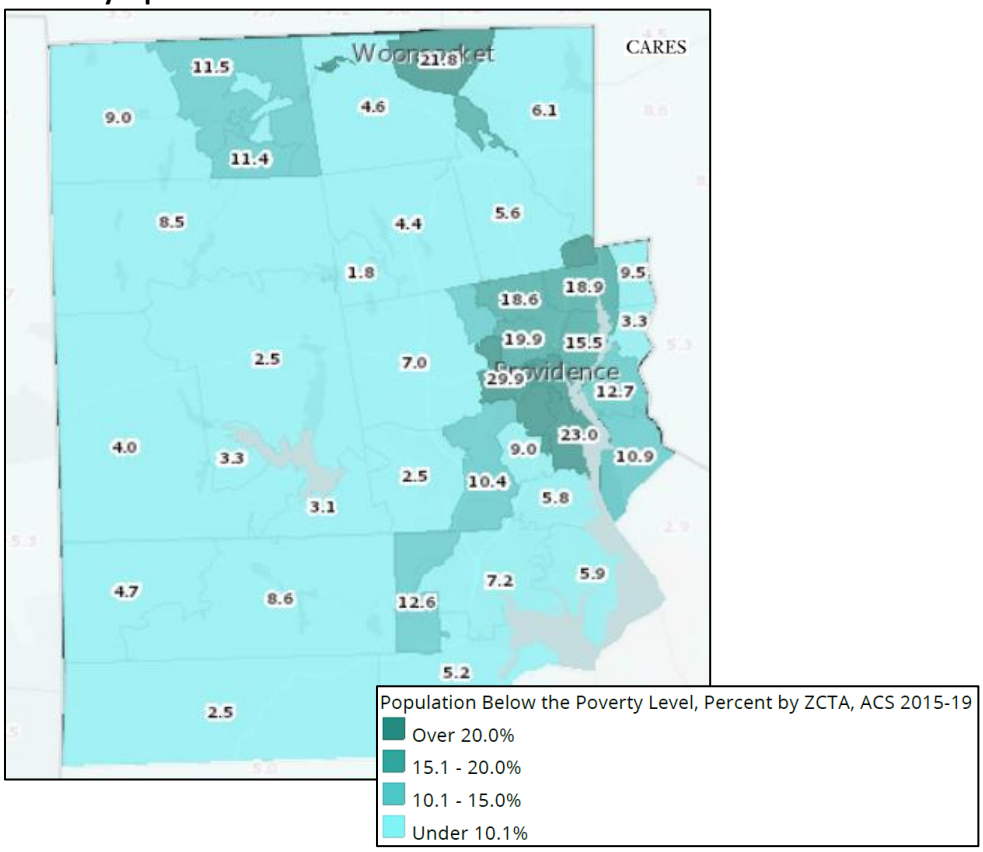


Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

2015-2019 Population in Poverty by Zip Code in Kent and Providence Counties



2015-2019 People in Poverty by Race and Ethnicity with 2019 CHNA Comparison (2012-2016)

	White	Black / African American	Asian	Latinx origin (any race)
Bristol County	**10.0%**	**45.8%**	**19.8%**	**8.0%**
2019 CHNA	6.4%	47.6%	1.0% (n=8)	11.2%
Kent County	**7.3%** ↓	**6.9%** ↓	**6.7%** ↑	**9.8%** ↓
2019 CHNA	8.2%	8.2%	6.0%	11.7%
Newport County	**7.8%**	**24.3%**	**6.0%**	**19.9%**
2019 CHNA	8.0%	23.0%	3.9%	20.8%
Providence County	**12.2%** ↓	**22.2%** ↓	**18.6%** ↑	**26.6%** ↓
2019 CHNA	13.8%	25.4%	15.7%	32.8%
Washington County	**7.6%**	**33.2%**	**7.6%**	**20.2%**
2019 CHNA	9.0%	33.9%	11.2%	17.3%
Rhode Island	**10.0%**	**22.0%**	**15.8%**	**25.3%**
2019 CHNA	11.2%	25.1%	13.3%	31.0%
United States	**11.1%**	**23.0%**	**10.9%**	**19.6%**
2019 CHNA	12.4%	26.2%	12.3%	23.4%

Source: US Census Bureau, American Community Survey

While overall poverty is lower in Rhode Island compared to the US, poverty among older adults is slightly higher (9.7% vs. 9.3%). This finding is of note due to the large and growing proportion of Rhode Island residents age 65 or older. In response to the continued growth of older residents, communities will be challenged to expand older adult health and social services for populations with fewer financial resources. Among CharterCARE service counties, this trend should be monitored in Kent County, where older adult poverty increased over the past five years and is the second highest in the state behind Providence County.

The 2020 Rhode Island Healthy Aging Data Report provides a comprehensive picture of the health and socioeconomic status of older adults statewide. According to data report findings, **the economic situation of older adults in Rhode Island had worsened even before the impact of COVID-19, including higher poverty rates, increased receipt of food benefits, and more older adults in the workforce.** The following table depicts annual cost of living for older adults, as provided by the Elder Index Measure of Economic Security, with comparisons to 2016 data report findings.

Rhode Island Annual Cost of Living for Older Adults, 2016 vs. 2020

	2016	2020	Change from 2020 to 2016
Single, homeowner without mortgage, good health	$22,188	$23,484	+$1,296
Single, renter, good health	$23,544	$25,560	+$2,016
Couple, homeowner without mortgage, good health	$32,252	$33,984	+$1,732
Couple, renter, good health	$33,708	$36,060	+$2,252

Source: Tufts Health Plan Foundation, Rhode Island Healthy Aging Data Report

Food Insecurity

Food insecurity is defined as not having reliable access to a sufficient amount of nutritious, affordable food. Food insecurity is associated with lower household income and poverty, as well as poorer overall health status. **Consistent with higher poverty levels, Providence County has historically had the highest food insecurity rates in Rhode Island, but all communities are affected.** In 2019, approximately 1 in 10 children in Bristol, Kent, Newport, and Washington counties were food insecure.

Similar to unemployment rates, COVID-19 had a profound impact on food insecurity. The Rhode Island Community Food Bank reported a pre-pandemic average of 3.1 million pounds of food distributed every quarter. More than 4 million pounds were distributed in the second quarter of 2020, at the onset of the pandemic. Projected food insecurity rates for 2020 and 2021 for Rhode Island demonstrate persistent food insecurity needs. **All counties saw an increase in food insecurity from 2019 to 2020, including a 6- to 8-point increase among children. Prior to 2020, food insecurity percentages were declining in all counties.**

Within the CharterCARE PSA, the core cities continue to be areas of opportunity for improving access to nutritious, affordable foods, particularly among youth. Approximately half of students in Central Falls and Providence participate in the school breakfast program. Low-income student participation, estimated at approximately 20%-40% for most of the PSA, should be explored.

Trended and Projected Food Insecurity

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
All Residents							
2021 (projected)	**9.6%**	**10.7%**	**10.6%**	**13.3%**	**9.3%**	**11.4%**	**12.9%**
2020 (projected)	**10.8%**	**12.4%**	**12.0%**	**15.2%**	**10.7%**	**13.1%**	**13.9%**
2019	7.6%	8.6%	8.6%	11.0%	7.4%	9.5%	10.9%
2018	8.1%	9.2%	9.0%	12.0%	7.8%	11.4%	11.5%
2017	9.5%	9.7%	10.6%	12.6%	9.7%	11.4%	12.5%
Children							
2021 (projected)	**12.4%**	**15.4%**	**15.0%**	**20.4%**	**13.7%**	**17.1%**	**17.9%**
2020 (projected)	**14.7%**	**18.8%**	**17.9%**	**24.0%**	**16.5%**	**20.5%**	**19.9%**
2019	9.0%	12.0%	11.7%	16.4%	10.6%	13.9%	14.6%
2018	12.0%	14.8%	13.6%	17.8%	13.3%	17.8%	15.2%
2017	13.8%	14.8%	15.2%	18.4%	14.9%	17.3%	16.1%

Source: Feeding America

October 2019 Children Participating in School Breakfast by CharterCARE PSA School District

	Total Student Enrollment	Percent of All Students Participating in School Breakfast	Low-Income School Enrollment	Percent of Low-Income Students Participating in School Breakfast
Central Falls	2,877	53%	NA*	NA*
Cranston	10,324	26%	4,502	34%
Cumberland	4,508	10%	952	27%
East Providence	5,026	21%	2,244	31%
Johnston	3,199	13%	1,403	20%
North Providence	3,530	17%	1,641	24%
Pawtucket	8,657	29%	NA*	NA*
Providence	22,958	50%	NA*	NA*
Smithfield	2,379	6%	337	22%
Warwick (Kent County)	8,302	7%	2,917	14%
Woonsocket	5,884	41%	4,397	44%
Four Core Cities	40,376	44%	NA*	NA*
Remainder of Rhode Island	89,337	11%	26,681	24%

Source: 2021 Rhode Island Kids Count Factbook

*NA indicates that data was not available because some or all schools in this district were using the Community Eligibility Provision and therefore not collecting data on the incomes of students' families.

Education

High school graduation is one of the strongest predictors of longevity and economic stability. **Adult residents of Rhode Island are generally very well educated compared to the US. Providence County education indicators are less favorable than the US.** Approximately 14% of Providence County adults

have not completed high school compared to 9% or less in other counties. Across the CharterCARE PSA, educational attainment disparities mirror other reported socioeconomic disparities in Providence County and the core cities.

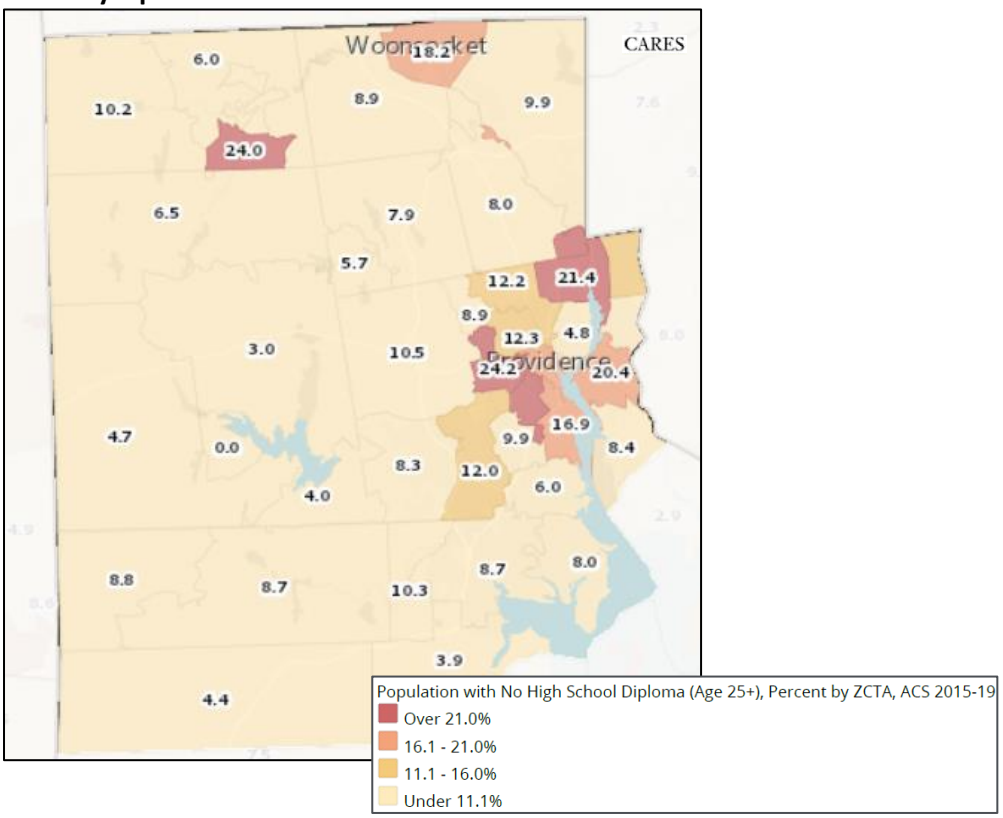
Consistent with having the highest reported household incomes in the state, nearly 50% of adults in Bristol, Newport, and Washington counties have completed graduate studies. Kent County has the second lowest median household income in the state. Consistent with this finding, residents are more likely to conclude their education with a high school diploma or associate's degree.

2015-2019 Population (Age 25 or Older) by Educational Attainment

	Less than high school diploma	High school graduate (includes GED)	Some college or associate's degree	Bachelor's degree	Graduate or professional degree
Bristol County	9.0%	19.4%	22.5%	25.4%	23.6%
Kent County	7.8%	28.0%	30.9%	20.9%	12.3%
Newport County	6.0%	22.1%	23.8%	28.5%	19.5%
Providence County	14.2%	31.0%	25.8%	17.5%	11.5%
Washington County	5.1%	22.8%	25.9%	26.1%	20.0%
Rhode Island	11.2%	28.3%	26.4%	20.4%	13.8%
United States	12.0%	27.0%	28.9%	19.8%	12.4%

Source: US Census Bureau, American Community Survey

2015-2019 Population with No High School Diploma by Zip Code in Kent and Providence Counties



Educational attainment disparities also exist between different racial and ethnic populations. Consistent with state and national trends, adults of Asian descent in Rhode Island are the most likely of any other population group to have completed higher education. Black/African American and Latinx adults, outside of Providence County, are generally more likely to attain higher education than their peers nationally, although less likely than White adults residing in the same communities. **Notably, in Providence County, where approximately 23% of residents identify as Latinx, only 12% of Latinx adults have attained a bachelor's degree or higher compared to 31% of White adults.**

2015-2019 Population with a Bachelor's Degree by Race and Ethnicity with 2019 CHNA Comparison (2012-2016)

	White	Black / African American	Asian	Latinx origin (any race)
Bristol County	**48.9%**	**22.4%**	**63.6%**	**51.2%**
2019 CHNA	46.2%	43.1%	65.2%	45.3%
Kent County	**32.8%**	**34.4%**	**63.1%**	**27.8%**
2019 CHNA	31.4%	33.3%	52.0%	28.8%
Newport County	**48.9%**	**20.8%**	**74.9%**	**37.7%**
2019 CHNA	46.1%	34.3%	56.3%	33.8%
Providence County	**31.0%**	**20.2%**	**47.8%**	**12.0%**
2019 CHNA	29.3%	18.4%	45.0%	10.8%
Washington County	**46.7%**	**31.3%**	**57.8%**	**34.0%**
2019 CHNA	45.3%	30.1%	51.0%	37.6%
Rhode Island	**35.9%**	**21.2%**	**52.1%**	**14.4%**
2019 CHNA	34.2%	20.2%	47.3%	13.1%
United States	**33.5%**	**21.6%**	**54.3%**	**16.4%**
2019 CHNA	31.6%	20.0%	52.1%	14.7%

Source: US Census Bureau, American Community Survey

Housing

Housing is the largest single expense for most households and should represent 30% of a household's monthly income. **The median home value for Rhode Island is more expensive than the median home value across the US, and more homeowners are considered housing cost burdened compared to the US benchmark.** Median home value is highest in the areas of Bristol, Newport, and Washington counties, although Newport is the only county with a higher percentage of cost burdened homeowners in comparison to the state or nation.

Despite having the lowest median home value in the state, only 54% of Providence County households own their home, a lower proportion than the state or nation. This disparity is likely due to in part to financial barriers. The county has higher poverty rates and nearly one-third of homeowners are cost burdened. Lack of homeownership in Providence County perpetuates financial insecurity, as renters generally experience less stable housing costs and nearly half are considered cost burdened. Renters are

also more vulnerable to substandard housing conditions like overcrowding, poor ventilation, pests, or allergens that are associated with poor health.

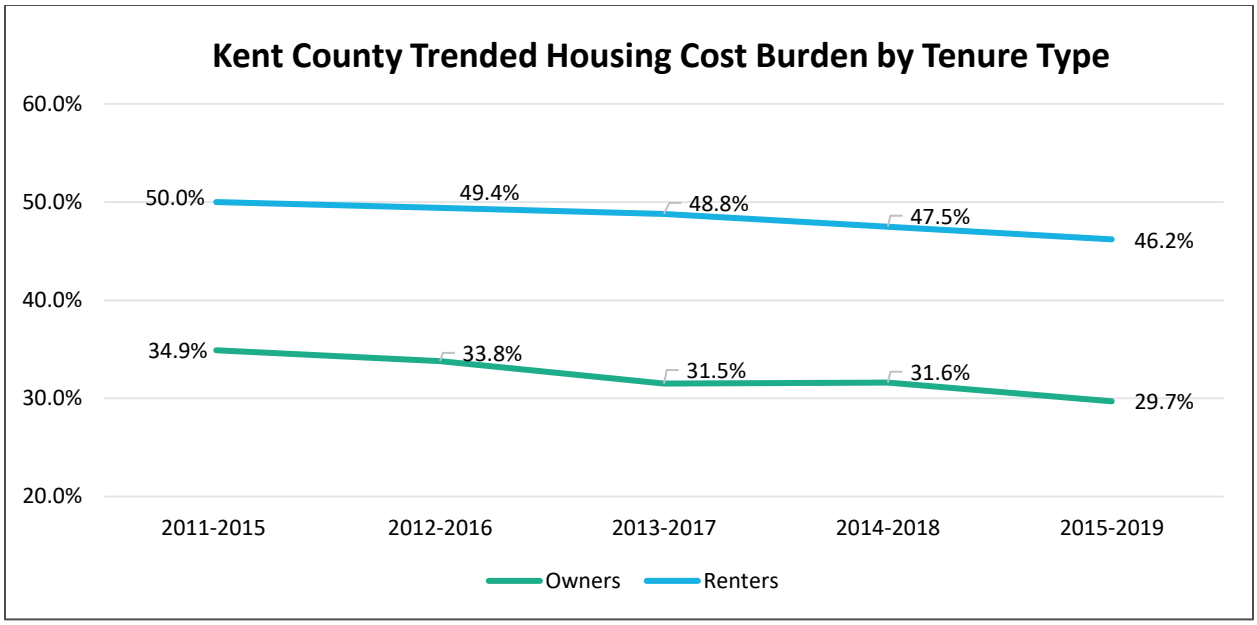
Rhode Island housing affordability slowly improved from 2011-2015 to 2015-2019 with a declining proportion of cost burdened homeowners and renters, but the economic impact of COVID-19 and historic increases in the cost of housing in 2020 and 2021 created new affordability strains on residents. HousingWorks RI reported that, "Across Rhode Island, housing markets continued to tighten. Rhode Island had a mere 1.3-month supply of sales housing stock at the end of Q1-2021, a 50 percent drop from Q1-2020; the vacancy rate in rental housing fell to 2.2 percent, compared to what is considered a healthy range of five to eight percent. Given these tight markets, it is not surprising that the rental market experienced a four percent increase at the end of Q1-2021, but that is outstripped by the double-digit increases in the median single family home prices, which increased by more than 12 percent over 2020, and more than 22 percent measured year-over-year by Q2-2021."

2015-2019 Housing Indicators

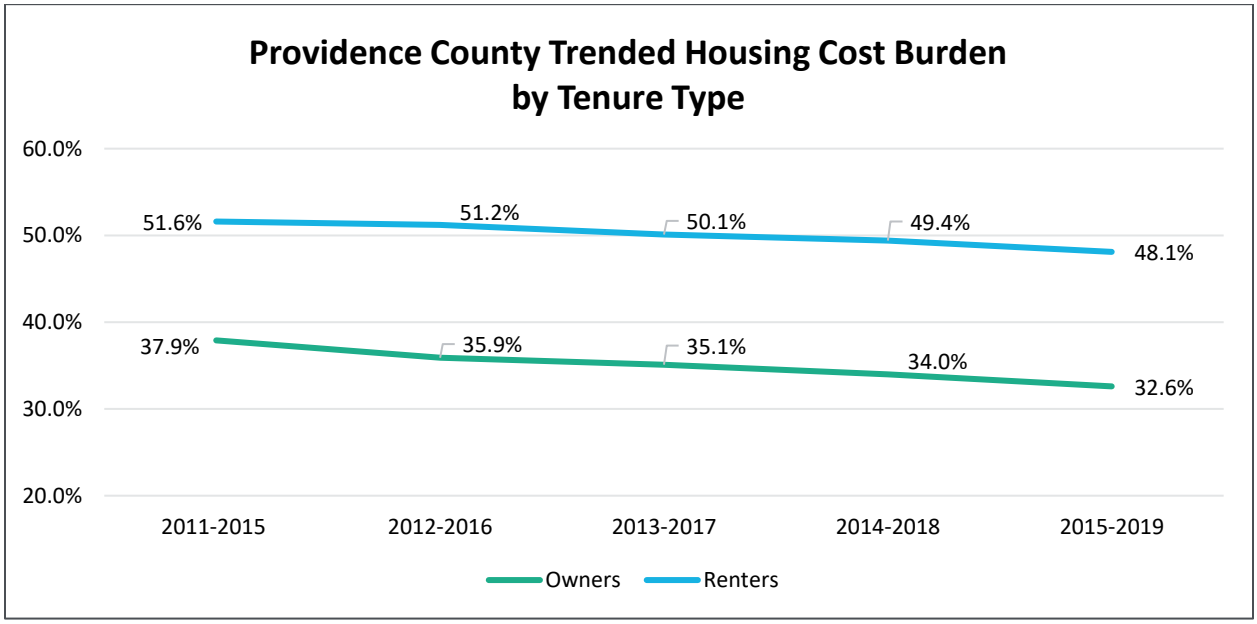
	Owners			Renters		
	Occupied Units	Median Home Value	Cost-Burdened*	Occupied Units	Median Rent	Cost-Burdened*
Bristol County	70.7%	$358,100	27.6%	29.3%	$1,037	49.1%
Kent County	70.1%	$236,300	29.7%	29.9%	$1,079	46.2%
Newport County	63.2%	$387,900	33.7%	36.8%	$1,285	44.3%
Providence County	54.2%	$233,500	32.6%	45.8%	$967	48.1%
Washington County	74.0%	$343,000	26.6%	26.0%	$1,133	46.8%
Rhode Island	60.8%	$261,900	31.0%	39.2%	$1,004	47.5%
United States	64.0%	$217,500	27.8%	36.0%	$1,062	49.6%

Source: US Census Bureau, American Community Survey

*Defined as spending 30% or more of household income on rent or mortgage expenses.



Source: US Census Bureau, American Community Survey

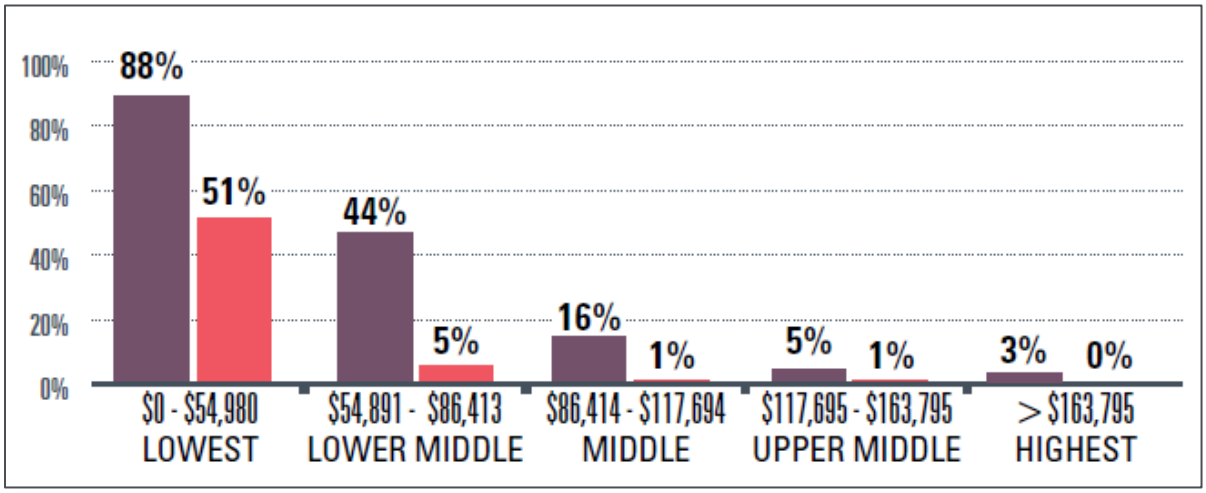


Source: US Census Bureau, American Community Survey

As reported in the HousingWorks RI 2021 Factbook, Rhode Island households earning $30,000 or less cannot affordably buy a median priced single-family home or rent an average priced two-bedroom apartment in any Rhode Island city or town. **For the first time since HousingWorks RI started to measure housing affordability, there are no towns or cities in Rhode Island where a household earning the state's median household income ($67,167) can affordably buy a single-family home.**

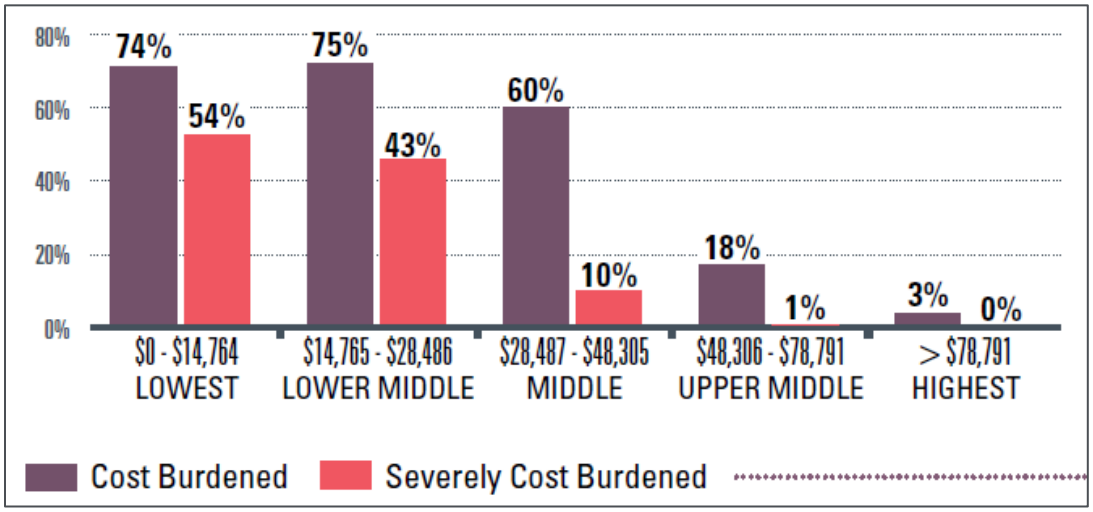
The following graphs depict cost burden and severe cost burden* by income group for homeowners with a mortgage and renters. In total for the reporting years 2015-2019, more than 140,000 Rhode Island households were cost burdened. Among the lowest income group, 88% of homeowners with a mortgage and 74% of renters were cost burdened. *Severe cost burden is defined as spending 50% or more of income on housing expenses.

2015-2019 Cost Burdened Homeowner Households with a Mortgage



Source: HousingWorks RI 2021 Housing Fact Book

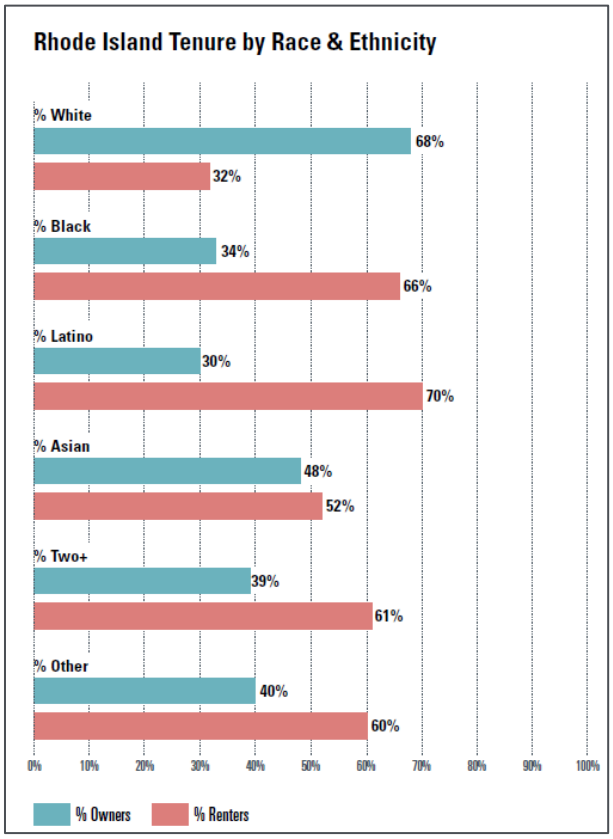
2015-2019 Cost Burdened Renter Households



Source: HousingWorks RI 2021 Housing Fact Book

Redlining and other forms of racial segregation led to a multi-generational loss of wealth. In Rhode Island, Black residents have a homeownership rate that is half the rate for White residents, and Latinx residents have the lowest homeownership rate of all racial and ethnic categories at 30%. **Homeownership rates among Black, Latinx, and Asian residents of Rhode Island are 10-19 percentage points lower than national homeownership rates for these populations.**

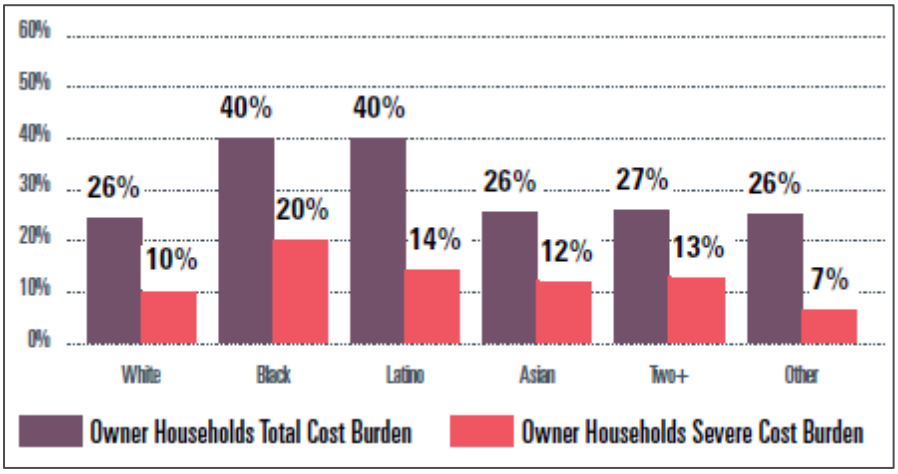
2015-2019 Rhode Island Tenure by Race and Ethnicity



Source: HousingWorks RI 2021 Housing Fact Book

Renter cost burden is largely consistent among White, Black, and Latinx Rhode Islanders, with approximately 1 in 2 households cost burdened and 1 in 4 households severely cost burdened. **Homeowner cost burden is not consistent among racial and ethnic groups.** Approximately 40% of Black and Latinx households are cost burdened compared to 26% of White households.

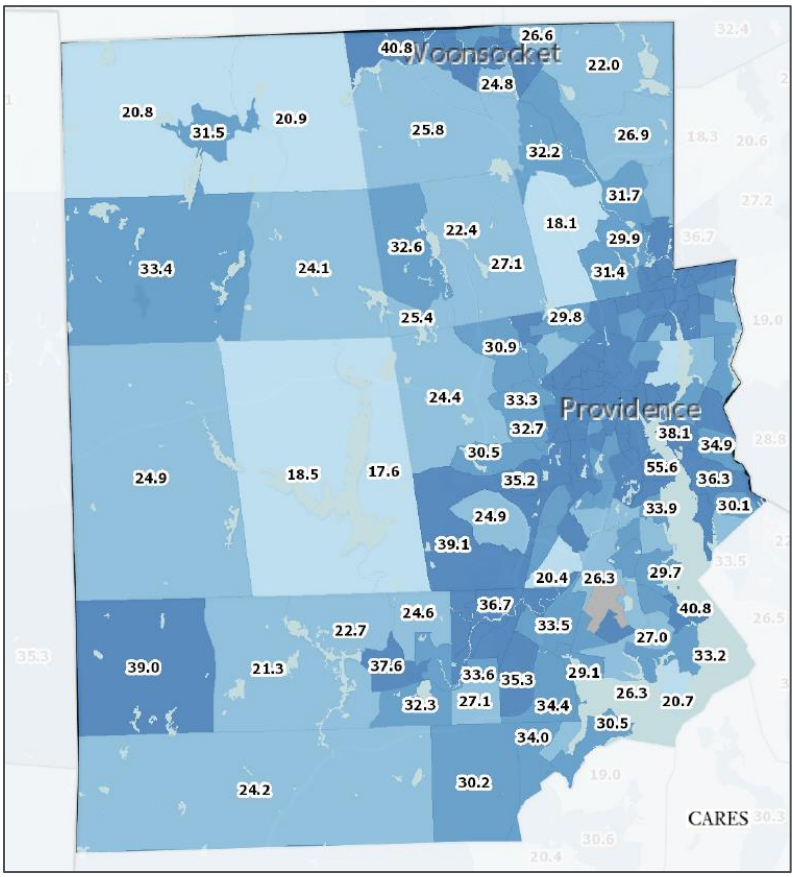
2015-2019 Homeowner Cost Burden by Race and Ethnicity



Source: HousingWorks RI 2021 Housing Fact Book

The following map depicts the percentage of cost burdened households by census tract within Kent and Providence counties. **Relative to CharterCARE's PSA, housing cost burden is concentrated in the core cities, areas of greater racial and ethnic diversity and higher socioeconomic disparity. Of note, as many as half of households in census tracts comprising Central Falls, Pawtucket, Providence, and Woonsocket are cost burdened.**

2015-2019 Cost Burdened Households
by Census Tract in Kent and Providence Counties



Cost Burdened Households (Housing Costs Exceed 30% of Household Income), Percent by Tract, ACS 2015-19

- Over 35.1%
- 28.1 - 35.0%
- 21.1 - 28.0%
- Under 21.1%
- No Data or Data Suppressed

Rhode Island is tied with Massachusetts for the third oldest housing stock in the nation.
Approximately 73.5% of housing units in Rhode Island were built before 1980 compared to 53.6% nationwide; less than 2% of units have been built since 2014. Providence County has the oldest housing stock in Rhode Island with 78.5% of units built before 1980. Washington County has the newest housing stock in the state, primarily due to new development between 1980 and 2009.

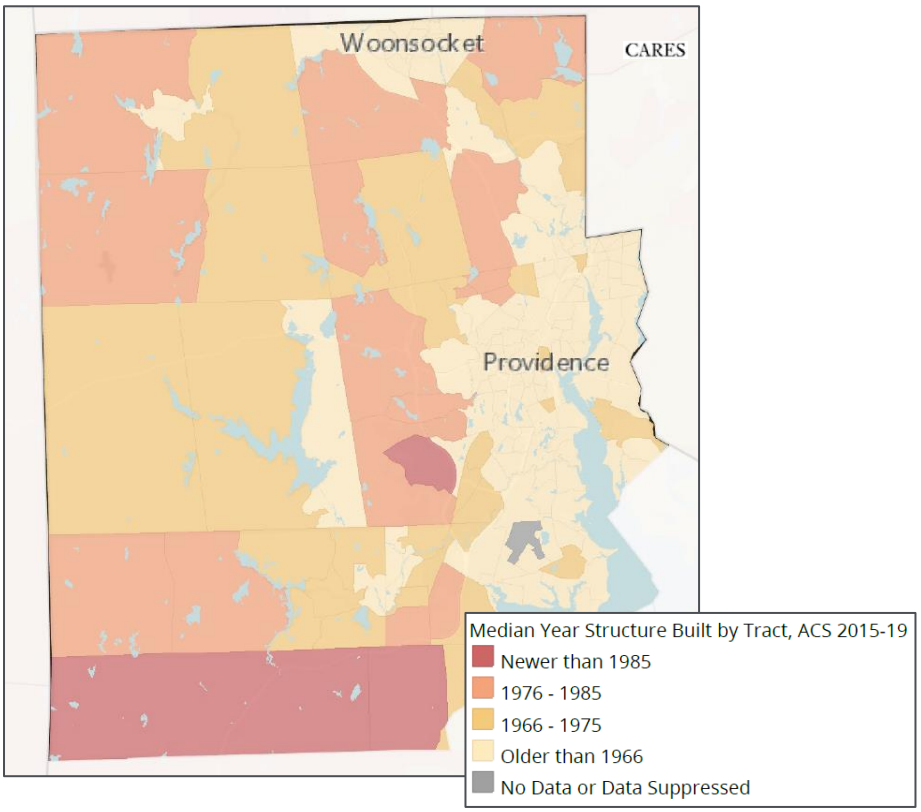
2015-2019 Housing by Year Built

	Before 1980	1980-1999	2000-2009	2010-2013	2014 or Later
Bristol County	73.7%	19.4%	5.1%	1.4%	0.4%
Kent County	72.3%	20.8%	5.5%	0.6%	0.8%
Newport County	67.5%	20.9%	8.9%	1.3%	1.4%
Providence County	78.5%	15.6%	4.7%	0.8%	0.4%
Washington County	57.6%	28.9%	11.0%	1.6%	1.0%
Rhode Island	73.5%	18.9%	6.1%	0.9%	0.7%
United States	53.6%	27.3%	14.0%	2.7%	2.5%

Source: US Census Bureau, American Community Survey

The following map depicts the median year that housing structures were built by census tract within Kent and Providence counties. In nearly all census tracts in and around Central Falls, Pawtucket, Providence, and Woonsocket, the median year for housing build was before 1966.

