



2022 Community Health Needs Assessment





Table of Contents

OVERVIEW OF THE 2022 CHNA	2
EVALUATION OF HEALTH IMPACT	4
2022 CHNA RESEARCH METHODS.....	11
SERVICE AREA DESCRIPTION	12
SOCIAL DETERMINANTS OF HEALTH	13
PRIORITY HEALTH NEEDS	15
COVID-19 IMPACT ON RHODE ISLAND COMMUNITIES	18
SERVICE AREA POPULATION STATISTICS.....	23
HEALTH STATISTICS	53
ACCESS TO HEALTHCARE	53
HEALTH RISK FACTORS AND CHRONIC DISEASE	58
AGING POPULATION	71
MENTAL HEALTH AND SUBSTANCE USE DISORDER.....	76
YOUTH HEALTH	92
MATERNAL AND INFANT HEALTH.....	104
APPENDIX A: SECONDARY DATA SOURCES	110



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

Jean Marie Rocha, MPH, RN, Hospital Association of Rhode Island, Vice President, Clinical Affairs
Otis Brown, CharterCARE, Vice President, Marketing & External Affairs
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
Donna Rubinate, CharterCARE, Chief Operating Officer
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 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

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, HARI member hospitals collected feedback from community partners and sought to align with internal population health management strategies. Hospitals will focus efforts on one or more of the following community health priorities over the next three-year cycle:

- ▶ Behavioral Health
- ▶ Chronic Disease
- ▶ Maternal and Child Health

Board Approvals

The CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements for not-for-profit hospitals 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 Board of Directors of each member hospital. The CHNA reports and CHIPs are available for review and comment on each hospital's website and on the HARI website www.hari.org.

The CHNA findings will continue to foster collaboration among HARI and its member hospitals, guide community benefit investments, and engage local partners to collectively address identified health needs.



Evaluation of Health Impact: Hospitals Progress Toward Addressing Community Health Needs

HARI member hospitals have collaborated on a statewide CHNA since 2011. Each CHNA process culminated in the development of a supporting three-year Implementation Plan for community health improvement. The Implementation Plans outline strategies for measurable impact on identified priority health needs, which have consistently centered on Behavioral Health, Chronic Disease, and Maternal and Child Health. The following sections outline select key initiatives and success by each entity in addressing the priority areas, as applicable.

Behavioral Health

Care New England – Decriminalizing Behavioral Health and Providing Inclusive Care Services

The Providence Center (TPC), an affiliate of Care New England, has partnered with the Providence Police Department since TPC's founding in 1969. In 2010, TPC initiated a program that "embeds" behavioral health clinicians in the Police Department. These staff are "co-responders," responding with police officers to behavioral health crises. Working together, police officers and clinicians can often de-escalate a crisis safely and non-violently and connect the individual to needed treatment and recovery supports without further criminal justice involvement.

The mutual goal of the Police Department and TPC is to address the needs of individuals in the community without criminalizing mental illness or substance use disorder. TPC clinicians also aim to divert individuals away from unnecessary hospitalization and into outpatient treatment options whenever possible. As a result of overwhelming program success, TPC has doubled staffing in Providence to two full time clinicians and expanded its co-responder program into the Warwick, West Warwick, and multiple Washington County police departments.

The Butler Hospital *True Self Intensive Outpatient Program* for young adults is designed to meet the specific psychological needs of individuals 18 to 26 years old in the LGBTQIA+ communities. The program's theoretical framework draws on aspects of Cognitive Behavioral Therapy, Dialectical Behavioral Therapy, and Acceptance and Commitment Therapy. The program aims to provide a safe and supportive environment where people can seek treatment without fear of discrimination.

The True Self program continues to thrive. Consistent feedback from patients is that the space feels safe and welcoming, and staff are supportive and knowledgeable. The program secured Blue Cross's Safe Zone Certification in 2022 and will now be advertised by the insurer as a safe and affirming program. From October 1, 2020 to September 30, 2021, the program served 55 unique patients for a total of 188 visits.

CharterCARE – Expanding Behavioral Health Services to Meet the Needs of Our Community

CharterCARE through its two hospitals, Roger Williams and Our Lady of Fatima Hospital, is one of the state's leading providers of behavioral health and addiction treatment services, including the state's only Level I designated inpatient unit for substance use care, adult and geriatric psychiatry units,



specialty programs such as partial hospitalization, and intensive outpatient care. In 2021, Roger Williams Medical Center opened Rhode Island's first completely dedicated emergency treatment unit to treat mental health, drug, and alcohol medical emergencies. The new 9-bed unit, which features private rooms for comfort, safety, and privacy is the second and final phase of the hospital's \$18 million expansion and renovation of its Emergency Department, which treats approximately 25,000 patients each year.

In recognition of its role as a leading provider of behavioral health services, CharterCARE actively partners with community organizations and taskforces to respond to emerging community needs. CharterCARE is a partner for the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals; The Mayor's Substance Abuse Prevention Council (Providence); and Southern Providence County Prevention Coalition. CharterCARE also provides community education and classes, such as Mental Health First Aid and Narcan and fentanyl awareness to help the public identify, understand, and respond to signs of mental illnesses and substance use.

Landmark Medical Center – Promoting Safe and Nurturing Homes, Neighborhoods, and Communities

Landmark Medical Center has been a collaborating and funding partner for the Woonsocket Health Equity Zone (HEZ) since its inception. The HEZ envisions a future where residents are connected to each other and to resources; where relationships are built on a foundation of trust; and where all individuals, families, and children in Woonsocket live in safe, nurturing homes, neighborhoods, and communities that support healthy development. The HEZ focuses on priorities identified by the community including the opioid epidemic, teen health, food access, and the well-being of children and families.

The Community Care Alliance's Serenity Center is a Woonsocket HEZ partner. The Serenity Center is a peer-run drop-in recovery center that offers an array of services: over 100 recovery groups, one-on-one peer support, and assistance connecting members with agency and external supports, including but not limited to housing, education, employment, and behavioral health services. In February 2021, the Safe Haven Drop-in Center opened, extending the services of The Serenity Center to specialty services for homeless individuals and those in need of harm reduction supports.

South County Health – Transforming Behavioral Health

South County Health serves as the backbone organization for Healthy Bodies, Healthy Minds Washington County (HBHM), the county's Health Equity Zone. Healthy Bodies, Healthy Minds released their consumer driven Action Plan for transforming behavioral health in Washington County in October 2020, culminating an 18-month planning process involving robust input from people with lived experience with behavioral health needs and services. The goal of the three-year Action Plan is to develop a recovery-oriented system of care, designed with and accountable to people with lived experience and their families.

Four key action strategies (pillars) will guide system transformation in Washington County: reduce stigma and fear of seeking treatment; people with lived experience and their families are valued and drive the design, delivery, and evaluation of a new system; improve network adequacy, parity, and accountability along a full continuum of care; and address gaps in the crisis system.



In 2021, HBHM was also selected as one of six teams for the Rhode to Equity Initiative, an innovative funding opportunity made available through the RI Executive Office of Health and Human Services Health Systems Transformation Project. The intent of this twelve-month learning and action collaborative is to provide cross-sector teams (with HEZ as the project lead) the opportunity to test and evaluate strategies that will build leadership and operational capacity for clinical-community linkages and enhance place-based initiative's ability to improve both health and social outcomes. Building on the three-year Action Plan, HBHM and its partners will implement a population health approach to behavioral health with the aim to create access to evidence-based treatment within the same amount of time (or less) as one would when experiencing a medical crisis.

Westerly Hospital – Fostering Collective Impact

Westerly Hospital is also a leading partner in Healthy Bodies, Healthy Minds, supporting its four strategic pillars for the transformation of behavioral health in Washington County. Additionally, Westerly Hospital is a convening partner of The Health Impact Collaborative of Greater Westerly. The HICGW is made up of more than 60 individuals representing Westerly Hospital, community agencies, faith-based organizations, community health centers, town agencies, and residents from greater Westerly. Priority focus areas for the collaborative include behavioral health, healthy aging, and housing.

In partnership with HBHM, the Health Impact Collaborative of Greater Westerly has focused on the following initiatives to improve behavioral health outcomes for residents:

- ▶ Facilitate resident connections to senior-focused community resources to promote health and wellness and reduce social isolation
- ▶ Increase mental health awareness and knowledge related to mental health conditions and reduce stigma
- ▶ Facilitate access to a full continuum of behavioral health services from prevention to aftercare
- ▶ Implement systems to improve awareness of mental health conditions, reduce stigma, and strengthen community and cross-system capacity to care for people with behavioral health needs - fostering resilience and recovery

Chronic Disease

Care New England – Addressing the Unique Care Needs of Older Adults

The Age-Friendly Health Systems initiative is a set of evidence-based interventions specifically designed to improve care for older adults. Kent Hospital joined more than 100 health systems in become an Age-Friendly Health System, working to make care for older adults even more tailored to patients' goals and preferences and consistently of high-quality.

In February 2019, Kent Hospital, opened an Adult Care for Elders (ACE) unit to test and implement the Age-Friendly Health Systems Framework. The unit focused on documenting what matters to the patient and implementing delirium screening and prevention plans for all patients. Since opening, the unit has seen a reduction in both length of stay and falls with injury, along with an increase in patient and staff satisfaction. The ACE unit expanded to 20 beds since its initial opening and serves an average of 100-120 patients per month, with an average age of 86.



CharterCARE – Providing Care to Historically Underserved Populations

A vital part of CharterCARE Health Partners system, 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. 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 staffs onsite Community Health Workers to assess and respond to social needs 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.

Landmark Medical Center – Improving Access to School-Based Healthcare and Healthy Foods

Landmark Medical Center supports the school-based health center, The Health Hut, run by Thundermist at Woonsocket High School. All students under 18 are required to have parental consent to be seen at The Health Hut. All services are provided at no out-of-pocket cost to the student; if the family has medical insurance the health center bills the insurance company.

Services at The Health Hut include physical exams (including school and sports), immunizations, sick visits, treatment of minor injuries, health education, chronic care management (i.e., asthma, diabetes), and dental services-including examinations and hygiene services. Additionally, The Health Hut has focused on family planning and contraception to help reduce teenage births and alleviate related issues, including generational poverty, abuse and neglect, and sexually transmitted disease spread.

Landmark Medical Center also supports The Refugee Dream Center Food Access Project as part of the Woonsocket HEZ. The project provided a total of 65 families in Woonsocket with emergency food items during the pandemic. All 65 families received case management and health food education services by Refugee Dream Center staff. Case management services included wellness calls, assistance with SNAP/WIC benefits, food distributions, emergency utility and rental assistance. The Boys and Girls Club of Woonsocket Food Access Project also delivered lunches to residents of Woonsocket since March 2020. The delivery of meals has been successful, specifically to Woonsocket's elderly and disabled population.



South County Health – Addressing the Social Needs of Patients and Community

South County Health implemented social determinants of health screenings at the hospital and in primary care settings to identify and respond to social needs among patients. Patients with identified needs are referred to the SCH Community Health Team and other community-based support programs for appropriate follow up service.

The COVID-19 pandemic exacerbated social needs for many patients. South County Health supported clients throughout the pandemic, providing financial assistance and social and emotional support, among other items. The following is a list of services provided by South County Health:

- Supplied grocery gift cards and “Be Safe” bags with cleaning supplies, masks, gloves, sanitizer, hygiene items, paper goods, thermometer, and food items
- Helped home-bound patients and COVID quarantined families to arrange pick-up or delivery services for prescriptions
- Provided pick-up and delivery services from the local food bank for home-bound patients
- Provided ongoing social and emotional support to patients and families socially isolated during the pandemic, including regular check-in phone calls
- Supported issues related to housing, evictions, and other moratoriums, including partnership with the Medical Legal Partnership of Boston (MLPB) for legal counsel
- Offered a borrowing service for iPads and Wi-Fi hotspots to enable patients to connect with friends and family, schedule medical appointments, and/or attend partial day programs

Westerly Hospital – Creating Age Friendly Communities

Westerly Hospital is a leader in Age Friendly Westerly, a collaborative of community members and organizational representatives convened and committed to addressing the needs and concerns of older residents. As of the summer of 2021, Westerly joined with other communities across the state and US to become a part of the network of AARP age-friendly communities.

Age Friendly Westerly has developed a plan with strategies that seek to positively impact the community in all domains of liveability including housing, transportation, social participation, respect and social inclusion, civic participation and employment, communication and health information, community support and health services, and outdoor spaces and buildings.

The work of Age Friendly Westerly strives to include and involve the older residents of the community. Its many partners, including Westerly Library, the housing and skilled nursing facilities, social service providers, the police department, town government, the hospital, and community organizations, work collaboratively to advance initiatives that allow residents to age in place with dignity and high quality of life.

A key initiative of Age Friendly Westerly was the establishment of the Westerly Village. The Westerly Village is designed to help provide practical support for older adults residing in Westerly to enable them to remain in place in their homes and community, while remaining active, connected, and independent.



It is supported by a network of neighbors helping neighbors with direct individual and household support and with broader social and resource connections. Direct one-on-one services to individual members include transportation, household maintenance and chores, technology support, and member-invited calls/visits. Group services include social programs and connections.

Maternal and Child Health

Care New England – Promoting a Culture of Inclusion and Humility

The Women & Infants Hospital Community Leadership Council is dedicated to improving continuity of care, promoting a culture of inclusion and humility, and creating an environment that supports low intervention births, inter-professional collaboration, and patient- and family-centered care. A key component of this work is partnership with and expansion of community doula services. In 2021, Rhode Island passed a state budget that includes Medicaid coverage for the doula care and mandates inclusion of doula care in private insurance plans. This coverage is critical to improving the health and safety of pregnant people and their children, and particularly Black birthing people and their families. The Women & Infants Hospital Obstetrics and Gynecology Care Center will partner with Integra's Women's Wellness Program to promote doula services.

The Women & Infants Hospital Community Leadership Council meets quarterly to discuss issues related to health inequities, program development, and the improvement of women's health. The Council has undertaken several initiatives, including: (1) Human Resources review of all policies and procedures to support a just culture; (2) targeted growth in diverse hiring for management roles; (3) ongoing educational opportunities for staff on microaggressions, unconscious bias, caring for the LGBTQIA+ population, trauma-informed care, and bullying/harassment; (4) enhanced orientation process for doulas and partnerships with insurers; (5) expanded interpreter services; (6) partnership with the RI Food Bank and CNE employees to provide personal care items to patients; and (7) enhancement of data dashboards to collect patient race and ethnicity information to better identify and respond to disparities.

Landmark Medical Center – Reducing Teen Birth Rates

In response to historically higher teen birth rates in Woonsocket, The Health Hut at Woonsocket High School, a school-based health center supported by Landmark Medical Center, has focused on family planning and contraception. These services have helped to reduce teenage births and alleviate related issues, including generational poverty, abuse and neglect, and sexually transmitted disease spread.

While the teen birth rate for Woonsocket is among the highest in the state, it has consistently declined. From the 2019 CHNA, the teen birth rate declined 22%. From the 2016 CHNA, the teen birth rate declined nearly 79%. Similarly, rates of child abuse/neglect also declined from prior assessments.

South County Health – Aligning Grant Funding with Multigeneration Care Needs

With support from the Rhode Island Department of Health and program leaders, SCH has worked to align community grant-funded programs with multigenerational care needs, addressing service delivery gaps and reducing service duplication. Funded programs have included First Connections, Healthy



Families America, Incredible Years, 5-2-1-0: A Recipe for Healthy Living, and Rhode Island Maternal Psychiatry Resource Network (RI MomsPRN).

As part of the First Connections Program, South County Home Health provides free, voluntary, confidential home visits to pregnant people and families with young children, birth to age three. Trained nurses, social workers, and community health workers meet with families in their homes to talk about their needs, answer questions they may have, and conduct comprehensive assessments. Home visits are based on the needs of the family. Visit topics may include health education and connections with appropriate healthcare services, human services, and community resources. If a child does not have a medical home, home health workers help the family find one. South County Home Health also conducts child wellness screenings and communicates the results with the child's healthcare provider. If needed, arrangements for interpretation services during home visits are made available.

From 2019 to 2021, the First Connections team made 744 referrals to family visiting programs and/or critical services such as Parents As Teachers, Early Intervention, and Health Families America, as well as community resources like WIC, breast feeding support, SNAP, housing, and other public benefits.

The First Connections Program was expanded into Kent County to provide assistance for new mothers with substance use disorder and infants affected by neonatal abstinence syndrome (NAS). Program participants receive a home visit from the First Connections Nurse and Peer Recovery Specialist within one week of discharge from the hospital. Telephonic and telehealth were leveraged for some visits during COVID-19. Referrals for this program often came from within the hospital Women and Newborn Care Unit as well as the Center for Women's Health. Over the three years of funding, the First Connections team provided outreach within 48 hours of referrals and over 357 home or telehealth visits to vulnerable families, including during the height of the pandemic.

HARI member hospitals continue to foster and support community partnership to meet the health and medical needs of residents. Sustained, meaningful health improvement requires collaboration and broad community engagement to develop equitable and creative solutions.



2022 CHNA Research Methods

Secondary data, including demographic, socioeconomic, and public health indicators, were analyzed for all of Rhode Island (RI) to measure key data trends and priority health issues, and to assess emerging health needs. Data were compared to United States (US) benchmarks and Healthy People 2030 (HP2030) goals, as available, to assess areas of strength and opportunity. Healthy People 2030 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

All reported demographic and socioeconomic data were provided by the US Census Bureau, American Community Survey, unless otherwise noted. Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, maternal and child health, and older adult health. Data were compiled from secondary sources including the Rhode Island Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, Community Needs Index, among other sources. A comprehensive list of data sources can be found in Appendix A.

The most recently available data at the time of publication is reported throughout the report. Reported data typically lag behind “real time” by as much as one to two years. It is important to note that many data do not reflect the impact of COVID-19. Anecdotal evidence suggest that socioeconomic conditions and health status have been negatively impacted by COVID-19.

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

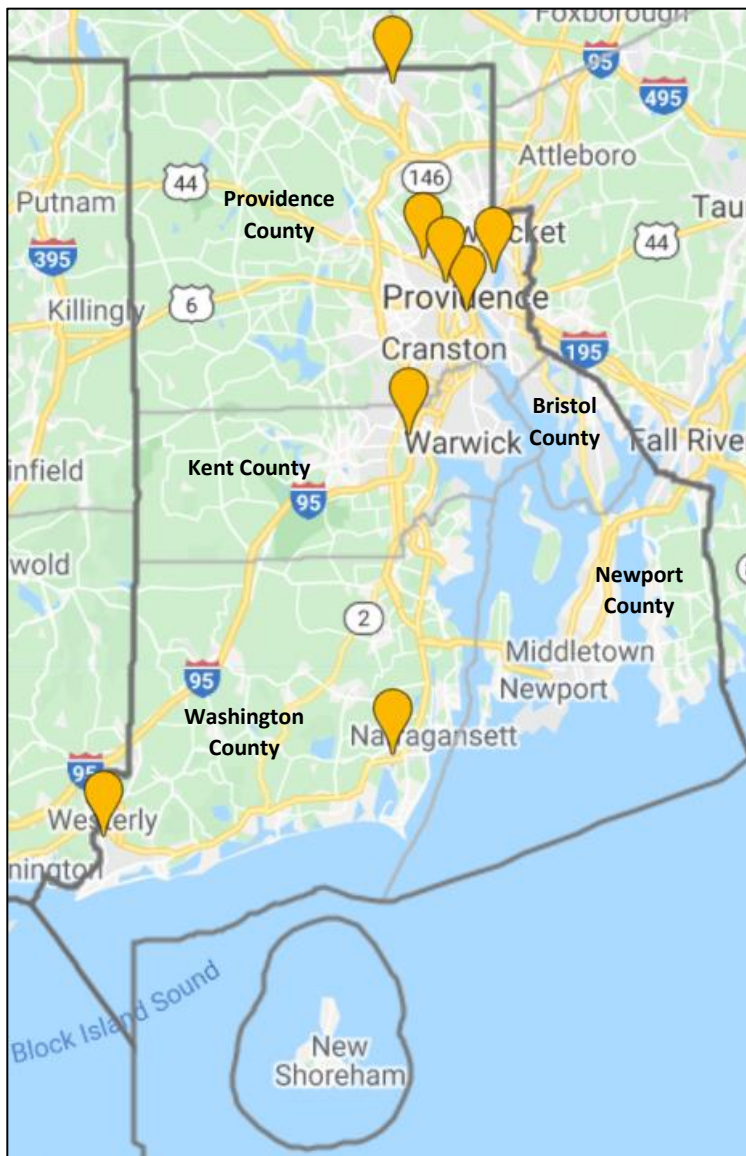
The Rhode Island Department of Health identifies four cities (Central Falls, Pawtucket, Providence, and Woonsocket) within Providence County that experience greater economic distress and greater potential for health inequity. Designated as the “core cities,” these areas are identified based on having a child poverty level greater than 15%. Data are reported for the core cities as available to depict health disparities in comparison to the state as a whole.



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. A map of HARI member hospitals in Rhode Island is shown below.

HARI Member Hospital Locations



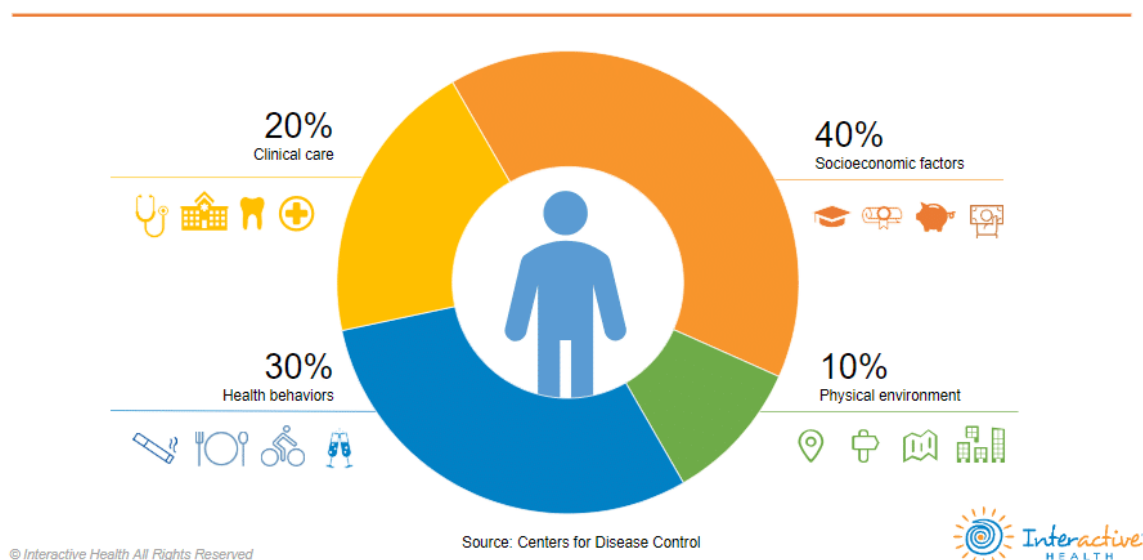


Social Determinants of Health: The connection between our communities and our health

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.

WHAT MAKES US HEALTHY?



Understanding Health Inequity

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.



Historical structural barriers based on race have perpetuated health inequities for communities of color. As the CDC notes, “Racism is a system – consisting of structures, policies, practices, and norms—that assigns value and determines opportunity based on the way people look or the color of their skin. This results in conditions that unfairly advantage some and disadvantage others throughout society.” “The impact is pervasive and deeply embedded in our society—affecting where one lives, learns, works, worships and plays and creating inequities in access to a range of social and economic benefits—such as housing, education, wealth, and employment.” Recognizing the role of structural racism on access to the elements needed for healthy living can help clear a path towards a better quality of life for all.

Health Inequities in Rhode Island

As a whole, Rhode Island socioeconomic status and health indicators are more favorable in comparison to the nation. However, not all people experience these positive outcomes. A closer look at health and socioeconomic indicators illuminates wide disparities among racial and ethnic populations and those with lower incomes. The data illustrate the critical role of SDoH as root causes of health disparities.

The impact of SDoH are evident among distinct communities, as shown in the table below. Within Kent and Providence counties, where residents are more likely to experience socioeconomic disparities, average life expectancy is approximately two years less than in other counties. Within the core cities, life expectancy is lower than 78 years in most census tracts, and lower than 72 years in select areas.

Key Health and Socioeconomic Indicators

	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Socioeconomic Indicators (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%
Attained a bachelor's degree	49.0%	33.2%	48.0%	29.0%	46.1%	34.2%	32.2%
Adult Health Indicators (2018)							
Current smokers	14.4%	18.5%	14.9%	17.6%	16.2%	15.2%	15.9%
Obesity prevalence	24.8%	29.6%	26.5%	29.6%	25.6%	27.5%	30.9%
Diabetes prevalence	7.4%	9.0%	7.4%	10.7%	7.7%	9.6%	10.0%
High blood pressure	25.6%	30.6%	26.4%	32.0%	27.1%	29.9%	29.7%
Frequent mental distress	12.8%	14.1%	12.3%	13.9%	12.8%	12.5%	12.9%
Overall Life Expectancy	81.5	79.2	81.6	79.4	81.0	79.8	NA

The COVID-19 pandemic both highlighted and deepened socioeconomic and health inequities. Across Rhode Island, COVID-19 case rates were highest for Black/African American and Latinx residents, and the death rate for these populations was 50-100% higher than for White residents. Economic indicators, including unemployment and food insecurity, skyrocketed as a result of the pandemic. In 2020, average unemployment was 9.4% in Rhode Island 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, HARI and its hospital members collected feedback from community partners and sought to align with internal population health management strategies. HARI and its hospital members 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 behavioral health providers compared to the national average. As of 2020, the rate of behavioral 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. Despite the growth in behavioral health services, significant statewide gaps persist.

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.

Insurance difficulties and low reimbursement rates are additional obstacles to meeting behavioral healthcare needs statewide. Insufficient Medicaid benefits (e.g., appropriate length of stay) and lack of providers accepting Medicare create barriers to care for individuals with these insurance types. Due to low insurance reimbursement rates, providers may opt to be cash-only, contributing to high costs regardless of insurance type.

The growth of existing behavioral 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. 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 community and 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.

Despite experiencing overall better health outcomes, chronic conditions continue to be the leading causes of morbidity and mortality for Rhode Island residents. Notably, the prevalence of adult obesity and diabetes increased for all counties except Bristol. Statewide disparities in health outcomes for Black/African Americans are also persistent. Related to diabetes, the statewide death rate among Black/African Americans is more than 10 points higher than the death rate among Whites. Similar disparities are seen across chronic disease conditions.

Across Rhode Island, older adult chronic health needs are a growing concern. Rhode Island is an aging community, with a growing proportion of older adults that exceeds national averages. Approximately 17% of Rhode Island residents are aged 65 or older, with higher proportions in Newport County (21.7%), Washington County (19.9%), and Bristol County (19.4%). The proportion of older adults aged 65-74 saw the greatest increase in recent years, indicating that the need for older adult health and support services is likely to continue in the coming years.

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. Poorer health among older adults may be due in part to declining economic situation. 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.

It is also important to note that while a high proportion of Rhode Island residents are insured, fewer providers accept Medicaid insurance due to lower reimbursement rates and administrative challenges. Nearly 22% of insured Rhode Island residents have Medicaid compared to 20% nationwide. In Providence County, nearly 27% of insured residents have Medicaid. A lack of Medicaid-accepting



providers perpetuates access to care barriers among individuals with lower income and contributes to poorer health outcomes, including chronic disease prevalence and management.

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, including 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 Rhode Island follows.

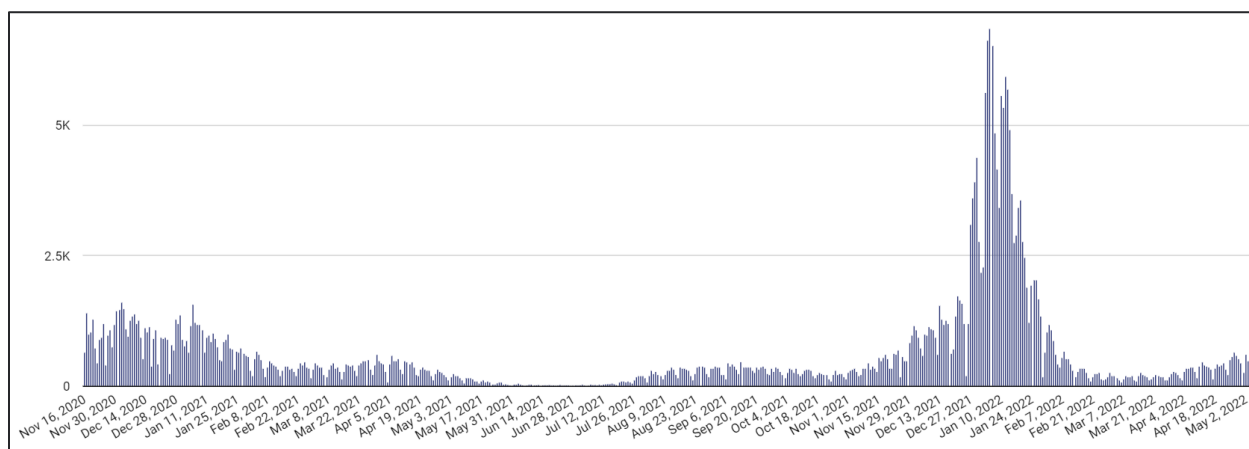


COVID-19 Impact on Rhode Island Communities

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 contact 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.



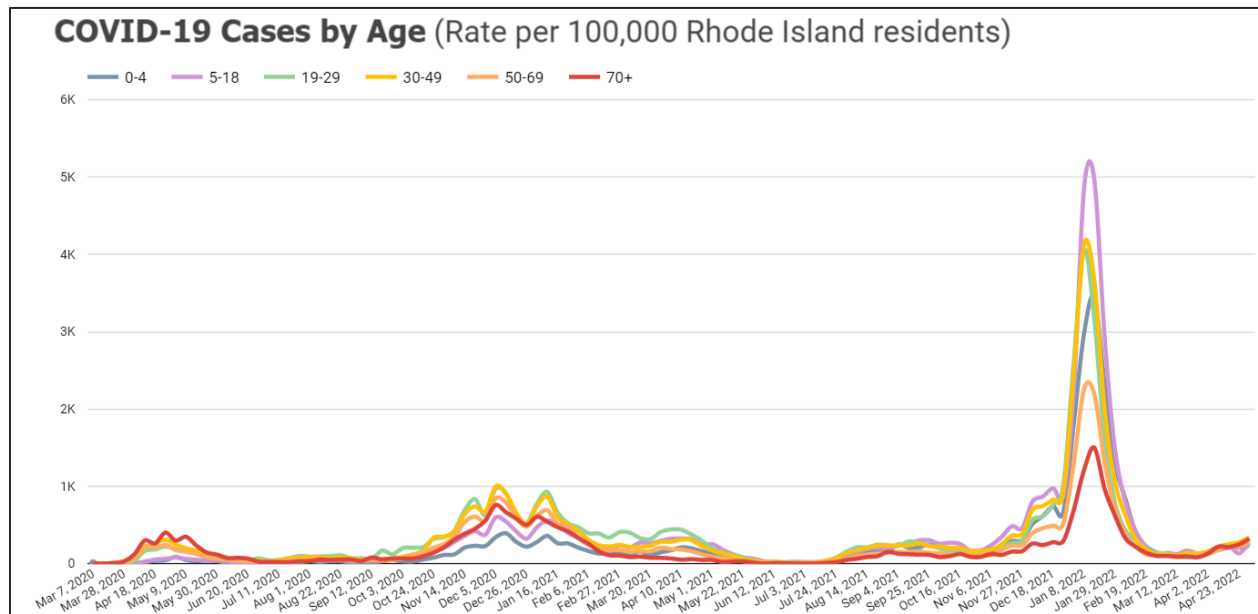
Source: Rhode Island Department of Health

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

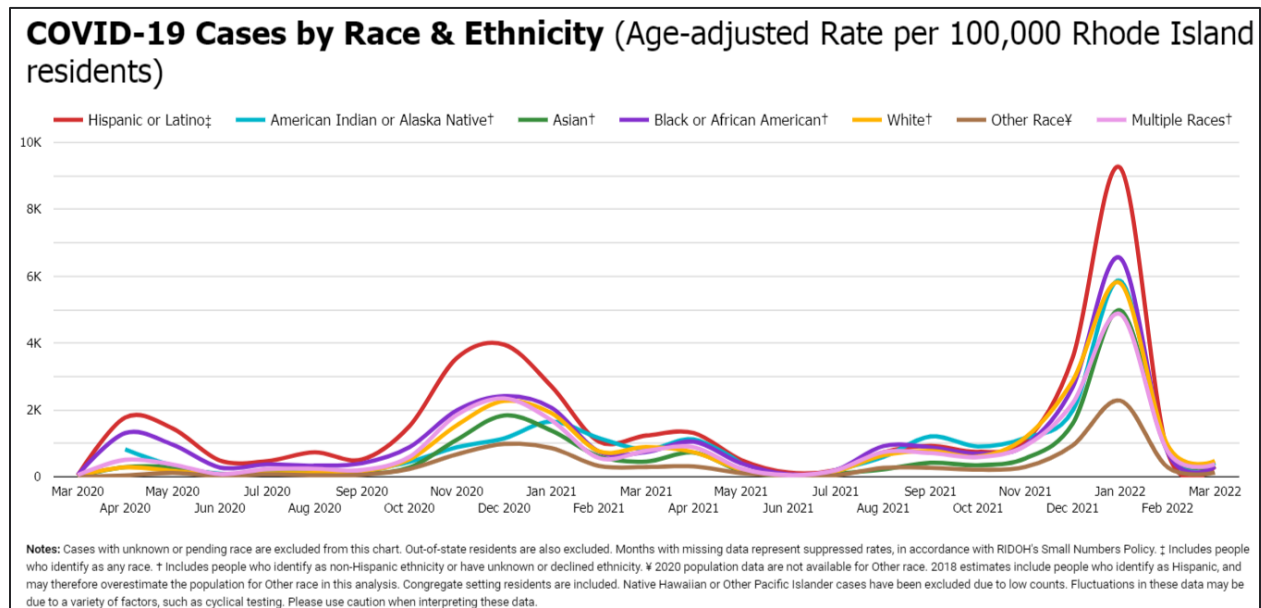
Age Group	Cases Total = 354,294		Deaths Total = 3,540	
	Count	Percent of Total	Count	Percent of Total
0-4	15,050	4%	<5	--
5-9	21,218	6%	0	0%
10-14	22,772	6%	<5	--
15-18	20,855	6%	0	0%
19-24	37,591	11%	<5	--
25-29	30,609	9%	8	<1%
30-39	57,584	16%	28	1%
40-49	45,808	13%	70	2%
50-59	44,718	13%	220	6%
60-69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

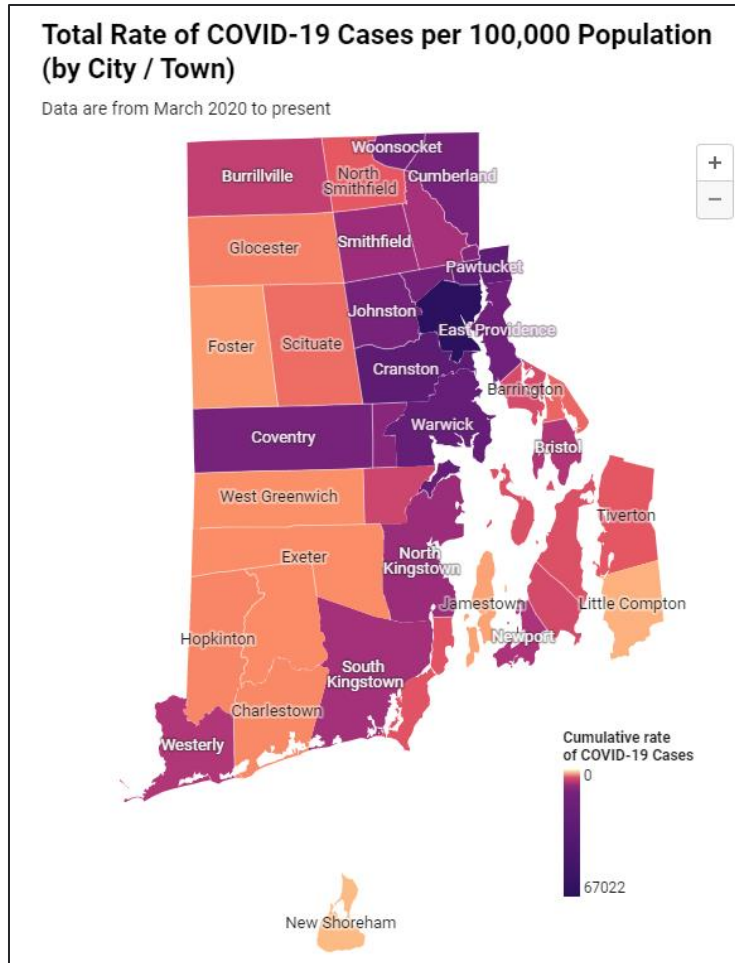


**Statewide COVID-19 Vaccination
by Age and Race and Ethnicity**

		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 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%.



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

COVID-19 Cases, Deaths, and Vaccination by Core City

	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%
Pawtucket	27,071	37,726	182	254	66.4%
Providence	67,022	37,352	678	378	69.2%
Woonsocket	14,230	34,257	266	640	59.1%

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



Service Area Population Statistics

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.