2015-2019 Median Year of Housing Build
by Census Tract in Kent and Providence Counties



Quality and affordable housing has a direct impact on health. HousingWorks RI states, “Homes built through 1978 predate safety regulations for contaminants like lead and asbestos, which may be present in paint and plumbing, contributing to the health risks of lead poisoning and unsafe drinking water.”

As reported by HousingWorks RI, of the 73.5% of homes that were built before 1980, less than 10% are certified Lead Safe, having undergone a state certified inspection and mitigation process. While statewide the percentage of children entering kindergarten with a history of lead poisoning has decreased, lead poisoning exposure continues to be higher among children residing in areas with older housing, particularly in the four core cities.

Rhode Island adults and children have a higher prevalence of asthma than their peers nationwide. As of 2019, 11.2% of Rhode Island adults and 8.7% of children reported having a current asthma diagnosis compared to 9% of adults and 7.4% of children nationwide. As reported in the HousingWorks RI 2021 Fact Book, "40 percent of the triggers that cause asthma are fixable and found within the home."

Asthma is the most common chronic condition among children, and a leading cause of hospitalization and school absenteeism. From 2015 to 2019, Rhode Island saw a total of 1,075 child hospitalizations with a primary diagnosis of asthma for a rate of 1.0 per 1,000 children. Additionally, the state saw 6,919 child emergency department (ED) visits with a primary diagnosis of asthma for a rate of 6.2 per 1,000 children. Both hospitalizations and ED visits were more than twice as high in the four core cities as the remainder of the state.

Consistent with these findings, within the CharterCARE PSA, the core cities have the oldest housing stock and the highest prevalence of child lead poisoning and child ED visits due to asthma. North Providence also has elevated rates of ED visits due to asthma; 68% of homes were built before 1980.

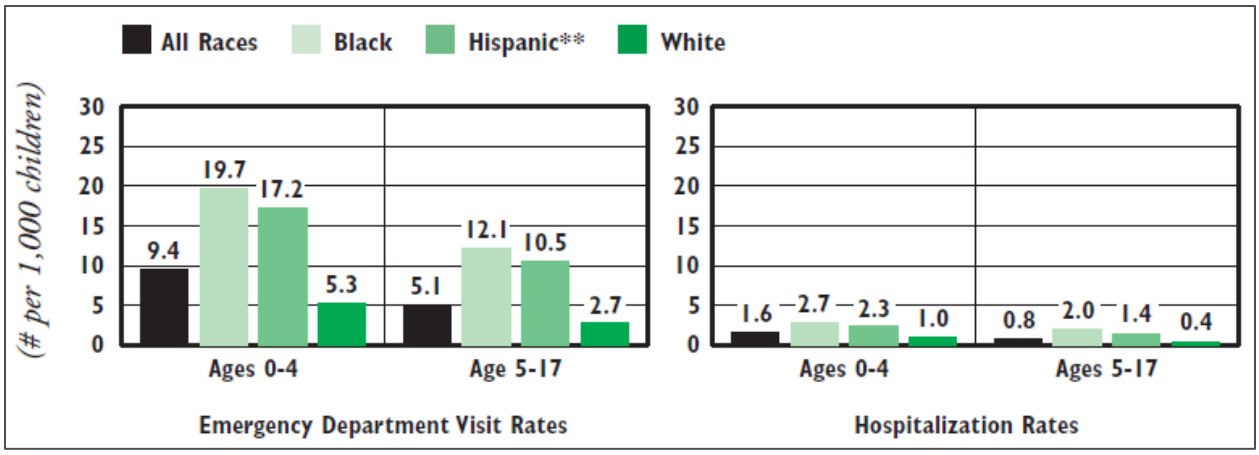
Housing and Health within the CharterCARE PSA

	Lead Poisoning Among Children Entering Kindergarten in Fall 2022			2015-2019 ED Visits with Primary Asthma Diagnosis		Housing Stock Built Pre-1980
	Number Tested	Number with Lead Poisoning	Percent with Lead Poisoning	Child ED Visits	Rate per 1,000 Children	
Central Falls	307	22	7.2%	341	12.1	87%
Cranston	718	20	2.8%	186	6.4	77%
Cumberland	341	2	0.6%	102	2.7	64%
East Providence	460	11	2.4%	125	7.1	84%
Johnston	250	5	2.0%	52	5.4	66%
North Providence	268	7	2.6%	104	10.2	68%
Pawtucket	848	53	6.3%	714	8.6	86%
Providence	2,477	167	6.7%	1,420	16.8	86%
Smithfield	157	1	0.6%	21	3.9	62%
Warwick (Kent County)	675	11	1.6%	308	3.9	80%
Woonsocket	561	27	4.8%	274	13.0	86%
Four Core Cities	4,193	269	6.4%	4,080	11.1	86%
Remainder of Rhode Island	6,094	123	2.0%	2,833	3.8	67%

Source: 2021 Rhode Island Kids Count Factbook

Black/African American and Latinx residents are more likely to rent their home and live in areas of Rhode Island with older housing. These trends, coupled with other social determinants of health barriers, contribute to a disproportionate rate of asthma compared to Whites and other races. **In Rhode Island, the 2015-2019 rate of ED visits due to asthma for Black/African American and Latinx children under age five was more than triple the rate for White children.**

2015-2019 Asthma Emergency Department and Hospitalization Rates by Age and Race and Ethnicity



Source: 2021 Rhode Island Kids Count Factbook

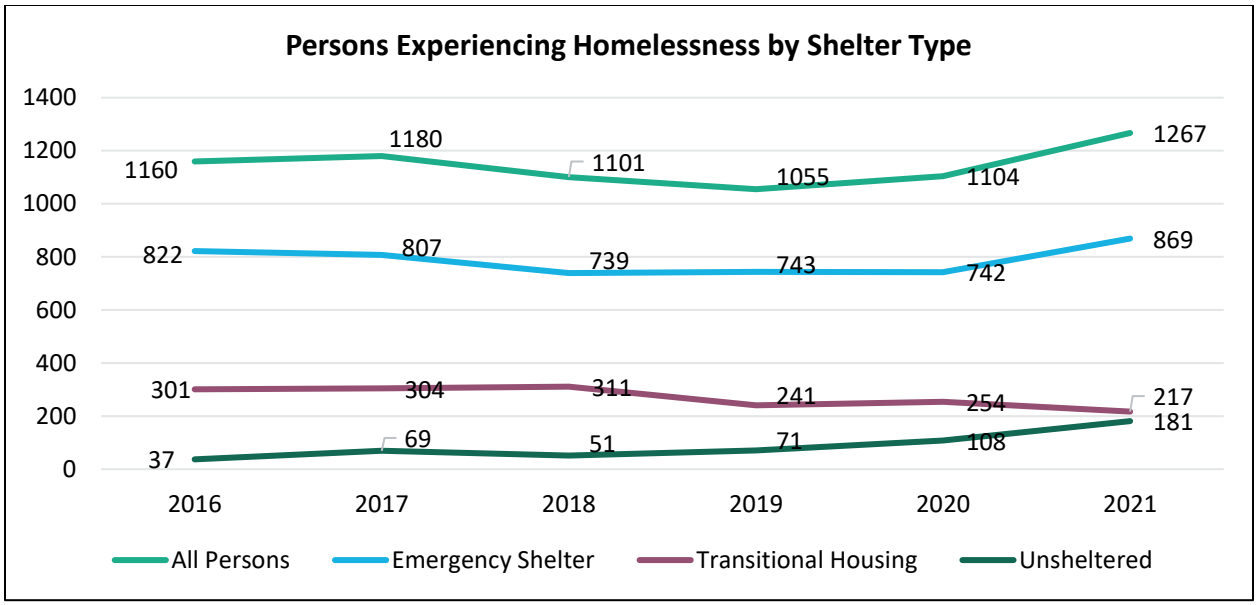
The Point-in-Time (PIT) count is a count of sheltered and unsheltered homeless persons on a single night in January which is mandated by HUD in every community nationwide. Sheltered locations include emergency shelters and transitional housing. Unsheltered locations include cars, streets, parks, etc.

The Rhode Island Coalition to End Homelessness is responsible for conducting the PIT count in Rhode Island. The number of individuals experiencing homelessness in Rhode Island increased in both 2020 and 2021, likely due in part to the COVID-19 pandemic. **From 2020 to 2021, the percentage of young adults experiencing homelessness doubled from 4% to 8%, and the percentage of chronic homeless increased from 20% to 28%. The number of unsheltered individuals more than doubled from 2019 to 2021.**

2021 Rhode Island Statewide Point-in-Time Homeless Count

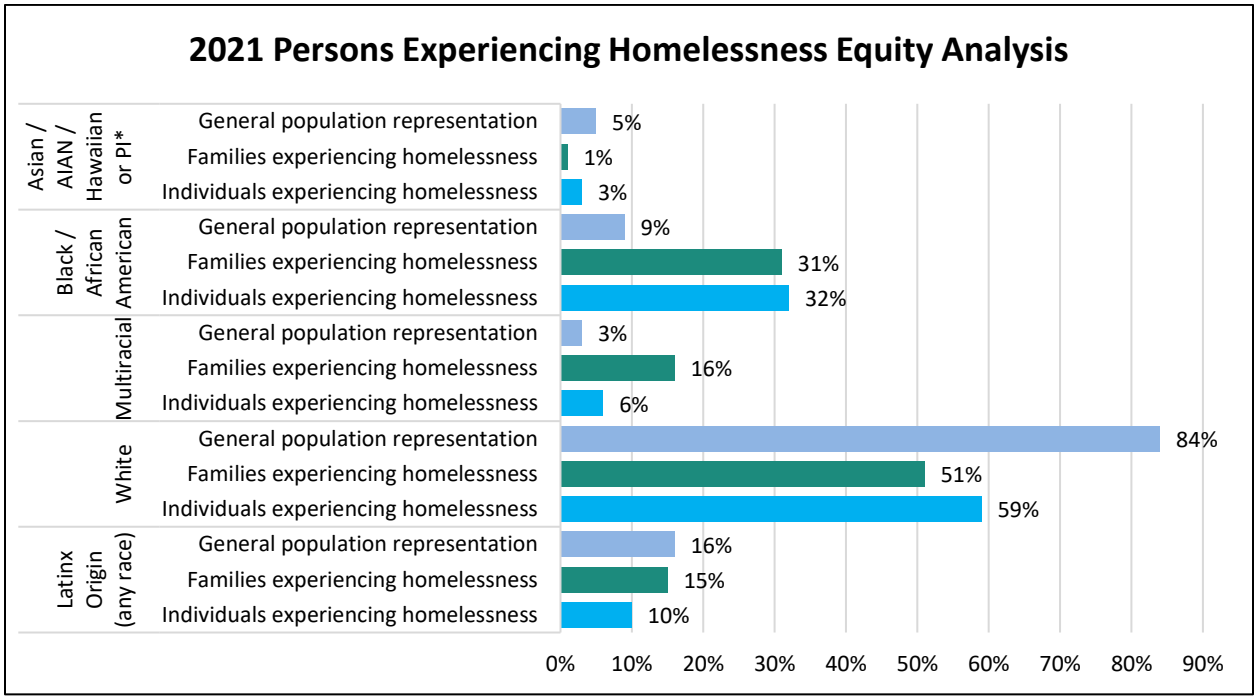
	Persons Experiencing Homelessness
Total	1,267
Household Type	
Individuals	793 (67%)
Families	474 (37%)
Individual Characteristics	
Chronic homeless	357 (28%)
Veterans	97 (8%)
Young adults	96 (8%)

Source: Rhode Island Coalition to End Homelessness



Source: Rhode Island Coalition to End Homelessness

The Rhode Island Coalition to End Homelessness conducts an equity analysis to compare the percentage of people experiencing homelessness by race and ethnicity, relative to their representation in the general population. **Black/African Americans are disproportionately represented among people experiencing homelessness.** They represent 9% of the general population, but 31% of families and 32% of individuals experiencing homelessness in 2021. Multiracial individuals were also disproportionately represented, although not to the same degree as Black/African Americans.



Source: Rhode Island Coalition to End Homelessness

*American Indian or Alaska Native, Pacific Islander

Homeless children are at greater risk for health and developmental problems and are more likely to experience food insecurity and trauma, among other issues. **Within the CharterCARE PSA, 3.2% of Woonsocket students and 2.5% of Central Falls students experienced homelessness compared to 0.9% across Rhode Island (excluding the core cities).**

2019-2020 School Year Children Experiencing Homelessness by CharterCARE PSA School District

	Total Student Enrollment	Students Identified as Homeless
Central Falls	2,878	73 (2.5%)
Cranston	10,475	72 (0.7%)
Cumberland	4,668	13 (0.3%)
East Providence	5,251	31 (0.6%)
Johnston	3,258	32 (1.0%)
North Providence	3,585	42 (1.2%)
Pawtucket	8,784	98 (1.1%)
Providence	23,836	304 (1.3%)
Smithfield	2,382	22 (0.9%)
Warwick (Kent County)	8,610	85 (1.0%)
Woonsocket	6027	194 (3.2%)
Four Core Cities	41,525	669 (1.6%)
Remainder of Rhode Island	91,104	803 (0.9%)

Source: 2021 Rhode Island Kids Count Factbook

Related to housing issues, is access to computers and internet. Termed the "digital divide," there is a growing gap between the underprivileged members of society, especially the poor, rural, elderly, and handicapped portion of the population, who do not have access to computers or the internet and the wealthy, middle-class, and young Americans living in urban and suburban areas who have access.

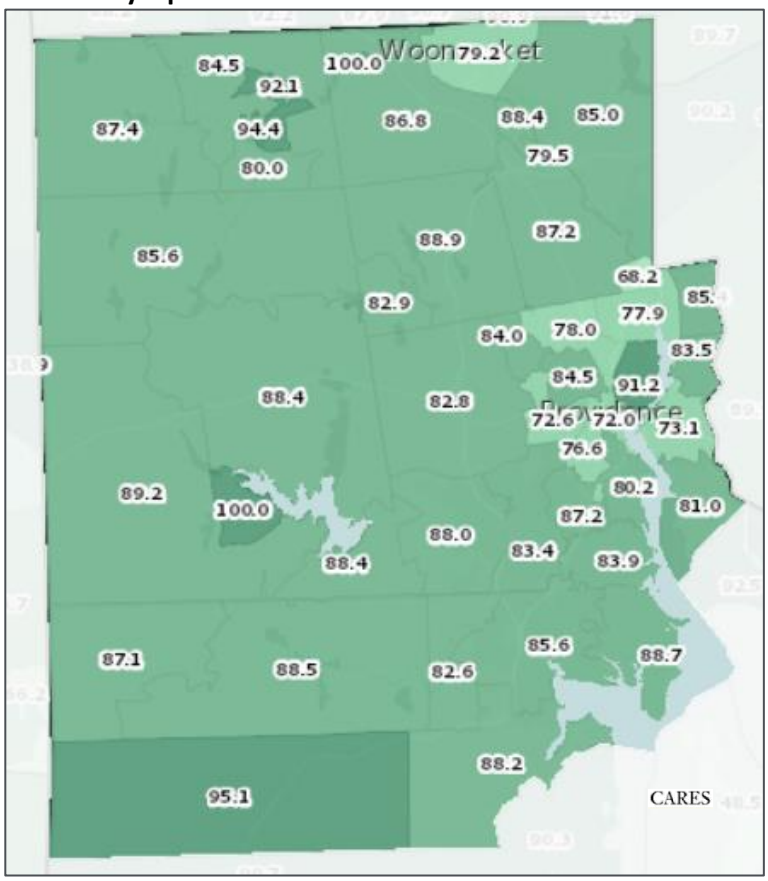
Rhode Island overall has comparable digital access as the nation, and these findings are generally consistent across all counties except Providence. While a similar proportion of Providence County residents have a computer device and/or internet subscription compared to the state, fewer residents own a computer or have broadband internet. This disparity is of particular concern in Central Falls, where only 68% of households have broadband internet.

2015-2019 Households by Digital Access

	With Computer Access			With Internet Access	
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Bristol County	89.8%	83.4%	78.5%	86.9%	86.2%
Kent County	90.7%	81.7%	78.0%	86.7%	86.5%
Newport County	91.3%	82.3%	77.9%	86.4%	86.1%
Providence County	87.6%	73.8%	76.3%	81.9%	81.6%
Washington County	92.9%	85.8%	80.0%	89.6%	89.4%
Rhode Island	89.1%	77.7%	77.3%	84.2%	84.0%
United States	90.3%	77.8%	79.9%	83.0%	82.7%

Source: US Census Bureau, American Community Survey

2015-2019 Households with any Broadband Internet by Zip Code in Kent and Providence Counties



Households with Any Broadband, Percent by ZCTA, ACS 2015-19

- Over 90.0%
- 80.1 - 90.0%
- 70.1 - 80.0%
- 60.1 - 70.0%
- Under 60.1%

Illuminating Health Inequities

Health inequities refer to the systematic differences in opportunities that population groups have to achieve optimal health, which lead to unfair and avoidable differences in health outcomes. Without addressing inequities and supporting initiatives aimed at providing a healthy start, access to opportunity for improvement, and a tangible pathway to a better life, interventions focused only on individual behavior change often do not have enough social and environmental soil to take root and create lasting positive change. By addressing inequities in our communities, we can more effectively work towards a healthier community for all people now and in the future.

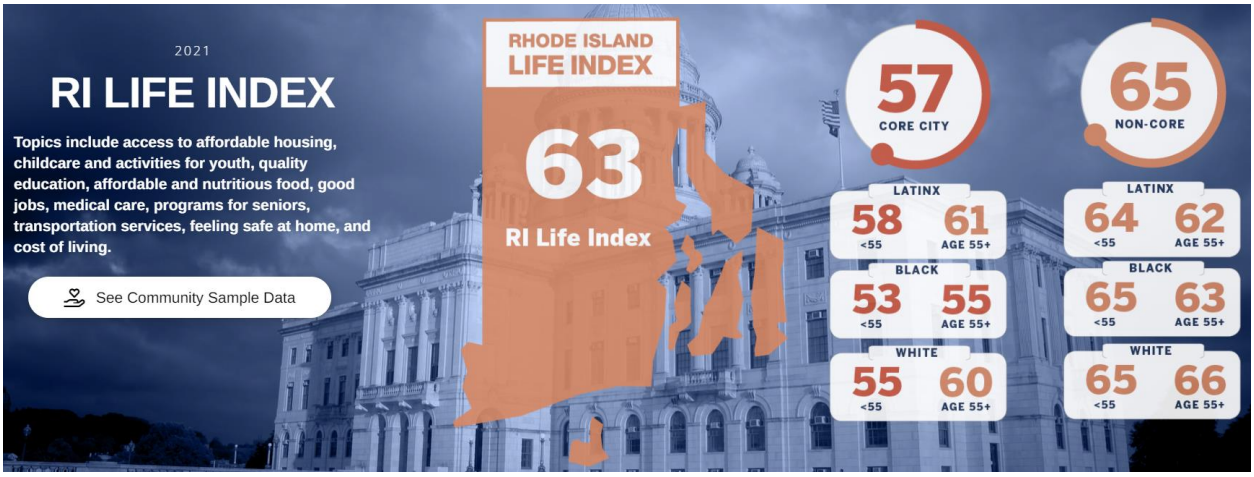
Rhode Island (RI) Life Index

The RI Life Index, begun in 2019 as an initiative of Brown University's School of Public Health and Blue Cross & Blue Shield of Rhode Island, captures Rhode Islander's perceptions of SDoH to help drive community investment in meeting people's basic needs and achieving more equitable health outcomes. The topic areas comprising the RI Life Index focus on community life and quality of community elements, including affordable housing, quality education, and good jobs.

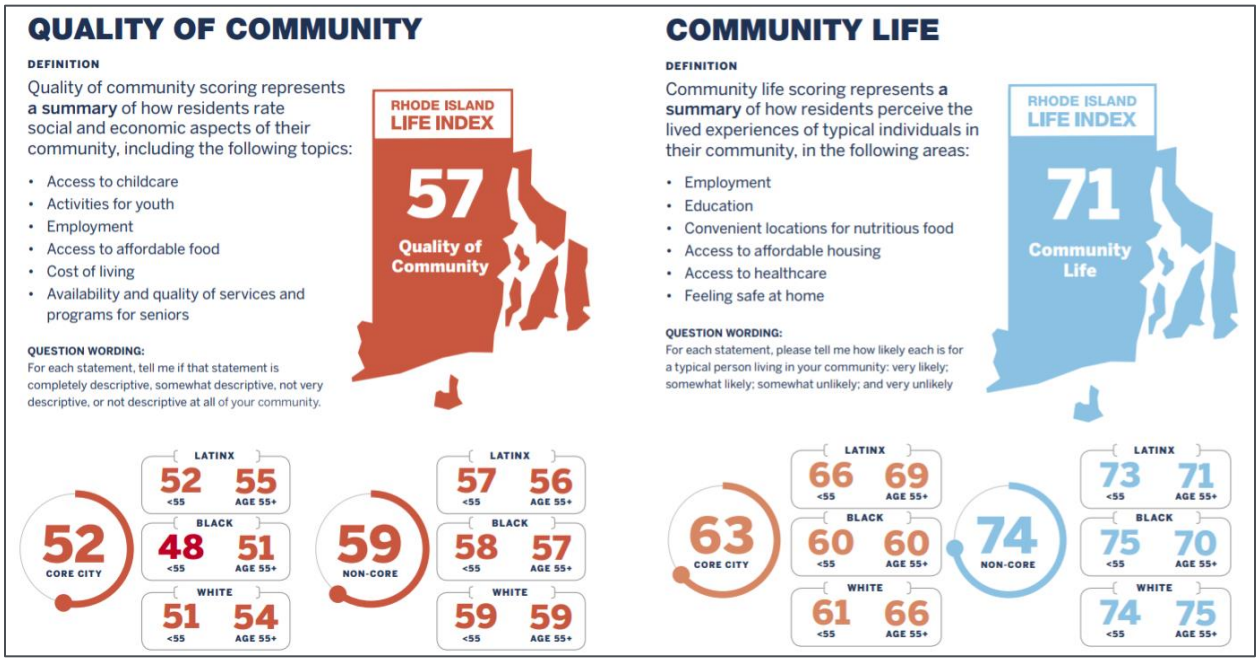
The following graphics illustrate a composite score of health and well-being drivers, as defined by the RI Life Index, as well as summary scores for community life and quality of community elements. Scores are further summarized by core city versus non-core city residents and by race, ethnicity, and age. All indices indicate a disparity in the perceived quality of SDoH for core city residents and people of color, particularly Black/African Americans. A**s reported in the 2021 RI Life Index report, "In virtually all topic areas from 2019 through 2020, BIPOC Rhode Islanders living in core cities perceived social factors such as access to affordable housing and cost of living as much greater impediments to health and well-being than have white Rhode Islanders living in non-core areas."**

The 2021 RI Life Index findings largely align with those of 2020 and 2019. The most notable trend in 2021 was a significant perceived declined in programs and services for children, including access to quality education, youth activities, and places to raise children. Additionally, there was a significant decrease in perceptions of the availability of services for older adults among core city residents and those identifying as Latinx.

RI Life Index Composite Score



RI Life Index Summary Perceptions of Community

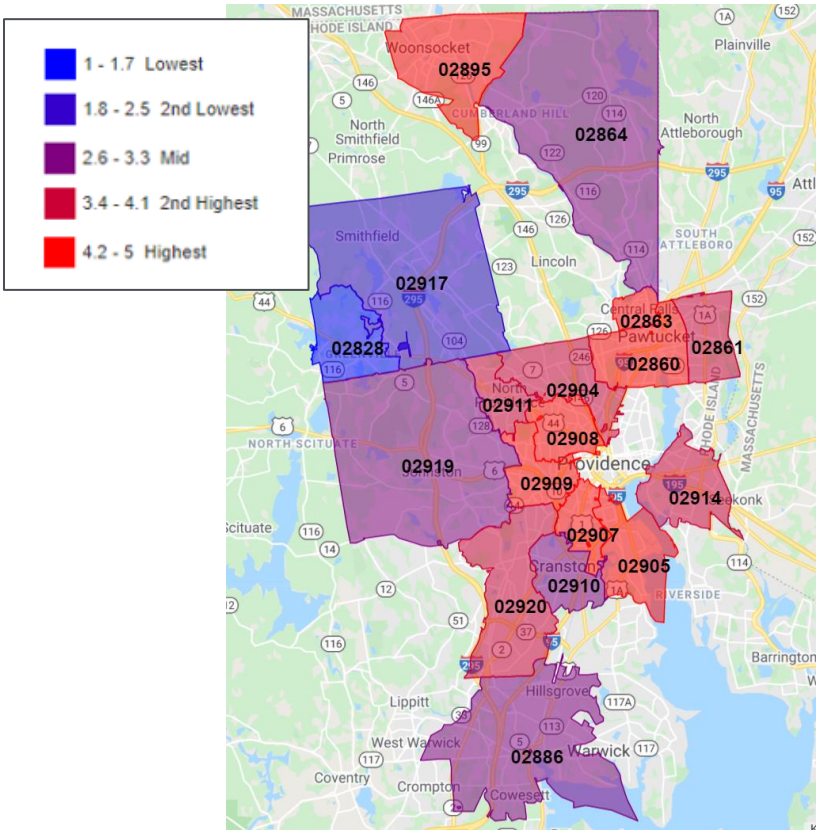


Tools for Identifying Disparity at the Community-Level

The following data visualizations illustrate the potential for health disparities and inequities at the community-level based on social determinants of health barriers. A description of each data visualization tool is provided below:

- **Community Need Index (CNI)**: The CNI scores zip codes on a scale of 1.0 to 5.0, with 1.0 indicating a zip code with the least need and 5.0 indicating a zip code with the most need compared to the US national average of 3.0. The CNI is a zip code-based index of community need calculated nationwide, regarding healthcare. The CNI is weights, indexes and scores zip codes by socioeconomic barriers, including income, culture, education, insurance, and housing.
- **Vulnerable Population Footprint**: The Vulnerable Population Footprint identifies areas where high concentrations of people living in poverty and people living without a high school diploma overlap. Areas are reported by census tract. Census tracts are statistical subdivisions of a county that have roughly 4,000 inhabitants.
- **Area Deprivation Index (ADI)**: The ADI provides a census block group measure of socioeconomic disadvantage based on income, education, employment, and housing quality. ADI scores are displayed at the block group level on a scale from 1 (least disadvantaged) to 10 (most disadvantaged). A block group is a subdivision of a census tract and typically contains between 250 and 550 housing units.

Community Need Index

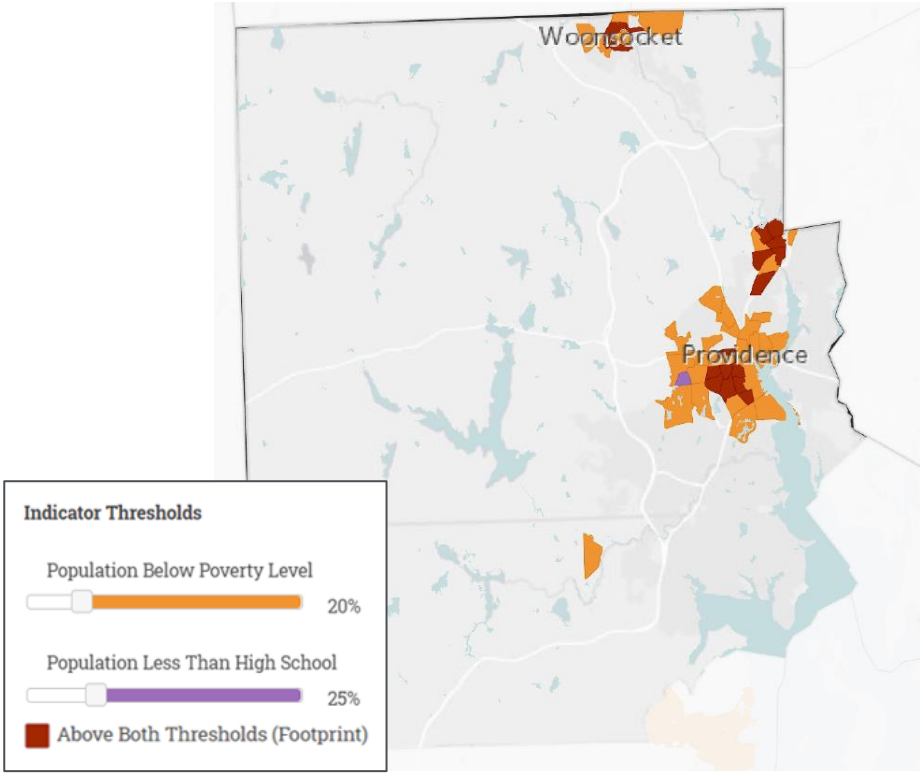


Zip Code	Town	CNI Score
02828	Greenville	1.6
02917	Smithfield	2.0
02919	Johnston	2.8
02864	Cumberland	3.0
02886	Warwick	3.0
02910	Cranston	3.2
02861	Pawtucket	3.6
02911	Providence	3.6
02920	Cranston	3.6
02904	Providence	3.8
02914	East Providence	4.0
02908	Providence	4.2
02895	Woonsocket	4.4
02905	Providence	4.4
02860	Pawtucket	4.6
02863	Central Falls	4.8
02907	Providence	4.8
02909	Providence	4.8

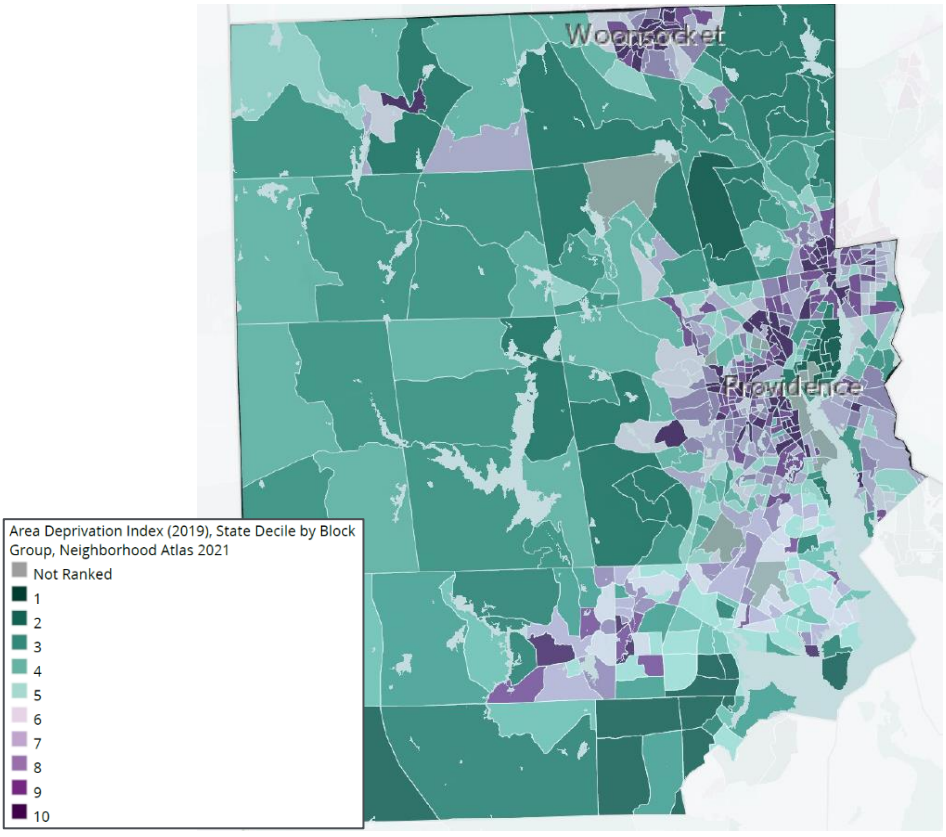
Lowest need

Highest need

Vulnerable Population Footprint



Area Deprivation Index



Providence zip codes 02907 and 02908, Central Falls zip code 02863, and Pawtucket zip code 02860 have the highest CNI scores of 4.6 or higher out of 5.0. The CNI scores also correlate with areas of vulnerability and high deprivation. Identified community need within these areas is primarily driven by elevated poverty (particularly among children), potential for language barriers, low educational attainment, and/or high uninsured populations. Of note, of the 18 zip codes comprising CharterCARE's PSA, 12 have a higher need CNI score of 4.2 or higher.

Comparing health indicators with population statistics demonstrates the adverse impact of social determinants on populations that historically and continually experience inequities. The areas with the highest CNI scores are also among the most diverse populations in the service area. In this way we can begin to see how inequities perpetuate persistent disparities in health and social outcomes.

2015-2019 Social Determinants of Health by Geography

	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than HS Diploma	Without Health Insurance	CNI Score
02828, Greenville	1.8%	0.0%	5.2%	5.6%	1.8%	1.6
02917, Smithfield	4.4%	0.0%	11.4%	7.8%	1.8%	2.0
02919, Johnston	7.0%	6.4%	18.0%	10.5%	2.8%	2.8
02864, Cumberland	6.1%	6.0%	17.9%	9.8%	2.6%	3.0
02886, Warwick (Kent County)	7.2%	7.4%	10.5%	8.7%	3.2%	3.0
02910, Cranston	9.0%	15.5%	27.1%	9.9%	5.0%	3.2
02861, Pawtucket	9.5%	13.7%	27.5%	14.4%	5.1%	3.6
02911, Providence	10.3%	10.8%	21.0%	8.9%	2.4%	3.6
02920, Cranston	10.4%	12.5%	24.8%	11.9%	3.1%	3.6
02904, Providence	18.6%	20.9%	30.8%	12.2%	5.5%	3.8
02914, East Providence	12.7%	16.8%	35.1%	20.4%	6.3%	4.0
02908, Providence	19.9%	30.5%	46.7%	12.3%	5.1%	4.2
02895, Woonsocket	21.8%	35.2%	26.7%	18.3%	7.2%	4.4
02905, Providence	23.0%	30.8%	48.2%	16.9%	6.7%	4.4
02860, Pawtucket	18.9%	29.1%	50.3%	21.4%	6.8%	4.6
02863, Central Falls	30.2%	39.8%	67.4%	35.1%	17.1%	4.8
02907, Providence	28.3%	37.9%	69.7%	28.4%	10.6%	4.8
02909, Providence	29.9%	43.3%	62.9%	24.3%	10.2%	4.8
Rhode Island	12.4%	17.0%	22.4%	11.2%	4.5%	NA
United States	13.4%	18.5%	21.6%	12.0%	8.8%	NA

Source: US Census Bureau, American Community Survey

2015-2019 Population by Race and Ethnicity

	White	Black or African American	Asian	Some Other Race	Two or More Races	Latinx origin (any race)
02828, Greenville	94.3%	0.0%	1.9%	1.6%	2.3%	4.5%
02917, Smithfield	91.4%	2.2%	3.6%	0.7%	2.0%	3.2%
02919, Johnston	90.5%	1.9%	3.2%	2.1%	2.2%	9.0%
02864, Cumberland	93.4%	1.2%	2.5%	1.6%	1.3%	6.9%
02886, Warwick (Kent County)	91.4%	1.4%	4.2%	0.9%	1.7%	6.5%
02910, Cranston	77.2%	7.3%	6.2%	4.6%	4.0%	21.4%
02861, Pawtucket	79.2%	7.5%	3.0%	5.6%	4.2%	15.6%
02911, Providence	82.9%	8.2%	3.7%	3.0%	2.0%	15.6%
02920, Cranston	78.4%	6.1%	6.2%	4.3%	4.3%	16.8%
02904, Providence	64.7%	19.1%	2.3%	8.7%	4.5%	22.6%
02914, East Providence	72.9%	10.9%	3.7%	4.9%	7.4%	10.2%
02908, Providence	64.1%	17.6%	3.3%	10.3%	4.4%	39.9%
02895, Woonsocket	73.5%	9.6%	5.8%	4.7%	5.4%	18.8%
02905, Providence	58.9%	18.4%	4.2%	13.0%	4.8%	43.6%
02860, Pawtucket	52.1%	23.1%	2.1%	15.6%	6.3%	30.6%
02863, Central Falls	48.5%	12.7%	0.6%	29.6%	7.1%	66.4%
02907, Providence	36.9%	21.3%	7.0%	26.0%	6.3%	62.0%
02909, Providence	47.6%	15.4%	4.5%	27.2%	4.1%	60.1%
Rhode Island	80.5%	6.8%	3.4%	5.5%	3.3%	15.4%
United States	72.5%	12.7%	5.5%	4.9%	3.3%	18.0%

Source: US Census Bureau, American Community Survey

Life expectancy is another measure of adverse social determinants of health. Overall life expectancy in Kent and Providence counties is the lowest in Rhode Island, falling more than two years below Newport County with the highest life expectancy. **Within CharterCARE's PSA, life expectancy is lower than 78 years in many of the census tracts comprising the core cities, and lower than 75 years in select areas.**

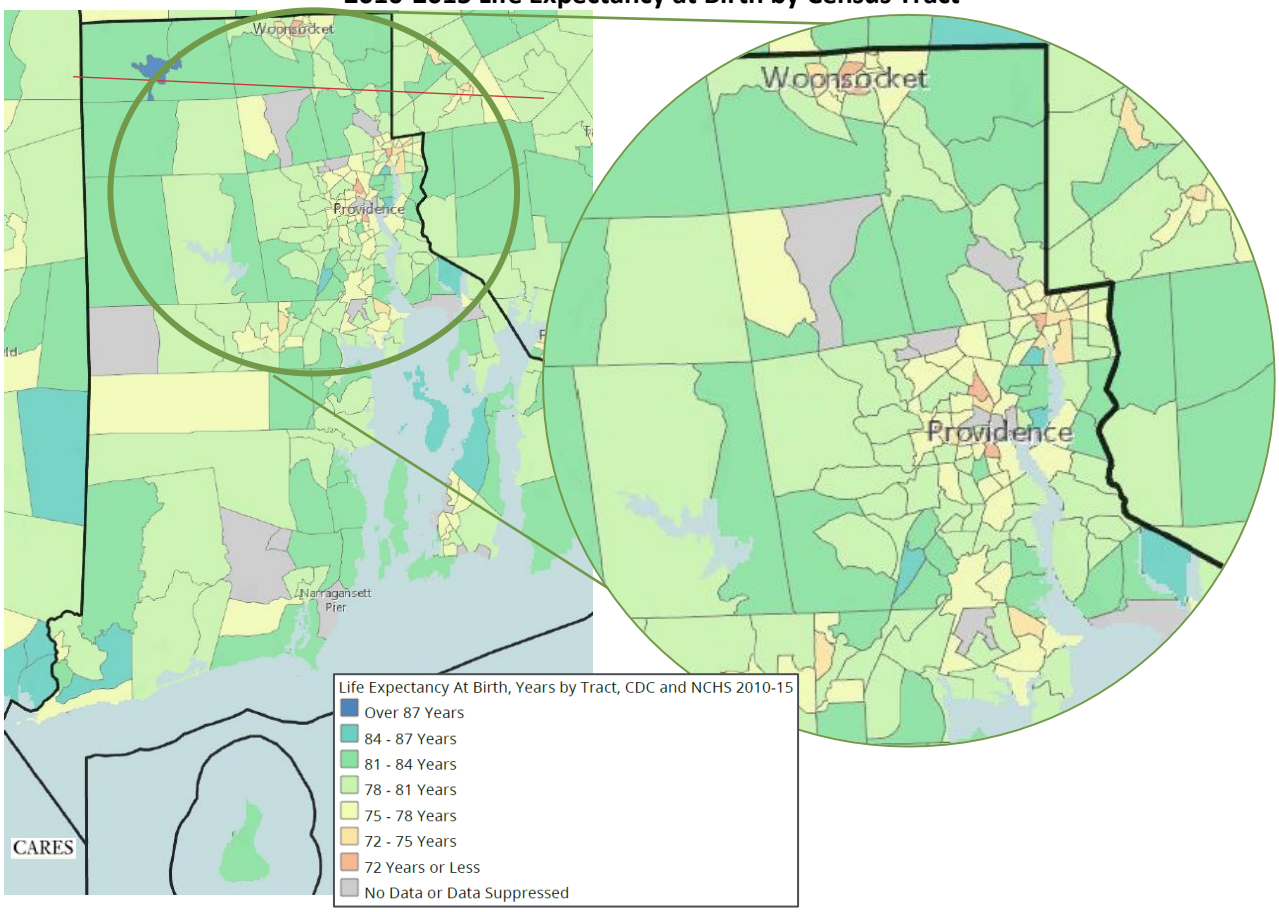
Life expectancy also varies widely by racial and ethnic group. In Rhode Island, life expectancy is highest for Latinx and Asian residents. The state differs from national trends with higher life expectancy among Black/African Americans than Whites. This trend is consistent across all counties except Newport and is largely reflected in mortality data presented in this report. For example, in all counties except Newport, Black/African Americans have a similar or lower all-cause death rate compared to Whites. Nationally, the all-cause death rate is 130 points higher for Black/African Americans than Whites.