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

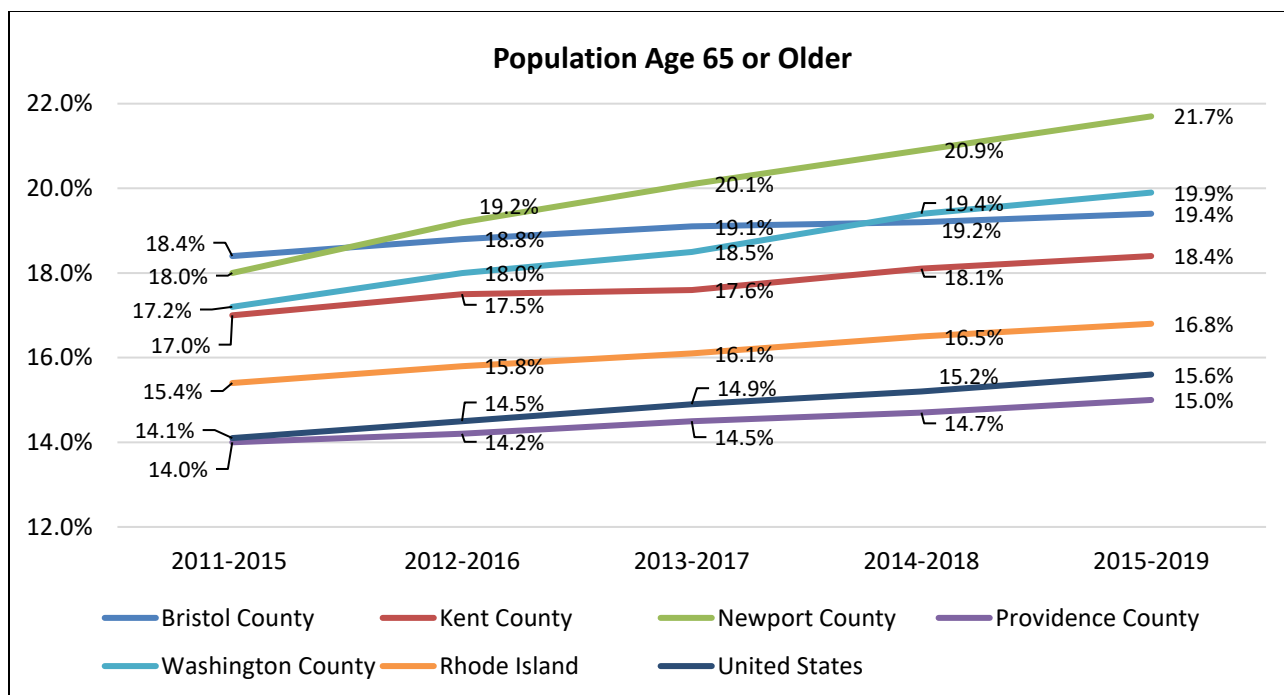
Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and healthcare needs. The age distribution of Rhode Island is older than the nation in all counties except Providence. The median age of Providence County is approximately 37 years compared to 44-45 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.

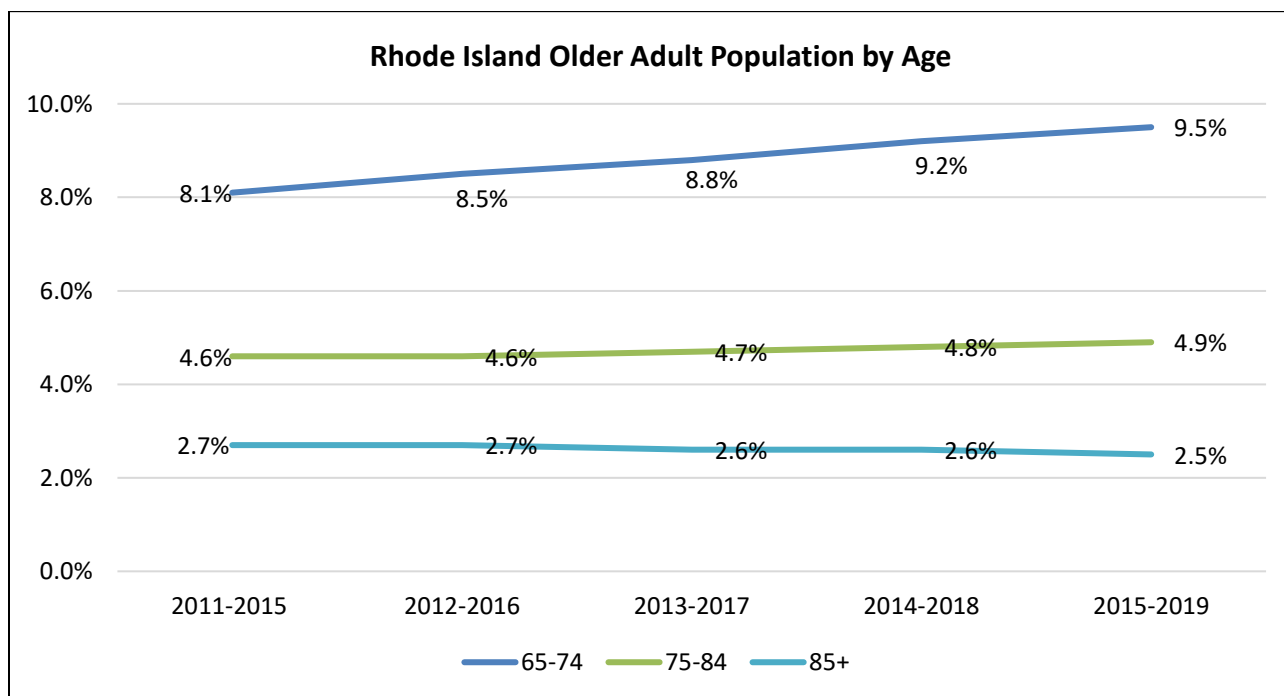
2015-2019 Population by Age

	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



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%

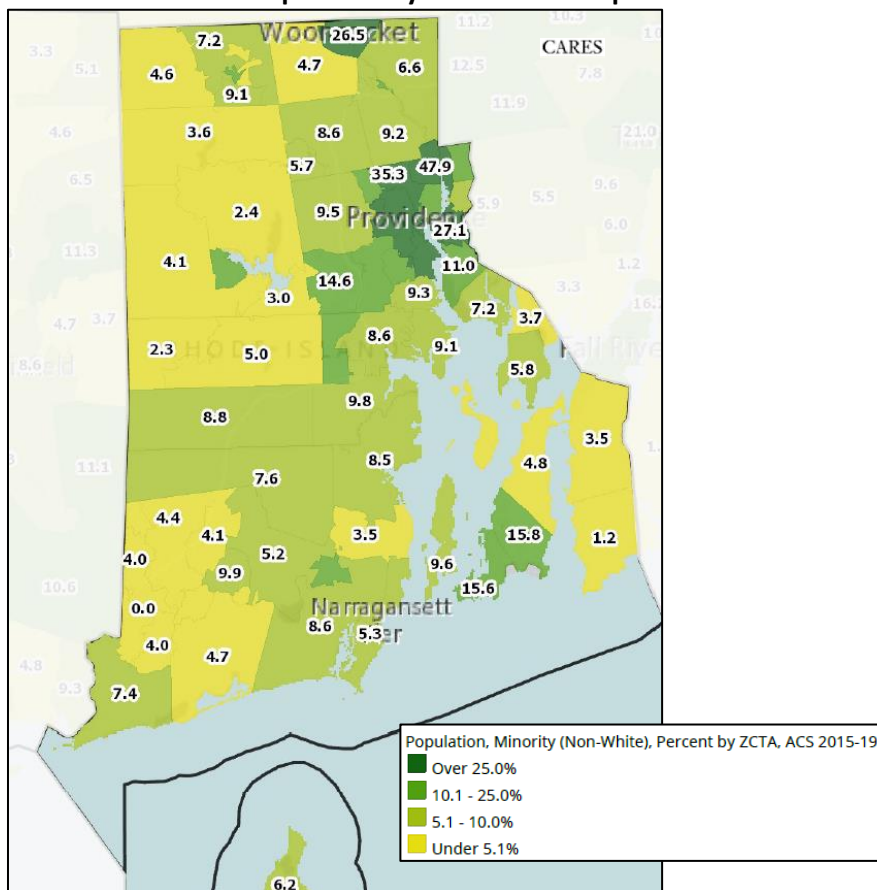
Source: US Census Bureau, American Community Survey

Racial and ethnic diversity in Rhode Island is concentrated in the core cities. For example, 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% of 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 with approximately 19% of residents identifying as Latinx and 10% identifying as Black/African American.

2015-2019 Non-White Population by Rhode Island Zip Code



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. Providence County zip codes previously identified as benefiting from greater racial and ethnic diversity are more at-risk for being linguistically isolated. **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'. In other core city zip codes, approximately 1 in 10 households are considered linguistically isolated.

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

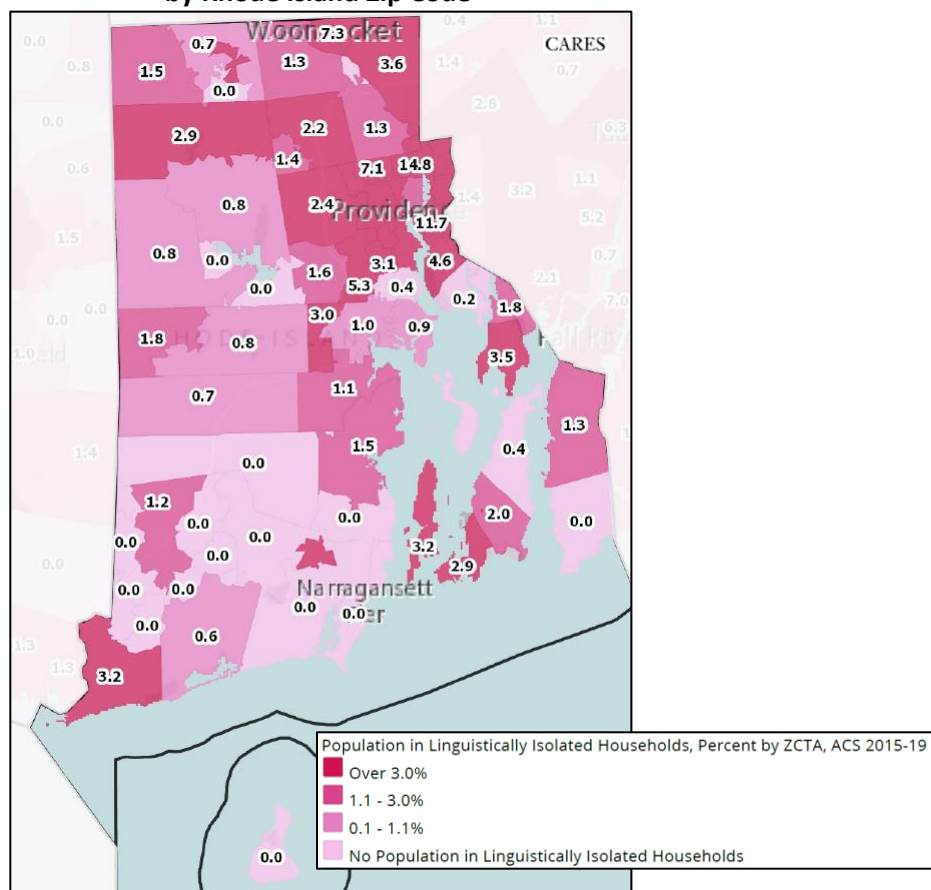
2015-2019 Foreign-Born Population by Region of Birth

	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 Rhode Island Zip Code



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.

Consistent with the nation, poverty declined in Rhode Island and its five counties for both the overall population and youth. However, wide disparities in wealth continue to exist. **In Providence zip codes 02903, 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.

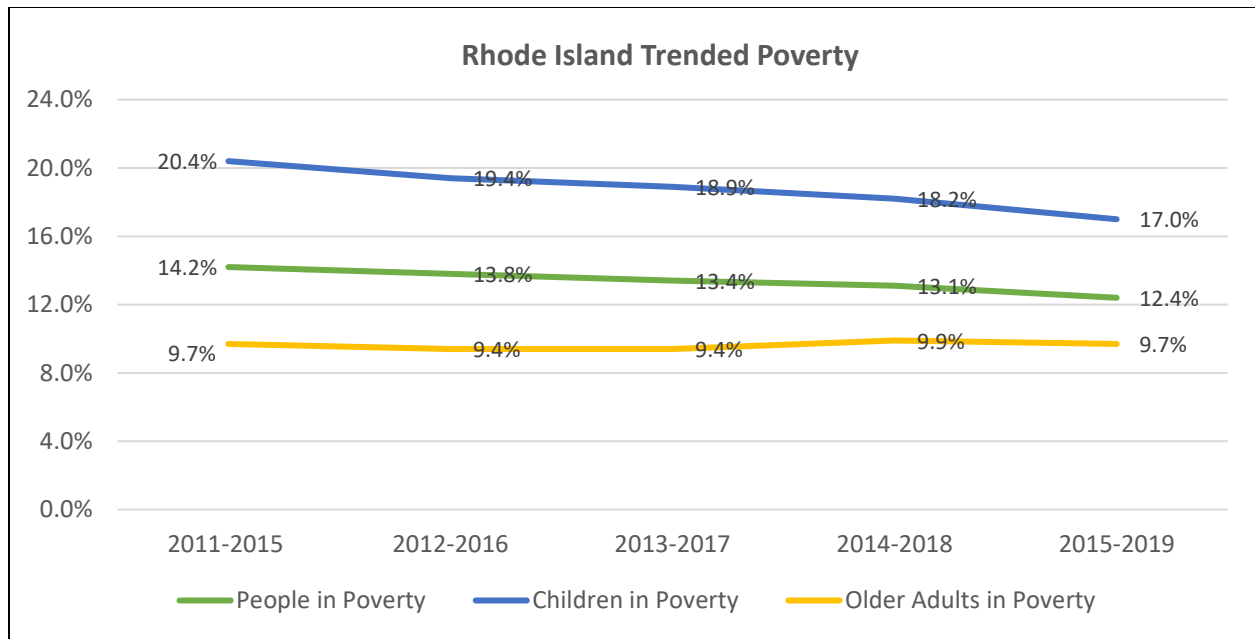
The COVID-19 pandemic had a significant impact on unemployment rates in Rhode Island, particularly in Providence County. **The 2020 average unemployment rate for Rhode Island and Providence County was 9.4% and 10.2% respectively, compared to a national average of 8.1%.** The state has since largely recovered, 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%

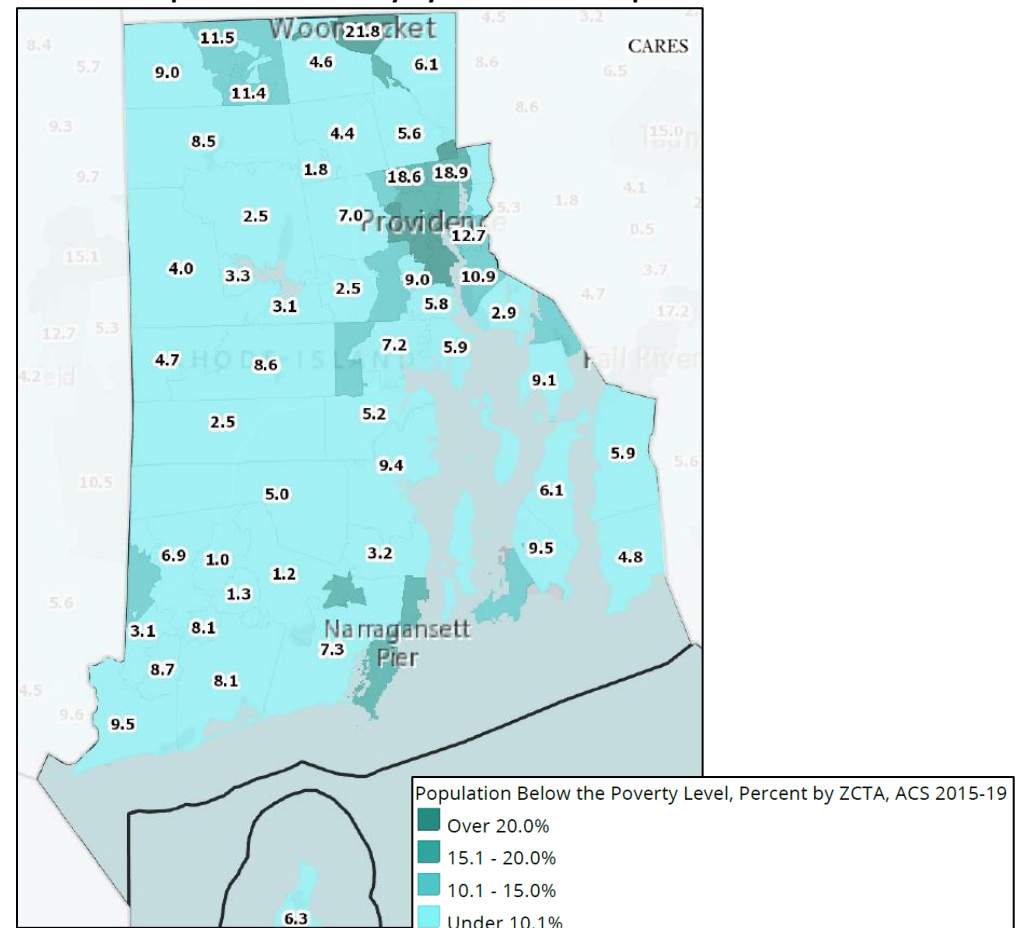
Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics

*Supplemental Nutrition Assistance Program.



Source: US Census Bureau, American Community Survey

2015-2019 Population in Poverty by Rhode Island Zip Code





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. This trend should be monitored in Kent County, where older adult poverty increased over the past five years, from 7.3% to 9.3%, 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.**

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 24% outside of the core cities, 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 Core City 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*
Pawtucket	8,657	29%	NA*	NA*
Providence	22,958	50%	NA*	NA*
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. Educational attainment disparities mirror other reported socioeconomic disparities in Providence County, largely affecting the core cities. **In Providence zip codes 02907 and 02909, Central Falls zip code 02863, and Pawtucket zip code 02860, approximately one-quarter to one-third of adults have not completed high school.**

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.