2017-2019 Life Expectancy by Race and Ethnicity

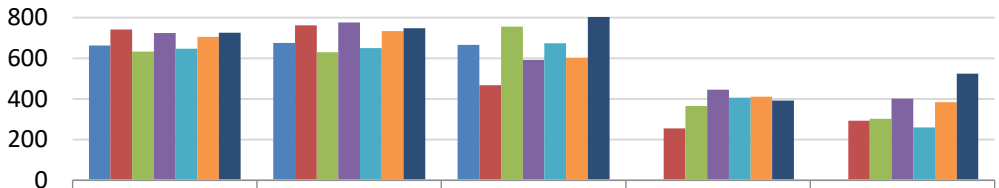
	Overall Life Expectancy	White	Black	Asian	Latinx origin (any race)
Bristol County	81.5	NA	NA	NA	NA
Kent County	79.2	78.7	87.5	93.2	91.1
Newport County	81.6	81.7	77.1	89.5	98.0
Providence County	79.4	78.5	82.8	85.9	91.3
Washington County	81.0	81.0	81.9	89.0	89.9
Rhode Island	79.8	79.4	82.1	87.4	91.7

Source: National Vital Statistics System

2010-2015 Life Expectancy at Birth by Census Tract



2015-2019 All Cause Death Rate by Race/Ethnicity per Age-Adjusted 100,000



	Total population	White (Non-Hispanic)	Black (Non-Hispanic)	Asian (Non-Hispanic)	Latinx (any race)
Bristol County	663.1	676.3	666.7	0.0	0.0
Kent County	741.7	762.1	467.8	255.0	292.2
Newport County	632.7	629.5	756.0	365.5	303.0
Providence County	725.1	775.7	592.7	446.4	401.8
Washington County	647.7	650.0	674.4	405.8	260.2
Rhode Island	706.3	734.2	601.6	410.5	384.8
United States	726.3	747.8	877.9	392.3	524.6

Source: Centers for Disease Control and Prevention

Our Health Status as a Community

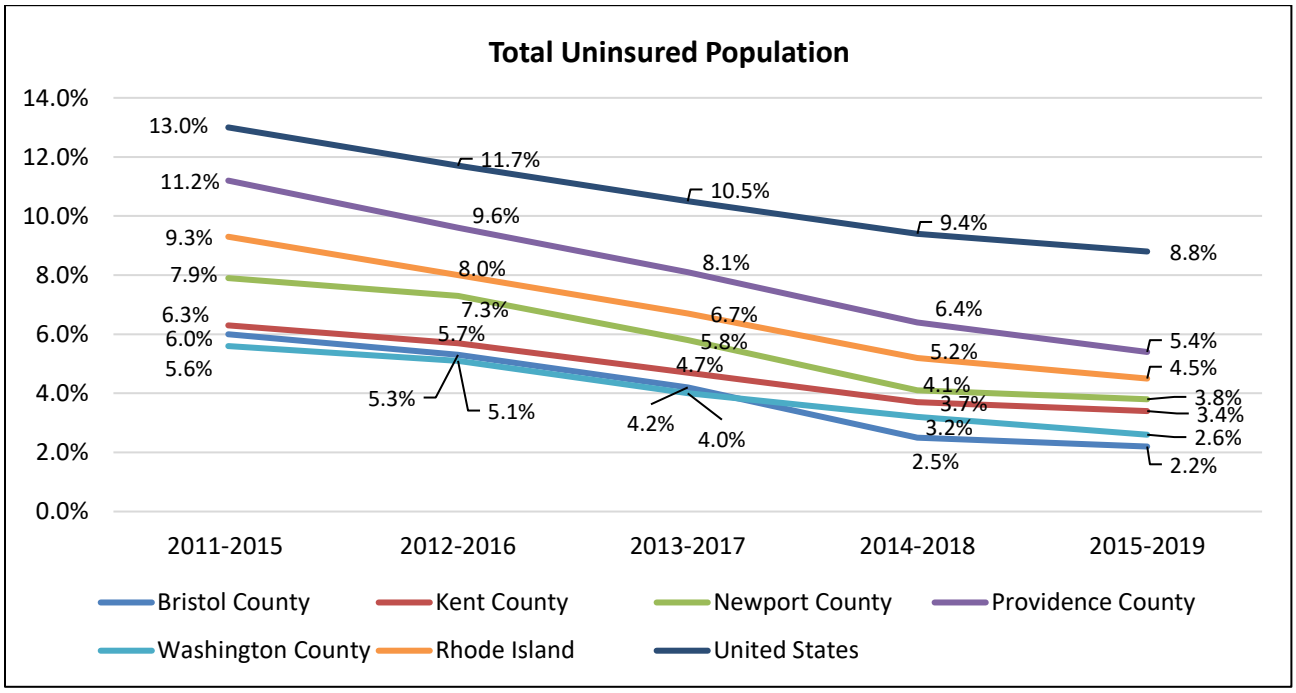
Access to Healthcare

All Rhode Island counties meet the HP2030 goal of 92.1% insured residents. Rhode Island residents are more likely to be insured than their peers nationally, and the uninsured percentage continues to decline in all counties. When considered by age, it is worth noting an elevated uninsured percentage among young adults age 19-25 and adults age 26-44 in Newport and Providence counties, in comparison to other counties. Approximately 1 in 10 residents in these age groups are uninsured in both counties.

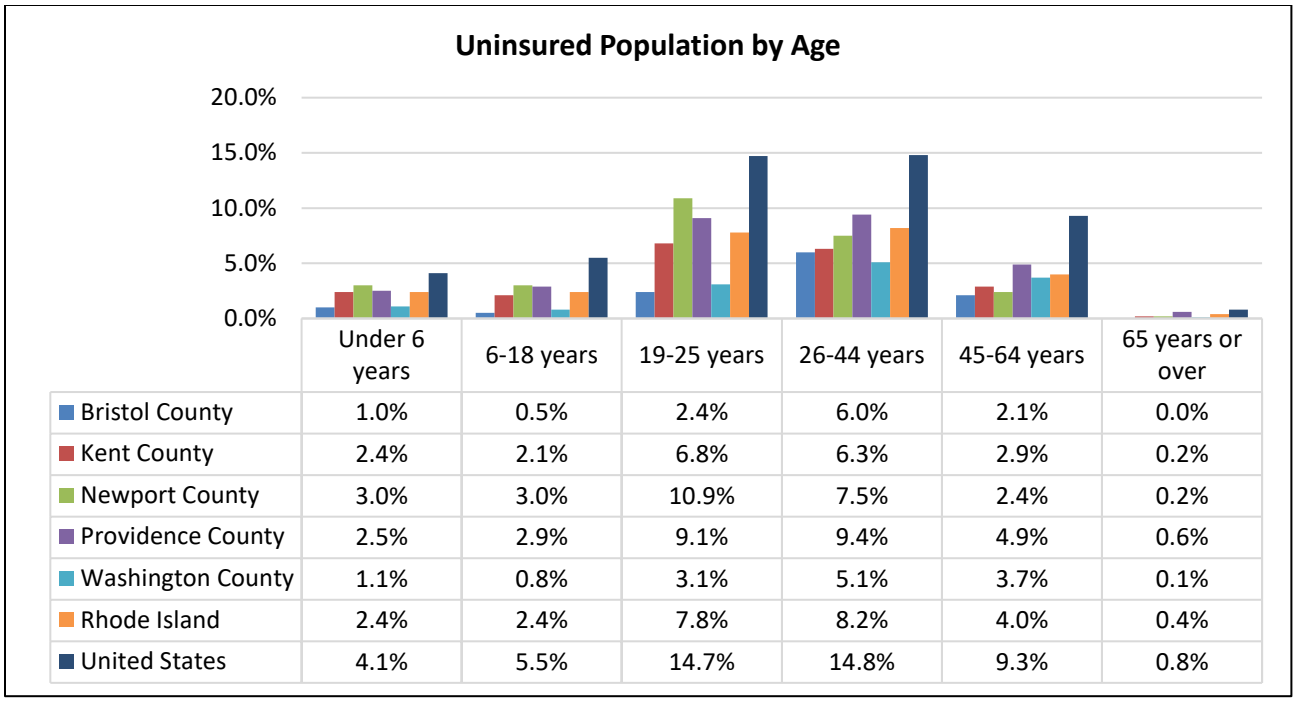
Among individuals with health insurance living in Rhode Island, the majority are covered by employer-based insurance. Medicare and Medicaid coverage rates are also higher in Rhode Island in comparison to the nation. Medicaid coverage is particularly high in Providence County, covering 27% of individuals. Across the state, the percentage of Medicaid insured residents increased in nearly all zip codes.

The uninsured percentage declined in all CharterCARE PSA zip codes from the 2019 CHNA. The percentage of uninsured residents is similar to or lower than state and national benchmarks in all PSA zip codes except Central Falls 02863 (17.1%), Providence 02907 (10.6%), and Providence 02909 (10.2%). Of note, while the percent uninsured continues to be high in Providence zip codes 02907 and 02909, it is half the percentage reported at the time of the 2019 CHNA. Zip code 02907 saw a nearly 10-point increase in the percentage of Medicaid insured residents.

Statewide, the uninsured percentage declined for all racial and ethnic groups, but individuals of color continue to be disproportionately uninsured compared to Whites. The uninsured percentage for Black/African Americans (7%) and Latinxs (10.7%) is double or more than the White percentage (3.5%).

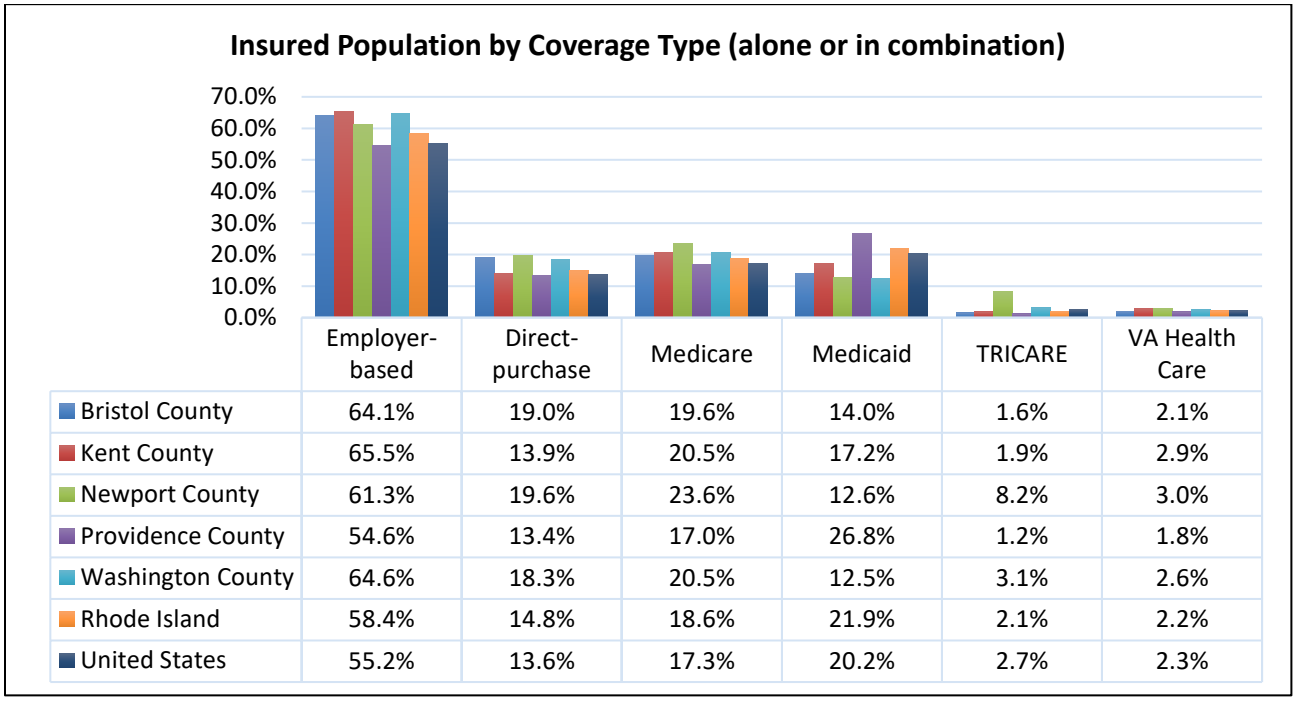


Source: US Census Bureau, American Community Survey



	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Bristol County	1.0%	0.5%	2.4%	6.0%	2.1%	0.0%
Kent County	2.4%	2.1%	6.8%	6.3%	2.9%	0.2%
Newport County	3.0%	3.0%	10.9%	7.5%	2.4%	0.2%
Providence County	2.5%	2.9%	9.1%	9.4%	4.9%	0.6%
Washington County	1.1%	0.8%	3.1%	5.1%	3.7%	0.1%
Rhode Island	2.4%	2.4%	7.8%	8.2%	4.0%	0.4%
United States	4.1%	5.5%	14.7%	14.8%	9.3%	0.8%

Source: US Census Bureau, American Community Survey



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Bristol County	64.1%	19.0%	19.6%	14.0%	1.6%	2.1%
Kent County	65.5%	13.9%	20.5%	17.2%	1.9%	2.9%
Newport County	61.3%	19.6%	23.6%	12.6%	8.2%	3.0%
Providence County	54.6%	13.4%	17.0%	26.8%	1.2%	1.8%
Washington County	64.6%	18.3%	20.5%	12.5%	3.1%	2.6%
Rhode Island	58.4%	14.8%	18.6%	21.9%	2.1%	2.2%
United States	55.2%	13.6%	17.3%	20.2%	2.7%	2.3%

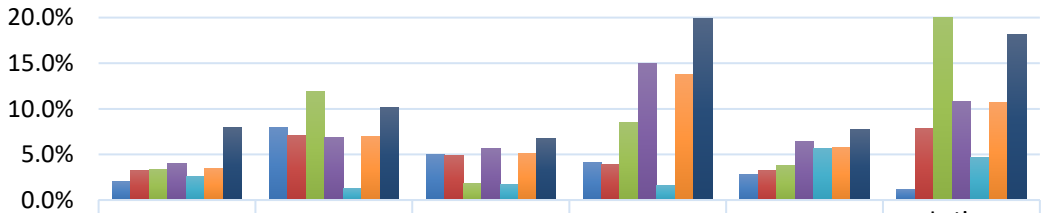
Source: US Census Bureau, American Community Survey

Health Insurance Coverage Trends by CharterCARE PSA Zip Code

	Uninsured		Medicaid Insured (Alone or in Combination)	
	2022 CHNA (2015-2019)	2019 CHNA (2012-2016)	2022 CHNA (2015-2019)	2019 CHNA (2012-2016)
02863, Central Falls	17.1%	25.1%	49.8%	42.9%
02907, Providence	10.6%	20.3%	55.2%	45.7%
02909, Providence	10.2%	20.7%	46.3%	44.5%
02895, Woonsocket	7.2%	9.4%	36.9%	31.4%
02860, Pawtucket	6.8%	13.4%	36.3%	35.3%
02905, Providence	6.7%	12.7%	37.1%	36.3%
02914, East Providence	6.3%	10.9%	22.9%	26.5%
02904, Providence	5.5%	8.5%	32.9%	27.3%
02861, Pawtucket	5.1%	8.9%	24.6%	20.5%
02908, Providence	5.1%	11.5%	36.2%	32.9%
02910, Cranston	5.0%	7.2%	20.5%	20.8%
02886, Warwick (Kent County)	3.2%	4.7%	17.4%	13.9%
02920, Cranston	3.1%	6.9%	21.4%	20.4%
02919, Johnston	2.8%	3.8%	16.6%	17.6%
02864, Cumberland	2.6%	3.4%	12.3%	12.2%
02911, Providence	2.4%	4.6%	23.2%	20.4%
02828, Greenville	1.8%	2.5%	8.1%	7.6%
02917, Smithfield	1.8%	4.4%	11.1%	7.3%
Rhode Island	4.5%	8.0%	21.9%	19.9%
United States	8.8%	11.7%	20.2%	19.1%

Source: US Census Bureau, American Community Survey

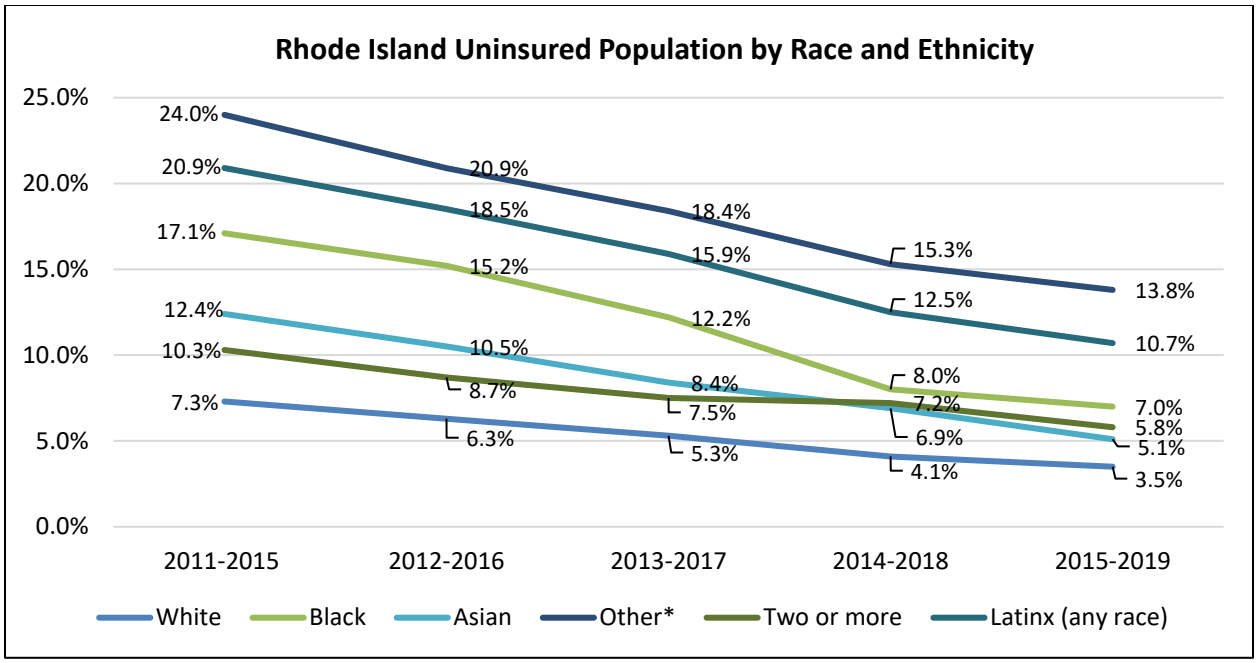
Uninsured Population by Race and Ethnicity



	White	Black	Asian	Other*	Two or more	Latinx (any race)
Bristol County	2.0%	8.0%	5.0%	4.1%	2.8%	1.2%
Kent County	3.2%	7.1%	4.9%	3.9%	3.2%	7.8%
Newport County	3.4%	11.9%	1.8%	8.5%	3.8%	21.2%
Providence County	4.0%	6.9%	5.6%	15.0%	6.4%	10.8%
Washington County	2.6%	1.3%	1.7%	1.6%	5.7%	4.7%
Rhode Island	3.5%	7.0%	5.1%	13.8%	5.8%	10.7%
United States	7.9%	10.1%	6.7%	19.9%	7.7%	18.2%

Source: US Census Bureau, American Community Survey

*Includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and other unidentified race.



Source: US Census Bureau, American Community Survey

*Includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and other unidentified race.

Availability of healthcare providers also impacts access to care and health outcomes. **Rhode Island overall continues to have more primary care providers than the nation**, as indicated by the rate of primary care physicians per 100,000 population. The distribution of providers is largely consistent across the state, excluding a higher rate in Bristol County, and a similar, higher percentage of adults have received a recent physical checkup in comparison to the nation.

Rhode Island has fewer dentists than the nation overall, but adults in all counties are more likely to receive regular dental care, likely due in part to higher insured rates. Despite this overall positive finding, wide differences in dental care access exist across the state, demonstrating the negative impact of social determinants of health. In Bristol County, the rate of dental providers per 100,000 (39.2) is nearly half the statewide rate (65.7), but 77% of Bristol County adults have had recent dental care compared to 72% statewide. In Providence County, the rate of dental providers (60.6) is similar to the statewide rate, but only 67% of adults have had recent dental care. Lower adult dental care access in Kent County (70%) should also be explored.

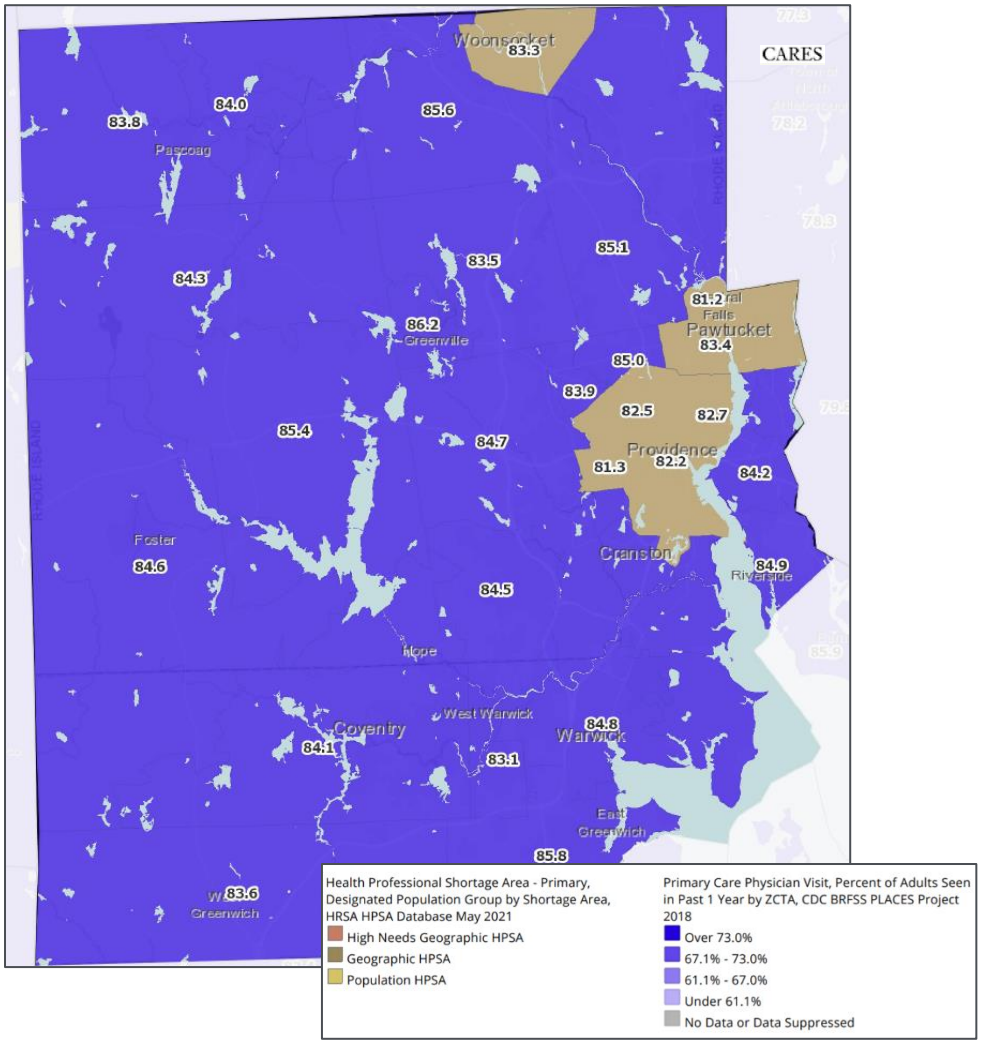
Health Professional Shortage Areas (HPSAs) are measured by the Federal Department of Health and Human Services, and can be geographic areas, populations, or facilities. These designated areas have a shortage of primary or dental providers. Within the CharterCARE PSA, low-income individuals residing in the core cities live in a primary and dental HPSA. **Dental care access disparities are stark in the core cities, particularly among CharterCARE service area residents experiencing higher socioeconomic disparity.** Among adults, as few as 48% in Central Falls zip code 02863, 61% in Pawtucket zip code 02860, and 54%-55% in Providence zip codes 02907 and 02909 have had recent dental care compared to a statewide average of 72%.

Primary and Dental Provider Rates and Adult Healthcare Access

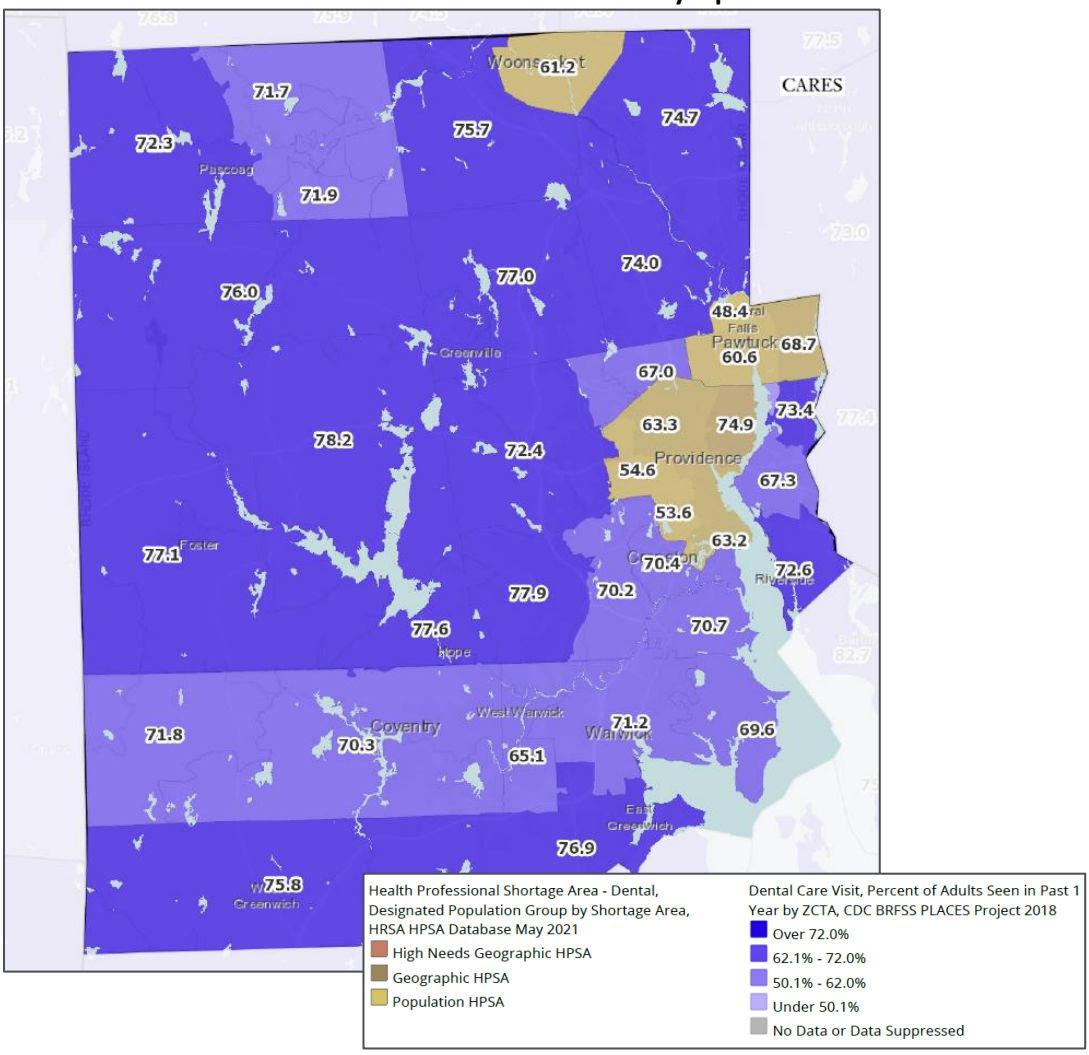
	Primary Care		Dental Care	
	Physicians per 100,000 Population (2018)	Routine Checkup within Past Year (2018)*	Dentists per 100,000 Population (2019)	Dental Visit within Past Year (2018)*
Bristol County	199.4	83.0%	39.2	76.5%
Kent County	87.3	82.8%	76.7	70.0%
Newport County	90.9	81.4%	104.8	77.0%
Providence County	97.9	83.5%	60.6	67.0%
Washington County	89.6	81.7%	62.1	75.7%
Rhode Island	99.4	82.4%	65.7	71.8%
United States	75.8	75.1%	71.4	66.2%

Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, PLACES & BRFSS
*Data are reported as age-adjusted percentages.

Kent and Providence Counties: Primary Care HPSAs and Adults with a Routine Checkup within the Past Year by Zip Code



Kent and Providence Counties: Dental Care HPSAs and Adults with a Dental Visit within the Past Year by Zip Code



Health Risk Factors and Chronic Disease

Routine preventative care contributes to fewer health risk factors and better health status. Consistent with having better overall access to care, Rhode Islanders as a whole are healthier than their peers nationally, with fewer reported health risk factors and lower prevalence and mortality due to chronic disease.

While the state overall is healthier than the nation, health outcomes vary widely across the five counties. Residents of Kent and Providence counties have increased risk factors for chronic disease, including lack of physical activity and tobacco use. **These health disparities correlate with existing differences in socioeconomic factors and physical environment, including lower income, higher poverty, and/or lower educational attainment.**

Consistent with having increased health risk factors, residents of Kent and Providence counties have a higher prevalence of chronic disease, including obesity, diabetes, heart disease, cancer, and respiratory disease. The following report sections further explore these health issues and their connection to underlying social determinants of health. Social determinants of health not only lead to poorer health outcomes and the onset of disease, but are also likely to impede disease management and treatment efforts, further exacerbating poorer health outcomes

2018 Age-Adjusted Adult (18+) Physical Health Outcomes

	Physical Health Not Good for 14 or More Days in Past 30 Days	No Leisure-Time Physical Activity in Past 30 Days
Bristol County	10.7%	20.9%
Kent County	11.9%	23.2%
Newport County	10.3%	19.3%
Providence County	13.8%	27.9%
Washington County	11.0%	19.0%
Rhode Island	11.5%	24.5%
United States	11.8%	23.6%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

2018 Age-Adjusted Adults (18+) Who Are Current Smokers*

	Percentage
Bristol County	14.4%
Kent County	18.5%
Newport County	14.9%
Providence County	17.6%
Washington County	16.2%
Rhode Island	15.2%
United States	15.9%

Source: Centers for Disease Control and Prevention, BRFSS

*A change in reporting methodology occurred in 2018 providing age-adjusted county percentages. Data prior to 2018 were reported as crude percentages and are not comparable.

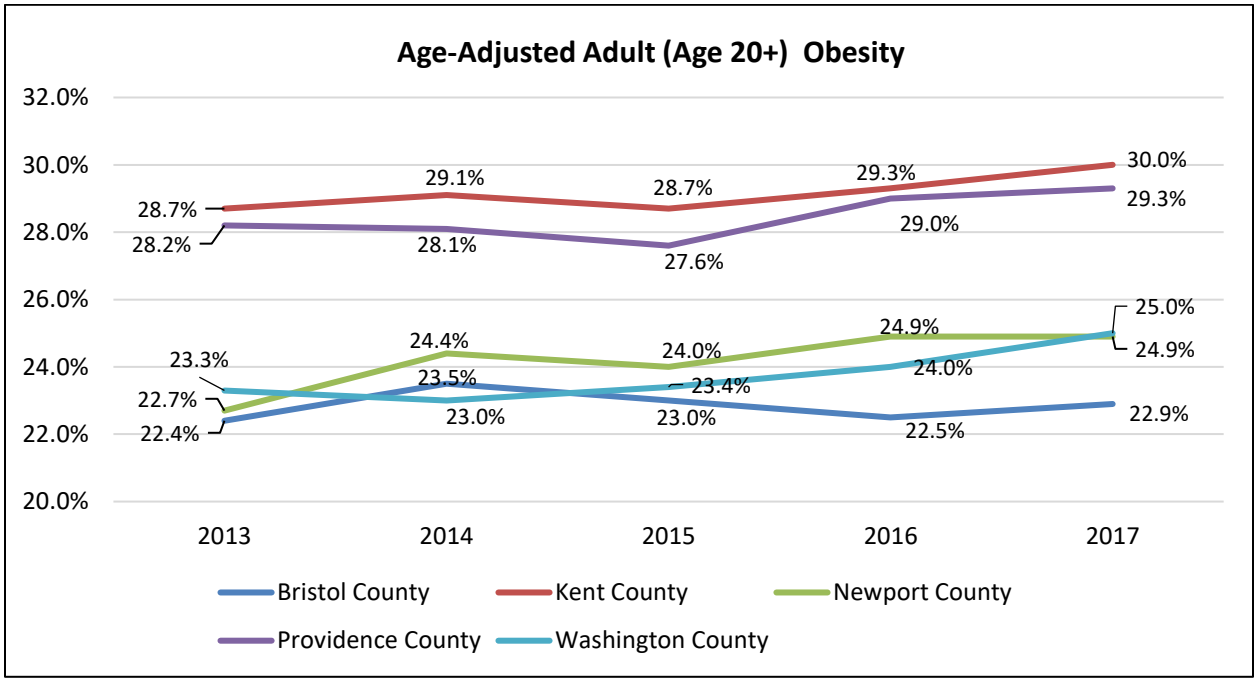
Obesity and Diabetes

Rhode Island adults overall have historically had lower prevalence of obesity and diabetes compared to national benchmarks, but prevalence largely increased in recent years. **From 2013 to 2017, all counties except Bristol saw an increase in adult obesity.** Currently, approximately 1 in 4 adults in all counties are considered obese. From 2016 to 2017, **all counties except Bristol also saw an increase in adult diabetes.**

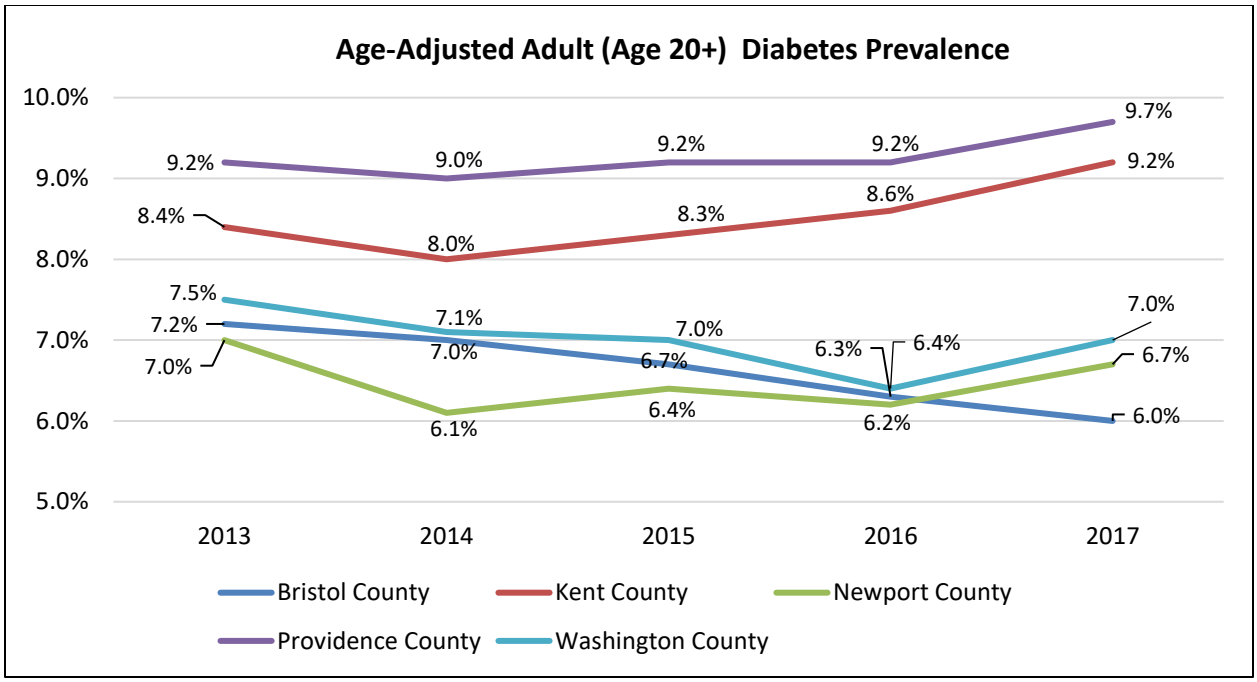
Kent and Providence counties have the highest prevalence of adult obesity and diabetes in the state, estimated at nearly 30% and 10% respectively in both counties. Adult diabetes prevalence in Kent County increased annually from 2014 to 2017. Kent and Providence counties also have the highest rates

of diabetes death in the state and saw the largest death rate increase from 2010 to 2019. **Consistent with national trends, diabetes death rates are disproportionately higher among Black/African American Rhode Islanders compared to other racial and ethnic groups.** This disparity also holds true in Providence County; racial and ethnic data are not reported for other counties due to unreliable rates.

A change in data methodology occurred in 2018 providing obesity and diabetes prevalence for adults age 18 or older versus age 20 or older at the county-level. Of note, based on the new methodology, the prevalence of adult diabetes in Providence County is estimated at 10.7%, a 1-point increase from previous reporting, and a potential indicator of higher diabetes prevalence among young adults. **Consistent with social determinants of health barriers captured by the area deprivation index (ADI), communities served by CharterCARE with a higher ADI, including the core cities, have a higher prevalence of both obesity and diabetes.** Of note, adult diabetes prevalence in Providence zip code 02907 and Central Falls zip codes 02863 is approximately 15% compared to a statewide average of 10%.



Source: Centers for Disease Control and Prevention, US Diabetes Surveillance System & BRFSS
*State and national data are reported as a percentage of adults age 18+ and are excluded.



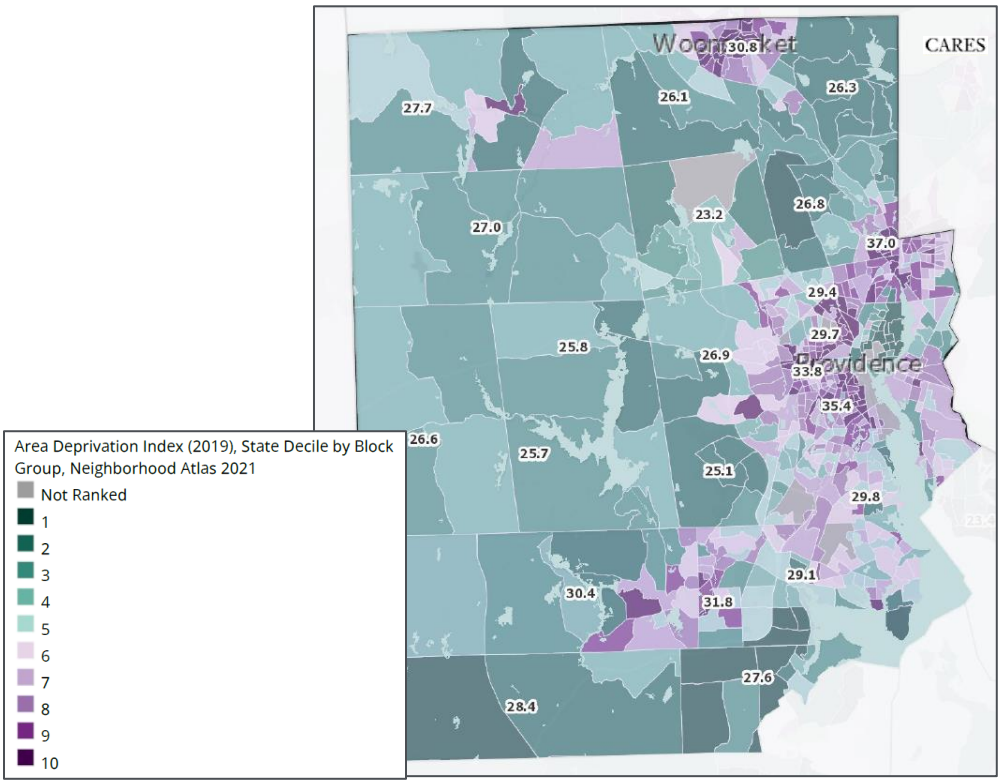
Source: Centers for Disease Control and Prevention, US Diabetes Surveillance System
*State and national data are reported as a percentage of adults age 18+ and are excluded.

2018 Age-Adjusted Adult (Age 18+) Health Outcome Indicators*

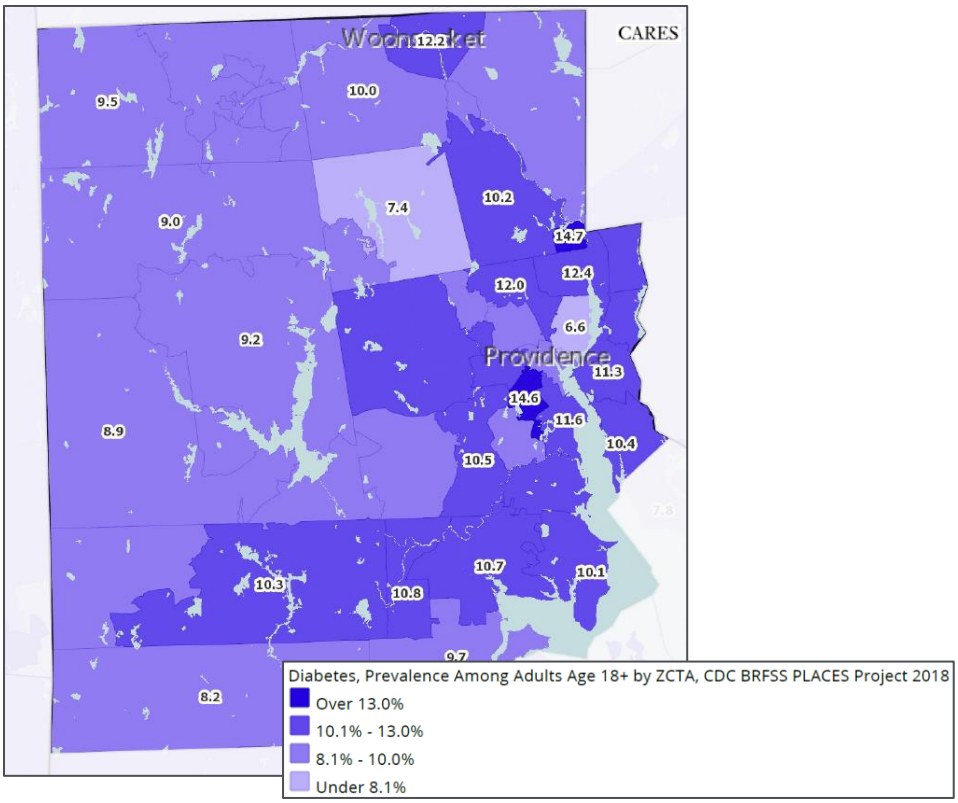
	Obese	Diabetes Diagnosis
Bristol County	24.8%	7.4%
Kent County	29.6%	9.0%
Newport County	26.5%	7.4%
Providence County	29.6%	10.7%
Washington County	25.6%	7.7%
Rhode Island	27.5%	9.6%
United States	30.9%	10.0%

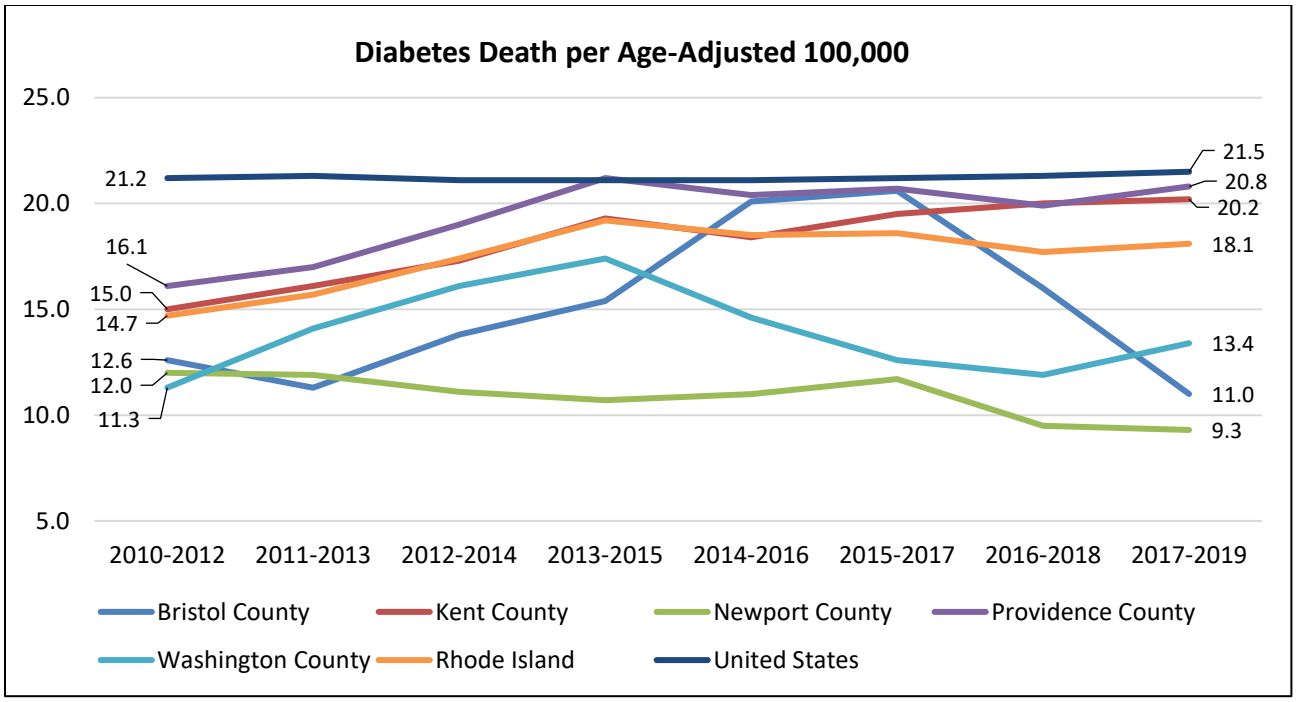
Source: Centers for Disease Control and Prevention, PLACES & BRFSS
*Data are not comparable to previously trended indicators due to differences in age composition (age 18+ vs. age 20+) at the county-level.

Kent and Providence Counties: Area Deprivation Index by Block Group and Percent of Obese Adults by Zip Code



Kent and Providence Counties: Adult Diabetes by Zip Code





Source: Centers for Disease Control and Prevention

2017-2019 Diabetes Death Rate per Age-Adjusted 100,000, by Race and Ethnicity*

	Providence County	Rhode Island	United States
Total Population	20.8	18.1	21.5
White, Non-Hispanic	20.2	17.3	18.9
Black or African American, Non-Hispanic	29.8	29.0	38.5
Asian, Non-Hispanic	NA	NA	16.5
Latinx origin (any race)	17.6	17.9	25.2

Source: Centers for Disease Control and Prevention
*Data are not reportable for other counties due to low death counts.

Heart Disease

Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. Across Rhode Island counties, more than 1 in 4 adults have high blood pressure and/or high cholesterol, a consistent proportion as the nation overall. **Kent and Providence counties have the highest proportion of adults with high blood pressure and/or high cholesterol, and the highest death rates due to heart disease.**

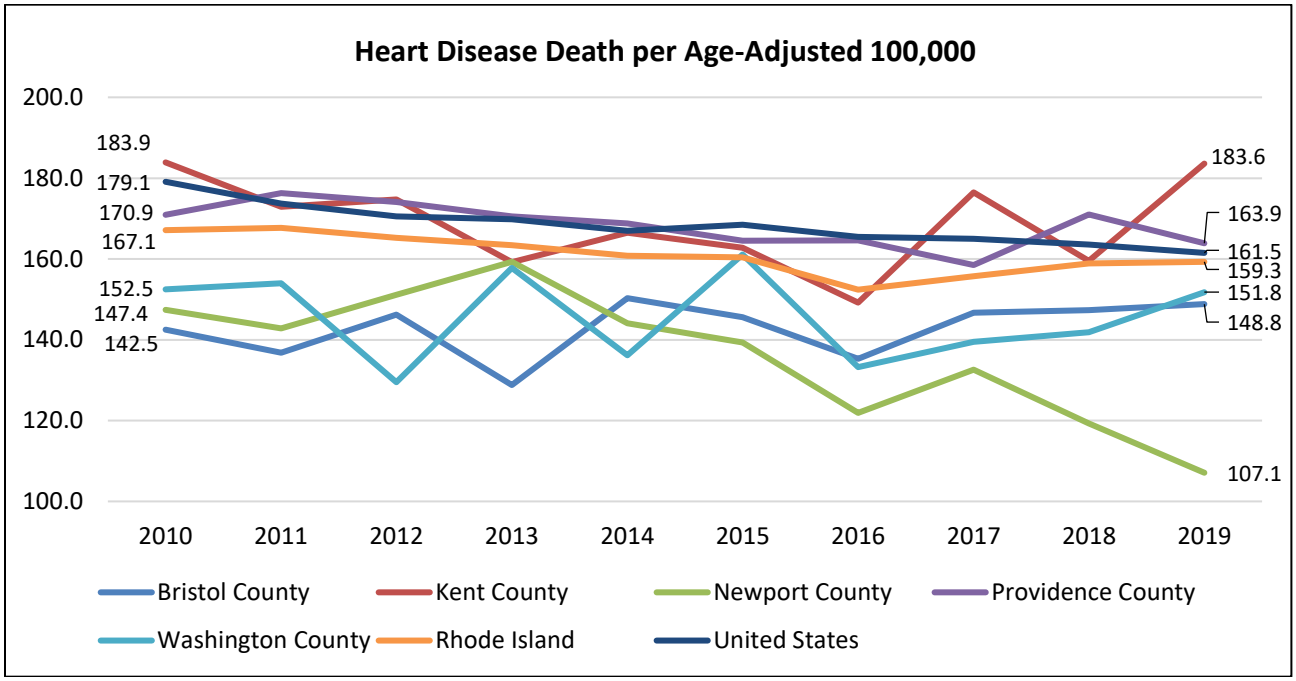
Rhode Island overall has historically had a lower heart disease death rate than the nation, although the rates are more similar now due to an increase in the statewide death rate from 2016 to 2019. At the county-level, heart disease death rates have been variable over the past decade with the exception of Newport County, which saw a 40-point decline from 2010 to 2019. Rhode Island and Providence County differ from the nation with a higher heart disease death rate among Whites than Black/African

Americans; racial and ethnic data are not reported for other Rhode Island counties due to unreliable rates.

2017 Age-Adjusted Adult (Age 18+) Heart Disease Risk Factors Prevalence

	Adults with High Blood Pressure	Adults with High Cholesterol
Bristol County	25.6%	26.8%
Kent County	30.6%	27.4%
Newport County	26.4%	25.7%
Providence County	32.0%	29.0%
Washington County	27.1%	27.4%
Rhode Island	29.9%	28.9%
United States	29.7%	29.3%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2017-2019 Heart Disease Death Rate per Age-Adjusted 100,000, by Race and Ethnicity*

	Providence County	Rhode Island	United States
Total Population	164.4	158.0	163.4
White, Non-Hispanic	178.7	165.3	167.4
Black or African American, Non-Hispanic	123.1	127.0	207.6
Asian, Non-Hispanic	83.1	81.5	84.3
Latinx origin (any race)	67.6	64.5	112.5

Source: Centers for Disease Control and Prevention

*Data are not reportable for other counties due to low death counts.

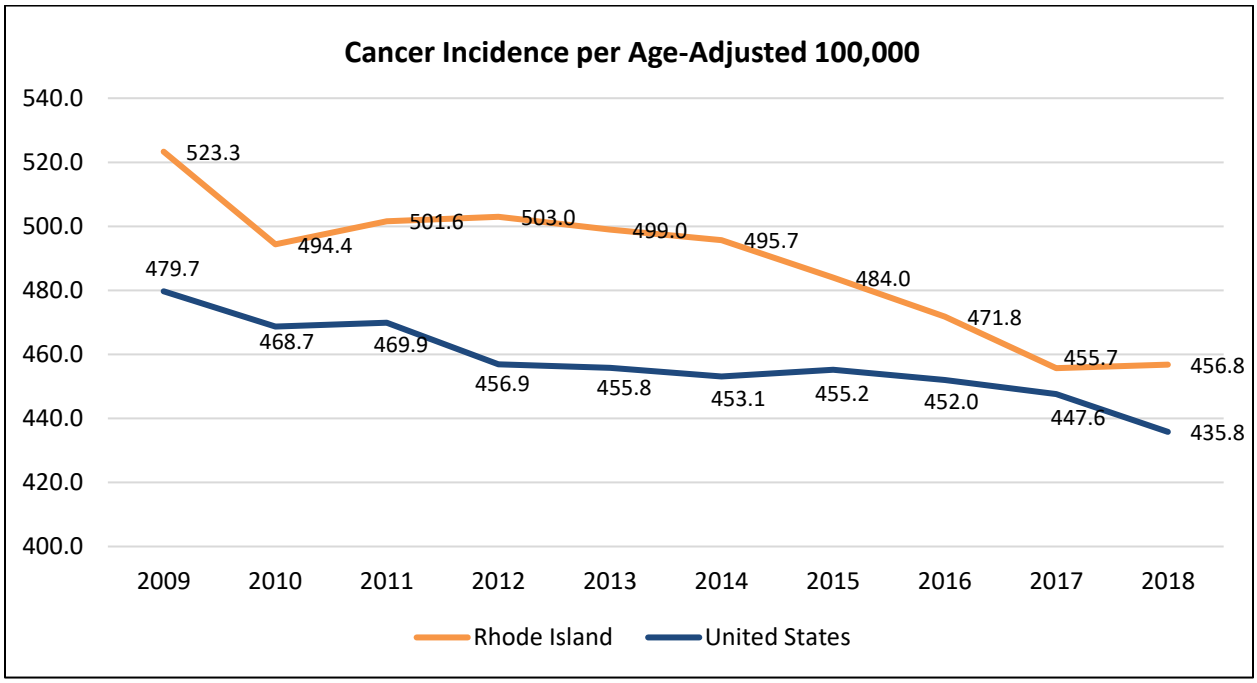
Cancer

Cancer is the second leading cause of death nationally. Approximately 7% of adults in Rhode Island counties have ever been diagnosed with cancer compared to 6% nationwide. As of 2018, the statewide cancer incidence rate was approximately 20 points higher than the national rate. **Despite having higher cancer incidence, the statewide cancer death rate is similar to the national rate. This finding is likely reflective of better cancer screening practices in Rhode Island and earlier detection and treatment.** With few exceptions, Rhode Island counties report a higher percentage of adults who receive cancer screenings in comparison to the nation.

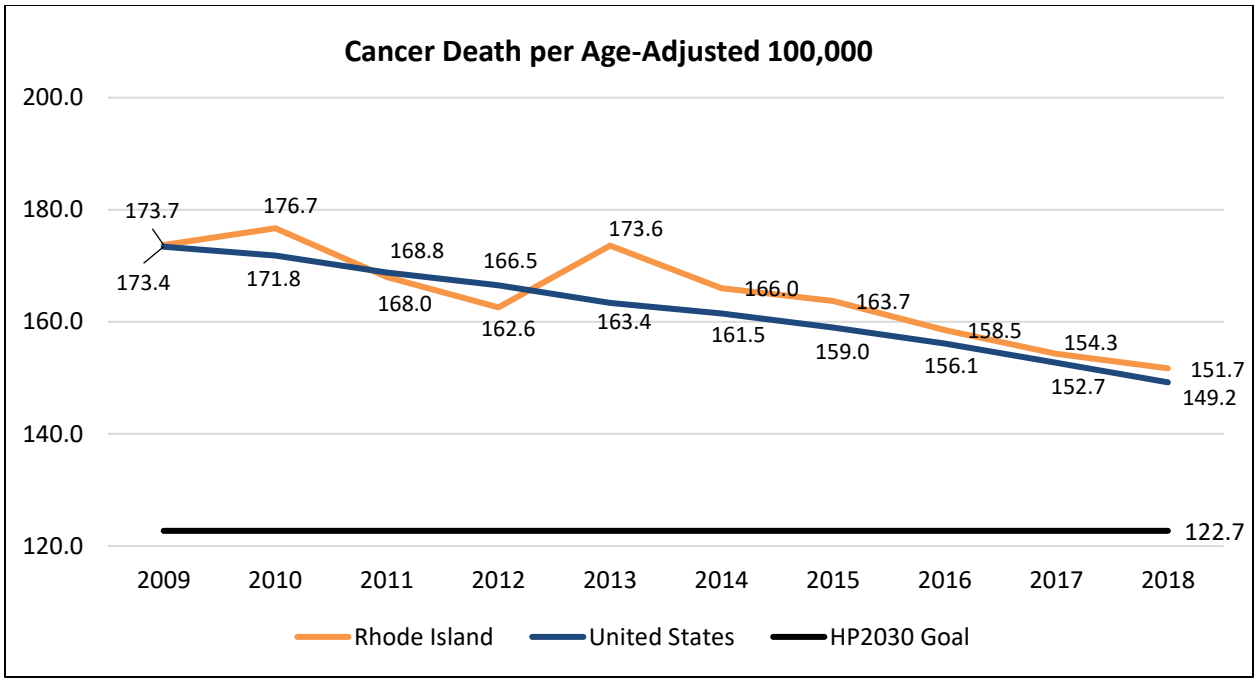
2018 Age-Adjusted Adult Cancer Prevalence and Screening Practices

	Adults with Cancer (ever, excluding skin)	Mammogram in the Past 2 Years (50-74 years)	Cervical Cancer Screening (21-65 years)	Colon Cancer Screening (50-74 years)
Bristol County	6.6%	76.6%	88.0%	73.6%
Kent County	6.7%	78.3%	87.9%	72.9%
Newport County	6.8%	76.7%	88.8%	74.4%
Providence County	6.3%	78.8%	86.8%	68.1%
Washington County	7.0%	75.1%	87.5%	70.5%
United States	6.0%	77.8%	85.5%	65.0%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations



Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations

No Rhode Island counties meet the HP2030 overall cancer death rate goal of 122.7 per 100,000. Based on 2014-2018 aggregate data, Bristol County has the lowest overall death rate at 140.1. Of note, Bristol County has a higher incidence of common cancer types, including female breast and prostate cancer, but the death rates for these cancers meet HP2030 goals, suggesting cancers are being identified earlier and treated effectively in the county.

Kent County residents experience notable cancer disparities in comparison to other Rhode Island residents. The county has the highest cancer incidence and death rates in the state and exceeds national rates. Analysis of common cancer types suggests that lung cancer is a top contributor to cancer morbidity and mortality in Kent County and is likely a result of both higher smoking rates among adults and potential exposure to radon. Prostate cancer death is also elevated in Kent County compared to other counties and should be further explored.

Rhode Island overall has higher reported lung cancer incidence and death rates than the nation. A potential contributor is the prevalence of radon in homes. 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 (EPA) recommends action to mitigate radon when indoor testing shows levels of 4.0 pCi/L or higher. **As of 2016, it was estimated that 1 in 4 homes in Rhode Island had radon levels at or above 4.0 pCi/L compared to the national average of 1 in 15 homes.**

The EPA distinguishes counties by radon zones, with Zone 1 indicating counties with predicted average indoor radon screening levels greater than 4.0 pCi/L. Within Rhode Island, Kent and Washington counties are designated as Zone 1, and both counties have elevated rates of lung cancer incidence and death, although Kent County rates far exceed Washington County rates.

Providence County has the second highest rates of lung cancer incidence and death in the state, behind Kent County. The county has a higher percentage of smoking adults and is designated as Zone 2 by the EPA for radon levels. Consistent with other morbidity and mortality statistics, Providence County reports the most robust cancer data by race and ethnicity. Available racial and ethnic data indicates that Whites experience higher cancer burden in Rhode Island.

Newport County has lower overall cancer incidence and death rates than the state and nation, as well lower incidence and death rates for all common cancer types except female breast. **The Newport County female breast cancer incidence rate is the lowest in the state, but the death rate is the highest in the state and exceeds the national death rate.** Newport County women are slightly less likely to receive mammogram screenings (76.7%) as women nationwide (77.8%); other potential access to care barriers should also be explored.

2014-2018 Age-Adjusted Cancer Incidence and Death per 100,000 Population by Race and Ethnicity

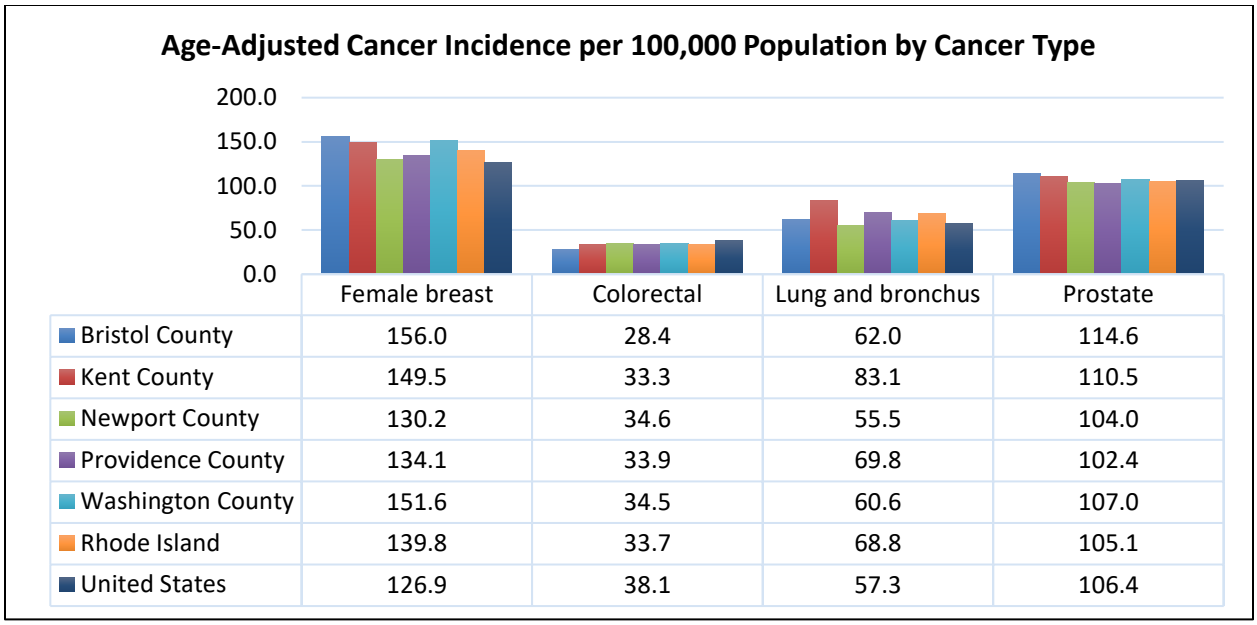
	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Cancer Incidence							
Total Population	470.4	507.4	460.0	459.4	496.2	472.8	449.0
White	470.6	506.5	461.9	461.4	493.0	474.1	451.3
Black or African American	NA	332.5	378.6	333.7	NA	338.4	445.4
Asian	NA	NA	NA	271.6	392.6	276.8	291.5
Latinx origin (any race)	NA	353.0	NA	402.8	NA	397.2	345.5
Cancer Death							
Total Population	140.1	171.2	150.9	158.4	157.8	158.8	155.6
White	141.1	174.3	152.8	164.6	157.5	162.8	156.4
Black or African American	NA	NA	NA	103.3	NA	106.6	177.6
Asian	NA	NA	NA	100.4	NA	92.9	97.4
Latinx origin (any race)	NA	NA	NA	82.8	NA	81.0	111.3

Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations

2021 Radon Zones and Estimated Levels by County

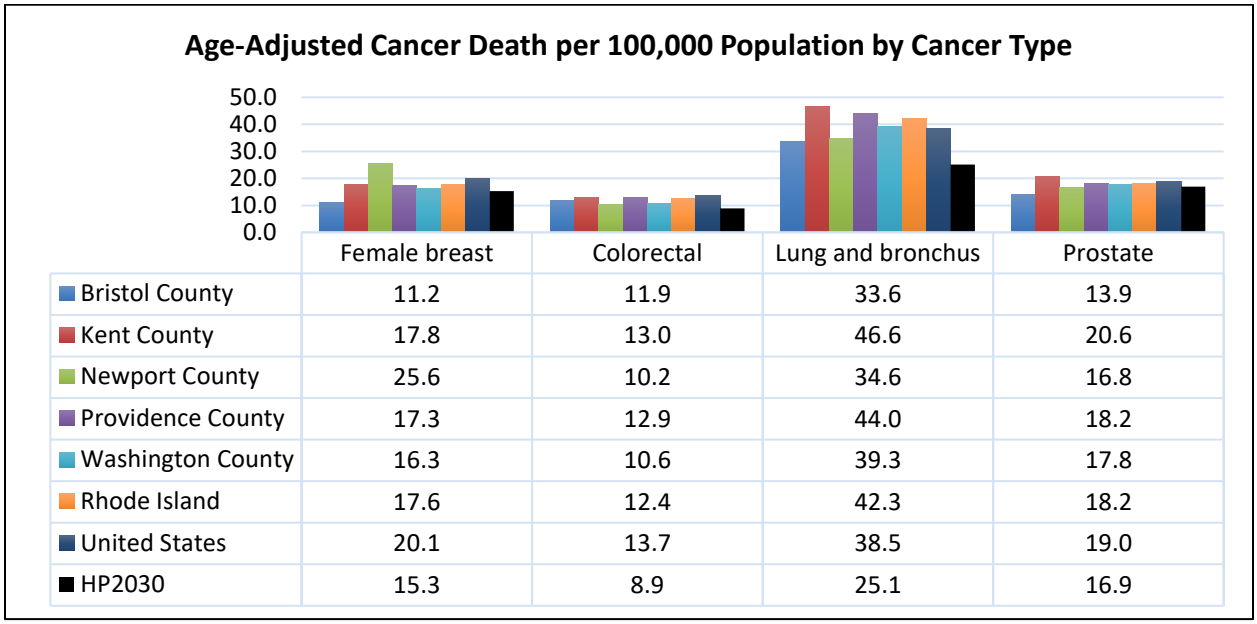
	Radon Zone
Bristol County	Zone 3 (<2 pCi/L)
Kent County	Zone 1 (>4 pCi/L)
Newport County	Zone 2 (2-4 pCi/L
Providence County	Zone 2 (2-4 pCi/L)
Washington County	Zone 1 (> 4 pCi/L)

Source: Environmental Protection Agency



	Female breast	Colorectal	Lung and bronchus	Prostate
Bristol County	156.0	28.4	62.0	114.6
Kent County	149.5	33.3	83.1	110.5
Newport County	130.2	34.6	55.5	104.0
Providence County	134.1	33.9	69.8	102.4
Washington County	151.6	34.5	60.6	107.0
Rhode Island	139.8	33.7	68.8	105.1
United States	126.9	38.1	57.3	106.4

Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations



	Female breast	Colorectal	Lung and bronchus	Prostate
Bristol County	11.2	11.9	33.6	13.9
Kent County	17.8	13.0	46.6	20.6
Newport County	25.6	10.2	34.6	16.8
Providence County	17.3	12.9	44.0	18.2
Washington County	16.3	10.6	39.3	17.8
Rhode Island	17.6	12.4	42.3	18.2
United States	20.1	13.7	38.5	19.0
HP2030	15.3	8.9	25.1	16.9

Source: Centers for Disease Control and Prevention, United States Cancer Statistics: Data Visualizations

Respiratory Disease

Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). **All Rhode Island counties have a higher prevalence of adult asthma compared to the national benchmark. This disparity is due in part to Rhode Island's older housing stock, which is more likely to contain hazardous materials that can trigger asthma.** Rhode Island is tied with Massachusetts for the third oldest housing stock in the nation.

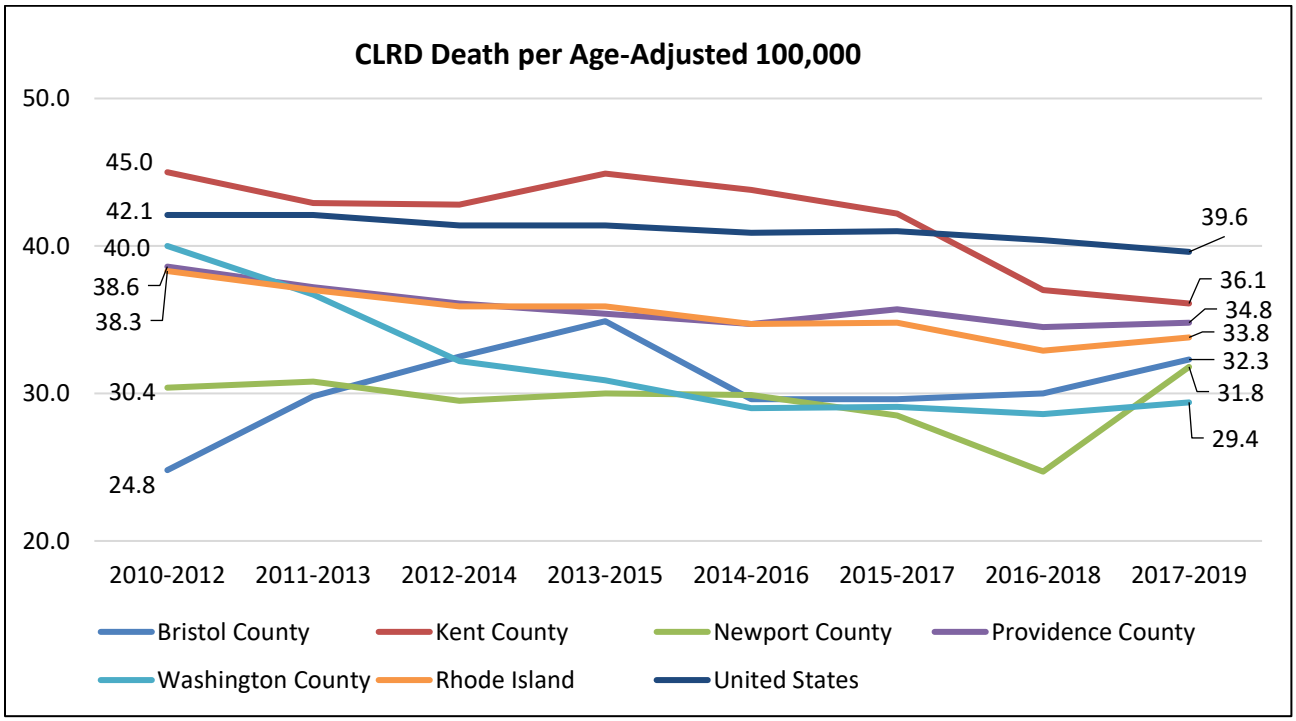
Approximately 73.5% of housing units in Rhode Island were built before 1980 compared to 53.6% nationwide. Providence County has the oldest housing stock in Rhode Island, and the highest prevalence of adult asthma. Adult COPD prevalence across Rhode Island is consistent with the nation.

The CLRD death rate has generally been declining in Rhode Island and across the nation. All Rhode Island counties have a lower CLRD death rate than the nation; Kent and Providence are the only counties to exceed the statewide death rate. Consistent with the nation, CLRD death rates are historically higher among Whites than other racial and ethnic groups.