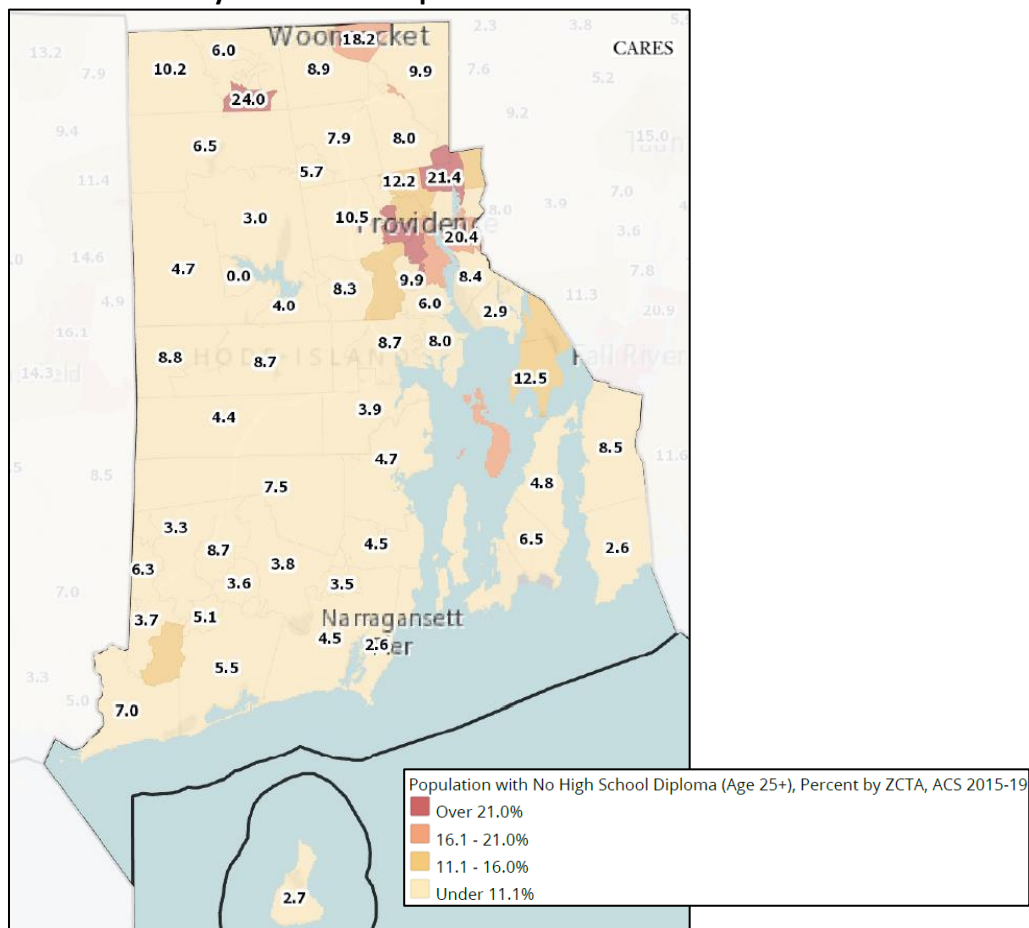
2015-2019 Population (Age 25 or Older) by Educational Attainment

	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 Rhode Island Zip Code



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



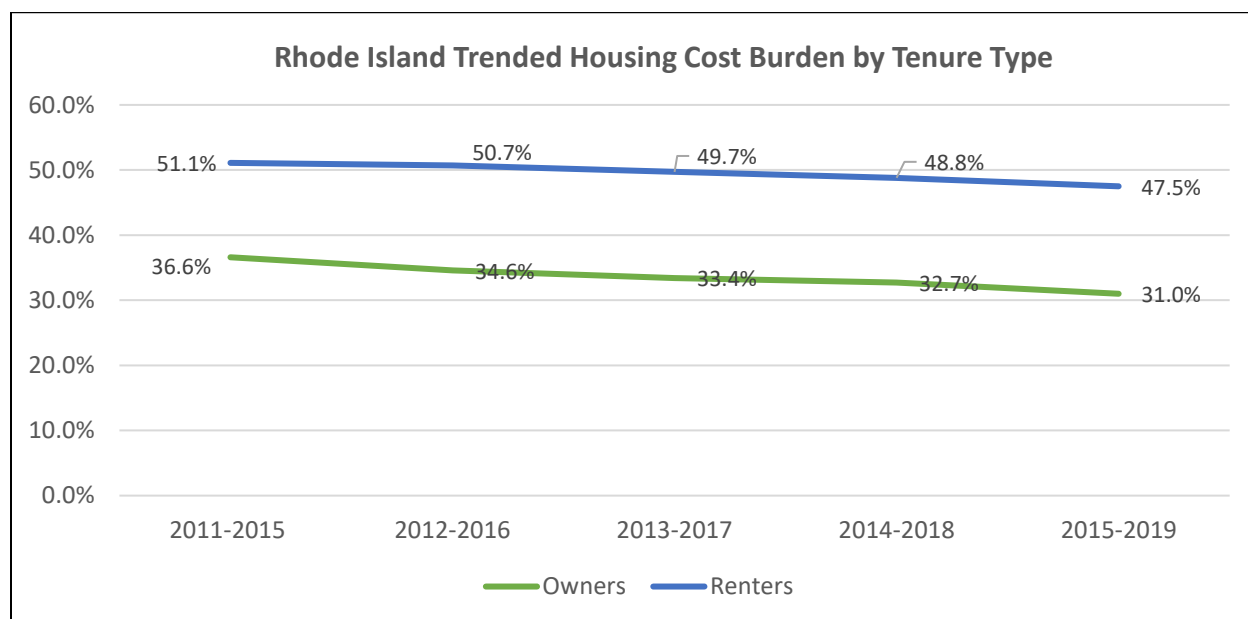
the rental market experienced a four percent increase at the end of Q1-2021, but that is outstripped by the double-digit increases in the median single family home prices, which increased by more than 12 percent over 2020, and more than 22 percent measured year-over-year by Q2-2021.”

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.



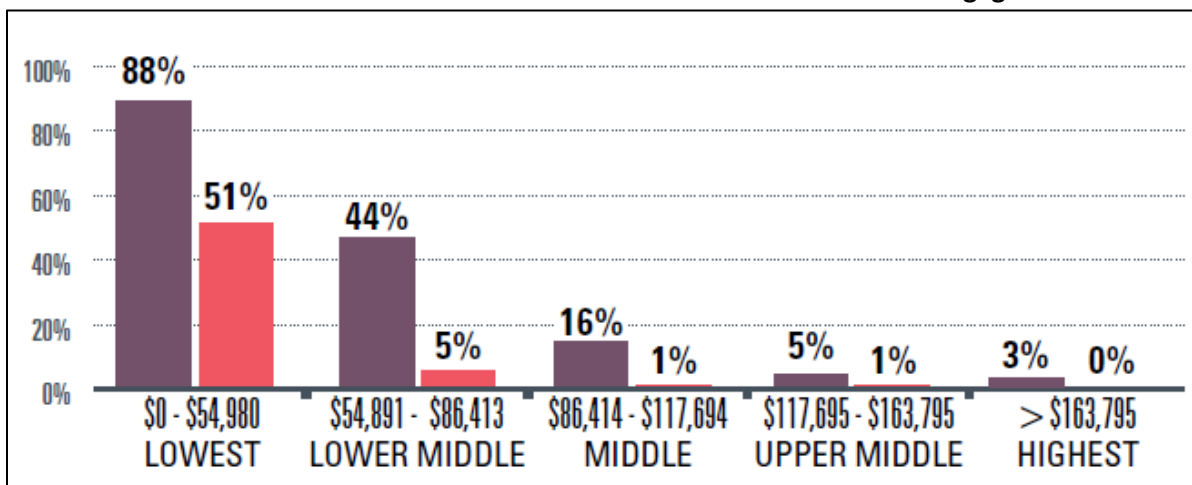
Source: US Census Bureau, American Community Survey

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.**



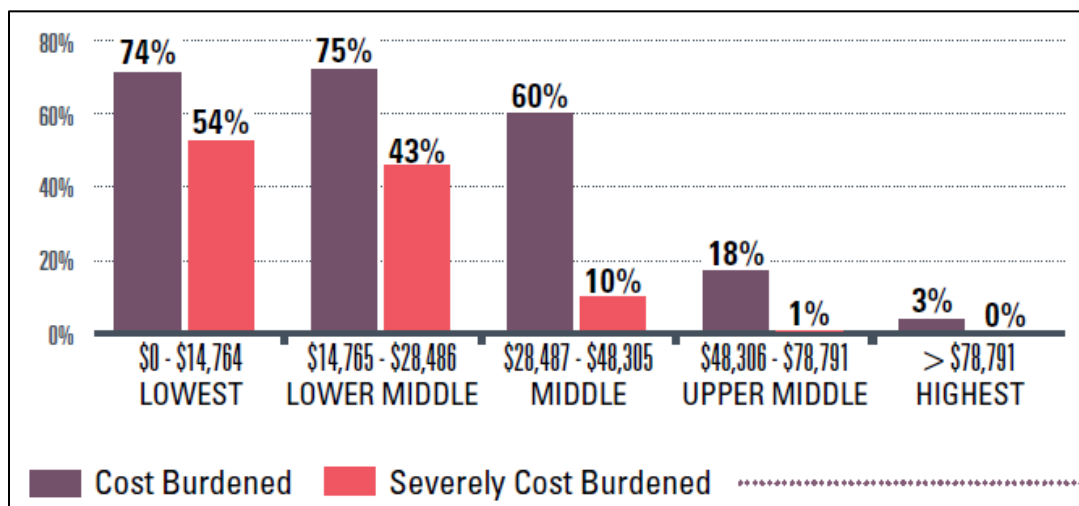
The following graphs depict cost burden and severe cost burden* by income group for homeowners with a mortgage and renters. In total for the reporting years 2015-2019, more than 140,000 Rhode Island households were cost burdened. Among the lowest income group, 88% of homeowners with a mortgage and 74%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



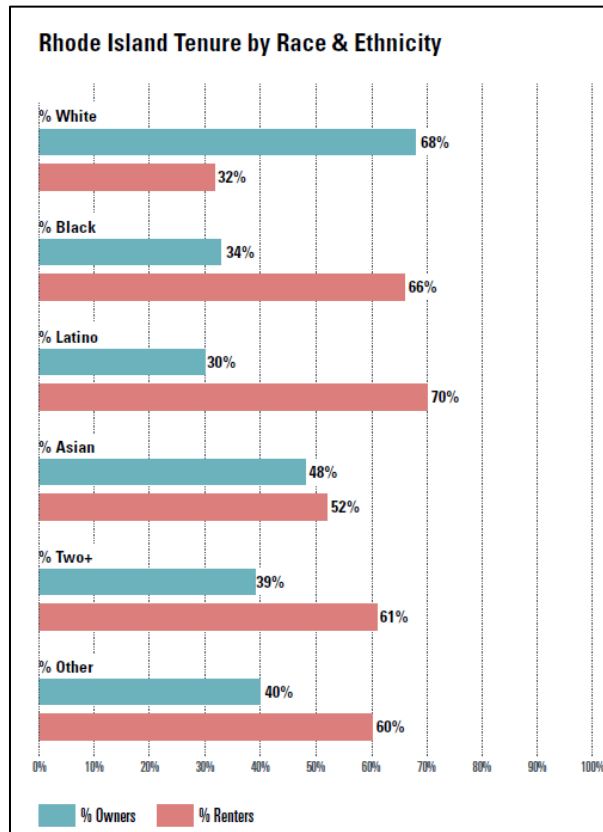
Source: HousingWorks RI 2021 Housing Fact Book

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.



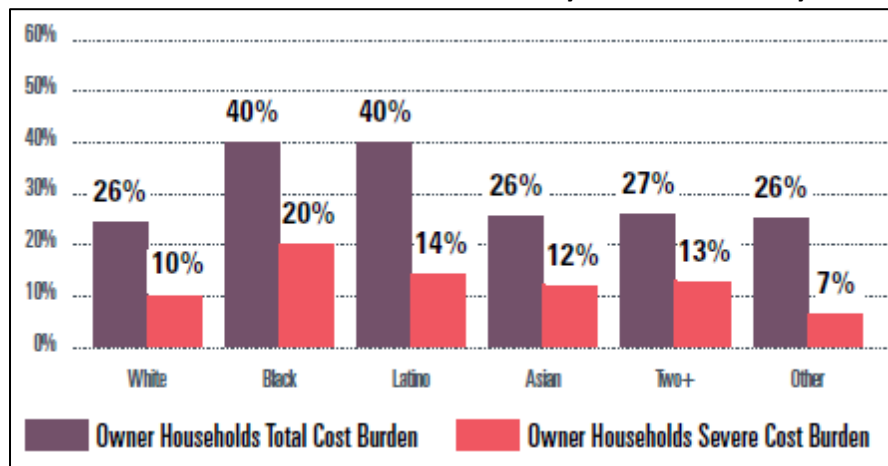
2015-2019 Rhode Island Tenure by Race and Ethnicity



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

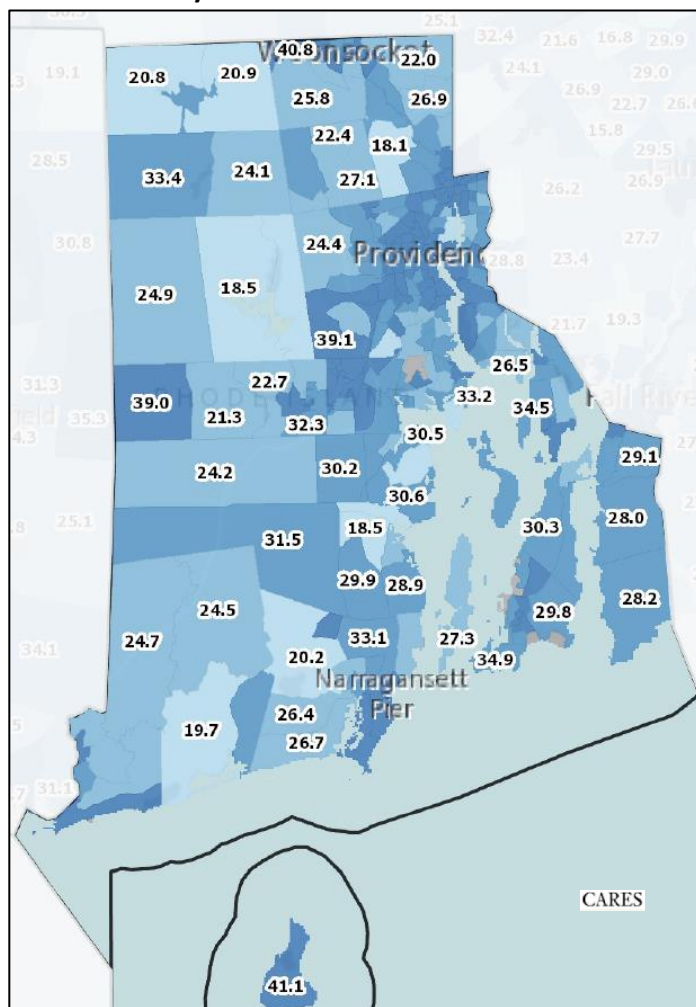


Source: HousingWorks RI 2021 Housing Fact Book



The following map depicts the percentage of cost burdened households by Rhode Island census tract. **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 Rhode Island Census Tract**



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.



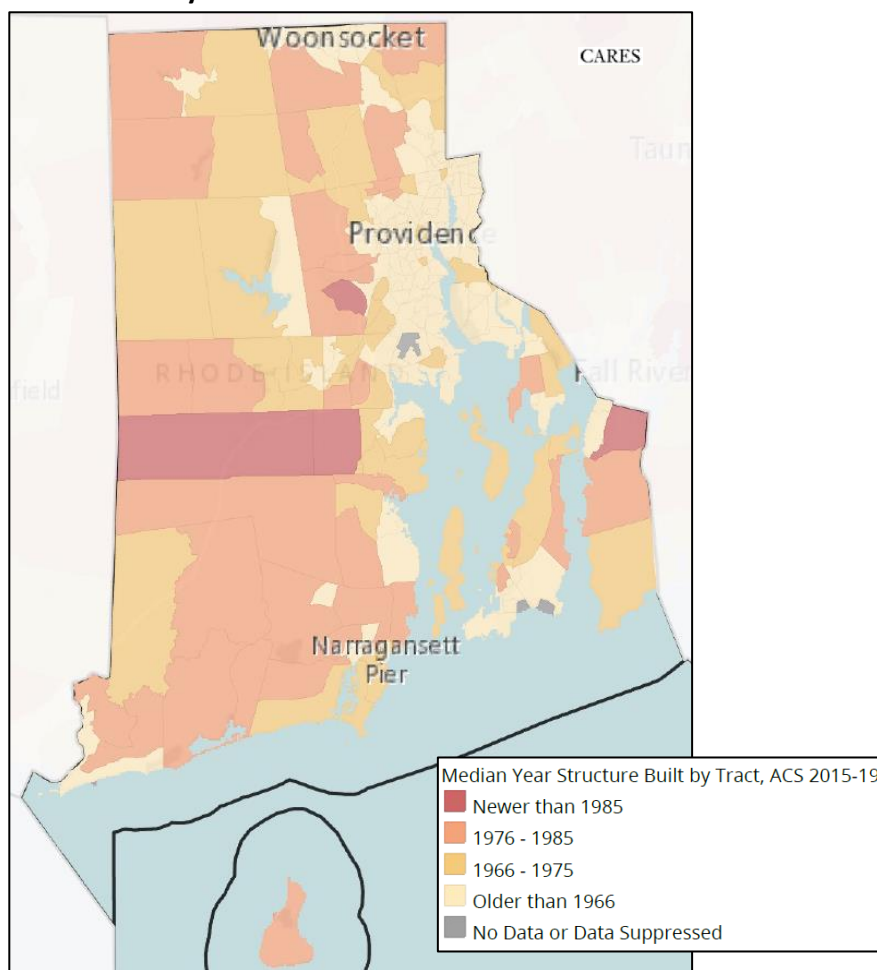
2015-2019 Housing by Year Built

	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 Rhode Island census tract. 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 Rhode Island Census Tract





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, the core cities have the oldest housing stock and the highest prevalence of child lead poisoning and child ED visits due to asthma in the state. The prevalence of lead poisoning is particularly high in Central Falls, while the rate of child ED visits due to asthma is more than four times higher in Providence than the rest of Rhode Island (excluding the core cities).