2018 Age-Adjusted Adult (Age 18+) Respiratory Disease Prevalence

	Adults with Current Asthma Diagnosis	Adults with COPD
Bristol County	10.3%	5.7%
Kent County	11.3%	6.4%
Newport County	10.4%	5.6%
Providence County	11.8%	6.9%
Washington County	11.0%	6.1%
Rhode Island	11.9%	6.2%
United States	9.1%	6.2%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2017-2019 CLRD Death Rate per Age-Adjusted 100,000, by Race and Ethnicity*

	Rhode Island	United States
Total Population	33.8	39.6
White, Non-Hispanic	36.6	45.0
Black or African American, Non-Hispanic	13.5	29.8
Asian, Non-Hispanic	NA	11.3
Latinx origin (any race)	8.3	16.8

Source: Centers for Disease Control and Prevention
*Data are not reportable by county due to low death counts.

Aging Population

Rhode Island is an aging community, with a growing proportion of older adults that exceeds national averages. As of 2015-2019, 30.7% of Rhode Island residents were age 55 or older compared to 28.5% nationwide. Among older adults age 65 or older, the proportion age 65-74 saw the greatest increase in recent years, largely due to the entry of the baby boomer generation.

According to the 2020 Rhode Island Healthy Aging Data Report, **the state saw an increase in the number of older adults with multiple chronic conditions and a decline in those with no chronic conditions from 2016, suggesting increased overall morbidity.** Consistent with this finding, statewide inpatient hospital stays among older adults age 65 or older increased from 2016 to 2020.

According to Centers for Medicare & Medicaid Services data, **74.4% of Rhode Island Medicare beneficiaries age 65 or older have two or more chronic conditions compared to 70.3% nationwide**. The proportion of Medicare beneficiaries with multiple chronic conditions is highest in Kent County (76.8%), followed by Providence County (75.1%). Kent and Providence counties also have the highest proportion of beneficiaries with six or more conditions, affecting 1 in 5 individuals.

Poorer health among older adults may be due in part to declining economic situation. As reported in earlier report sections, the economic situation of older adults in Rhode Island worsened even before the impact of COVID-19, including higher poverty and receipt of food benefits and more older adults engaged in the workforce. Kent and Providence counties have the highest proportion of older adults living in poverty at approximately 1 in 10; Kent County older adult poverty is increasing.

2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Bristol County	26.7%	32.6%	24.0%	16.8%
Kent County	23.2%	31.6%	24.9%	20.4%
Newport County	28.4%	33.1%	22.2%	16.3%
Providence County	24.9%	30.5%	24.9%	19.7%
Washington County	27.3%	34.6%	23.0%	15.0%
Rhode Island	25.6%	31.9%	24.2%	18.4%
United States	29.7%	29.4%	22.8%	18.2%

Source: Centers for Medicare & Medicaid Services

While chronic conditions are on the rise among Rhode Island older adults, medical utilization patterns and population statistics suggest improving care access and lower disability. The rate of physician visits per year increased from 2016 to 2020, while prescription refills and durable medical equipment claims decreased. According to 2015-2019 data, the proportion of older adults with a reported disability is similar to or lower than the national average in all Rhode Island counties. Kent and Providence counties report the highest proportion of disabled older adults at approximately one-third of individuals.

Rhode Island Statewide Older Adult Healthcare Utilization, 2016 vs. 2020

	2016	2020	Change from 2020 to 2016
Dually eligible for Medicare and Medicaid	14.6%	13.8%	-0.8%
Physician visits per year	8.0	8.4	0.4
Inpatient hospital stays per 1,000 people 65+ per year	284.1	295.2	11.1
Part D monthly prescription fills per person per year	2.0	1.7	-0.3
Durable medical equipment claims per year	55.8	54.2	-1.6

Source: Tufts Health Plan Foundation, Rhode Island Healthy Aging Data Report

2015-2019 Older Adult Population by Disability Status

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Total population	10.2%	14.7%	12.2%	13.8%	11.4%	13.4%	12.6%
65 years or older	27.0%	34.1%	25.9%	34.4%	27.9%	32.2%	34.5%
Ambulatory	15.4%	19.7%	15.3%	23.4%	13.8%	20.1%	21.9%
Hearing	12.0%	15.9%	11.6%	12.8%	14.1%	13.3%	14.3%
Independent living	11.6%	13.9%	10.7%	16.2%	8.8%	13.9%	14.2%
Cognitive	6.1%	8.3%	6.5%	9.4%	5.6%	8.2%	8.6%
Vision	4.2%	5.6%	3.4%	5.7%	4.4%	5.2%	6.3%

Source: US Census Bureau, American Community Survey

Across Rhode Island, there is opportunity to leverage increasing physician visits among older adults to ensure receipt of preventive services, such as recommended vaccines and cancer screenings. **Across all counties, about one-quarter of older adult men and women are up to date on preventive services, a lower proportion than the nation overall.** Older adult men residing in Providence County are at increased risk, with only 19.4% up to date on preventive services.

2018 Age-Adjusted Older Adult (65+) Clinical Preventive Services*

	Older Adult Men Who Are Up To Date On Clinical Preventive Services	Older Adult Women Who Are Up To Date On Clinical Preventive Services
Bristol County	27.2%	24.3%
Kent County	24.4%	24.7%
Newport County	23.6%	22.7%
Providence County	19.4%	24.3%
Washington County	26.3%	25.4%
United States	32.7%	28.1%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

*Includes a flu vaccine in the past year, pneumococcal pneumonia vaccine ever, colorectal cancer screening, and mammogram in the past two years (women).

Older adult healthcare utilization and costs increase significantly with a higher number of reported chronic diseases. Tracking these indicators helps plan allocation of resources to best anticipate and serve need in the community. **Rhode Island overall has lower per capita spending among older adult Medicare beneficiaries compared to the nation, regardless of the number of chronic conditions, but spending is still notable. Among beneficiaries with six or more conditions, per capita spending averages $26,000 annually.** Of note, healthcare spending is generally higher in Newport and Washington counties.

2018 Per Capita Standardized Spending* for Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Bristol County	$1,970	$4,994	$9,977	$25,651
Kent County	$2,000	$4,848	$9,432	$26,530
Newport County	$2,188	$5,401	$10,528	$28,181
Providence County	$1,684	$4,761	$9,435	$26,354
Washington County	$2,218	$5,310	$10,360	$26,627
Rhode Island	$1,923	$4,980	$9,749	$26,598
United States	$1,944	$5,502	$10,509	$29,045

Source: Centers for Medicare & Medicaid Services

*Standardized spending takes into account payment factors that are unrelated to the care provided (e.g., geographic variation in Medicare payment amounts).

2018 ED Visits per 1,000 Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Bristol County	112.7	223.8	480.4	1,492.6
Kent County	106.6	276.3	602.8	1,800.9
Newport County	140.0	342.7	690.5	1,876.7
Providence County	101.9	263.7	572.6	1,748.9
Washington County	121.5	304.6	662.2	1,800.5
Rhode Island	112.4	282.0	601.9	1,767.9
United States	122.6	318.4	621.1	1,719.1

Source: Centers for Medicare & Medicaid Services

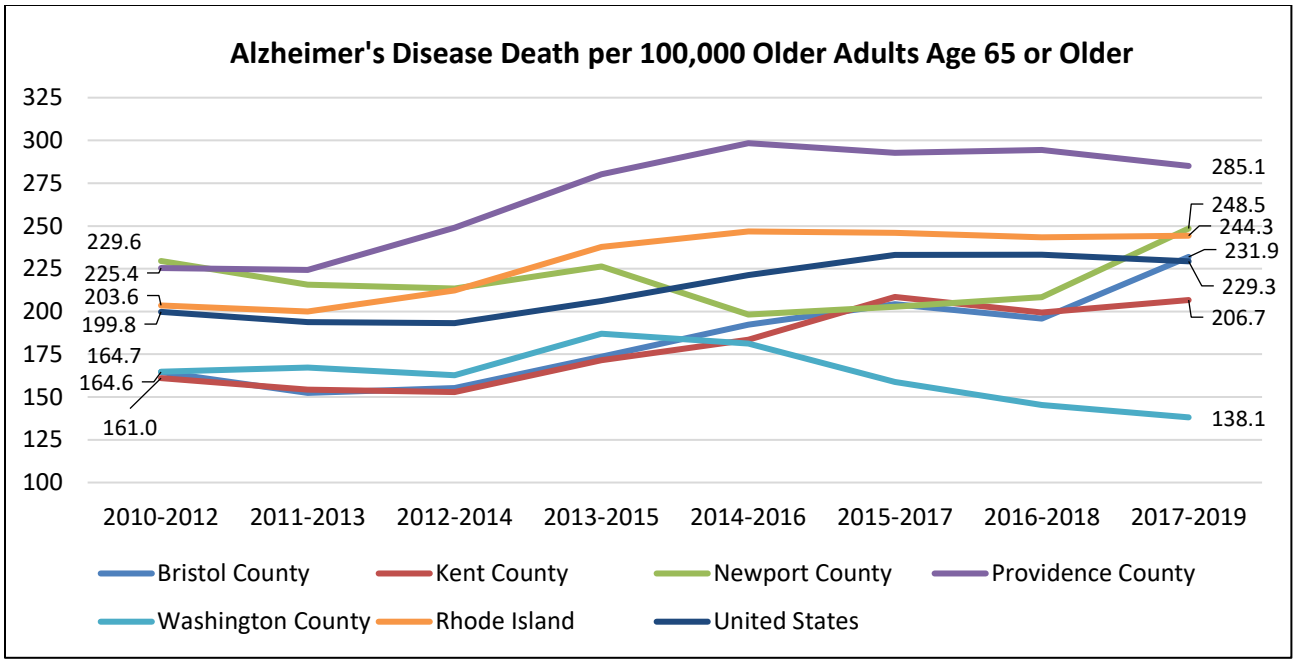
Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol, and arthritis. This finding is consistent across Rhode Island and its five counties. In comparison to the nation, **Rhode Island older adult Medicare beneficiaries have a higher prevalence of all reported chronic conditions, except Alzheimer's disease, chronic kidney disease, diabetes, heart failure, and ischemic heart disease.** Higher statewide disease prevalence is largely due to disparities in Kent and Providence counties. Consistent with total population statistics, nearly all Rhode Island counties have a higher prevalence of cancer among older adults.

The death rate from Alzheimer's disease is higher in Rhode Island than the nation, largely due to a death rate in Providence County that exceeds the national death rate by more than 50 points. **The Alzheimer's disease death rate is generally increasing in all Rhode Island counties except Washington.** Washington County reports a lower prevalence of Alzheimer's disease among older adults and a declining death rate. Bristol County reports the highest prevalence of Alzheimer's disease in the state and saw the highest death rate increase over the past decade.

2018 Chronic Condition Prevalence among Medicare Beneficiaries Age 65 Years or Older

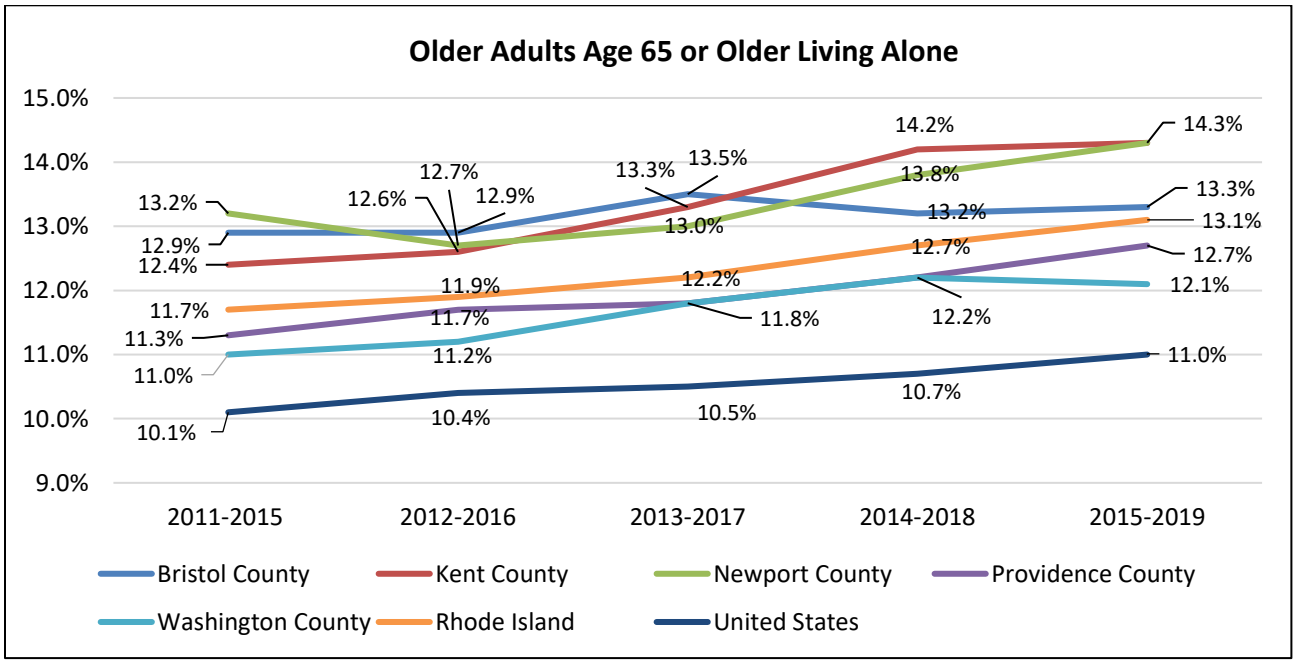
	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Alzheimer's Disease	12.0%	10.9%	10.1%	11.6%	9.4%	10.9%	11.9%
Arthritis	34.4%	36.9%	32.8%	35.2%	36.7%	35.4%	34.6%
Asthma	6.4%	6.0%	6.1%	6.8%	5.9%	6.4%	4.5%
Cancer	11.2%	11.3%	11.4%	10.8%	11.2%	11.1%	9.3%
Chronic Kidney Disease	21.2%	25.6%	19.5%	25.7%	19.9%	23.6%	24.9%
COPD	9.8%	12.3%	11.2%	11.9%	10.7%	11.5%	11.4%
Depression	17.8%	20.2%	18.2%	19.4%	16.8%	18.8%	16.0%
Diabetes	22.9%	26.4%	21.2%	27.4%	20.8%	25.0%	27.1%
Heart Failure	12.1%	14.3%	12.1%	14.4%	11.8%	13.5%	14.6%
High Cholesterol	56.5%	59.4%	55.2%	57.8%	53.5%	56.9%	50.5%
Hypertension	61.9%	66.0%	60.3%	64.6%	61.2%	63.6%	59.8%
Ischemic Heart Disease	26.7%	31.5%	24.8%	28.3%	25.1%	27.8%	28.6%
Stroke	4.3%	4.1%	4.0%	4.2%	3.7%	4.1%	3.9%

Source: Centers for Medicare & Medicaid Services



Source: Centers for Disease Control and Prevention

In older adults, chronic illness often leads to diminished quality of life and increased social isolation. Social isolation may also impede effective chronic illness management and accelerate the negative impact of chronic diseases. One indicator of social isolation among older adults is the percentage of adults ages 65 years or older who live alone. **Rhode Island older adults are more likely to live alone when compared to their peers across the US.** This trend holds true across all counties, where approximately 12-14% of older adults live alone compared to 11% nationwide.



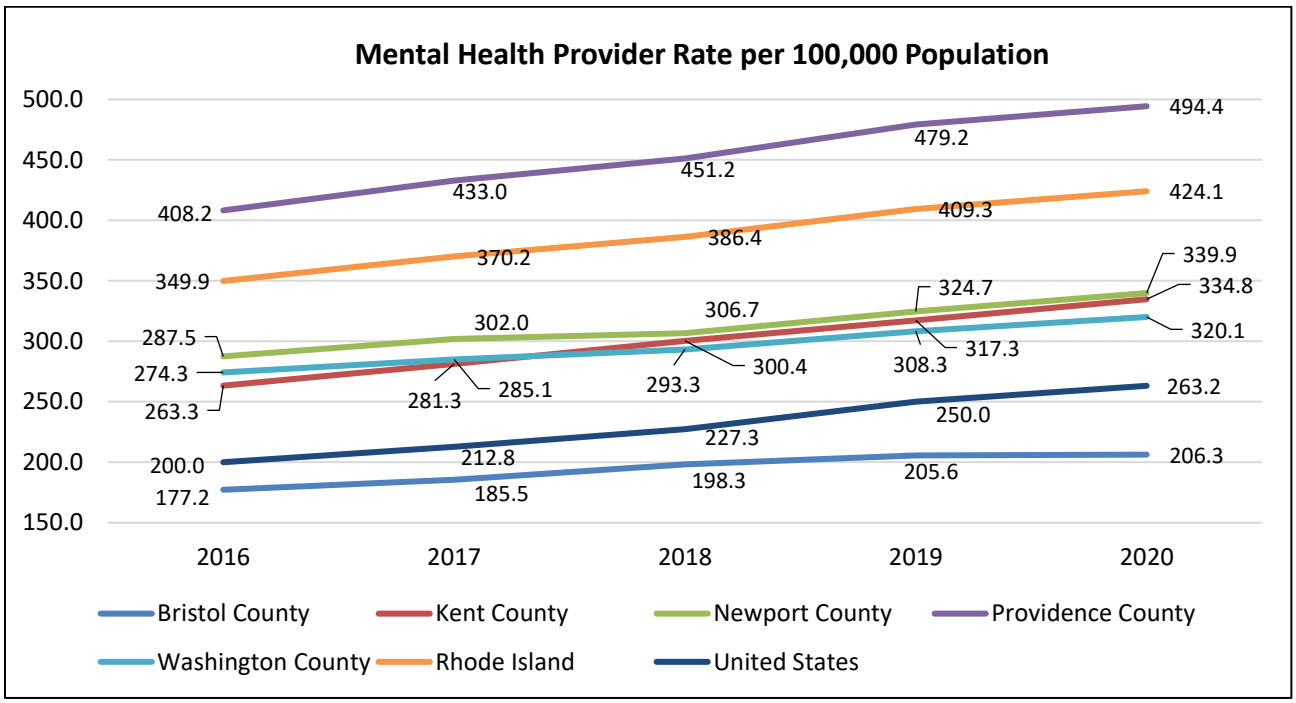
Source: US Census Bureau, American Community Survey

Behavioral Health and Substance Use Disorder

Rhode Island overall has better access to mental health providers than the nation, as indicated by the rate of mental health providers per 100,000 population. **As of 2020, the rate of mental health providers across Rhode Island exceeded the national rate by more than 160 points.** While providers are concentrated in Providence County, Bristol County is the only county to have a lower rate of providers than the nation.

Note: The mental health provider rate includes psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among others. It does not account for potential shortages in specific provider types.

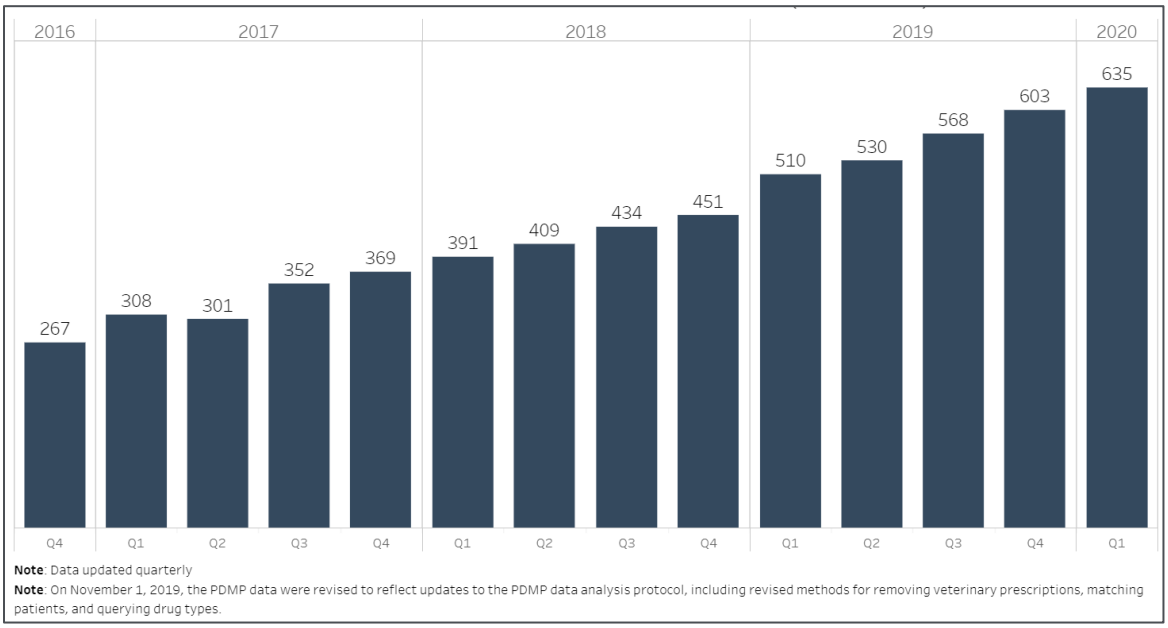
Despite higher and increasing mental health provider availability statewide, much of Rhode Island is a mental health HPSA and mental healthcare is not accessible to all residents. All of Newport and Washington counties are designated mental health HPSAs. Providence County is a HPSA for low-income individuals, despite having a mental health provider rate that is nearly double the national rate.



Source: Centers for Medicare and Medicaid Services

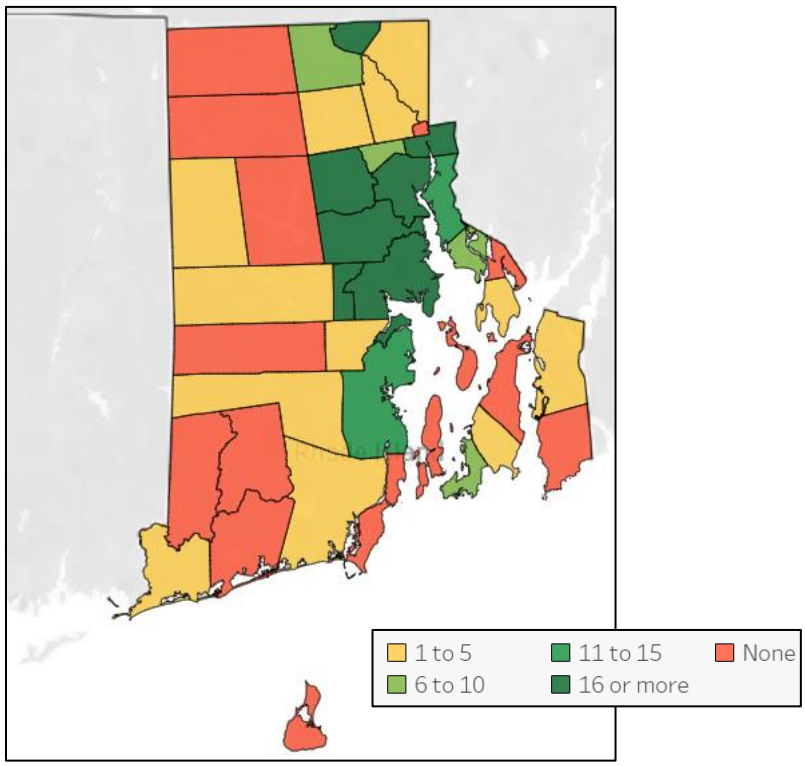
Rhode Island also saw a significant increase in the number of practitioners able to prescribe buprenorphine, from 267 at the end of 2016 to 635 in Q1 2020. Buprenorphine is the first medication-assisted treatment (MAT) for opioid use disorder that can be prescribed or dispensed in physician offices. MAT waivered providers and opioid treatment programs, including buprenorphine, are available across Rhode Island, but the largest concentration of providers is in and around Providence and Woonsocket.

2016-2020 Number of Trained and DATA-Waivered Practitioners for Buprenorphine



Source: Prevent Overdose RI

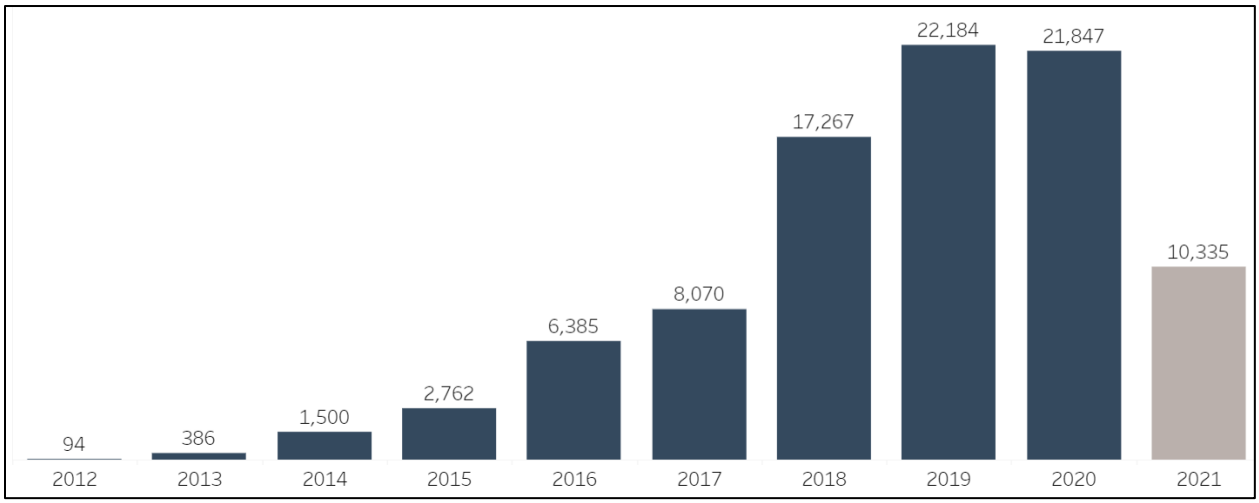
MAT Providers and Programs by City or Town



Source: Prevent Overdose RI

Naloxone is an emergency use medicine that rapidly reverses an opioid overdose. Rhode Island has prioritized making naloxone kits available across the community, partnering with hospitals, pharmacies, and other community partners. **In 2020, 21,847 naloxone kits were distributed in Rhode Island, a nearly 15-fold increase from 2014.** The increase in distribution reflects both greater access and greater demand for Naloxone in the community.

2012-2021 Naloxone Kits Distributed in Rhode Island



Source: Prevent Overdose RI

In 2019, the Rhode Island Executive Office of Health and Human Services conducted a review of the behavioral health system in the state. The resulting Rhode Island Behavioral Health System Review included both quantitative and qualitative components, to determine gaps in services and access in the state. Key findings from the system review are highlighted below:

- **Rhode Island has several behavioral health system capacity challenges to address including both gaps in key service lines and a shortage of linguistically and culturally competent providers, that together disproportionately negatively impact communities of color.**
- Underlying drivers that perpetuate the challenges described above include:
    - Fragmentation in accountability both across state agencies and across providers, insufficient linkages between services to support care coordination and transitions of care, and a lack of integration between behavioral health and medical care.
    - Payments for behavioral health services largely rely on a fee-for-service chassis that does not account for quality or outcomes.
    - Lack of sufficiently modern infrastructure hinders providers of behavioral health services in Rhode Island, as well as creates barriers for Rhode Island to effectively and efficiently monitor the behavioral health system on an ongoing basis.

The following diagrams summarize identified gaps and shortages in the behavioral health continuum of care for children, adults, and older adults**.** Gaps indicate there was no evidence of the service existing

in Rhode Island. Shortages indicate that while some level of service exists it is not adequate to meet the need of Rhode Islanders with behavioral health conditions.

Behavioral Health Service Gaps and Shortages for Adults and Older Adults

Mental Health Services		Substance Use Services	
Status	**Service Type**	**Status**	**Service Type**
Gaps	Mobile Crisis Treatment	Gaps	Mobile Medication Assisted Treatment
Significant Shortages	Community Step Down Hospital Diversion State Sponsored Institutional Services Nursing Home Residential	Significant Shortages	Indicated Prevention Correctional SUD Transitional Services Recovery Housing Residential–High & Low Intensity*
Moderate Shortages	Non-CMHC Outpatient Providers Intensive Outpatient Programs Dual Diagnosis Treatment Crisis/Emergency Care Inpatient Treatment Home Care Homeless Outreach	Moderate Shortages	Intensive Outpatient Services Supported Employment
Slight Shortage	Licensed Community Mental Health Center tied to accessibility statewide		

Source: 2021 Rhode Island Behavioral Health System Review
*Between Aug-Dec. 2020, between 55-108 people were waiting for residential services.

Behavioral Health Service Gaps and Shortages for Children

Status	Service Type
Gaps	Community Step Down Transition Age Youth Services Residential Treatment for Eating Disorders*
Significant Shortages	Universal BH Prevention Services Hospital Diversion State Sponsored Institutional Services Nursing Home Residential/Housing*
Moderate Shortages	SUD Treatment Enhanced Outpatient Services Home and Community Based Services Mobile Crisis
Slight Shortage	Emergency Services

Source: 2021 Rhode Island Behavioral Health System Review
*Between May-Dec. 2020, between 5-31 children and adolescents were waiting for residential services.

Mental Health Incidence and Prevalence

More than 1 in 10 adults across Rhode Island and the nation report having poor mental health on 14 or more days during a 30-day period. This measure is an indicator of persistent, and likely severe, mental health issues, which may impact quality of life and overall wellness. A similar percentage of adults report frequent mental distress across Rhode Island counties, with slightly higher percentages in Kent and Providence counties.

2018 Age-Adjusted Adult (Age 18+) Poor Mental Health Days

	Average Mentally Unhealthy Days per Month	Frequent Mental Distress: 14 or More Poor Mental Health Days per Month
Bristol County	4.2	12.8%
Kent County	4.8	14.1%
Newport County	4.0	12.3%
Providence County	4.4	13.9%
Washington County	4.2	12.8%
Rhode Island	4.2	12.5%
United States	4.1	12.9%

Source: Centers for Disease Control and Prevention, BRFSS

The following tables show statewide hospitalization and ED usage for a primary diagnosis of mental health condition among Rhode Island residents. Data are trended from 2016 to second quarter (Q2) 2021. **The data demonstrate that while overall hospitalizations and ED visits were declining from 2016 to 2019, significant declines were seen in 2020.** From 2019 to 2020, the number of ED visits and hospitalizations due to a primary diagnosis of mental health condition decreased by 5,116 and 1,442 respectively. This finding is likely due in part to delayed or avoided care during the COVID-19 pandemic. Data for the first half of 2021 suggest similar trends as 2020.

Provided percentages by gender, race/ethnicity, and age reflect the proportion of individuals with a hospitalization or ED visit due to a primary diagnosis of mental health condition relative to total hospitalizations or ED visits for that demographic. When viewed by gender and race and ethnicity, the proportion of residents accessing the ED for a mental health condition was generally consistent from 2019 to 2020. Of note, the proportion of Black or Other race individuals hospitalized for a mental health condition declined approximately 1-2 percentage points. When viewed by age group, the proportion of middle-aged adults 30-44 years hospitalized for a mental health condition declined nearly 2 percentage points from 2019 to 2020.

Number and Percent of Emergency Department Visits due to Primary Diagnosis of Mental Health Condition (excluding substance use)

	2016		2017		2018		2019		2020		2021 (Q1-Q2)*	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	26,506	5.8%	25,785	5.6%	23,808	5.4%	22,889	5.2%	17,773	5.1%	8,990	4.9%
Gender												
Male	12,440	6.0%	12,247	5.9%	11,270	5.7%	11,352	5.7%	8,903	5.6%	4,287	5.2%
Female	14,066	5.6%	13,530	5.3%	12,532	5.2%	11,529	4.8%	8,862	4.8%	4,700	4.6%
Race/Ethnicity												
White	19,202	6.4%	17,788	6.2%	16,670	6.0%	15,876	5.7%	12,305	5.6%	6,069	5.2%
Black	2,255	4.9%	2,467	5.4%	2,377	5.3%	2,391	5.2%	1,855	5.3%	939	5.2%
Hispanic	3,455	4.0%	3,377	3.7%	3,120	3.5%	3,213	3.5%	2,427	3.4%	1,313	3.4%
Other	1,101	6.6%	1,185	6.7%	1,143	6.1%	1,154	6.1%	912	6.1%	534	6.4%
Unknown	493	6.6%	968	5.2%	498	7.0%	255	4.7%	274	6.2%	135	7.9%
Age												
0-17	3,779	5.2%	3,939	5.3%	3,637	5.2%	3,603	5.2%	2,707	6.4%	1,771	8.3%
18-29	7,612	8.1%	7,140	7.9%	6,559	8.0%	5,929	7.3%	4,716	7.5%	2,325	7.3%
30-44	6,360	7.1%	6,315	7.0%	6,029	7.1%	6,241	7.1%	4,881	6.7%	2,342	5.9%
45-64	7,064	6.2%	6,636	5.8%	5,925	5.4%	5,600	5.1%	4,240	4.7%	1,957	4.1%
65+	1,691	2.0%	1,755	1.9%	1,658	1.8%	1,516	1.6%	1,229	1.6%	595	1.4%

Source: Rhode Island Department of Health

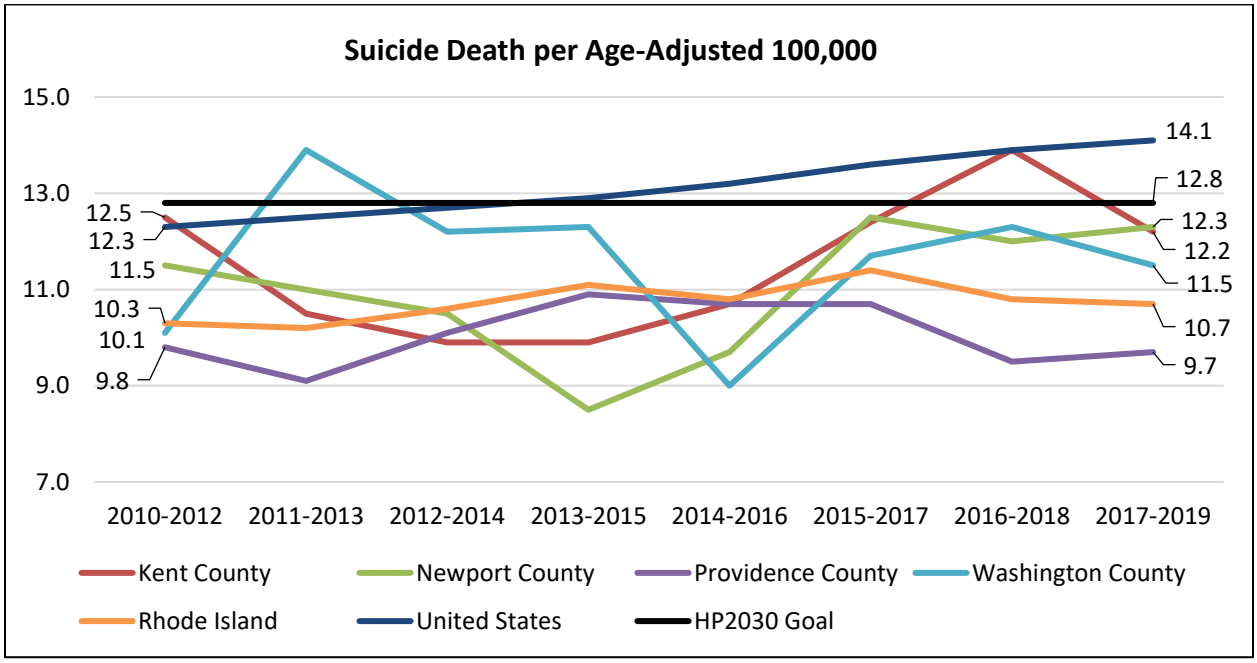
Number and Percent of Inpatient Admissions (hospitalizations) due to Primary Diagnosis of Mental Health Condition (excluding substance use)

	2016		2017		2018		2019		2020		2021 (Q1-Q2)*	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	14,312	12.0%	13,742	11.1%	12,144	10.1%	12,252	10.3%	10,810	10.2%	5,210	9.9%
Gender												
Male	7,221	13.7%	6,878	12.5%	6,112	11.5%	6,473	12.0%	5,575	11.5%	2,536	10.5%
Female	7,090	10.7%	6,858	10.0%	6,030	9.0%	5,777	8.9%	5,230	9.0%	2,673	9.3%
Race/Ethnicity												
White	10,314	11.5%	9,500	10.7%	8,492	9.5%	8,551	9.7%	7,590	9.8%	3,577	9.2%
Black	1,235	15.3%	1,345	15.8%	1,198	14.3%	1,242	14.3%	1,044	13.4%	471	12.7%
Hispanic	1,742	12.1%	1,695	11.1%	1,569	10.2%	1,634	10.3%	1,443	9.8%	803	11.2%
Other	706	18.0%	681	18.1%	568	14.5%	643	15.7%	541	13.6%	290	13.0%
Unknown	315	9.0%	521	7.6%	317	9.3%	182	7.2%	192	8.0%	69	9.0%
Age												
0-17	2,173	13.5%	2,263	14.6%	1,867	12.2%	1,855	12.6%	1,948	14.2%	1,203	17.6%
18-29	3,302	25.6%	3,076	24.4%	2,794	23.3%	2,721	23.6%	2,343	23.3%	1,138	24.1%
30-44	3,568	20.8%	3,343	19.1%	3,044	17.9%	3,228	18.4%	2,778	16.8%	1,185	14.5%
45-64	4,359	14.1%	4,068	12.6%	3,557	11.6%	3,544	11.7%	2,942	11.2%	1,313	10.0%
65+	910	2.2%	992	2.2%	882	2.0%	904	2.0%	799	2.0%	371	1.9%

Source: Rhode Island Department of Health

Frequent mental distress is also a risk factor for suicide. The suicide death rate steadily increased across the US over the past decade, but remained relatively stable in Rhode Island. **All Rhode Island counties except Bristol have a lower suicide death rate than the national death rate and meet the HP2030 goal of 12.8 suicides per 100,000 population.** Bristol County had 21 suicide deaths from 2017 to 2019 for a rate of 14.3 per 100,000.