Housing and Health within the Core Cities

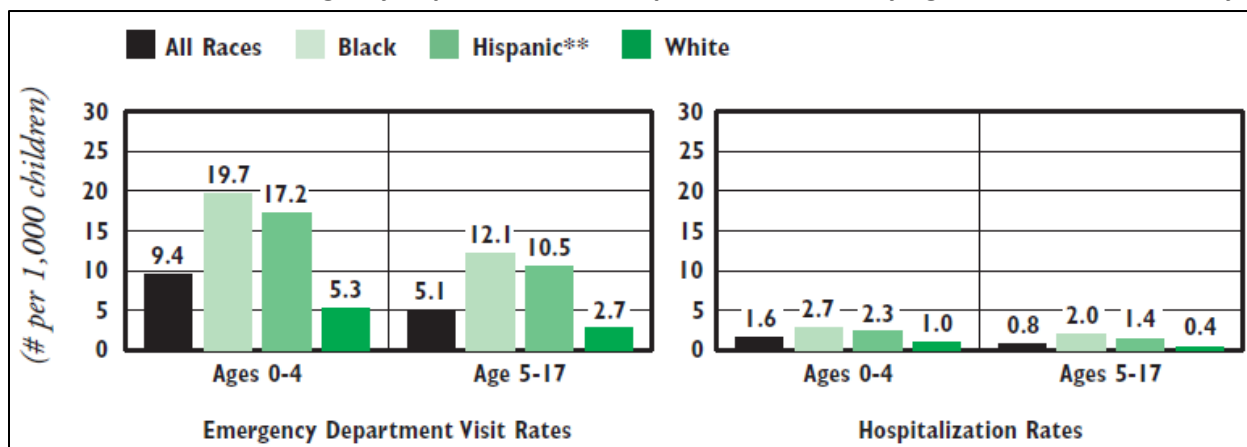
	Lead Poisoning Among Children Entering Kindergarten in Fall 2022			2015-2019 ED Visits with Primary Asthma Diagnosis		Housing Stock Built Pre-1980
	Number Tested	Number with Lead Poisoning	Percent with Lead Poisoning	Child ED Visits	Rate per 1,000 Children	
Central Falls	307	22	7.2%	341	12.1	87%
Pawtucket	848	53	6.3%	714	8.6	86%
Providence	2,477	167	6.7%	1,420	16.8	86%
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

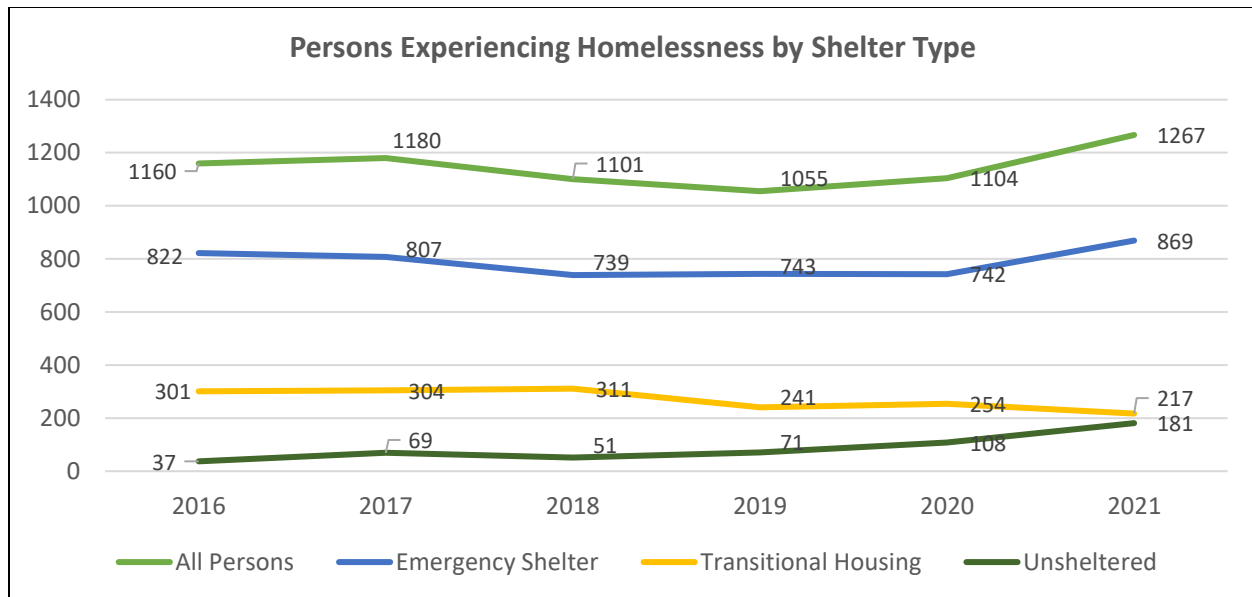
The Point-in-Time (PIT) count is a count of sheltered and unsheltered homeless persons on a single night in January which is mandated by HUD in every community nationwide. Sheltered locations include emergency shelters and transitional housing. Unsheltered locations include cars, streets, parks, etc.

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

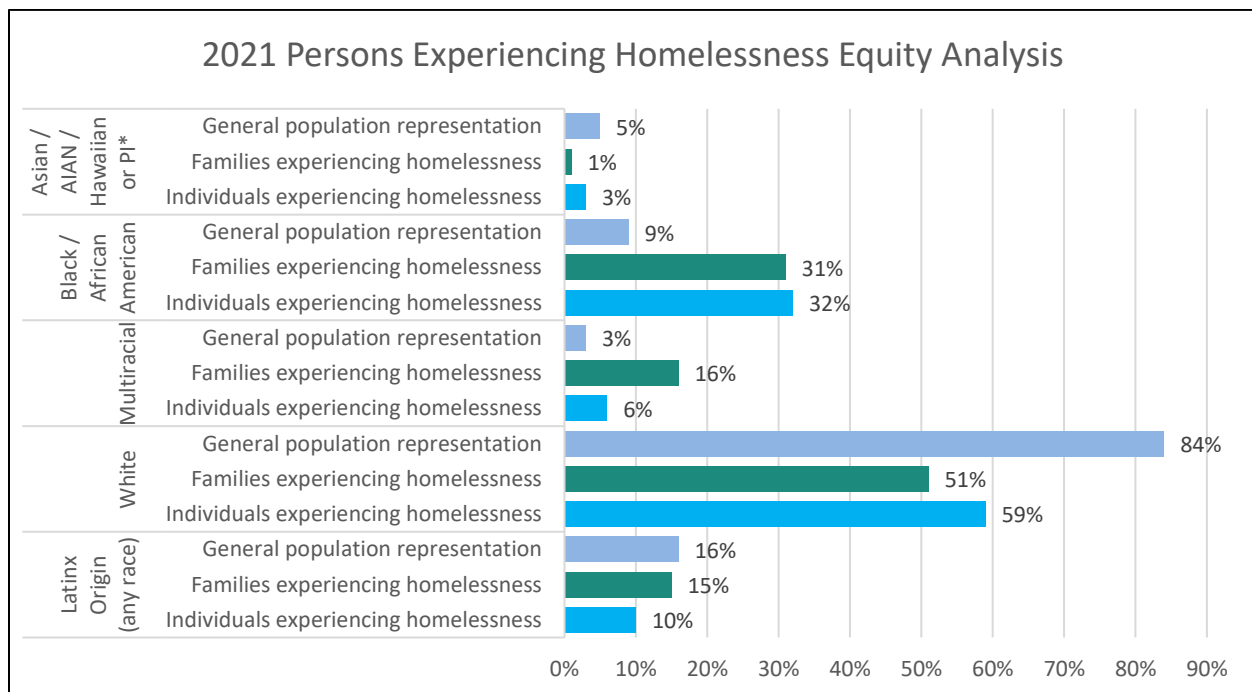
	Persons Experiencing Homelessness
Total	1,267
Household Type	
Individuals	793 (67%)
Families	474 (37%)
Individual Characteristics	
Chronic homeless	357 (28%)
Veterans	97 (8%)
Young adults	96 (8%)

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. Approximately 1.6% of core city children experienced homelessness during the 2019-2020 school year, nearly double the percentage for the remainder of the state. **Children in Woonsocket and Central Falls are particularly at risk for experiencing homelessness.**

2019-2020 School Year Children Experiencing Homelessness by Core City School District

	Total Student Enrollment	Students Identified as Homeless
Central Falls	2,878	73 (2.5%)
Pawtucket	8,784	98 (1.1%)
Providence	23,836	304 (1.3%)
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.

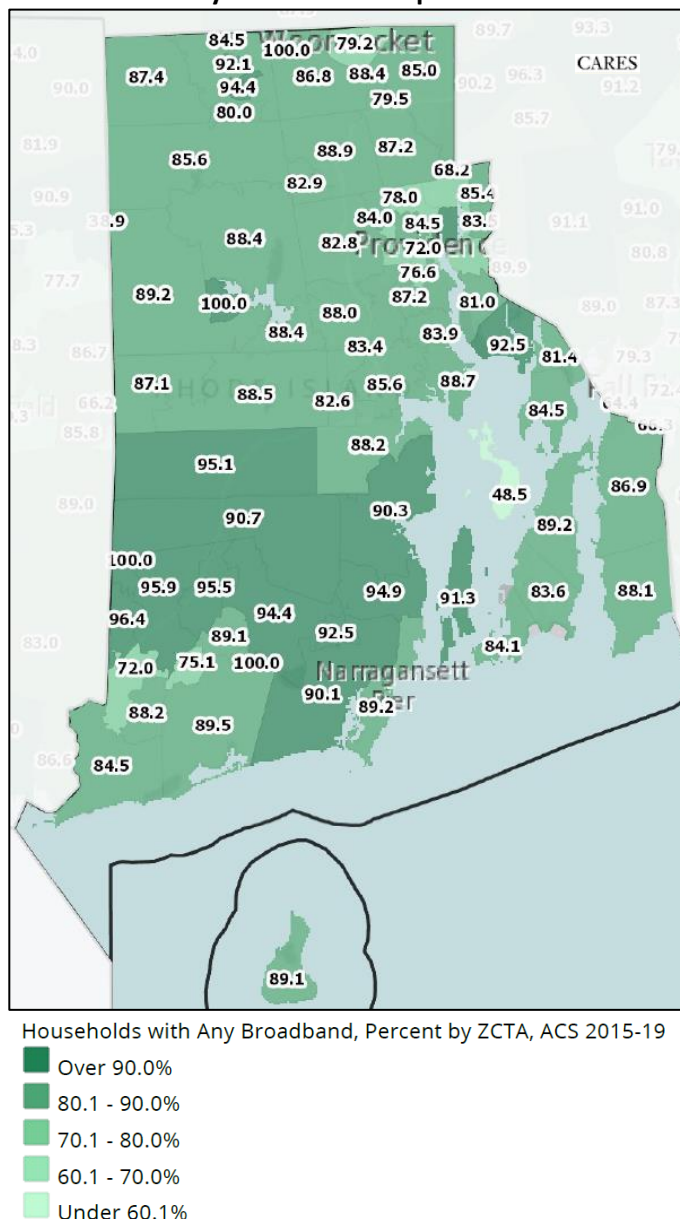
2015-2019 Households by Digital Access

	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 Rhode Island Zip Code



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.



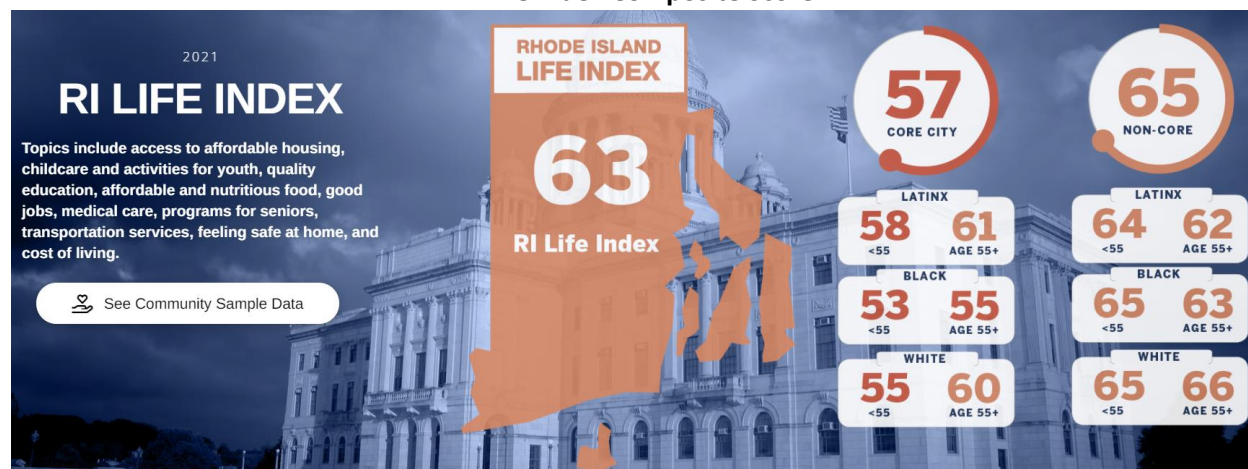
Rhode Island (RI) Life Index

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. As 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."**

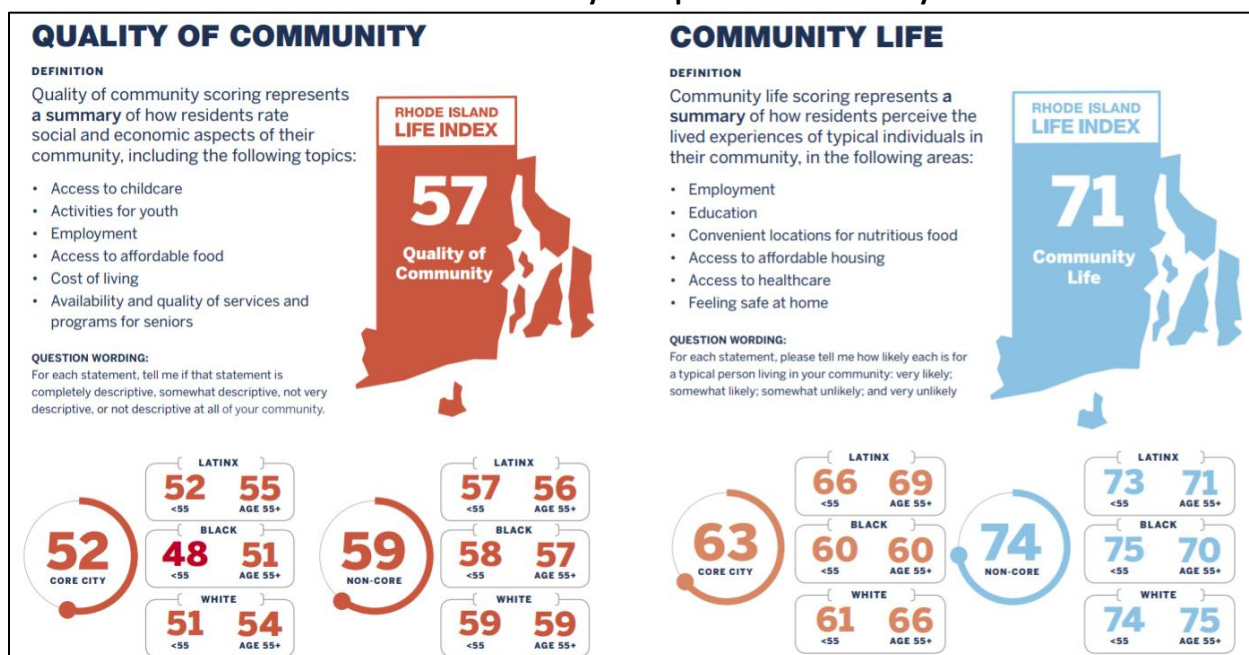
The 2021 RI Life Index findings largely align with those of 2020 and 2019. The most notable trend in 2021 was a significant perceived decline in programs and services for children, including access to quality education, youth activities, and places to raise children. Additionally, there was a significant 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



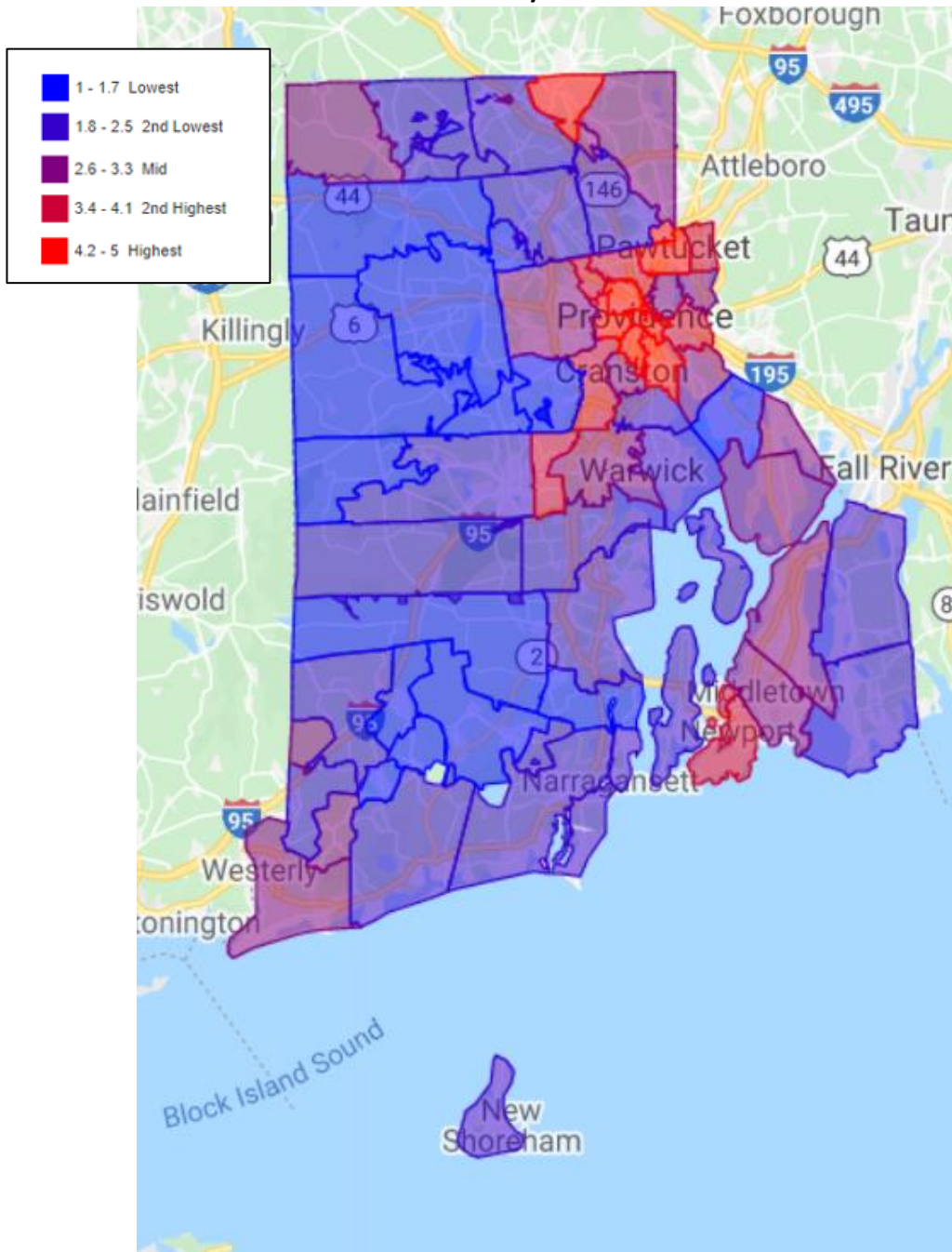
Tools for Identifying Disparity at the Community-Level

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.

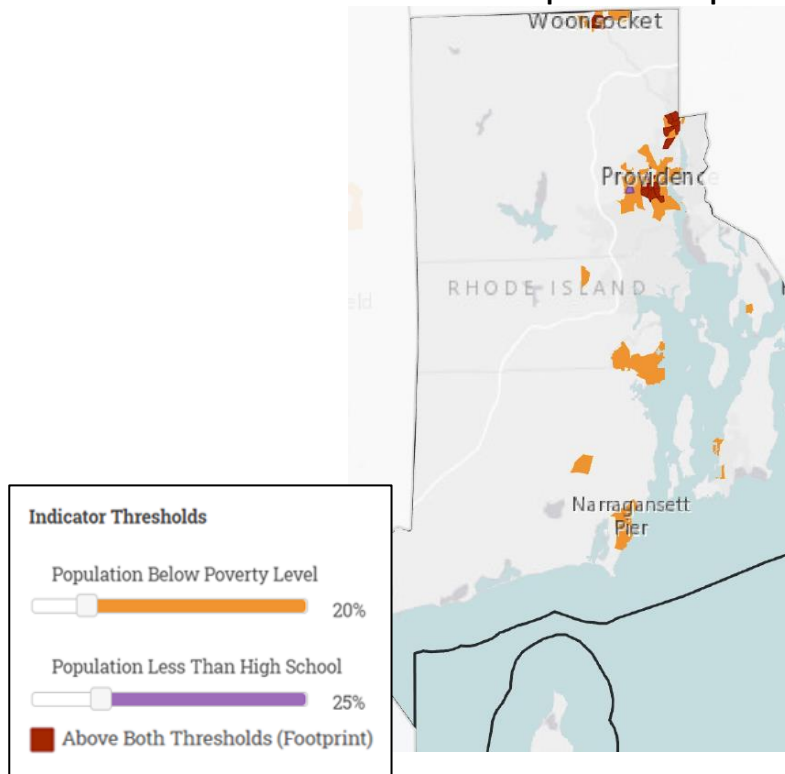


Community Need Index

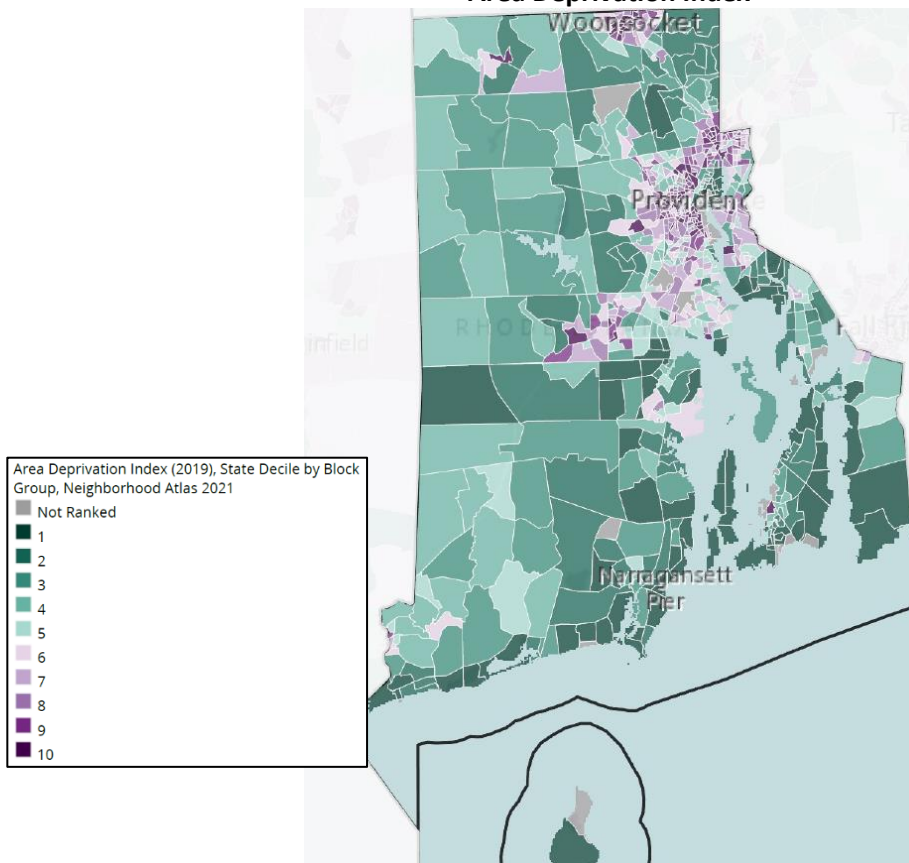




Vulnerable Population Footprint



Area Deprivation Index





Core city zip codes, including Providence zip codes 02903, 02907, and 02908; Central Falls zip code 02863; and Pawtucket zip code 02860 have the highest CNI scores in the state at 4.6 or higher out of a maximum of 5.0. The CNI scores for these zip codes are consistent with those reported at the time of the 2019 CHNA, and correlate with known areas of vulnerability, deprivation, and identified disparities related to poverty, housing cost burden, educational attainment, and language barriers, among others.

Providence zip codes 02907 and 02908 and Central Falls zip code 02863 have a CNI score of 4.8. Within these zip codes, approximately 30% of all residents and 40% of children live in poverty and nearly 70% speak a primary language other than English, proportions that are double to triple state and national averages. Central Falls zip code 02863 has the largest proportion of Latinx residents in the state. Consistent with known disparities among Latinx residents, Central Falls reports the lowest educational attainment and highest uninsured percentages in Rhode Island.

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 state. 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 Zip Code with a CNI Score of 3.4 or Higher

	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than HS Diploma	Without Health Insurance	CNI Score
02840, Newport	14.5%	20.1%	11.8%	6.2%	7.0%	3.4
02893, West Warwick	12.6%	16.2%	11.1%	10.2%	4.2%	3.4
02912, Providence	NA	NA	28.2%	NA	4.0%	3.4
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
02841, Newport	NA	NA	13.7%	0.0%	NA	3.8
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
02903, Providence	33.4%	14.5%	32.4%	17.6%	5.5%	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)
02840, Newport	84.4%	7.1%	1.8%	1.3%	3.5%	9.7%
02893, West Warwick	88.2%	4.0%	3.0%	2.2%	2.6%	7.4%
02912, Providence	71.4%	5.4%	15.7%	2.6%	4.8%	10.7%
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%
02841, Newport	79.4%	8.8%	4.5%	1.8%	5.6%	10.3%
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%
02903, Providence	66.3%	9.9%	12.3%	4.6%	5.5%	19.2%
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 the core cities, life expectancy is lower than 78 years in the majority of census tracts, and lower than 72 years in select census tracts.**

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 reported 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. However, results should be interpreted with caution based on a small population count of Black/African Americans across the state.

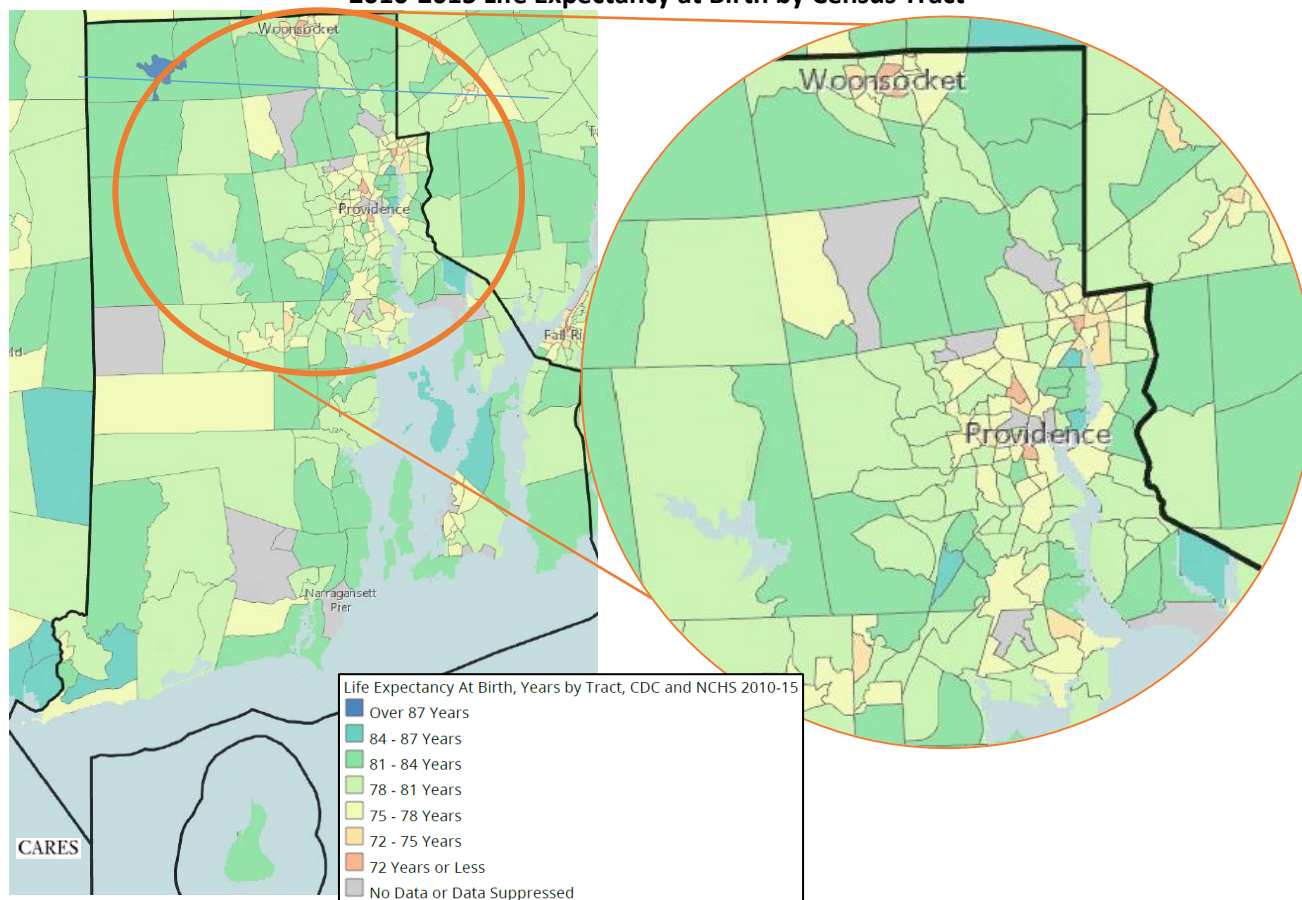
2017-2019 Life Expectancy by Race and Ethnicity

	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

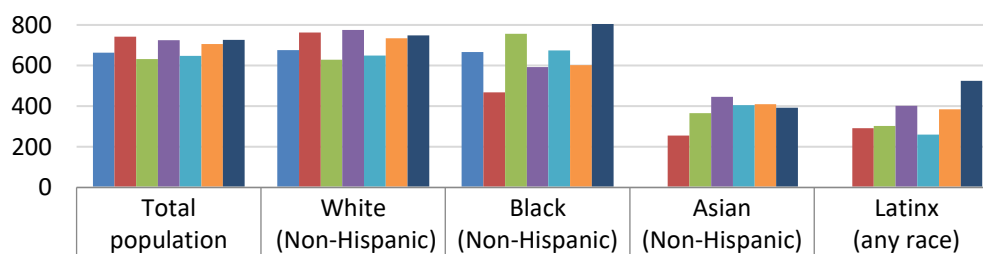
Source: National Vital Statistics System



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



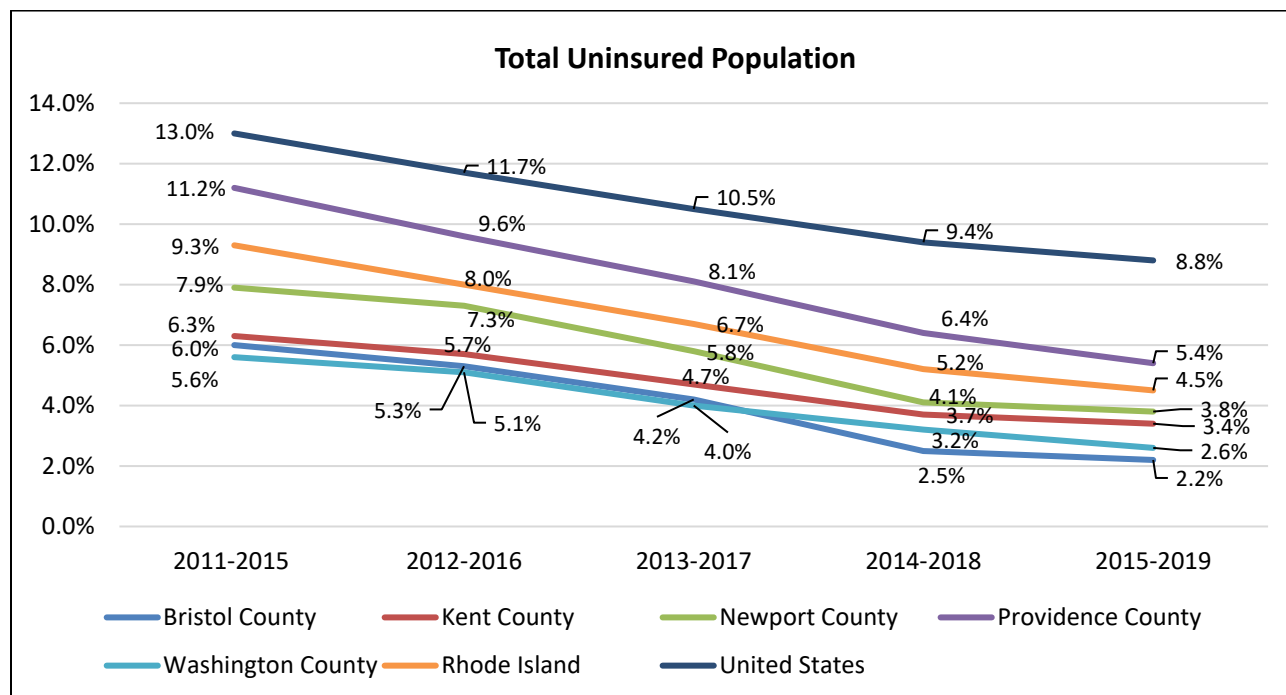
Our Health Status as a Community

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.

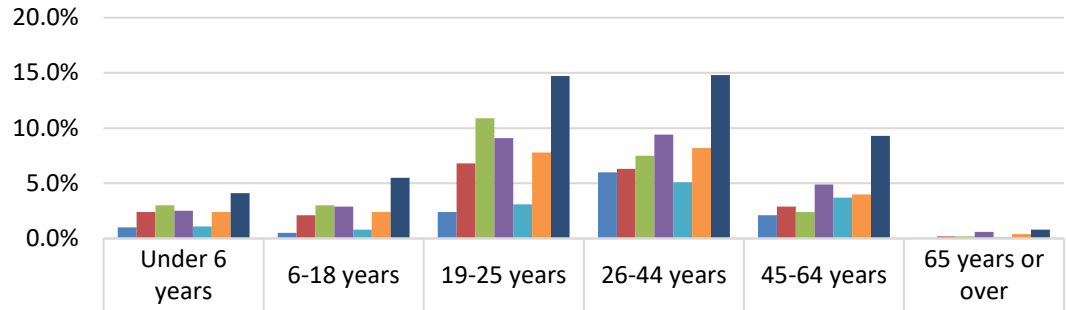
Statewide, the uninsured percentage declined for all racial and ethnic groups, but individuals of color continue to be disproportionately uninsured compared to Whites. The uninsured percentage for Black/African Americans (7%) and Latinx (10.7%) is double or more than the White percentage (3.5%).



Source: US Census Bureau, American Community Survey



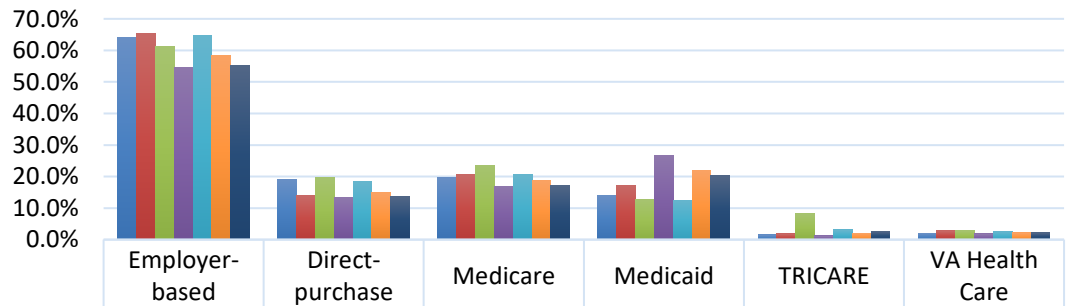
Uninsured Population by Age



	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

Insured Population by Coverage Type (alone or in combination)

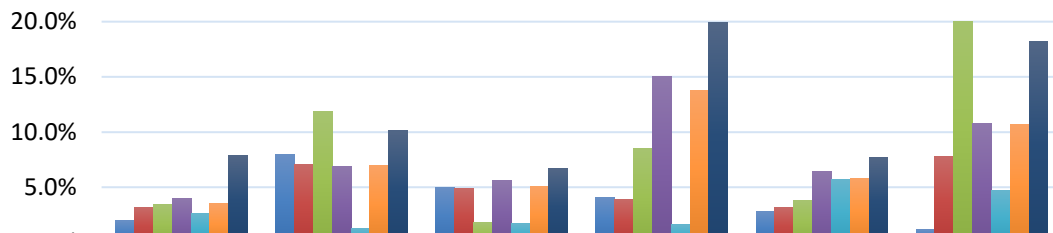


	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Bristol County	64.1%	19.0%	19.6%	14.0%	1.6%	2.1%
Kent County	65.5%	13.9%	20.5%	17.2%	1.9%	2.9%
Newport County	61.3%	19.6%	23.6%	12.6%	8.2%	3.0%
Providence County	54.6%	13.4%	17.0%	26.8%	1.2%	1.8%
Washington County	64.6%	18.3%	20.5%	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



Uninsured Population by Race and Ethnicity

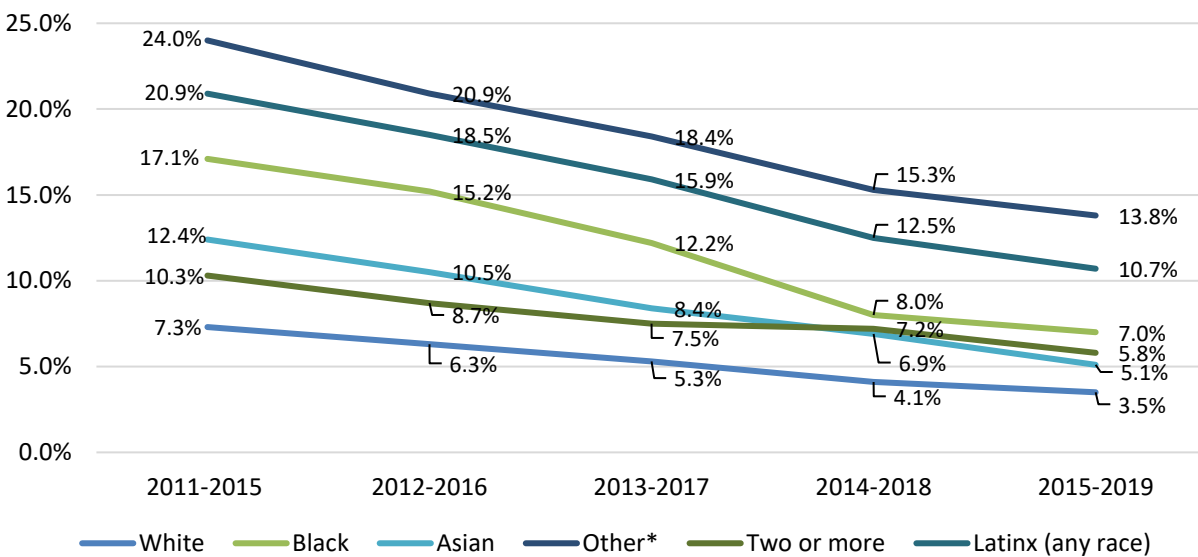


	White	Black	Asian	Other*	Two or more	Latinx (any race)
Bristol County	2.0%	8.0%	5.0%	4.1%	2.8%	1.2%
Kent County	3.2%	7.1%	4.9%	3.9%	3.2%	7.8%
Newport County	3.4%	11.9%	1.8%	8.5%	3.8%	21.2%
Providence County	4.0%	6.9%	5.6%	15.0%	6.4%	10.8%
Washington County	2.6%	1.3%	1.7%	1.6%	5.7%	4.7%
Rhode Island	3.5%	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.