The Rhode Island suicide death rate should continue to be monitored as deaths reflect pre-COVID pandemic rates. An analysis of demographic characteristics for suicide deaths occurring from 2017 to 2019 suggests that deaths are more prominent among males, middle-age adults, and White residents.



Source: Centers for Disease Control and Prevention

*Bristol County data are not trended due to data gaps. From 2017-2019, Bristol County had 21 suicide deaths for a rate of 14.3 per 100,000, the highest of any Rhode Island county and higher than the nation.

2017-2019 Statewide Suicide Deaths, Demographic Characteristics

	Suicide Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	89	5.1
Male	269	16.6
Age*		
15-24	28	6.3
25-34	60	13.6
35-44	61	16.4
45-54	72	17.2
55-64	76	17.0
65-74	31	10.0
75-84	24	15.5
Race and Ethnicity		
White, Non-Hispanic	315	12.6
Black/African American, Non-Hispanic	12	NA
Asian, Non-Hispanic	NA	NA
Latinx origin (any race)	17	NA

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

Substance Use Disorder Incidence and Prevalence

Substance use disorder affects a person's brain and behaviors and leads to an inability to control the use of substances which include alcohol, marijuana, and opioids, among others. Alcohol use disorder is the most prevalent addictive substance used among adults.

Across the US and Rhode Island, approximately 1 in 5 adults report heavy drinking and/or binge drinking. Among Rhode Island counties, **Newport and Washington counties have a higher prevalence of heavy drinking and binge drinking than the state or nation at approximately 1 in 4 adults. Consistent with the 2019 CHNA, Washington County also reports more driving deaths due to alcohol impairment than the state and nation.** Of note, Rhode Island as a whole reports more driving deaths due to alcohol impairment (41.6%) than the nation (27%).

Alcohol Use Disorder Indicators

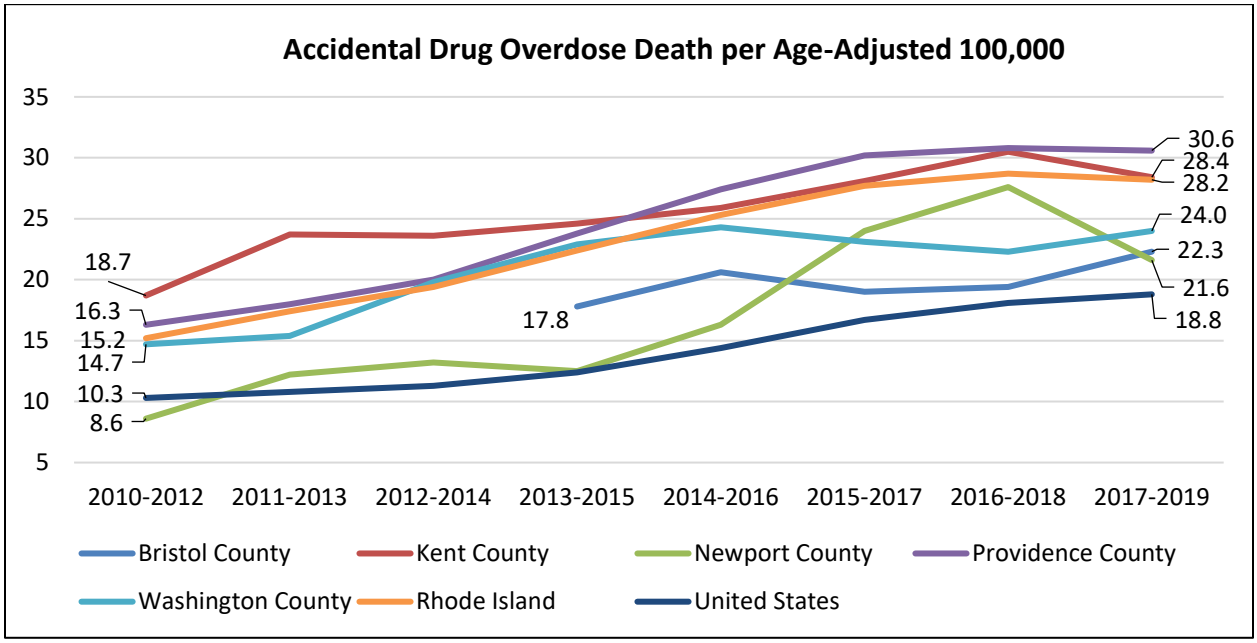
	2018 Adults Reporting Binge or Heavy Drinking (age-adjusted)	2015-2019 Driving Deaths due to Alcohol Impairment (%, count)
Bristol County	20.3%	40.0% (n=2)
Kent County	20.4%	45.5% (n=25)
Newport County	25.4%	21.4% (n=3)
Providence County	18.6%	38.7% (n=67)
Washington County	24.4%	54.2% (n=26)
Rhode Island	19.7%	41.6%
United States	19.0%	27.0%

Source: Centers for Disease Control and Prevention, BRFSS

The CDC reports that the number of accidental drug overdose deaths nationwide increased by nearly 5% from 2018 to 2019 and has quadrupled since 1999. Over 70% of the 70,630 overdose deaths in 2019 involved an opioid. Nationally, heroin- and prescription opioid-involved deaths are declining, while synthetic opioid-involved deaths are increasing. Synthetic opioids such as fentanyl are laboratory produced and have similar effects as natural opioids, but can have far greater potency, increasing the risk for overdose and death.

Rhode Island has more accidental drug overdose deaths than the nation, as indicated by the rate of deaths per 100,000 population. From 2017 to 2019, the accidental drug overdose death rate for Rhode Island was nearly 10 points higher than the national death rate. Kent and Providence counties have historically had the highest death rates in the state, although all counties saw increases over the past decade.

The overdose death rate leveled off in Rhode Island counties from 2015 to 2019, but 2020 increases are expected as a result of the COVID-19 pandemic. **The total number of accidental drug overdose deaths in Rhode Island in 2020 was 384, an increase from 308 in 2019 and 314 in 2018. Within the CharterCARE PSA, from 2019 to 2020, the number of overdose deaths increased from 29 to 35 in Pawtucket, 59 to 93 in Providence, and 10 to 31 in Woonsocket.**



Source: Centers for Disease Control and Prevention

*Data prior to 2013-2015 are not reportable for Bristol County due to low death counts (less than 20 during the three-year timespan).

Total Accidental Drug Overdose Deaths in Rhode Island by Year

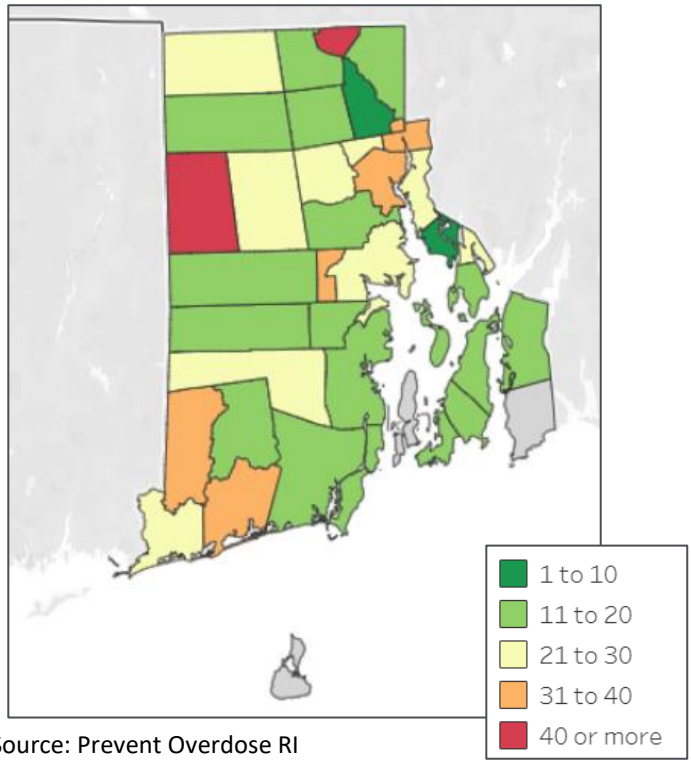
2014	2015	2016	2017	2018	2019	2020	2021*
240	290	336	324	314	308	384	322

Source: Rhode Island Department of Health

*Current as of November 2021.

The opioid epidemic has impacted all communities across the nation. The following map displays the aggregate overdose death rate from 2014 to 2020 by Rhode Island city or town. **Foster and Woonsocket have the highest overdose death rates per 100,000 population in the state at 56.83 and 44.83 respectively. Within the CharterCARE PSA, overdose death rates are also higher in Providence (39.79), Central Falls (35.34), and Pawtucket (33.30).**

2014-2020 Total Overdose Deaths per 100,000 by City or Town of Incident



Source: Prevent Overdose RI

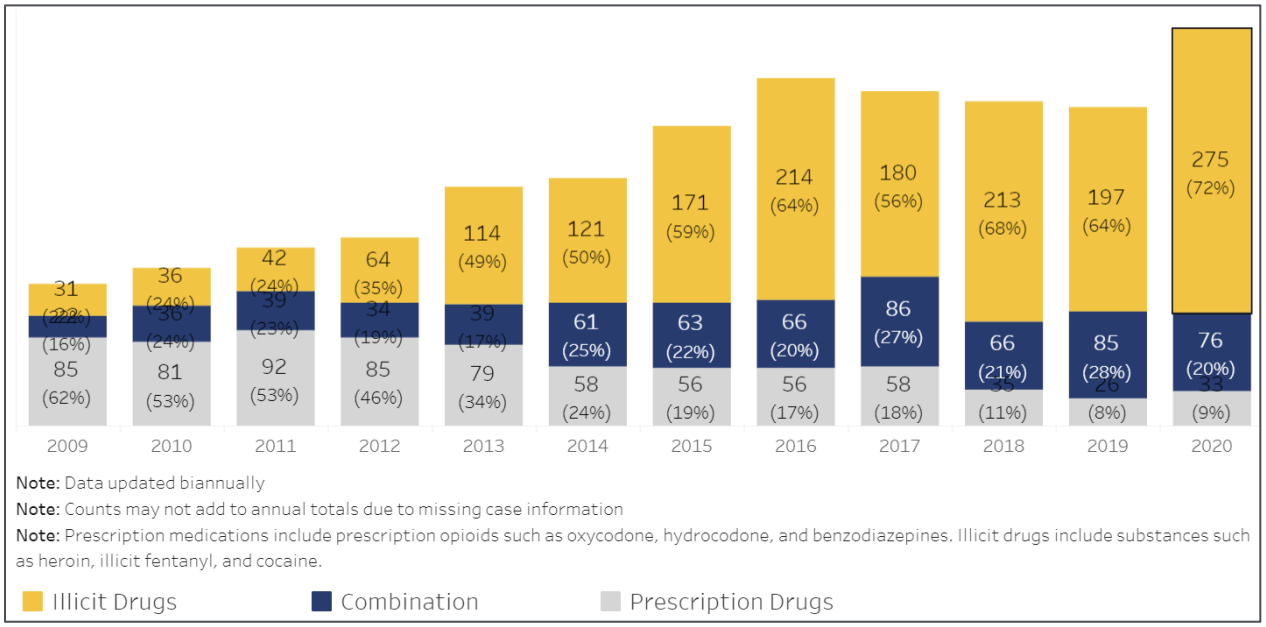
Accidental Drug Overdose Deaths and Rate per 100,000 by CharterCARE PSA Municipality

	Overdose Deaths (Count)							2014-2020 Rate per 100,000
	2014	2015	2016	2017	2018	2019	2020	
Central Falls	8	10	<5	6	<5	10	8	35.34
Cranston	13	16	15	11	21	18	18	19.75
Cumberland	<5	6	6	<5	<5	<5	9	13.25
East Providence	12	9	8	17	12	11	10	23.82
Johnston	7	6	13	11	6	10	6	28.89
North Providence	<5	11	11	6	7	11	8	25.57
Pawtucket	16	22	26	18	21	29	35	33.30
Providence	55	75	73	72	72	59	93	39.79
Smithfield	0	<5	<5	<5	<5	5	<5	17.73
Warwick (Kent County)	23	22	21	19	19	20	28	26.66
Woonsocket	11	16	26	24	12	10	31	44.83

Source: Rhode Island Department of Health

The percentage of overdose deaths due to illicit drugs continued to rise across Rhode Island, peaking at 72% in 2020. Fentanyl is a highly potent synthetic opioid with greater risk for overdose and death. According to the Rhode Island Department of Health, the number of overdose deaths related to illicit fentanyl increased 30-fold since 2019. **In 2020, over 70% of overdose deaths involved illicit fentanyl.**

2009-2020 Overdose Deaths by Drug Type



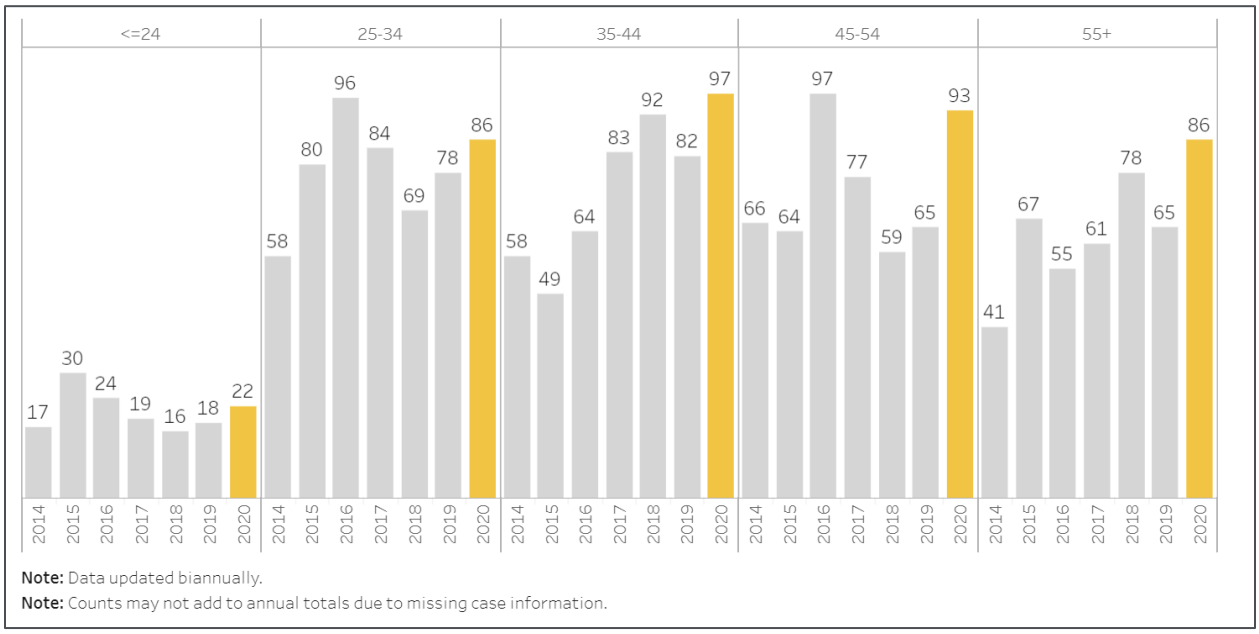
Source: Prevent Overdose RI

While the opioid epidemic has affected all genders and age groups, the largest proportion of overdose deaths has historically been among males and adults. In 2020, adults age 35-44 accounted for the largest proportion of overdose deaths (25.3%), followed by adults age 45-54 (24.2%). A similar proportion of deaths (22.4%) occurred among adults age 25-34 and 55+. Since 2018, males have accounted for more than 70% of overdose deaths.

In 2019 and 2020, Rhode Island saw an increase in overdose death rates for Black/African American and Latinx residents. As reported by the Rhode Island Department of Health, this trend is happening across the country and is rooted in systemic racism and related health inequities. These health inequities are also demonstrated in access to treatment services. Despite having the highest rate of death due to overdose, Black/African American residents are the least likely to be receiving methadone, one of the three FDA-approved medications for the treatment of opioid use disorder.

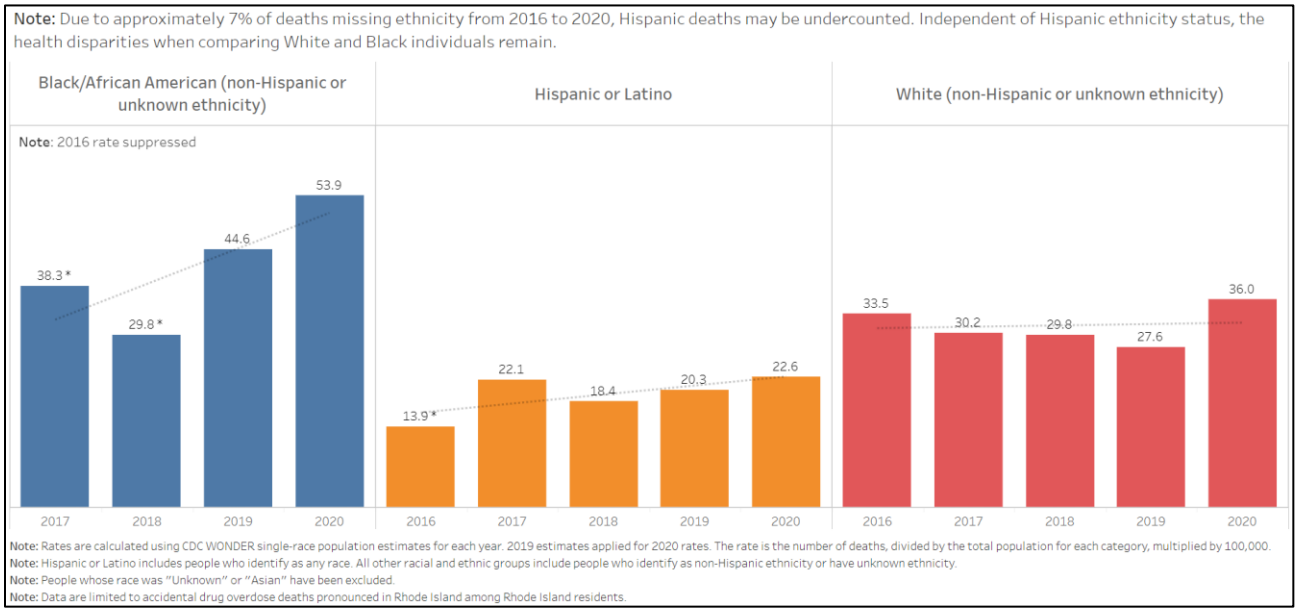
Of note, methadone uptake declined among all racial and ethnic groups in 2020, following two years of growth. This finding is likely a direct result of the COVID-19 pandemic, which caused delays in care and treatment across the healthcare system.

2014-2020 Overdose Deaths by Age



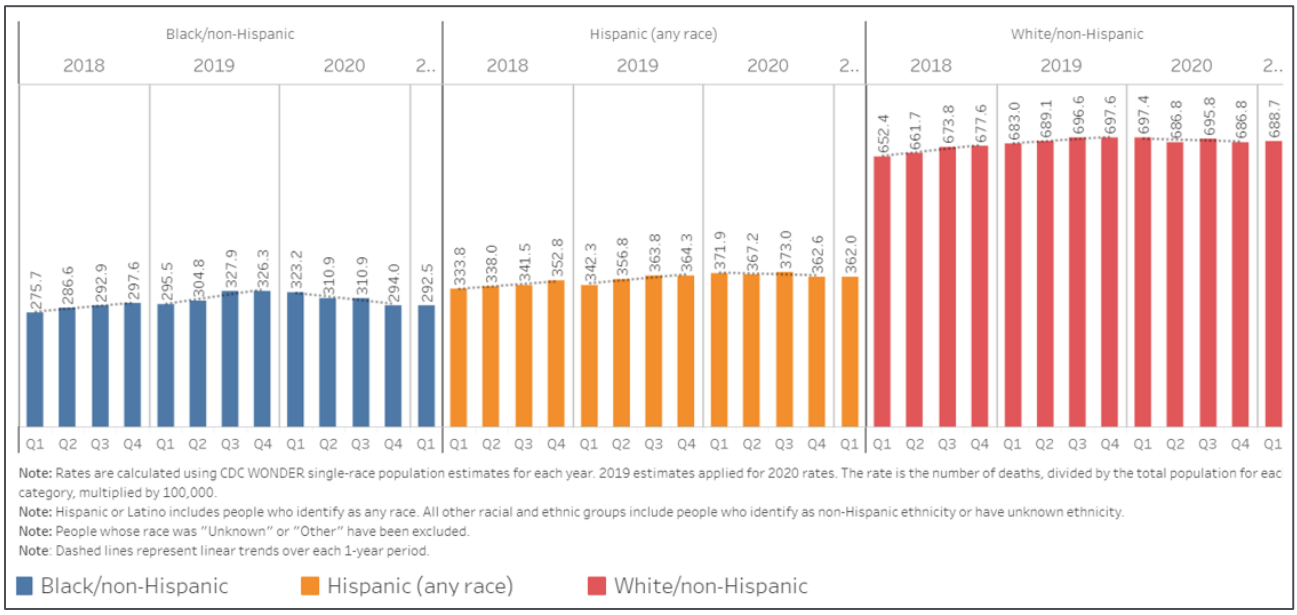
Source: Prevent Overdose RI

2016-2020 Overdose Death Rate per 100,000 by Race and Ethnicity



Source: Prevent Overdose RI

Q1 2018 – Q3 2020 Rate of Methadone Receipt per 100,000 by Race and Ethnicity



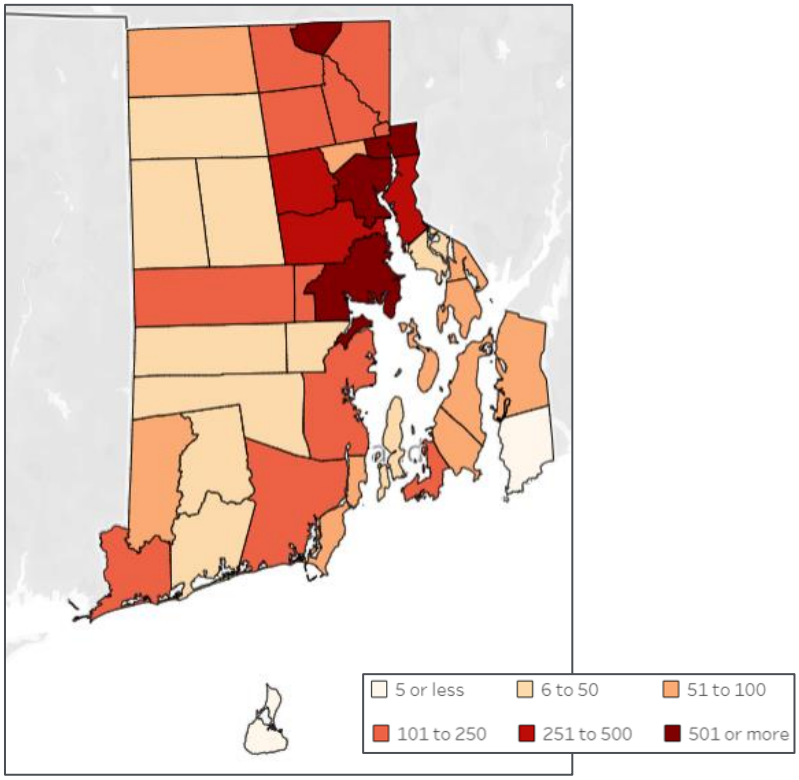
Source: Prevent Overdose RI

Opioid use disorder and overdoses have had a significant impact on local health resources. The following data depict Emergency Medical Services (EMS) response and ED visits for suspected overdoses.

The following map displays the aggregate number of EMS calls for suspected opioid overdose from 2016 to 2020 by Rhode Island city or town. While EMS calls were concentrated in Providence County, particularly the core cities, and Warwick in Kent County, communities in all counties were affected. Within the CharterCARE PSA, Woonsocket, Providence, and Central Falls had the highest rates of EMS calls per 100,000 population in the state.

While the number of overdose deaths generally increased or remained stable in CharterCARE PSA municipalities from 2019 to 2020, the number of EMS calls declined in all municipalities except Johnson, likely as a result of the COVID-19 pandemic. Fears surrounding the risk of going to the hospital and postponing care during COVID-19 contributed to a decline in EMS response nationwide. Lack of appropriate EMS response to overdose incidents likely contributed to increased overdose deaths across Rhode Island. Similar trends were seen in a decline in the provision of post-overdose counseling and naloxone services, particularly in the second quarter of 2020.

2016-2020 EMS Reports for Suspected Opioid Overdose by City or Town of Incident



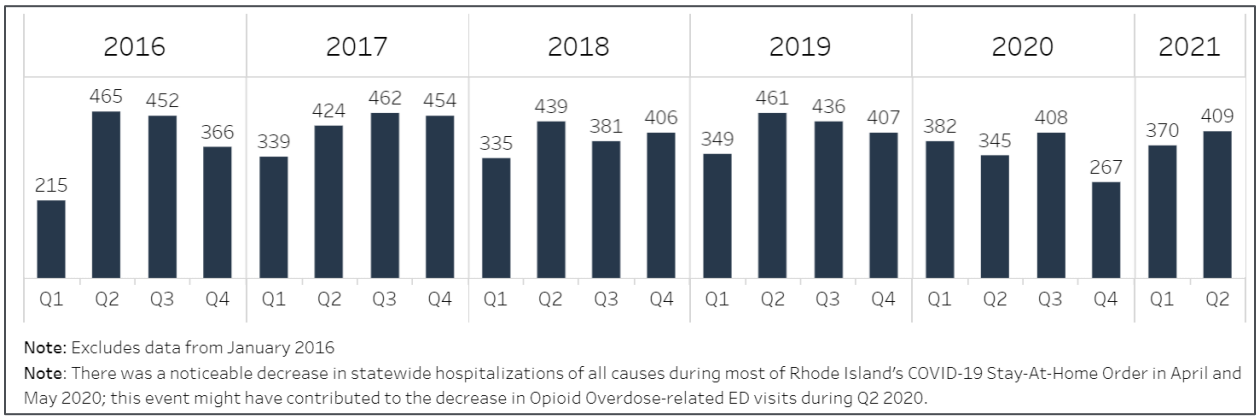
Source: Prevent Overdose RI

EMS Reports for Suspected Opioid Overdose by CharterCARE PSA Municipality

	EMS 991 Calls (Count)					2016-2020 Rate per 100,000
	2016	2017	2018	2019	2020	
Central Falls	45	33	51	67	41	1,223.0
Cranston	110	126	72	96	90	615.0
Cumberland	15	29	38	49	30	481.0
East Providence	41	39	50	81	49	553.0
Johnston	48	51	41	51	65	890.0
North Providence	25	<5	14	22	20	253.0
Pawtucket	159	148	88	103	95	833.0
Providence	568	433	471	535	402	1,353.0
Smithfield	19	22	28	21	20	513.0
Warwick (Kent County)	86	121	118	117	95	537.0
Woonsocket	138	139	94	152	135	1,598.0

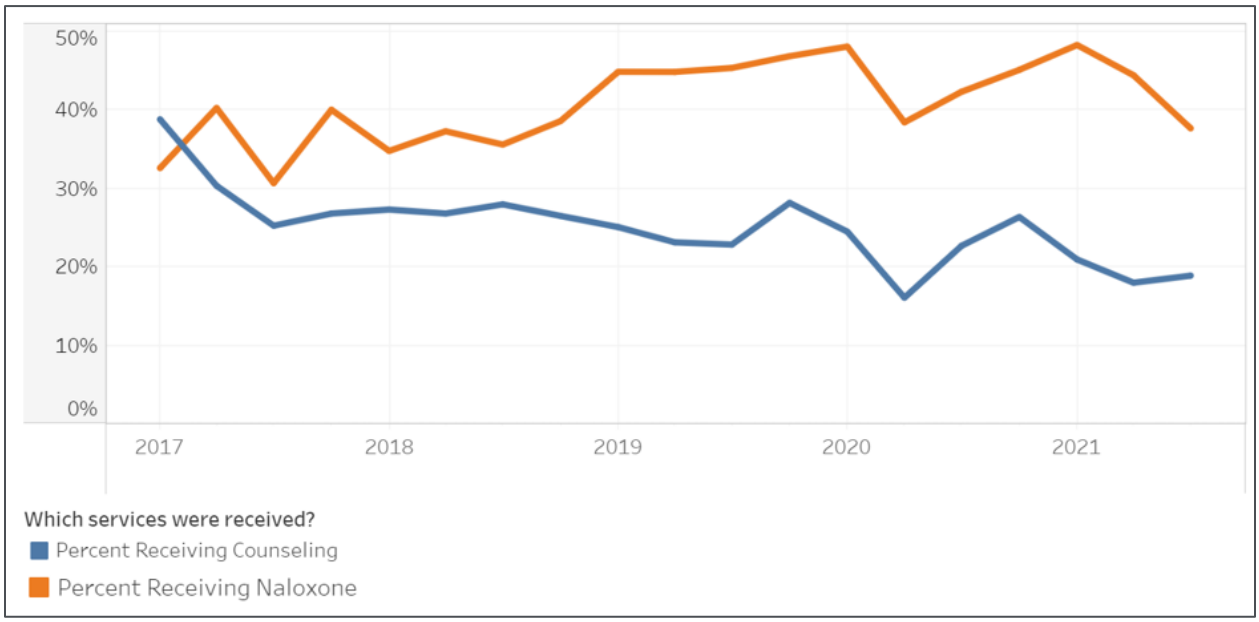
Source: Prevent Overdose RI

2016 - July 2021 Emergency Department Visits for Opioid Overdose



Source: Prevent Overdose RI

2017-2021 Emergency Department Visits for Opioid Overdose, Post-Overdose Counseling and Naloxone Services



Source: Prevent Overdose RI

The following tables show statewide hospitalization and ED usage for a primary diagnosis of substance use among Rhode Island residents. Data are trended from 2016 to second quarter (Q2) 2021. Substance use includes alcohol and opioid-related disorders, among other substances (e.g., marijuana, sedative, stimulant, tobacco).

The data demonstrate that while overall ED visits were increasing from 2016 to 2019, a significant decline was seen in 2020. From 2019 to 2020, the number of ED visits due to a primary diagnosis of substance use decreased by 3,115 visits. This finding is likely due in part to delayed or avoided care

during the COVID-19 pandemic. Data for the first half of 2021 suggest similar trends as 2020. Hospitalizations due to substance use were generally stable from 2017 to 2019 and only a small decline of 86 hospitalizations was seen in 2020.

Provided percentages by gender, race/ethnicity, and age reflect the proportion of individuals with a hospitalization or ED visit due to a primary diagnosis of substance use relative to total hospitalizations or ED visits for that demographic. The proportion of residents hospitalized or seen in the ED for substance use was generally consistent from 2019 to 2020, with the largest increase of nearly 1 percentage point in hospitalizations among White and Black residents and adults age 30-64 years.

Number and Percent of Emergency Department Visits due to Primary Diagnosis of Substance Use

	2016		2017		2018		2019		2020		2021 (Q1-Q2)*	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	17,076	3.8%	16,818	3.6%	16,846	3.8%	17,360	3.9%	14,245	4.1%	7,775	4.2%
Gender												
Male	12,181	5.9%	11,757	5.7%	11,834	6.0%	12,051	6.0%	10,200	6.4%	5,633	6.9%
Female	4,894	2.0%	5,056	2.0%	5,011	2.1%	5,309	2.2%	4,043	2.2%	2,141	2.1%
Race/Ethnicity												
White	12,417	4.2%	11,562	4.0%	11,720	4.2%	12,274	4.4%	10,104	4.6%	5,138	4.4%
Black	1,594	3.5%	1,532	3.3%	1,674	3.7%	1,547	3.4%	1,206	3.4%	641	3.5%
Hispanic	2,271	2.6%	2,357	2.6%	2,443	2.7%	2,774	3.0%	2,306	3.2%	1,615	4.2%
Other	551	3.3%	564	3.2%	671	3.6%	618	3.3%	443	3.0%	313	3.8%
Unknown	243	3.3%	803	4.3%	338	4.8%	147	2.7%	186	4.2%	68	4.0%
Age												
0-17	217	0.3%	214	0.3%	171	0.2%	229	0.3%	170	0.4%	76	0.4%
18-29	3,326	3.5%	3,167	3.5%	2,874	3.5%	2,883	3.6%	2,242	3.6%	1,218	3.8%
30-44	5,024	5.6%	5,205	5.8%	5,293	6.3%	5,793	6.6%	5,015	6.9%	2,801	7.1%
45-64	7,853	6.9%	7,476	6.5%	7,699	7.1%	7,467	6.8%	5,862	6.5%	3,159	6.6%
65+	656	0.8%	756	0.8%	809	0.9%	988	1.1%	956	1.2%	521	1.2%

Source: Rhode Island Department of Health

Number and Percent of Inpatient Admissions (hospitalizations) due to Primary Diagnosis of Substance Use

	2016		2017		2018		2019		2020		2021 (Q1-Q2)*	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	4,577	3.8%	5,032	4.1%	5,162	4.3%	5,072	4.3%	4,986	4.7%	2,580	4.9%
Gender												
Male	3,132	5.9%	3,522	6.4%	3,647	6.8%	3,522	6.5%	3,513	7.3%	1,856	7.7%
Female	1,442	2.2%	1,505	2.2%	1,514	2.3%	1,550	2.4%	1,472	2.5%	724	2.5%
Race/Ethnicity												
White	3,633	4.1%	3,807	4.3%	3,944	4.4%	3,908	4.5%	3,924	5.1%	2,008	5.2%
Black	274	3.4%	303	3.6%	322	3.9%	311	3.6%	328	4.2%	136	3.7%
Hispanic	426	3.0%	543	3.6%	567	3.7%	646	4.1%	515	3.5%	296	4.1%
Other	166	4.2%	184	4.9%	195	5.0%	176	4.3%	162	4.1%	111	5.0%
Unknown	78	2.2%	195	2.8%	134	3.9%	31	1.2%	57	2.4%	29	3.8%
Age												
0-17	14	0.1%	18	0.1%	11	0.1%	5	0.0%	18	0.1%	10	0.1%
18-29	652	5.1%	671	5.3%	754	6.3%	663	5.8%	614	6.1%	279	5.9%
30-44	1,431	8.3%	1,659	9.5%	1,659	9.8%	1,746	10.0%	1,780	10.8%	958	11.7%
45-64	2,260	7.3%	2,399	7.4%	2,416	7.8%	2,353	7.8%	2,249	8.5%	1,156	8.8%
65+	220	0.5%	285	0.6%	322	0.7%	305	0.7%	325	0.8%	177	0.9%

Source: Rhode Island Department of Health

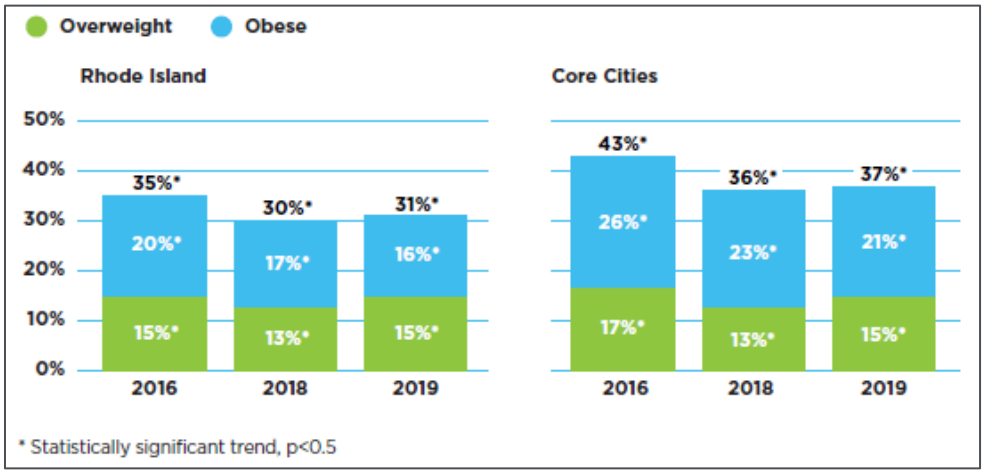
Youth Health

Overweight and Obesity

Childhood obesity is a persistent and significant threat to the long-term health of today's youth. The CDC reports that children who have obesity are more likely to have high blood pressure and high cholesterol, risk factors for heart disease; glucose tolerance, insulin resistance, and type 2 diabetes; breathing problems like asthma and sleep apnea; joint and musculoskeletal problems; and psychological and social problems, such as anxiety, depression, low self-esteem, and bullying; among other concerns.

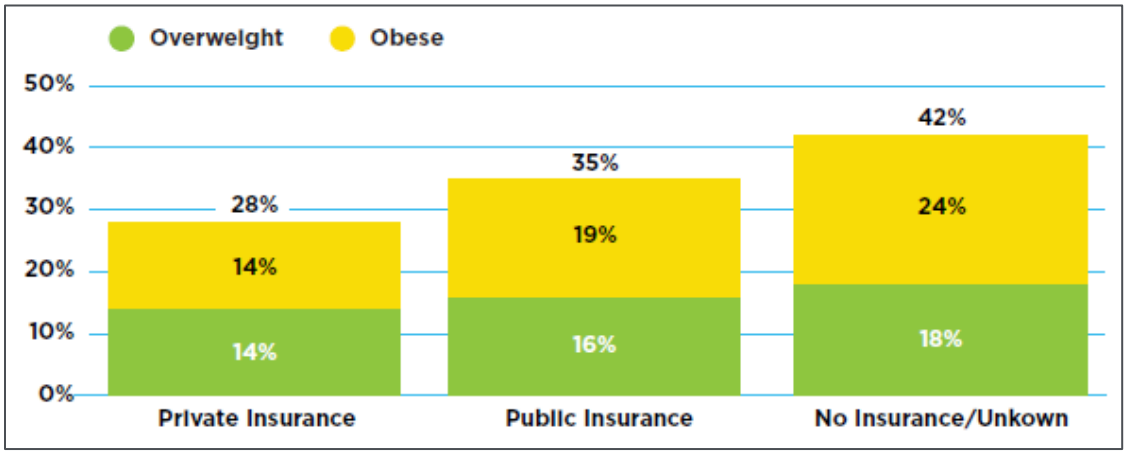
Among Rhode Island children ages 2 to 27 in 2019, 15% were considered overweight and 16% were considered obese for a combined 31%. This finding is consistent with 2018 and lower than 2016. Youth overweight and obesity varies widely by health insurance coverage, an indicator of preventative care access and socioeconomic status, and race and ethnicity. **Across Rhode Island, 42% of uninsured youth and 35% of youth with public health insurance are overweight or obese compared to 14% of youth with private health insurance. Among racial and ethnic groups, over one-third of Hispanic/Latinx and non-Hispanic Black/African American youth are overweight or obese compared to 29% of non-Hispanic White youth.**

Youth (2-17) Overweight and Obesity for Rhode Island and The Core Cities



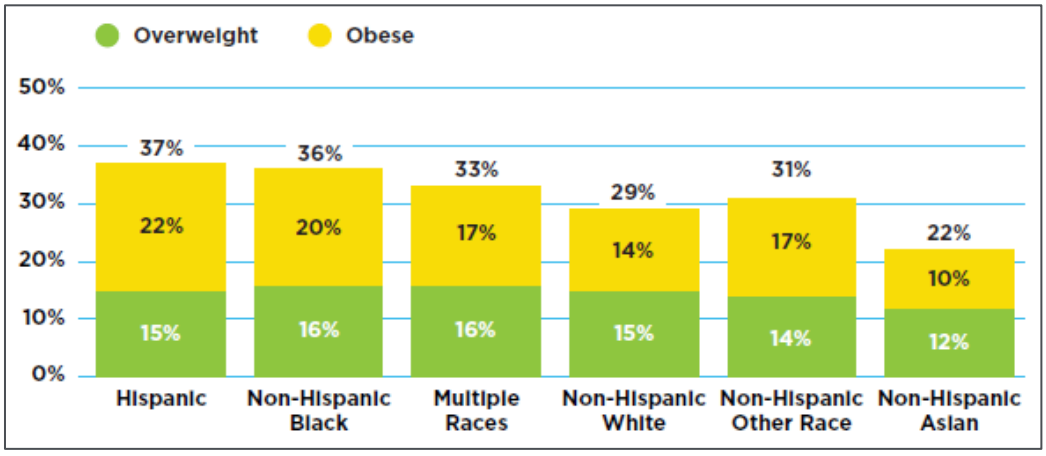
Source: Rhode Island Kids Count

2019 Rhode Island Youth (2-17) Overweight and Obesity by Insurance Status



Source: Rhode Island Kids Count

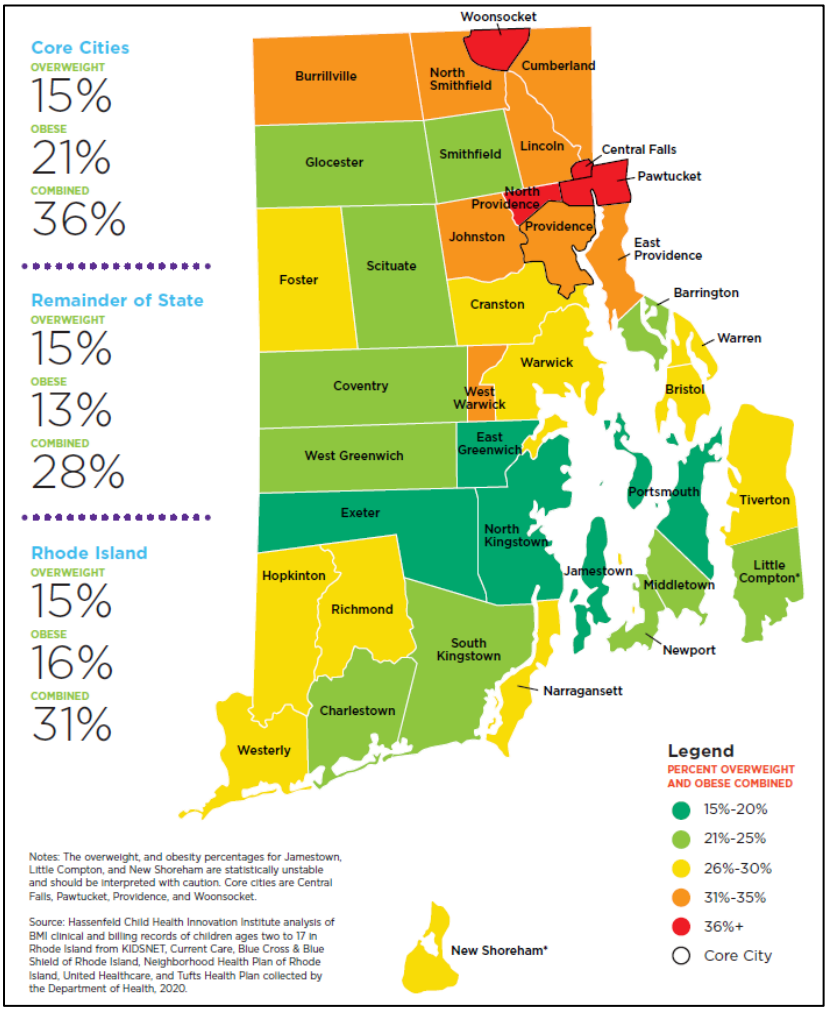
2019 Rhode Island Youth (2-17) Overweight and Obesity by Race and Ethnicity



Source: Rhode Island Kids Count

Overweight and obesity is higher in the core cities, reported as a combined 37% in 2019 compared to 28% in the remainder of the state**.** Within the CharterCARE PSA, 50% of Central Falls youth and 41% of Woonsocket youth are overweight or obese, the highest proportions of any city or town in Rhode Island. **All CharterCARE PSA municipalities except Smithfield have a higher proportion of overweight or obese youth compared to the state average (excluding the core cities).**

2019 Youth (2-17) Overweight and Obesity by Rhode Island City and Town



Source: Rhode Island Kids Count

2019 Youth (2-17) Overweight and Obesity by CharterCARE PSA Municipality

	Overweight	Obese	Combined
Central Falls	20%	30%	50%
Cranston	14%	15%	29%
Cumberland	16%	15%	31%
East Providence	17%	18%	35%
Johnston	16%	17%	33%
North Providence	20%	16%	36%
Pawtucket	17%	22%	39%
Providence	14%	19%	33%
Smithfield	15%	10%	25%
Warwick (Kent County)	16%	14%	30%
Woonsocket	17%	24%	41%
Four Core Cities	15%	21%	36%
Remainder of Rhode Island	15%	13%	28%

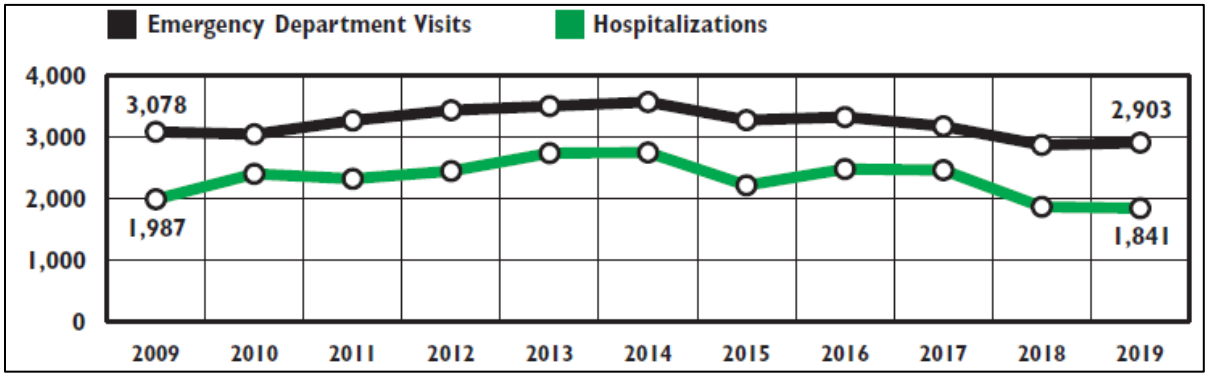
Source: Rhode Island Kids Count

Behavioral Health

The 2021 Rhode Island Kids Count Factbook states, "Mental health treatment systems tend to be fragmented and crisis-driven with disproportionate spending on high-end care and often lack adequate investments in prevention and community-based services." Rhode Island has made great strides in promoting mental wellbeing and improving mental healthcare services for youth, but more work is needed to provide adequate and timely care for all youth across the state.

As reported in the Rhode Island Kids Count Factbook, the percentage of Rhode Island children ages 3 to 17 who needed mental health treatment or counseling and had a problem obtaining it declined from 55% in 2016 to 36% in 2017. **Consistent with having better overall access to mental health treatment, the number of hospitalizations and ED visits among children for a primary mental disorder diagnosis continued to decline from the last CHNA.** Hospitalizations and ED visits for mental disorder are typically considered emergency care services that can often be avoided with appropriate outpatient care. In 2019, 1,841 children were hospitalized and 2,903 visited the ED for a mental disorder, a decrease from the prior CHNA reports of 2,476 and 3,318 respectively.

2009-2019 Child Emergency Care for Primary Diagnosis of Mental Disorder



Source: 2021 Rhode Island Kids Count Factbook

While youth mental health services are improving statewide, psychiatric care continues to be a needed, limited resource across Rhode Island. **The number of youths awaiting psychiatric inpatient admission increased from 212 in federal fiscal year (FFY) 2016 to 795 in FFY2020.** Inpatient psychiatric care is critical to help stabilize youth experiencing acute psychiatric symptoms, including risk of suicide. **Cooccurring with an increasing number of youths awaiting inpatient psychiatric care, was an increasing number of ED visits and hospitalizations among youth ages 13-19 due to suicide attempts.** From 2015 to 2019, there were 1,165 ED visits and 794 hospitalizations among youth ages 13-19 due to suicide attempts statewide; 20 children under age 20 died due to suicide.

Rhode Island has historically reported a higher percentage of youth attempting suicide than the nation. **In 2019, 14.7% of Rhode Island high school students reported an attempted suicide, an increase from 2015 and 2017 (10.5%) and a higher proportion than the nation (8.9%).** When considered by subgroup, attempted suicides were higher among Black/African American and Latinx students compared to White students, as well as students identifying as lesbian, gay, or bisexual (LGB) versus straight.

Rhode Island Youth Mental Health Service Availability Indicators

	FFY 2016	FFY 2017	FFY 2018	FFY 2019	FFY2020
Youth awaiting psychiatric inpatient admission (psychiatric boarding)	212	462	465	437	795
Average wait time for psychiatric admission	3 days	3.6 days	1.4 days	3.3 days	3.2 days
Average children per day unable to leave psychiatric hospital due to lack of step-down availability or safe placement	6	8	7	5	4

Source: Rhode Island Kids Count Factbook

Rhode Island Youth Suicide Attempts and Deaths

	2012-2016	2013-2017	2014-2018	2015-2019
ED visits among youth ages 13-19 due to suicide attempt	864	965	886	1,165
Hospitalizations among youth ages 13-19 due to suicide attempt	522	649	651	794
Suicide deaths among youth under age 20	22	6	25	20

Source: Rhode Island Kids Count Factbook

High School Students Reporting an Attempted Suicide

	2013	2015	2017	2019
Rhode Island	14.3%	10.5%	10.5%	14.7%
United States	8.0%	8.6%	7.4%	8.9%

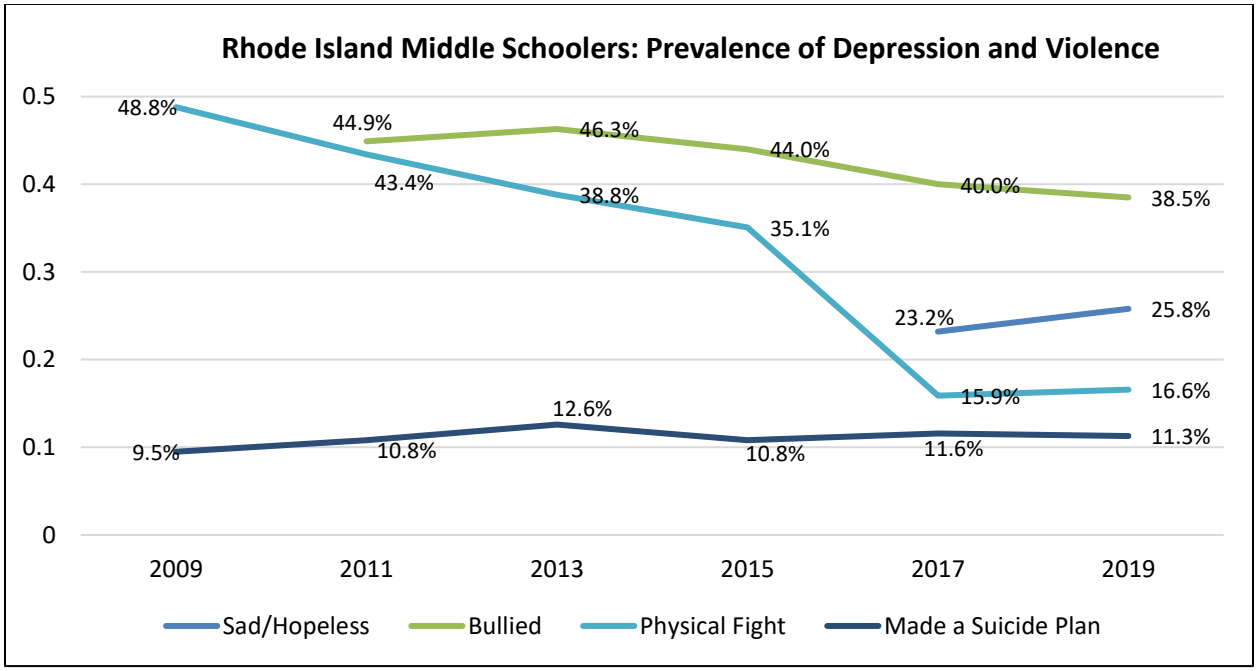
Source: Centers for Disease Control and Prevention, YRBS

2019 Rhode Island High School Students Reporting an Attempted Suicide

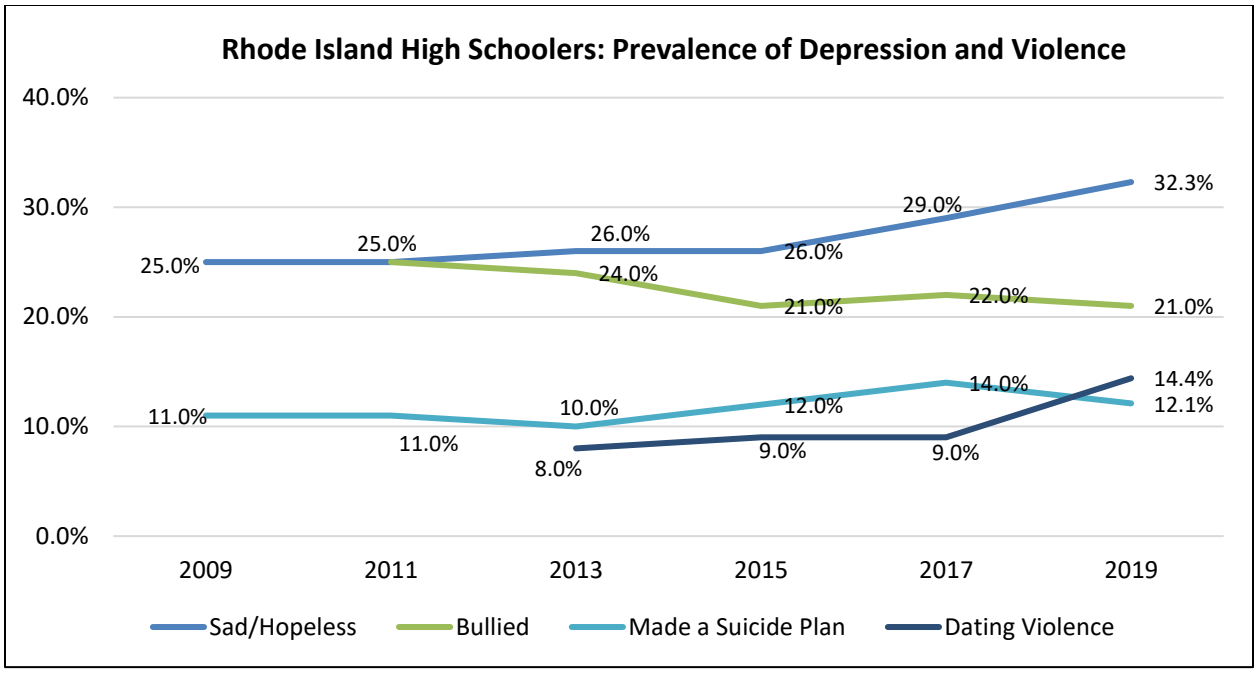
	Percent
Gender	
Female	13.5%
Male	15.5%
Race and Ethnicity	
White	12.1%
Black or African American	18.3%
Latinx origin (any race)	17.7%
Sexual Identity	
Lesbian, Gay, Bisexual (LGB)	21.6%
Straight	13.3%

Source: Centers for Disease Control and Prevention, YRBS

Contributing to acute psychiatric distress among Rhode Island youth is an overall increasing percentage of both middle school and high school students who report feeling consistently sad or hopeless, and a recent increase in dating violence among high school students. Bullying and fighting among students has generally declined.



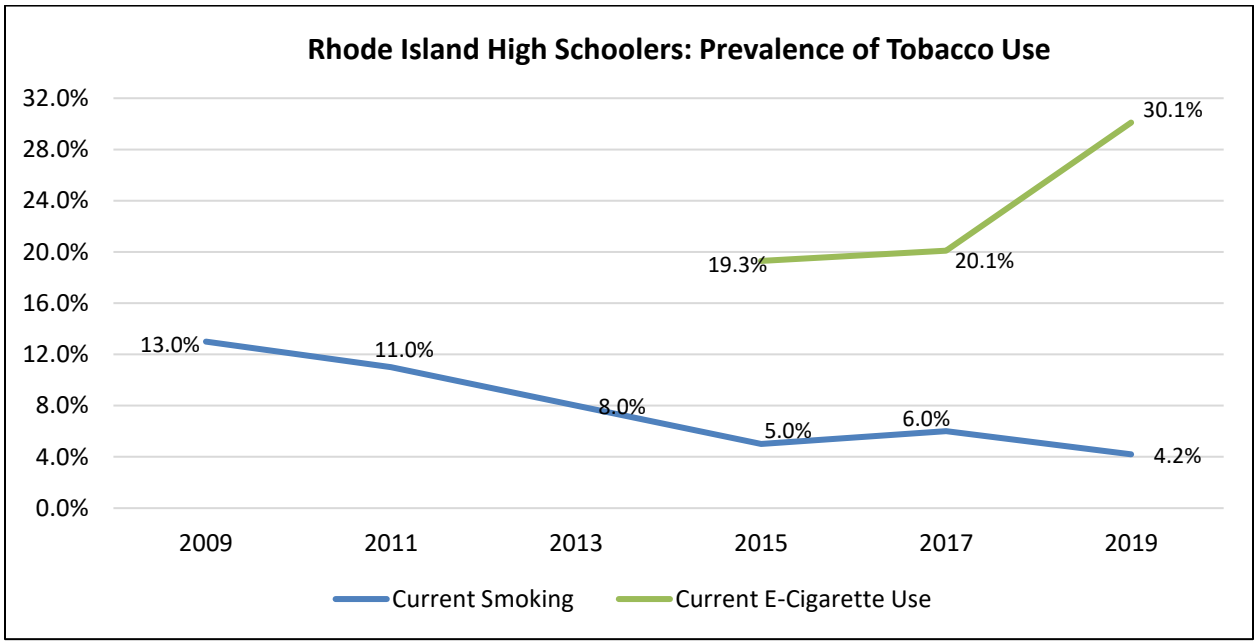
Source: Rhode Island Department of Health



Source: Rhode Island Department of Health

Substance Use (Tobacco, Alcohol, Drugs)

The use of e-cigarettes among youth continues to rise statewide and nationally. **In 2019, 30% of Rhode Island high school students reported currently using e-cigarettes, a 10-point increase from 2017, and a similar proportion as the nation overall (32.7%).** Rhode Island high school students who report current e-cigarette use are more likely to be female, White, and/or LGB. Current use is defined as use on at least one day during the 30 days before the survey.



Source: Rhode Island Department of Health

High School Students Reporting Current (within past 30 days) E-Cigarette Use

	2015	2017	2019
Rhode Island	19.3%	20.1%	30.1%
United States	24.1%	13.2%	32.7%

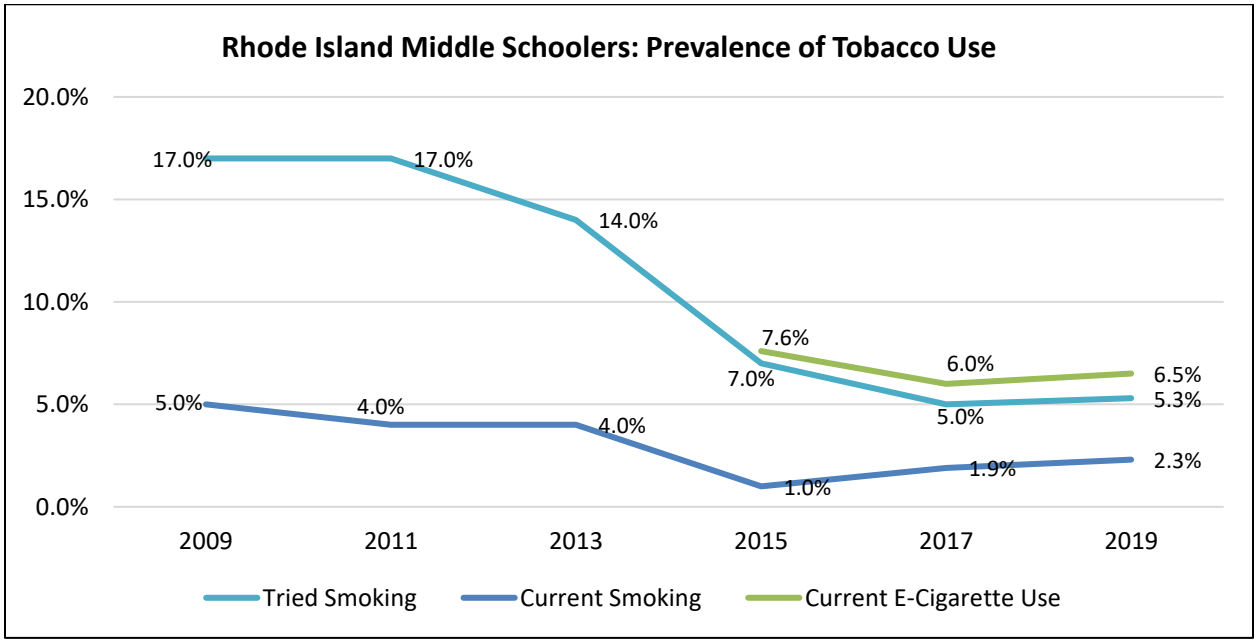
Source: Centers for Disease Control and Prevention, YRBS

2019 Rhode Island High School Students Reporting Current (within past 30 days) E-Cigarette Use

	Percent
Gender	
Female	31.2%
Male	28.4%
Race and Ethnicity	
White	36.4%
Black or African American	18.0%
Latinx origin (any race)	20.1%
Sexual Identity	
Lesbian, Gay, Bisexual (LGB)	37.3%
Straight	30.1%

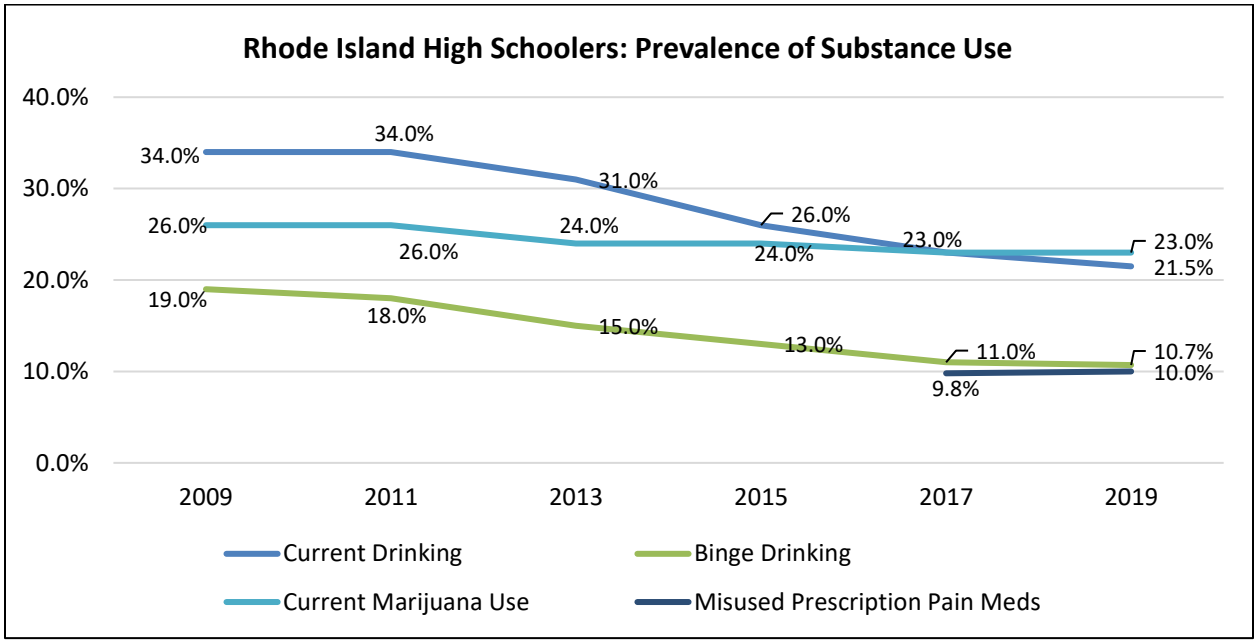
Source: Rhode Island Department of Health

Approximately 16% of Rhode Island middle school students have tried e-cigarettes. **While the percentage of current e-cigarette users has been stable since 2015, the percentage of current traditional cigarette smokers is on the rise, suggesting an increase in overall tobacco product use.**

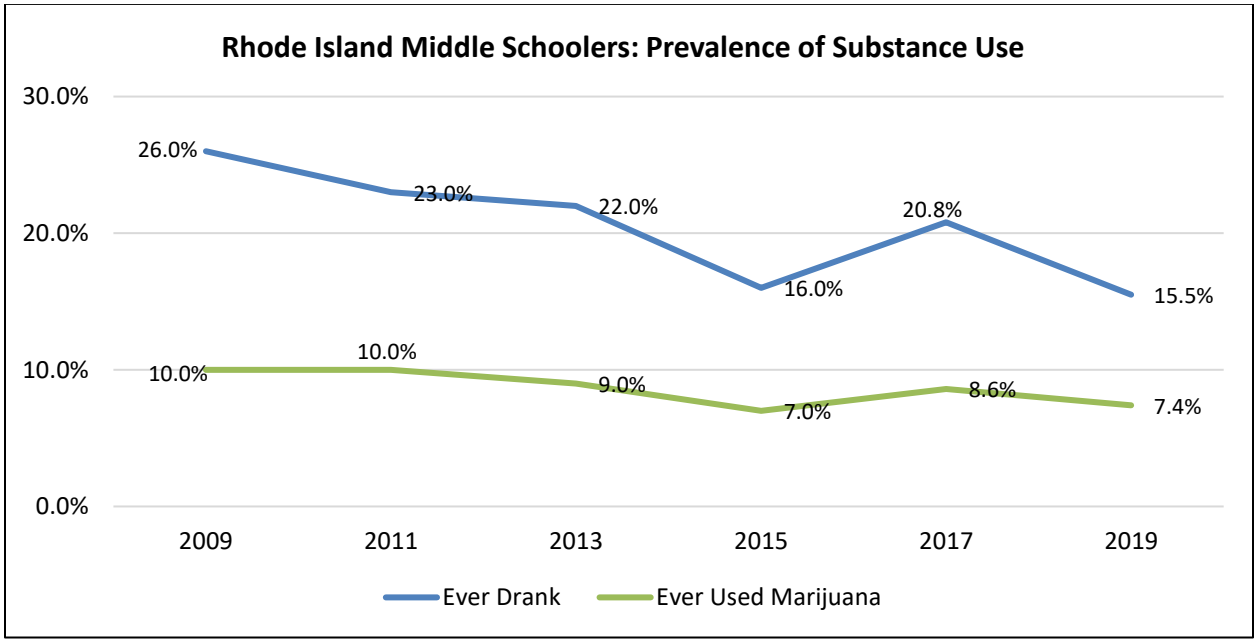


Source: Rhode Island Department of Health

Teen substance use is both a symptom and a risk factor for increased injury, depression, and poor health. The following graphs depict substance use among Rhode Island high school and middle school students. **Substance use is generally declining about Rhode Island students, however, approximately 1 in 4 high school students report current alcohol and marijuana use.** The misuse of prescription pain medications remained stable from 2017 to 2019 at approximately 1 in 10 high school students.



Source: Rhode Island Department of Health



Source: Rhode Island Department of Health

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 tables profile the prevalence of select ACEs among Rhode Island youth, including abuse, neglect, and family dysfunction (incarceration and domestic violence).

Child abuse and neglect is defined as the following:

- 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.

Between 2015 and 2019 in Rhode Island, there were 454 ED visits, 81 hospitalizations, and six deaths of children under age 18 due to child abuse and/or neglect. The occurrence of these incidents was variable on a year-to-year basis. Nationwide in 2019, the majority (73%) of child maltreatment deaths involved neglect and 44% involved physical abuse (Note: these categories are not mutually exclusive).

Rhode Island Emergency Department (ED) Visits, Hospitalizations, and Deaths due to Child Abuse and/or Neglect

	ED Visits*	Hospitalizations*	Deaths
2015	92	28	0
2016	79	8	1
2017	107	18	2
2018	102	13	1
2019	72	14	2
Total	**454**	**81**	**6**

Source: Rhode Island Kids Count

*Include both suspected and confirmed assessments of child abuse and neglect.

As reported in the 2021 Rhode Island Kids Count Factbook, "In 2020 in Rhode Island, there were 1,862 indicated investigations of child neglect and abuse involving 2,681 Rhode Island children. The rate of child neglect and abuse per 1,000 children under age 18 was two times higher in the four core cities (18.2 victims per 1,000 children) than in the remainder of the state (8.9 victims per 1,000 children). About half (45%) of the victims of child neglect and abuse in 2020 were young children under age six and one-third (33%) were ages three and younger."

In comparison to 2019 CHNA data findings, the rate of indicated investigations and victims of child abuse and neglect declined in both the core cities and the remainder of Rhode Island. Within the CharterCARE PSA, Woonsocket and Central Falls continue to have the highest rates of child abuse/neglect in the state, although rates declined from the 2019 CHNA. Of note, seven out of the 11 CharterCARE PSA municipalities have a higher rate of child abuse and neglect than the state (excluding the core cities).

2020 Indicated Investigations of Child Abuse and Neglect by CharterCARE PSA Municipality

	Investigations of Child Abuse/ Neglect	Investigations per 1,000 Children	Victims of Child Abuse/Neglect	Victims per 1,000 Children
Central Falls	87	15.4	145	25.7
Cranston	96	5.8	132	8.0
Cumberland	23	3.1	41	5.4
East Providence	78	8.5	97	10.6
Johnston	35	6.4	39	7.1
North Providence	53	9.6	84	15.2
Pawtucket	203	12.2	300	18.1
Providence	403	9.7	623	15.0
Smithfield	11	3.0	14	3.9
Warwick (Kent County)	91	5.8	154	9.7
Woonsocket	173	17.5	273	27.6
Four Core Cities	866	11.7	1,341	18.2
2019 CHNA Comparison	1,155	15.7	1,734	23.5
Remainder of Rhode Island	996	6.6	1,340	8.9
2019 CHNA Comparison	1,170	7.8	1,526	10.2

Source: Rhode Island Kids Count

As reported in the 2021 Rhode Island Kids Count Factbook, **"Of the 2,156 inmates awaiting trial or serving a sentence at the ACI (Adult Correctional Institution) on September 30, 2020 who answered the question on number of children, 1,299 inmates reported having 3,039 children. Thirty percent of sentenced mothers and 9% of sentenced fathers had sentences that were six months or less. Parents of Color were overrepresented compared to their proportion in the general population."**

The rate of children of incarcerated parents declined from the 2019 CHNA report, but continues to disproportionately impact families within the four core cities. The rate of children of incarcerated parents within Central Falls, Pawtucket, Providence, and Woonsocket is approximately three to five times higher than the remainder of the state.

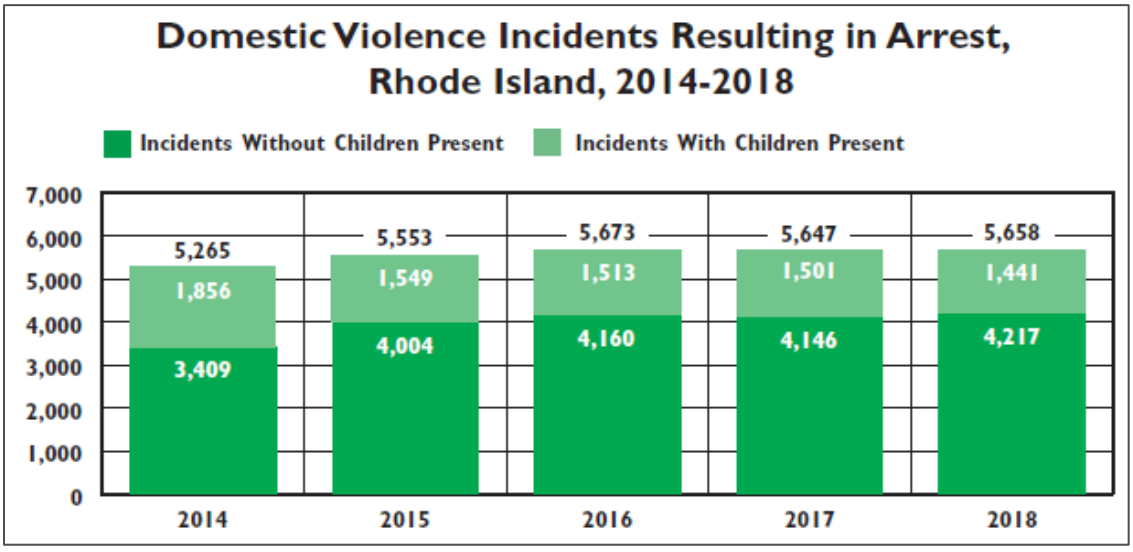
September 30, 2020, Children of Incarcerated Parents by CharterCARE PSA Municipality*

	Number of Children of Incarcerated Parents	Rate per 1,000 Children
Central Falls	113	20.0
Cranston	119	7.2
Cumberland	37	4.9
East Providence	37	4.0
Johnston	35	6.4
North Providence	43	7.8
Pawtucket	191	11.5
Providence	685	16.5
Smithfield	10	2.8
Warwick (Kent County)	72	4.5
Woonsocket	162	16.4
Four Core Cities	1,151	15.6
2019 CHNA Comparison	1,676	22.7
Remainder of Rhode Island	656	4.4
2019 CHNA Comparison	1,173	7.8

Source: Rhode Island Kids Count

*Data are self-reported by the incarcerated parent(s) and may include children over age 18.

Domestic violence incidents resulting in arrest continue to increase in Rhode Island, although the number of children present during the incidents is declining. In 2018, there were 5,658 domestic violence incidents that resulted in arrests, up from 5,553 incidents reported at the time of the 2019 CHNA (data year 2015). Children were present in 25% (1,441) of incidents in 2018.



Source: Rhode Island Kids Count

In comparison to 2019 CHNA data findings, the percentage of domestic violence incidents resulting in arrest, where children were present, declined in both the core cities and the remainder of Rhode Island. Consistent with the state benchmark, approximately 20-25% of incidents within the CharterCARE PSA had children present, excluding a higher proportion in Providence (29%) and Smithfield (30%).