Rhode Island Uninsured Population by Race and Ethnicity



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. Low-income individuals residing in the core cities live in a primary and dental HPSA. **While adult primary care access is generally consistent across core city zip codes, dental care access disparities are stark, particularly among residents experiencing higher socioeconomic disparity.** As few as 48% of adults 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

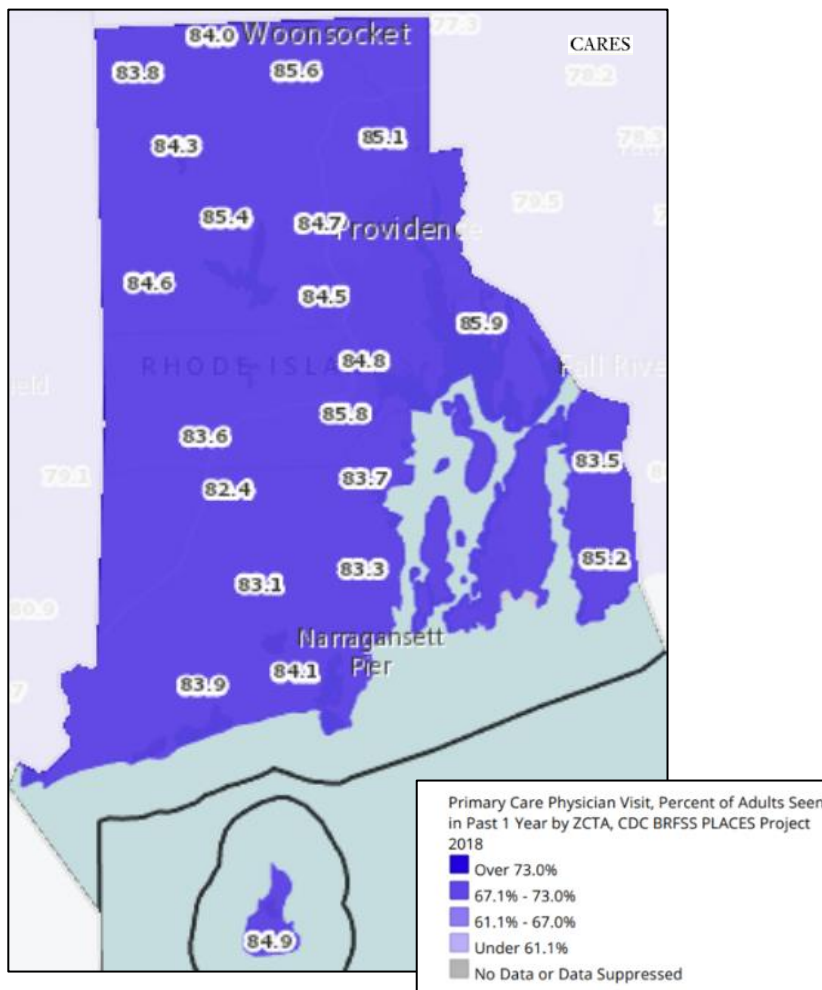
	Primary Care		Dental Care	
	Physicians per 100,000 Population (2018)	Routine Checkup within Past Year (2018)*	Dentists per 100,000 Population (2019)	Dental Visit within Past Year (2018)*
Bristol County	199.4	83.0%	39.2	76.5%
Kent County	87.3	82.8%	76.7	70.0%
Newport County	90.9	81.4%	104.8	77.0%
Providence 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.

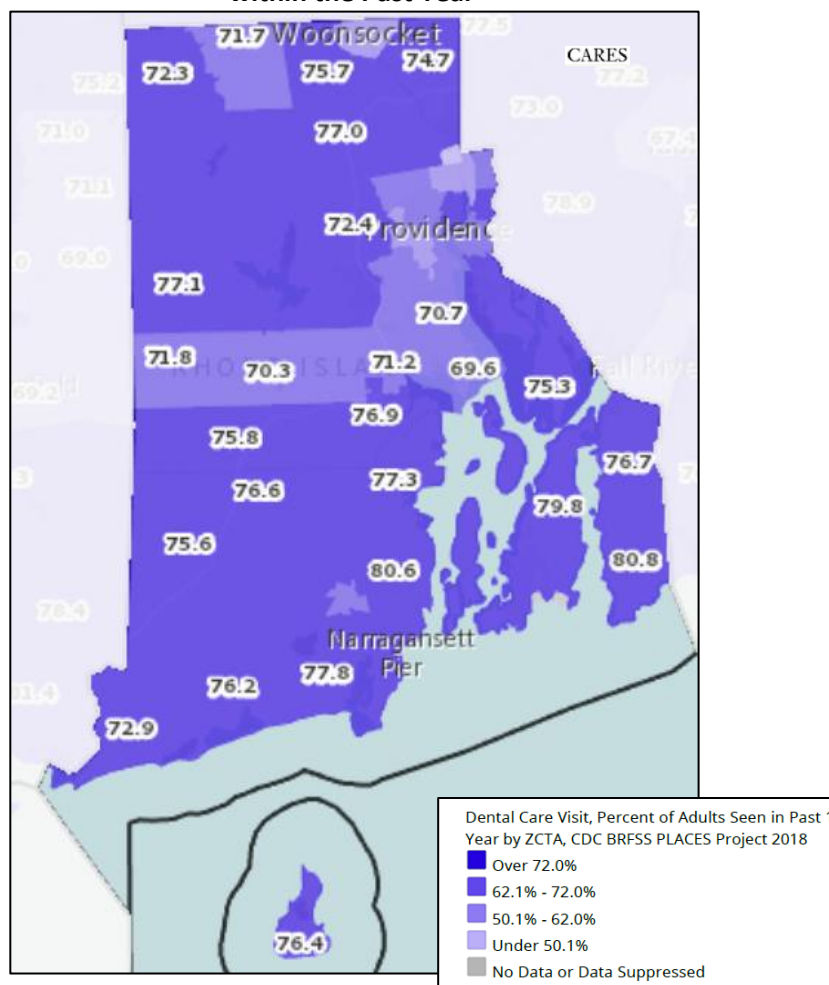


Rhode Island Adults with a Routine Checkup within the Past Year





Rhode Island Adults with a Dental Visit within the Past Year



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.**

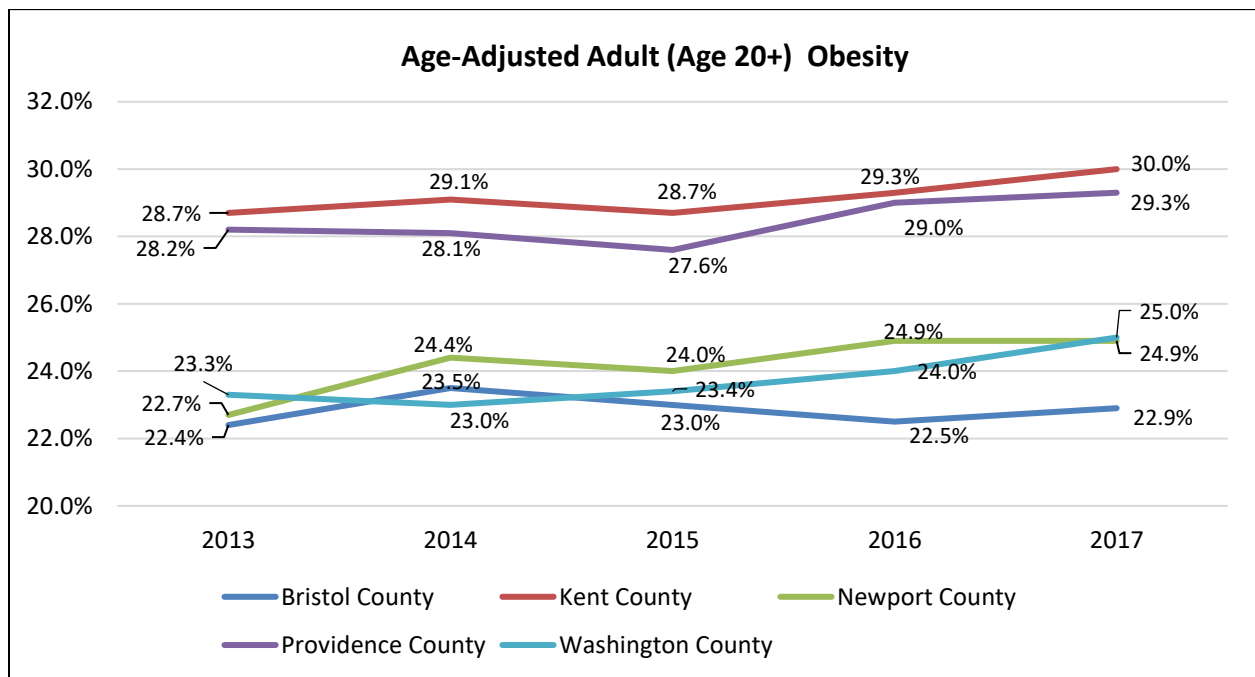
Kent and Providence counties have the highest prevalence of adult obesity and diabetes in the state, estimated at nearly 30% and 10% respectively in both counties. Adult diabetes prevalence in Kent County increased annually from 2014 to 2017. Kent and Providence counties also have the highest rates of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

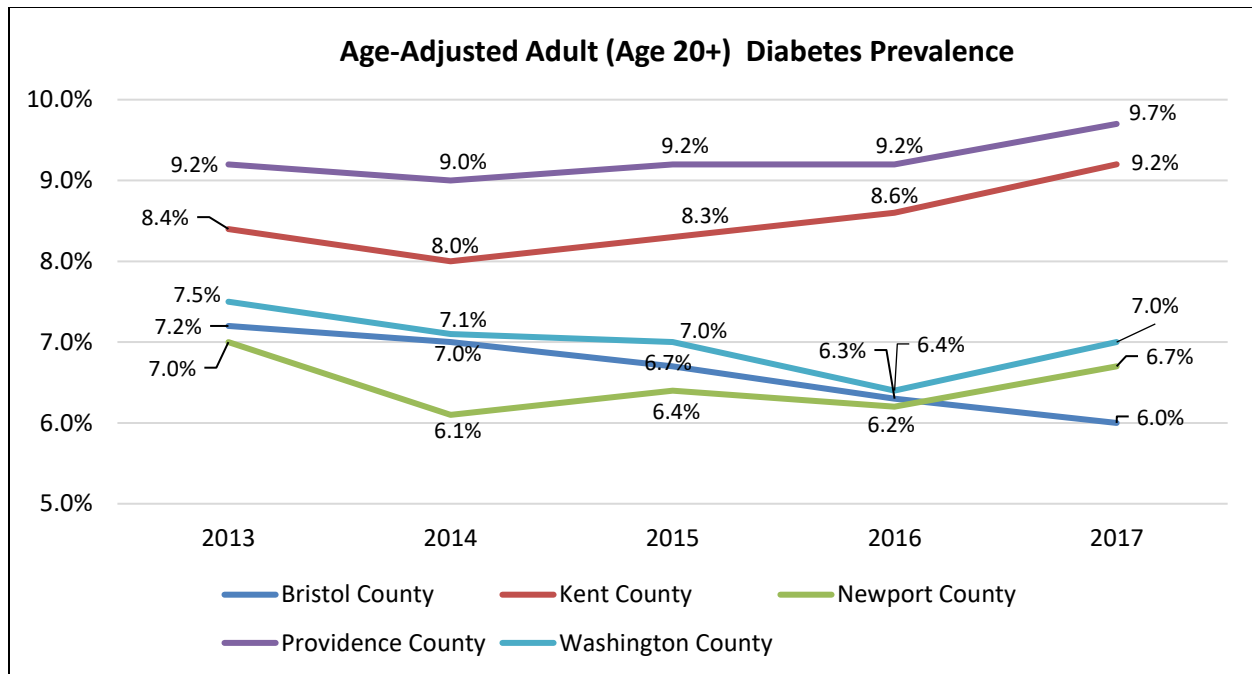
A change in data methodology occurred in 2018 providing obesity and diabetes prevalence for adults age 18 or older versus age 20 or older at the county-level. Of note, based on the new methodology, the prevalence of adult diabetes in Providence County is estimated at 10.7%, a 1-point increase from previous 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 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*

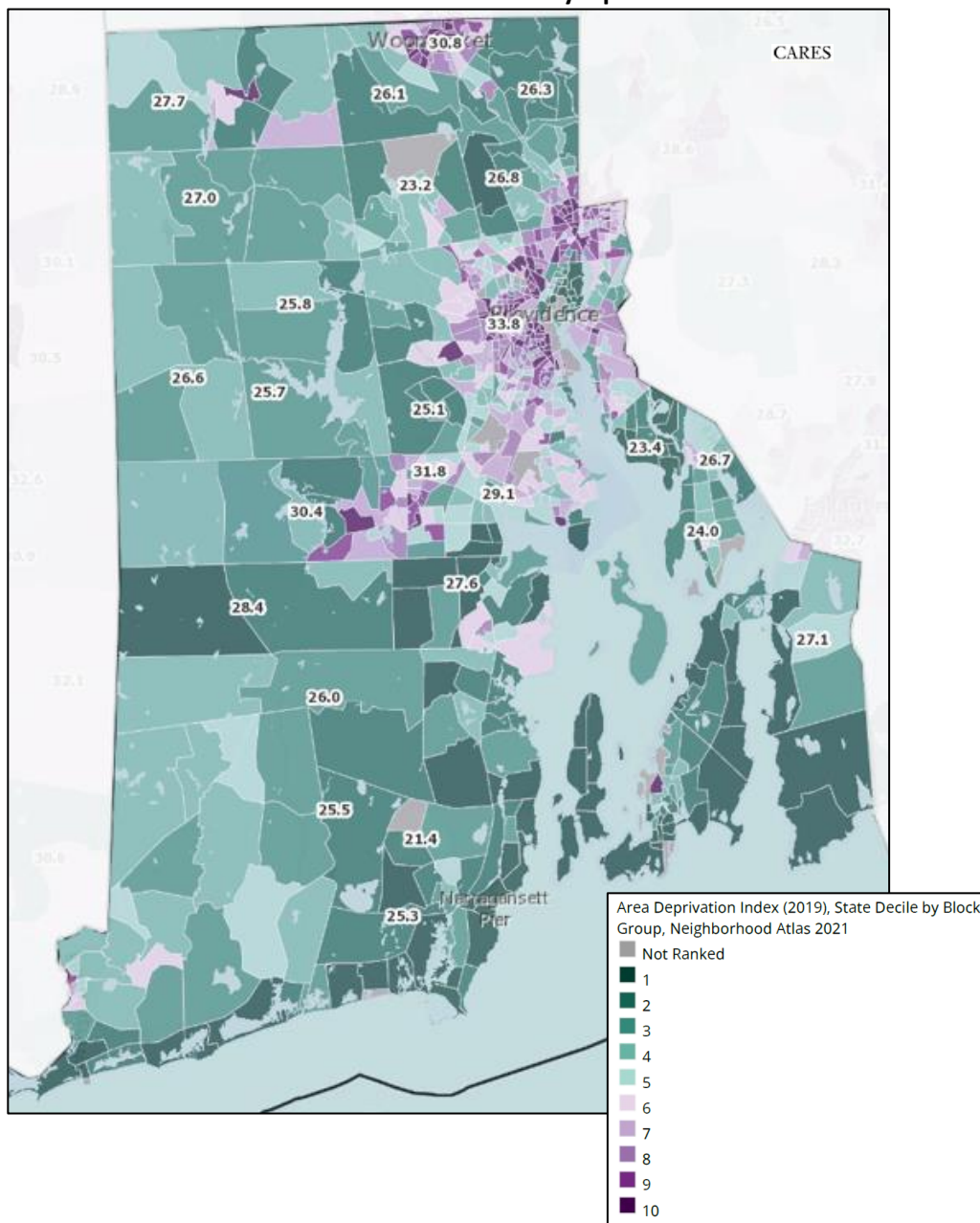
	Obese	Diabetes Diagnosis
Bristol County	24.8%	7.4%
Kent County	29.6%	9.0%
Newport County	26.5%	7.4%
Providence County	29.6%	10.7%
Washington County	25.6%	7.7%
Rhode Island	27.5%	9.6%
United States	30.9%	10.0%

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.

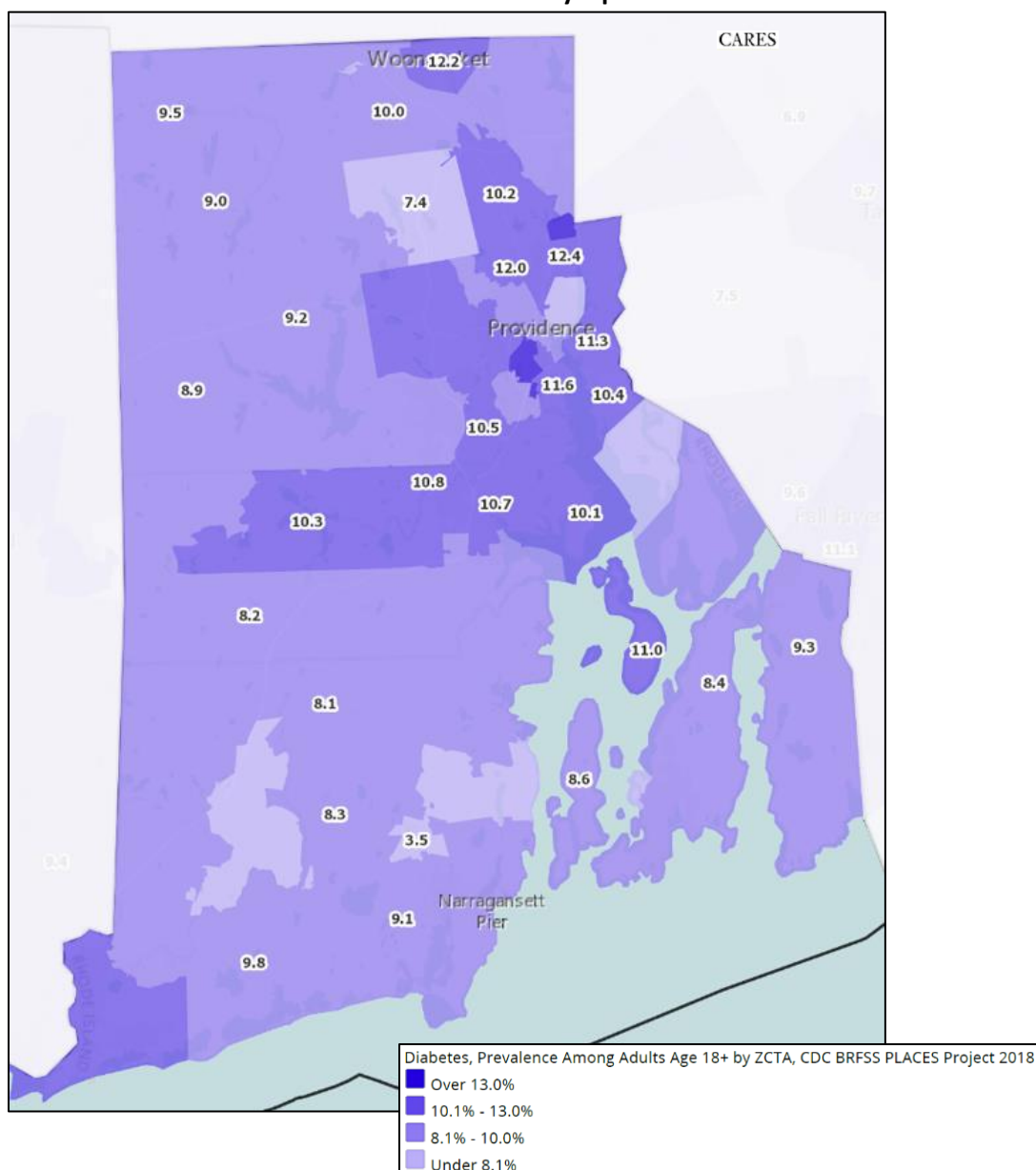


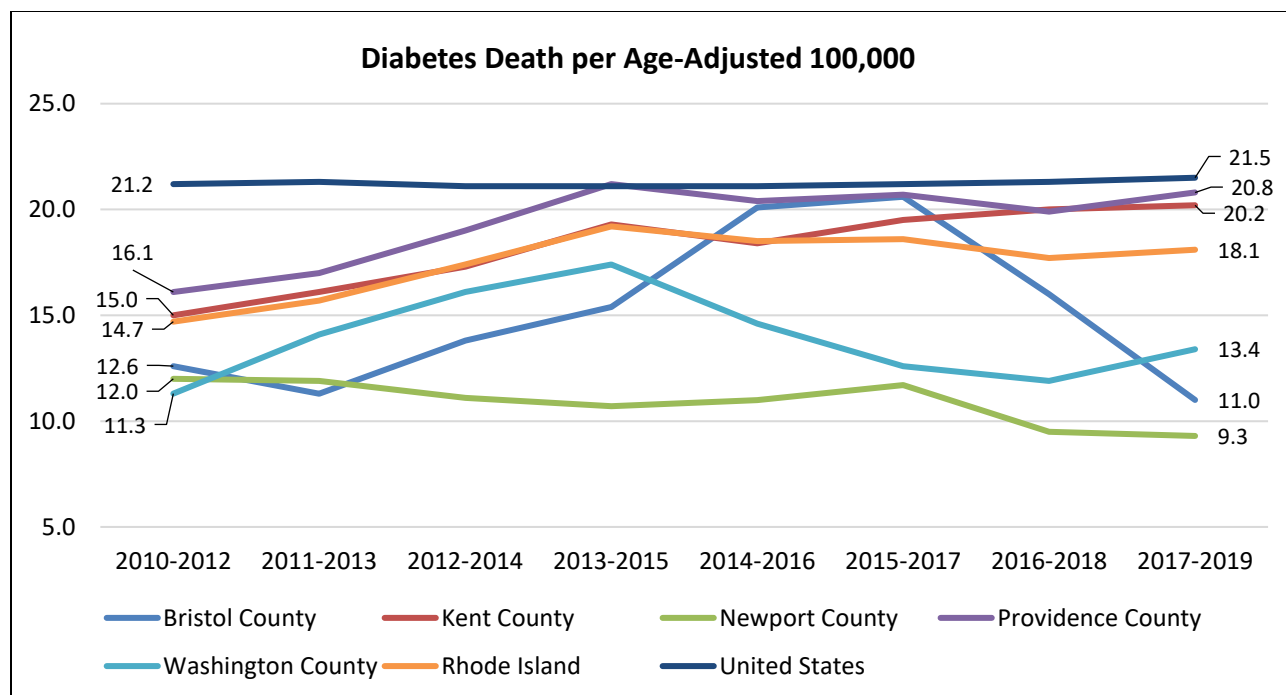
Rhode Island Area Deprivation Index by Block Group and Percent of Obese Adults by Zip Code





Rhode Island 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

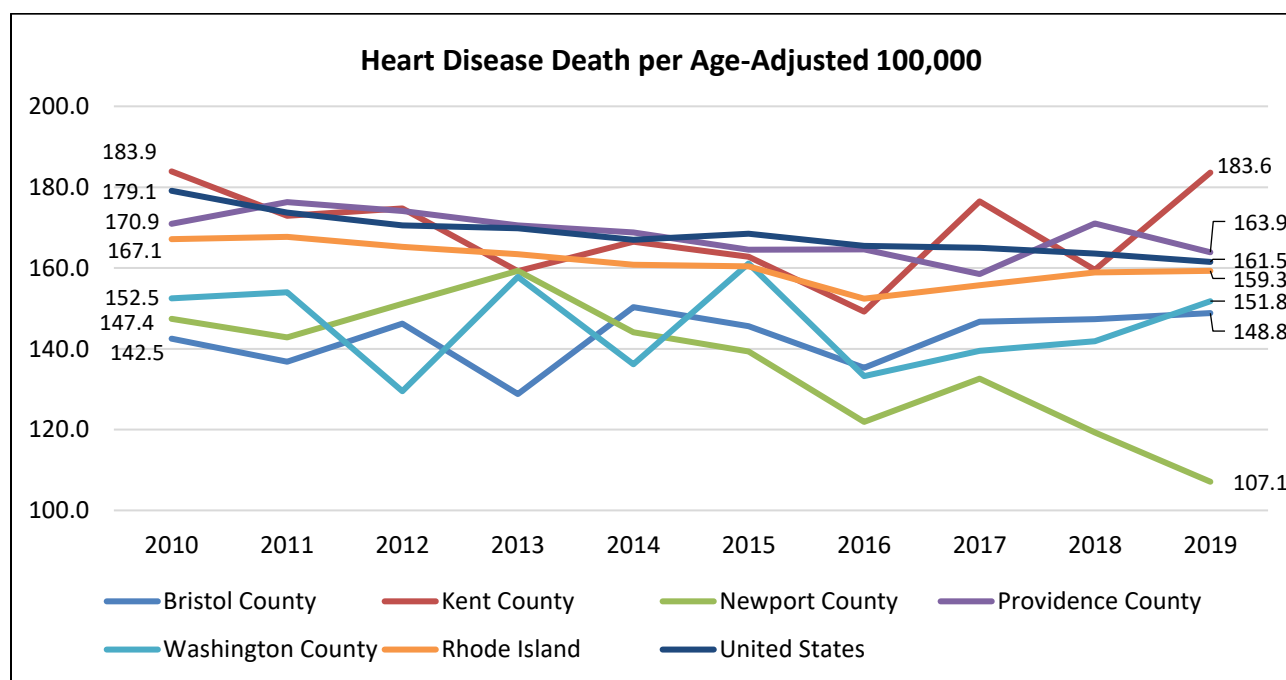


Americans; racial and ethnic data are not reported for other Rhode Island counties due to unreliable rates.

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.



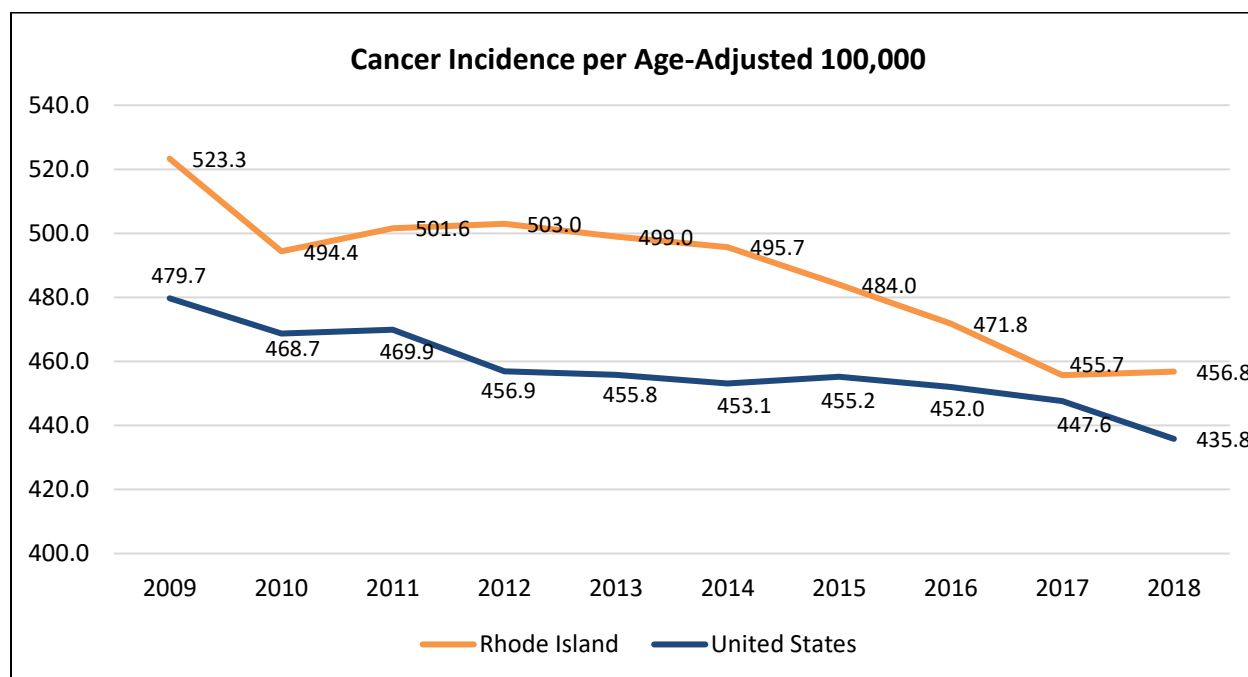
Cancer

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.

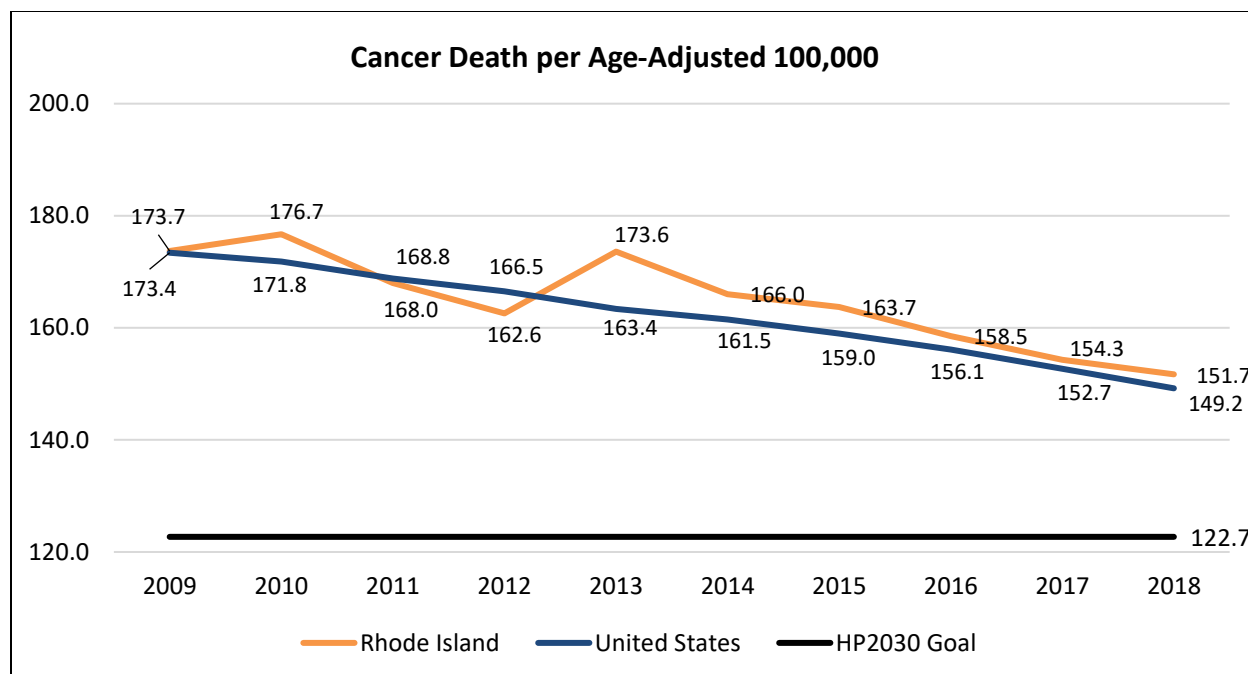
2018 Age-Adjusted Adult Cancer Prevalence and Screening Practices

	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

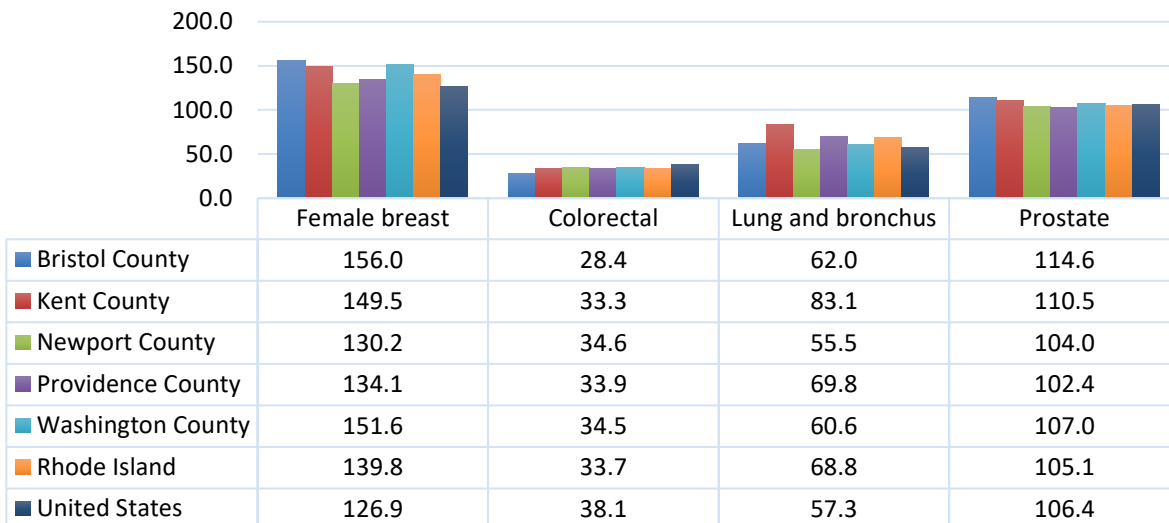
2021 Radon Zones and Estimated Levels by County

	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

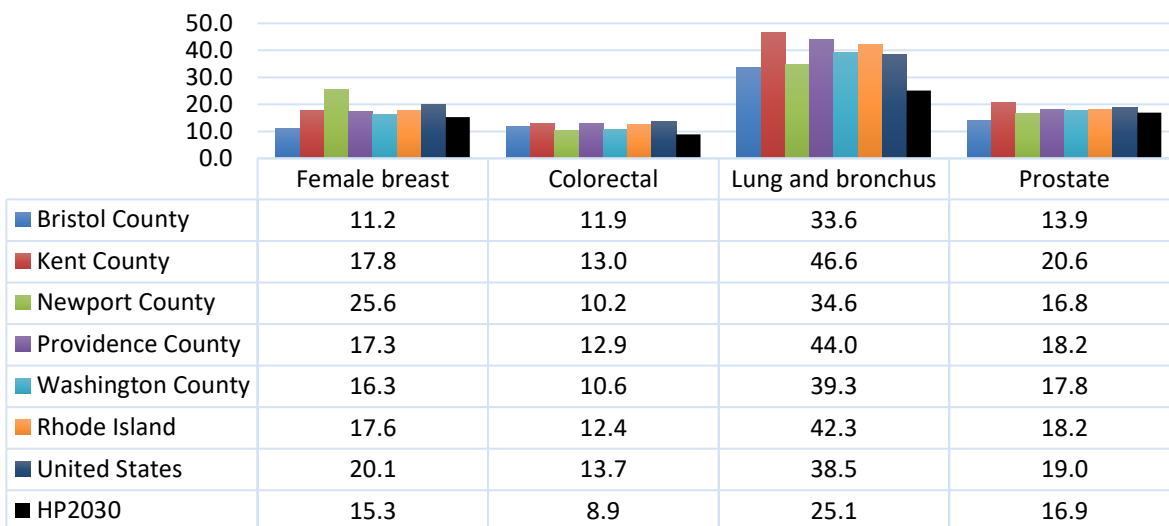


Age-Adjusted Cancer Incidence per 100,000 Population by Cancer Type



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

Age-Adjusted Cancer Death per 100,000 Population by Cancer Type



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.



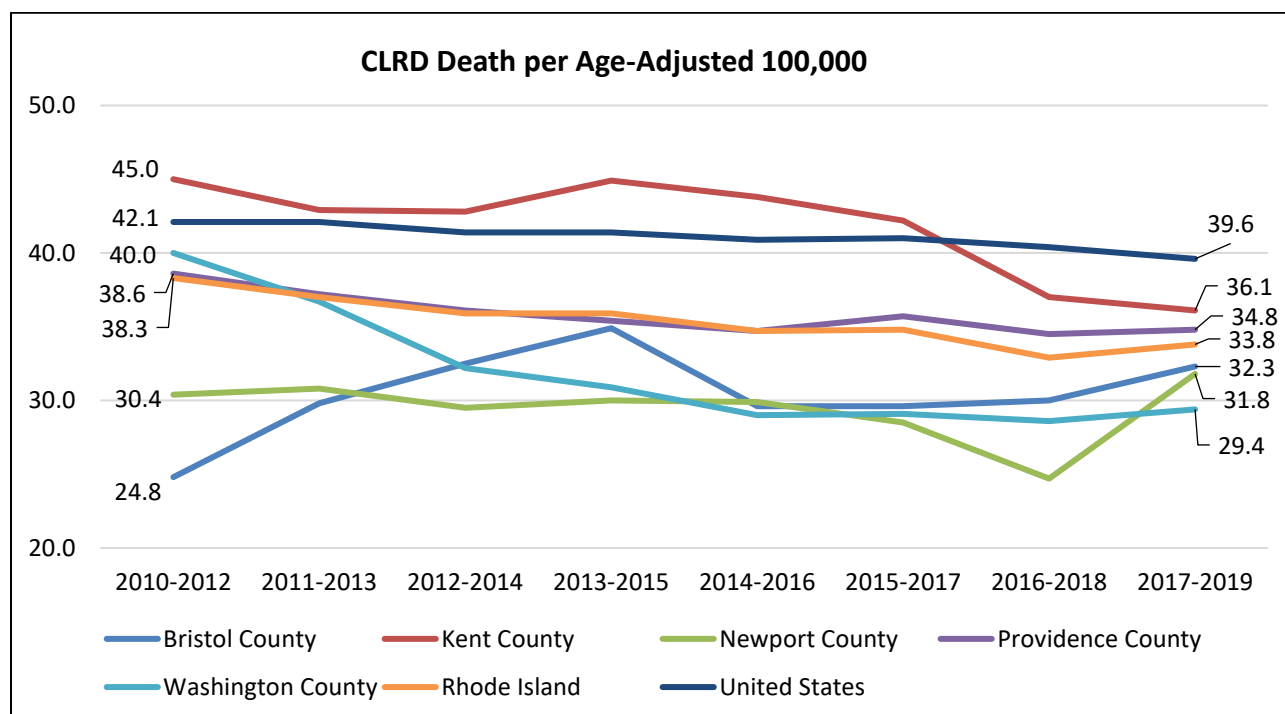
Approximately 73.5% of housing units in Rhode Island were built before 1980 compared to 53.6% nationwide. Providence County has the oldest housing stock in Rhode Island, and the highest prevalence of adult asthma. Adult COPD prevalence across Rhode Island is consistent with the nation.

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