2018 Children Present During Domestic Violence Incidents Resulting in Arrest by CharterCARE PSA Municipality

	Number of Incidents with Children Present	Percent with Children Present
Central Falls	46	26%
Cranston	87	26%
Cumberland	27	26%
East Providence	67	26%
Johnston	18	15%
North Providence	46	26%
Pawtucket	221	25%
Providence	297	29%
Smithfield	13	30%
Warwick (Kent County)	80	26%
Woonsocket	87	22%
Four Core Cities	651	26%
2019 CHNA Comparison	621	28%
Remainder of Rhode Island	790	25%
2019 CHNA Comparison	907	28%

Source: Rhode Island Kids Count

Maternal and Infant Health

A total of 9,590 births occurred in Rhode Island in 2020. Consistent with overall population demographics, the majority (68.4%) of births occurred to people residing in Providence County. Less than 5% of births in Rhode Island occurred in Bristol County, and less than 10% of births occurred in either Newport or Washington counties. Kent County had the second highest proportion of births at 14%.

All babies born in Rhode Island are screened by the Rhode Island Department of Health's Newborn Risk Assessment Program. **In 2020, 6,233 newborns (65%) screened positive, indicating the presence of one or more risk factors associated with poor developmental outcomes.** Key risk factors include economic hardship, single motherhood, parental low education levels, and teenage birth. The following table identifies the prevalence of birth risk factors by Rhode Island county, as available.

Infants born in the core cities experience more risk factors associated with poor developmental outcomes, with nearly 75% born to low-income families, 60% born to single mothers, and 22% born to mothers without a high school diploma. These outcomes are reflected in higher reported risk factors

across Providence County. Within other Rhode Island counties, approximately one-quarter to one-third of infants are born to low-income families, with a higher reported percentage in Newport County (37.7%). Newport County also reports a slightly higher percentage of births to single-mothers and mothers without a high school diploma compared to the remainder of the state.

2020 Infants Born at Risk

	Total Births	Births to Low-Income Families	Births to Single Mothers	Births to Mothers without a High School Diploma
Bristol County	313	29.1%	28.1%	3.8%
Kent County	1,353	31.4%	34.4%	4.3%
Newport County	589	37.7%	34.8%	8.0%
Providence County	6,563	57.8%	49.6%	15.4%
Washington County	771	27.4%	26.6%	1.7%
Four Core Cities	3,856	72.8%	59.8%	22.2%
Remainder of Rhode Island	5,734	33.7%	33.3%	5.0%

Source: Rhode Island Kids Count

Despite a high prevalence of risk factors, Rhode Island overall generally reports positive birth outcomes. From 2015 to 2019, only 4% of all births were to teenage mothers and all counties met HP2030 goals for prenatal care and premature births. However, **positive birth outcomes are not shared equally across counties or racial and ethnic groups.** Consistent with having higher reported risk factors, particularly in the core cities, Providence County experiences more negative birth outcomes compared to other counties. Notably, 67.9% of infants are breastfed compared to the statewide average of 72%, and 81.9% of pregnant people receive first trimester prenatal care compared to 85%-89% in other counties.

Across Rhode Island, Black/African Americans experience notable birth disparities. Fewer than 77% of Black/African Americans receive first trimester prenatal care compared to 87% of Whites. Nearly 12% of babies born to Black/African Americans are premature and/or have low birth weight compared to 7-8% of babies born to Whites. Latinx individuals also experience birth disparities in comparison to their White peers, although not to the same degree as Black/African Americans.

Consistent with the racial and ethnic makeup and known socioeconomic barriers within the core cities, among CharterCARE PSA municipalities, birth disparities are most prevalent in Central Falls, Pawtucket, Providence, and Woonsocket. **Notably, 79-81% of pregnant people in the core cities receive first trimester prenatal care compared to 87% in the remainder in the state, and 60-65% of babies in the core cities are breastfed compared to 77% in the remainder of the state.**

2015-2019 Maternal and Infant Health Indicators

	Percent of All Births to Teens (15-19)	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Breastfeeding at Time of Birth
Bristol County	1.9%	85.4%	7.7%	5.8%	81.1%
Kent County	2.5%	87.9%	7.9%	6.5%	76.3%
Newport County	2.4%	87.1%	8.0%	7.2%	81.2%
Providence County	4.8%	81.9%	9.3%	8.1%	67.9%
Washington County	2.4%	89.4%	8.4%	6.8%	85.7%
Rhode Island	4.0%	83.9%	8.9%	7.7%	72.0%
White, Non-Hispanic	NA	86.9%	8.2%	6.6%	NA
Black/African American, Non-Hispanic	NA	76.5%	11.5%	11.7%	NA
Asian, Non-Hispanic	NA	82.2%	7.7%	7.6%	NA
Latina (any origin)	NA	81.0%	9.6%	8.1%	NA
United States*	4.5%	77.6%	10.2%	8.3%	83.6%
HP2030 Goal	NA	80.5%	9.4%	NA	NA

Source: Rhode Island Kids Count

*Data are reported for 2019 (single year) based on availability.

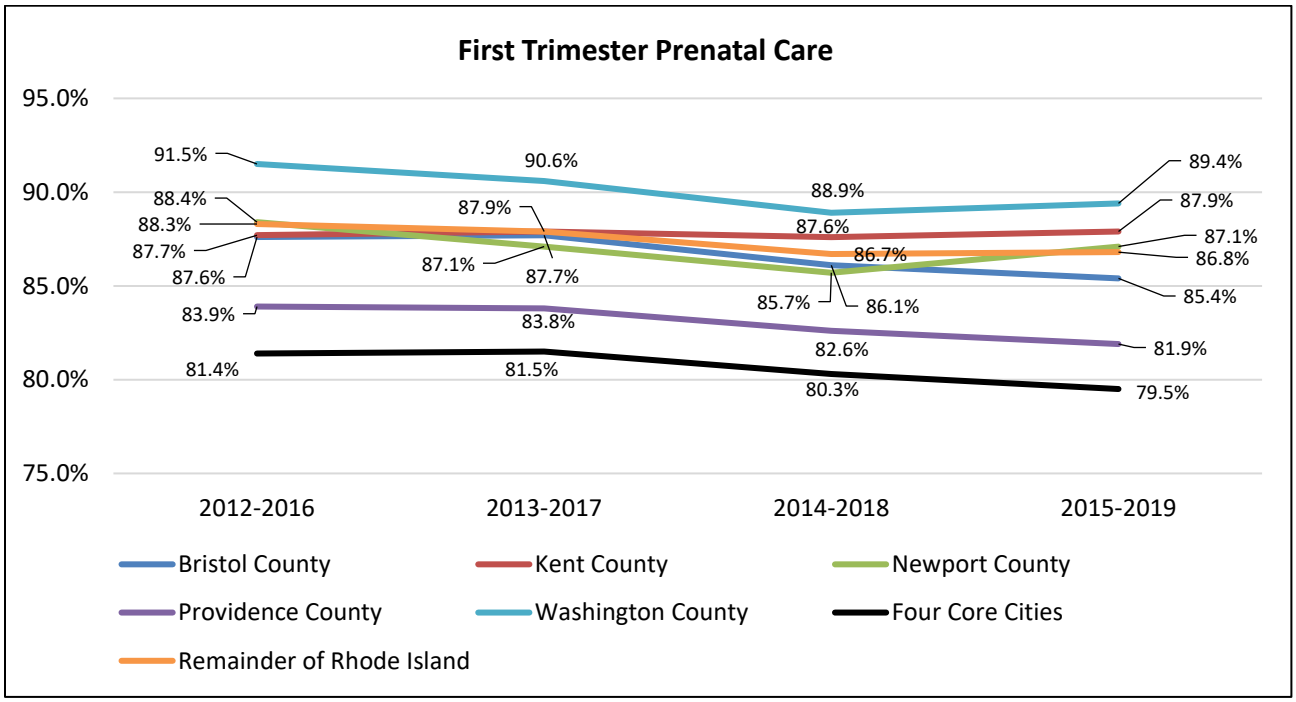
2015-2019 Maternal and Infant Health Indicators by CharterCARE PSA Municipality

	Percent of All Births to Teens (15-19)	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Breastfeeding at Time of Birth
Central Falls	9.2% (n=144)	78.8%	11.0%	8.7%	60%
Cranston	2.8% (n=111)	84.3%	9.0%	7.4%	73%
Cumberland	1.5% (n=25)	87.5%	8.1%	6.5%	79%
East Providence	2.6% (n=60)	84.8%	7.8%	7.5%	70%
Johnston	2.2% (n=29)	86.7%	9.0%	8.2%	71%
North Providence	4.1% (n=65)	85.2%	9.7%	8.9%	70%
Pawtucket	4.6% (n=217)	80.6%	9.7%	8.8%	65%
Providence	6.5% (n=797)	79.3%	9.7%	8.7%	63%
Smithfield	0.8% (n=6)	86.4%	6.3%	5.2%	81%
Warwick (Kent County)	2.4% (n=91)	88.0%	8.5%	6.7%	76%
Woonsocket	4.0% (n=201)	78.8%	10.0%	9.2%	63%
Four Core Cities	6.4%	79.5%	9.8%	8.8%	63%
Remainder of Rhode Island	2.5%	86.8%	8.2%	6.9%	77%

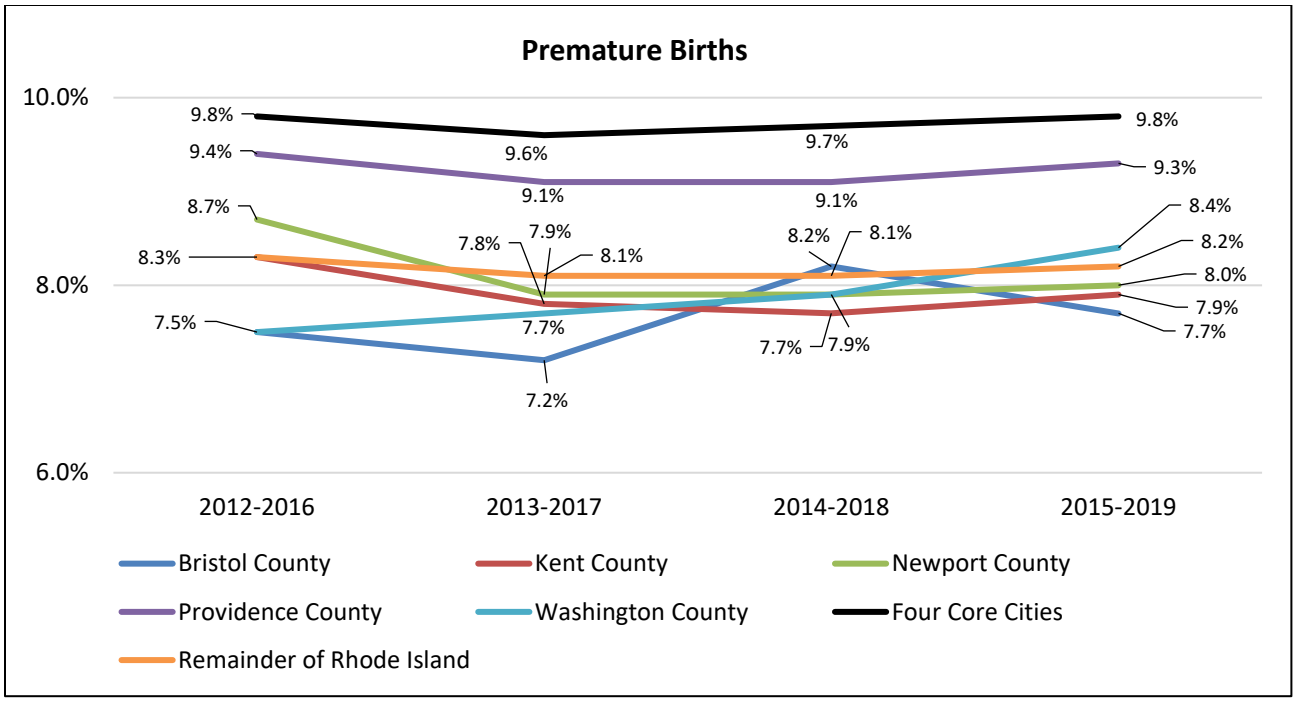
Source: Rhode Island Kids Count

The following graphs depict trends in prenatal care and birth outcomes from 2012-2016 to 2015-2019. **The percentage of pregnant people receiving first trimester prenatal care declined in both the core cities and the remainder of the state, and in all counties except Kent.** In Bristol, Providence, and Washington counties, the percentage of pregnant people receiving first trimester prenatal care declined two percentage points from 2012-2016 to 2015-2019.

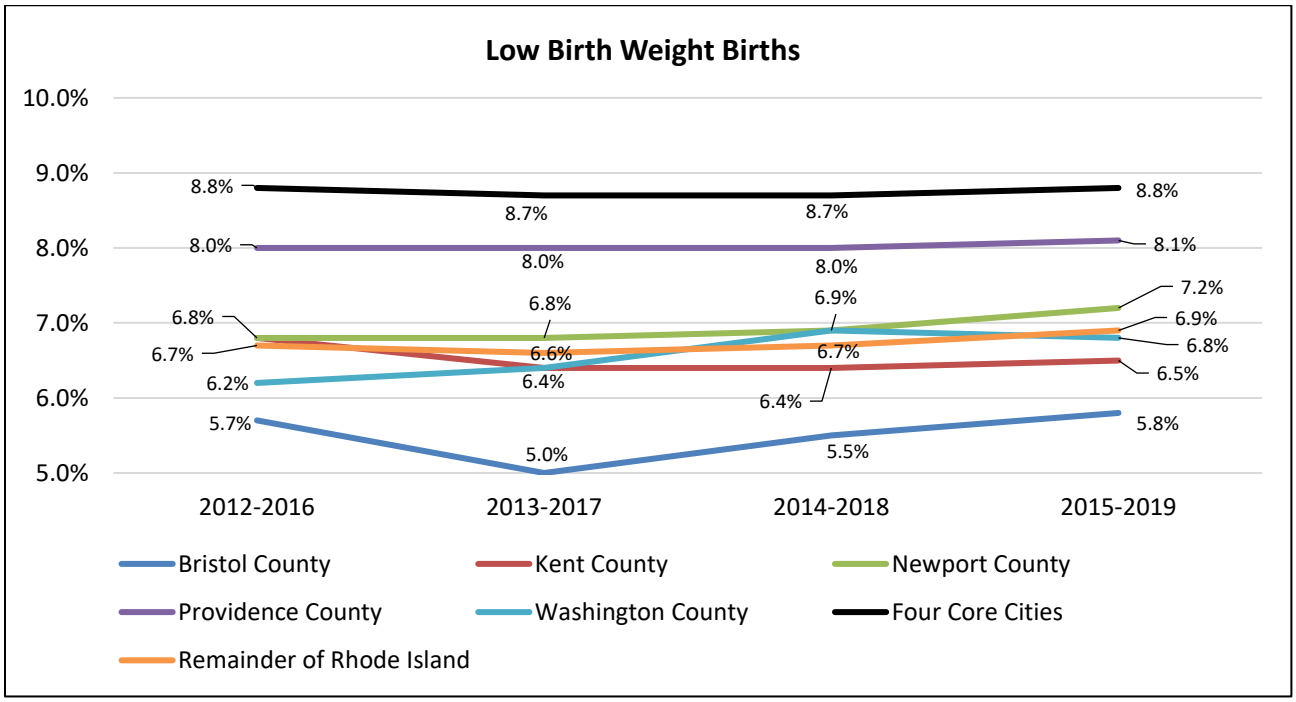
The percentage of babies breastfed at the time of birth also declined statewide, driven by a 10-percentage point decline in the core cities from 2012-2016 to 2015-2019. Based on known racial and ethnic disparities, the decline in breastfeeding was likely higher among non-White infants, particularly Black/African Americans. Other birth outcomes, including low birth weight and premature births have been largely consistent over recent years.



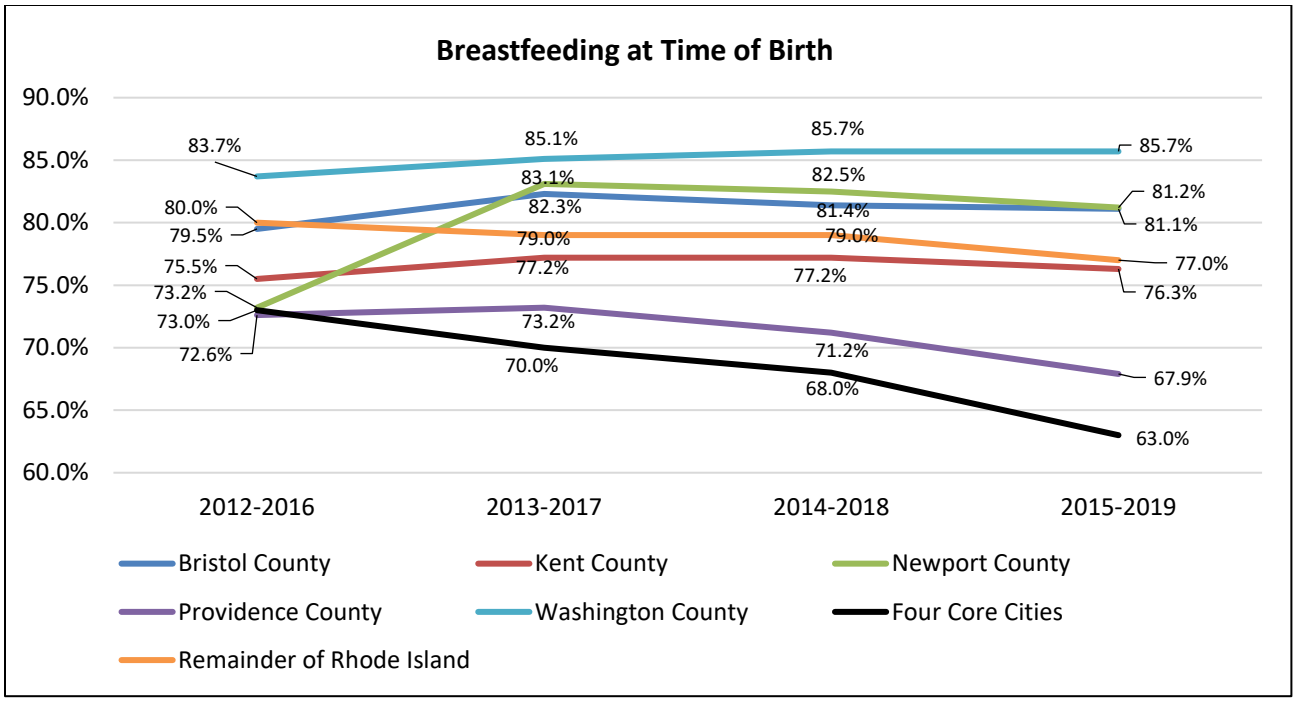
Source: Rhode Island Kids Count



Source: Rhode Island Kids Count



Source: Rhode Island Kids Count



Source: Rhode Island Kids Count

Rhode Island had a total of 285 infant deaths from 2015-2019, 156 or 55% occurred in the core cities. The infant death rate within the core cities is 50% higher than the remainder of Rhode Island and does not meet the HP2030 goal. Infant death disparities within the core cities are largely due to inequities experienced by Black/African Americans. **The infant mortality rate for Black/African Americans statewide is nearly three times higher than for Whites.** Similar disparities in maternal death rates are seen nationwide; **Black/African Americans have a maternal death rate that is 2.5 times higher than for Whites.** Rhode Island maternal death data is not available due to confidentiality restrictions.

2015-2019 Infant Deaths per 1,000 Live Births

	Infant Deaths per 1,000 Live Births
Bristol County	NA (n=2)
Kent County	3.9 (n=30)
Newport County	4.9 (n=17)
Providence County	6.2 (n=220)
Washington County	3.6 (n=16)
Four Core Cities	7.4
Remainder of Rhode Island	4.1
Rhode Island	5.4
White, Non-Hispanic	3.8
Black/African American, Non-Hispanic	10.6
Asian, Non-Hispanic	5.0
Latina (any origin)	6.3
HP2030 Goal	5.0

Source: Rhode Island Kids Count

2018 Maternal Deaths* per 100,000 Live Births

	Total Deaths	Total Death Rate	Black Death Rate	White Death Rate	Latina Death Rate
Rhode Island	NA	NA	NA	NA	NA
United States	658	17.4	37.1	14.7	11.8
HP2030 Goal	--	15.7	--	--	--

Source: Centers for Disease Control and Prevention

*Maternal deaths include deaths of pregnant people or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management. Rhode Island deaths are not reported due to confidentiality restrictions.

Research findings from secondary data analysis were compared to qualitative research findings to compare perceptions to statistical data, identify root causes, and contextualize data trends and contributing factors for identified health needs.

Evaluation of Health Impact: 2019-2022 Community Health Improvement Plan Progress

In 2019, CharterCARE completed a CHNA and developed a supporting three-year Implementation Plan for community health improvement. The Implementation Plan outlined our strategies for measurable impact on identified priority health needs, including Behavioral Health and Chronic Disease. Within six months of the release of the 2019 Implementation Plan, the COVID-19 pandemic shifted the priorities of our community and CharterCARE adapted our work to respond to the emergent needs of residents. The following sections outline our work to impact the priority health needs and respond to COVID-19 in our communities.

Behavioral Health

Behavioral health strategies implemented by CharterCARE addressed the overarching goal to advance the treatment of mental health and substance use disorders. As part of the 2019-2022 Implementation Plan, CharterCARE conducted the following programs and initiatives:

- Partnership with community organizations and taskforces to address behavioral health needs, including the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals; The Mayor's Substance Abuse Prevention Council (Providence); and Southern Providence County Prevention Coalition
- Partnership with The Providence Center and The Inner You Counseling Center to facilitate warm handoffs for patients requiring additional behavioral health services
- High Intensity Case Management (HICM) program for coordinated behavioral health and primary care services within CharterCARE and in partnership with Thundermist Health Center (Federally Qualified Health Center)
- Mental Health First Aid community classes to help the public identify, understand, and respond to signs of mental illnesses and substance use
- Financial contributions to Family Service of Rhode Island to support wraparound services focused on addressing the social determinants of health
- Development of a standardized tool for assessing substance use disorder
- Motivational interview training for nurse care managers and clinical social workers to assist in caring for patients with substance use disorder (planned for 2022 with support of SAMHSA grant funding)
- Community education and outreach, including Narcan and fentanyl awareness and available community treatment resources

Chronic Disease

Chronic disease strategies implemented by CharterCARE addressed the overarching goal to expand access to care to reduce health disparities. As part of the 2019-2022 Implementation Plan, CharterCARE conducted the following programs and initiatives:

- Comprehensive adult and pediatric care at St. Joseph Health Center, including sliding scale fee and bilingual and multicultural staffing
- Recruitment of primary care and specialty providers to Rhode Island, including seven primary care and two specialty care providers in 2021 alone
- Initiation of a formal Distress Screening for all cancer patients, as recommended by the American College of Surgeons Commission on Cancer
- Oncology social work services to identify mental health and social determinants of health barriers to care and connect patients with available community supports
- Social supports for cancer patients, including support groups, nutrition assistance, and programming, such as Look Good Feel Better
- Geriatric oncology and nurse navigator programs to help patients and their families better manage care and treatment through personalized plans that address nutrition, functional status, mood, medications, and other medical conditions
- Community education and outreach, targeting the Latinx community, to promote cancer screenings and facilitate linkages to care
- Partnership with the Gloria Gemma Breast Cancer Resource Foundation to bring social and wellness activities to cancer patients, including wellness activities to cancer patients
- Partnership with community organizations and taskforces to promote cancer prevention and care access, including the Latino Control Cancer Taskforce, Partnership to Reduce Cancer in Rhode Island, and Comprehensive Cancer Control Program
- Telehealth and electronic monitoring devices to serve patients during the COVID-19 pandemic and to expand and enhance care for patients who are homebound and/or experiencing access barriers
- Initiation of virtual patient and family member support groups due to COVID-19
- Bariatric weight loss program, including nutrition education and support groups in English and Spanish (virtual option available)

Program and Strategy Highlights

St. Joseph Health Center

The St. Joseph Health Center provides comprehensive care to children, adults, and families, specializing in care for historically underserved populations. The Health Center offers convenient hours of operation, including evening availability, accepts all forms of insurance, and offers a sliding fee based on income to individuals who qualify. Multicultural staff speaks a variety of languages including, but not limited to, English, Spanish, and Portuguese. Interpreter services are available for patients who speak other

languages. The Health Center serves approximately 5,000-6,000 unique patients annually with nearly 50,000 visits each year.

The Health Center is an active partner with the Rhode Island Department of Health to provide asthma, lead, and immunization services. Related to immunizations, the Health Center works to vaccinate all children regardless of health insurance status and coordinates services with school nurses. Lead prevention services include education and support for local landlords to make them aware of lead hazards and available mitigation services through state agencies.

The Health Center partners with Care New England's Women & Infants Hospital to provide a warm handoff for patients needing prenatal or obstetric care. The Health Center provides newborn, follow-up primary care, and post-partum services, including depression screenings. Uninsured or self-pay maternal patients are supported in applying for Medicaid or other insurance options.

The Health Center staffs onsite Community Health Workers (CHWs) to assess and respond to social determinants of health barriers among patients. The top barriers experienced by patients have included food insecurity, lack of transportation, unemployment, and long processing times for enrollment in health insurance and social support programs. Many of these barriers were exacerbated by the COVID-19 pandemic. Additionally, CHWs are seeing higher obesity prevalence among children due to poor nutrition and lack of physical activity during the pandemic.

Community Health Workers have been successful in helping patients fill out necessary paperwork and apply for eligible programs. They have connected patients with transportation services and food and utility assistance that was enhanced during the pandemic. The CHWs have also been successful in connecting youth with nutritionists and food support services to address obesity concerns. Additional supports for nutrition and diabetes education within the Health Center are being explored.

Cancer Programming and Community Initiatives

In the Roger Williams Breast Health Clinic, mammograms, ultrasounds, biopsies, and additional physician consults occur during the same visit so if needed, treatment planning can start without delay. In addition to clinical services, oncology social worker services are available to patients to help identify potential barriers to care and connect patients with community and home care supports.

In March 2022, the clinic initiated a formal Distress Screening for all cancer patients. The Distress Screening is a recommended protocol by the American College of Surgeons Commission on Cancer. Patients are identified as experiencing distress on a scale of 0 (no distress) to 10 (high distress). Patients with a screening of 8 or higher are seen by an oncology social worker before they leave the clinic.

The oncology social worker sees on average 300 patients per week, helping patients meet their sources of distress, including mental health and social determinants of health needs. Since the onset of COVID-19, the social worker has seen an increase in housing, transportation, and family health issues, including family members with COVID or long-term health impacts. The social worker partners with community agencies, such as the United Way, local churches, community food banks, and state resources to best address these needs, and conducts follow-up with patients to discuss successes and challenges. The

Clinic has also partnered with the Gloria Gemma Breast Cancer Resource Foundation to bring wellness activities to cancer patients, including arts and crafts, yoga and meditation, and community resource information. These services were halted during the pandemic and will look to be reinstated as part of recovery efforts.

Under the leadership of Dr. Abdul Saied Calvino, MD, the Cancer Center has conducted targeted outreach to the Latinx community, a population that has historically been underserved by healthcare and presented with more advanced cancers. Outreach efforts have included providing educational materials and staffing at Latinx community events, health fairs hosted by Latino Radio, and in partnership with the Providence Pastors Association. The Cancer Center had also provided a care navigator dedicated to the Latinx community to assess and assist with care access barriers. These efforts were postponed during the pandemic and will look to be reinstated as part of recovery efforts.

The Cancer Center is an active partner with local community organizations and taskforces to promote cancer prevention and care access. These partnerships have included the Latino Control Cancer Taskforce, Partnership to Reduce Cancer in Rhode Island, and Comprehensive Cancer Control Program. The Comprehensive Cancer Control Program is a Rhode Island Department of Health initiative to implement evidence-based interventions and policy, systems, and environmental changes to support the primary prevention of cancers, monitor cancer incidence and mortality, promote screening and the early detection of cancer, improve access to treatment, and improve the quality of life for cancer survivors and their caregivers.

The Geriatric Oncology Program is designed to address the social and economic needs of older adult cancer patients and promote quality of life. All cancer patients over the age of 65 receive a comprehensive geriatric assessment, including current health status, available social supports, and economic stability. A broad team of health and social providers, including primary care, nurse navigators, social workers, and psychologists, is engaged to respond to identified needs. This team meets biweekly to discuss high-risk patients and availability of wrap-around services. The top needs among patients have been nutrition, transportation, and housing.

2022-2025 Community Health Improvement Plan

CharterCARE developed a three-year Community Health Improvement Plan (CHIP) to guide community benefit and population health improvement activities across their service area. The CHIP builds upon previous health improvement activities, while recognizing new health needs identified in the 2022 CHNA, a changing healthcare environment, and the impact of the COVID-19 pandemic.

Goals, objectives, and strategies from the 2022-2025 CHIP are outlined below. In developing the CHIP, CharterCARE sought to focus on upstream interventions to address social determinants of health and advance health equity for our communities.

Priority Area: Behavioral Health

Goal: Strengthen and support community initiatives and healthcare services that increase behavioral health resources and address underlying barriers to equitable treatment access.

Strategies:

1. Support, promote, and participate in community behavioral health awareness efforts.
    - Support The Providence Mayor's Substance Abuse Prevention Council mission to implement evidence-based programs; build awareness; provide effective education; support comprehensive environmental strategies; and promote health and wellness activities that protect youth and prevent substance use
    - Support the Southern Providence County Regional Coalition to advocate for the prevention of youth substance use and promote good mental health through planning, development, and implementation of effective strategies
    - Host and participate in community education and outreach initiatives to increase awareness of substance use disorders and distribution of Narcan
2. Collaborate with community-based providers to assess behavioral health needs, facilitate service referrals, and coordinate care.
    - Conduct High Intensity Case Management for coordinated behavioral health and primary care within CharterCARE and in partnership with external community providers
    - Partner with The Providence Center, The Inner You Counseling Center, and Thundermist Health Center to facilitate complimentary warm handoff referrals
    - Conduct standardized screening for substance use disorder among patients
    - Explore opportunities to provide behavioral health education within CharterCARE primary care practices and hospitals (e.g., fentanyl and Narcan awareness, Mental Health First Aid)

3. Conduct community training for behavioral health to empower residents to seek services and reduce associated stigma and fear.
    - Conduct Mental Health First Aid (MHFA) training, targeting schools, employers, and first responders, among others
    - Train CharterCARE behavioral health providers in motivational interviewing techniques for patient-centered care for individuals with substance use disorder

4. Invest in workforce recruitment and retention of behavioral healthcare professionals.
    - Promote awareness of health and human services careers among middle school and high school students
    - Provide job shadowing, mentoring, training opportunities, targeting workforce development that reflects the multicultural and racial makeup of the community
    - Advocate for statewide behavioral health service delivery gaps and related policy initiatives

5. Invest in community services and programs that address adverse childhood experiences and the impact of trauma on behavioral health outcomes.
    - Support Family Service of Rhode Island to provide early interventions and wraparound supports focused on the social determinants of health

Priority Area: Chronic Disease

Goal: Strengthen and support community initiatives and healthcare services that address underlying inequities in access to care and improve health outcomes.

Strategies:

1. Invest in healthcare services that enhance access to care for historically underserved populations and promote whole-patient care.
    - Provide comprehensive adult and pediatric care at St. Joseph Health Center, including sliding scale fees and bilingual and multicultural staffing
    - Conduct social determinants of health screenings at St. Joseph Health Center and provide Community Health Workers to assist in social service connections
    - Continue telehealth and digital device monitoring to enhance care for patients who are homebound and/or experiencing access barriers
    - Explore partnership opportunities with Uber, Lyft, and other rideshare programs to address transportation barriers
    - Explore opportunities to provide high-demand essentials at St. Joseph Health Center (e.g., food pantry, diapers) for real-time response to identified patient needs
    - Explore opportunities for systemwide social determinants of health screening

2. Promote culturally relevant patient education and care practices.
    - Assess existing patient education materials for literacy levels and availability in multiple languages
    - Conduct community cancer education and outreach, targeting the Latinx community, to promote screenings and facilitate linkages to care
    - Explore opportunities to provide group health education sessions at St. Joseph Health Center, including family cooking classes and behavioral health support groups

3. Address the long-term impacts of COVID-19, including long-COVID and delayed preventive care and management during the pandemic.
    - Assess the need for post-COVID recovery to coordinate care for patients experiencing lingering side effects of COVID-19 infection
    - Collaborate with primary care practices to identify and schedule patients who have not seen their provider in the last 12 months and to respond to higher service demand due to delayed care practices

4. Support comprehensive cancer care services that address the physical, mental, and social needs of patients.
    - Partner with community organizations and taskforces to promote cancer prevention and care access, including the Latino Control Cancer Taskforce, Partnership to Reduce Cancer in Rhode Island, and Comprehensive Cancer Control Program
    - Conduct formal Distress Screenings for cancer patients and provide oncology social work services to respond to identified needs in partnership with community organizations
    - Partner with Gloria Gemma Breast Cancer Resource Foundation to bring wellness activities to cancer patients
    - Provide social supports for cancer patients, including support groups, nutrition assistance, and programming, such as Look Good Feel Better
    - Provider the geriatric oncology and nurse navigator programs to help older adult patients and their families better manage care and treatment through personalized plans

5. Invest in workforce recruitment and retention of primary and specialty care providers.
    - Promote awareness of health and human services careers among middle school and high school students
    - Provide job shadowing, mentoring, training opportunities, targeting workforce development that reflects the multicultural and racial makeup of the community
    - Continue recruitment and hiring practices and succession planning for primary and specialty care services

Priority Area: Maternal and Child Health

Goal: Continue to provide resources for woman and families through community education and partnership.

Strategies:

1. Continue to support programs through Saint Joseph Health Center and its partnership with Women & Infants Hospital.
    - Conduct pregnancy testing and coordinate with Women & Infants Hospital for timely access to prenatal care services
    - Provide newborn and postpartum care for infants and new parents
2. Conduct culturally and linguistically relevant maternal health education programs.
    - Partner with community organizations and statewide initiatives (e.g., Alliance for Innovation in Maternal Health (AIM)) to promote equitable birth outcomes for Black women and babies

Next Steps

CharterCARE welcomes your partnership to meet the health and medical needs of our community. We know we cannot do this work alone and that sustained, meaningful health improvement requires collaboration to bring the best that each community organization has to offer. To learn more about CharterCARE's community health improvement work or to discuss ways in which we can partner together, please visit our website: chartercare.org.

Appendix A: Public Health Secondary Data References

Center for Applied Research and Engagement Systems. (2021). *Map room*. Retrieved from https://careshq.org/map-rooms/

Centers for Disease Control and Prevention. (n.d.). *BRFSS prevalence & trends data*. Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html

Centers for Disease Control and Prevention. (2019). *Diabetes data and statistics*. Retrieved from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html

Centers for Disease Control and Prevention. (2020). *CDC wonder*. Retrieved from http://wonder.cdc.gov/

Centers for Disease Control and Prevention. (2020). *Youth risk behavior surveillance system*. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Centers for Disease Control and Prevention. (2021). *National vital statistics system*. Retrieved from https://www.cdc.gov/nchs/nvss/index.htm

Centers for Disease Control and Prevention. (2021). *PLACES: Local data for better health*. Retrieved from https://www.cdc.gov/places/

Centers for Disease Control and Prevention. (2021). *United States cancer statistics: data visualizations*. Retrieved from https://gis.cdc.gov/Cancer/USCS/#/StateCounty/

Centers for Medicare & Medicaid Services. (2021). *Chronic conditions*. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and Reports/Chronic-Conditions/CC_Main.html

County Health Rankings & Roadmaps. (2021). *Rhode Island.* Retrieved from http://www.countyhealthrankings.org/

Dignity Health. (2021). *Community need index*. Retrieved from http://cni.dignityhealth.org/

Environmental Protection Agency. (2021). *Interactive radon map*. Retrieved from https://www.epa.gov/radon/epa-map-radon-zones

Feeding America. (2021). *Food insecurity in the United States*. Retrieved from https://map.feedingamerica.org/

Health Resources and Service Administration. (2021). *HPSA find*. Retrieved from https://data.hrsa.gov/tools/shortage-area/hpsa-find

HousingWorks RI. (2021). *2021 Housing fact book*. Retrieved from https://www.housingworksri.org/Research-Policy/Publications-Reports/Fact-Books

Prevent Overdose RI. (2021). *See the data*. Retrieved from https://preventoverdoseri.org/see-the-data/

Rhode Island Coalition to End Homelessness. (2020). *2020 Point-in-time count*. Retrieved from https://www.rihomeless.org/point-in-time

Rhode Island Department of Health. (n.d.). *Data*. Retrieved from https://health.ri.gov/data/

Rhode Island Department of Health. (2021). *Rhode Island COVID-19 response data*. Retrieved from https://ri-department-of-health-covid-19-data-rihealth.hub.arcgis.com/

Rhode Island Kids Count. (2021) *Policy briefs and special publications.* Retrieved from https://www.rikidscount.org/Data-Publications/Policy-Briefs-and-Special-Publications

Rhode Island Kids Count. (2021) *RI kids count factbook.* Retrieved from https://www.rikidscount.org/Data-Publications/RI-Kids-Count-Factbook

Tufts Health Plan Foundation. (2020). *2020 Rhode Island healthy aging data report*. Retrieved from https://healthyagingdatareports.org/rhode-island-healthy-aging-data-report/

United States Bureau of Labor Statistics. (2021). *Local area unemployment statistics*. Retrieved from https://www.bls.gov/lau/

United States Census Bureau. (n.d.). *American Community Survey*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Department of Health and Human Services. (2010). *Healthy people 2030.* Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives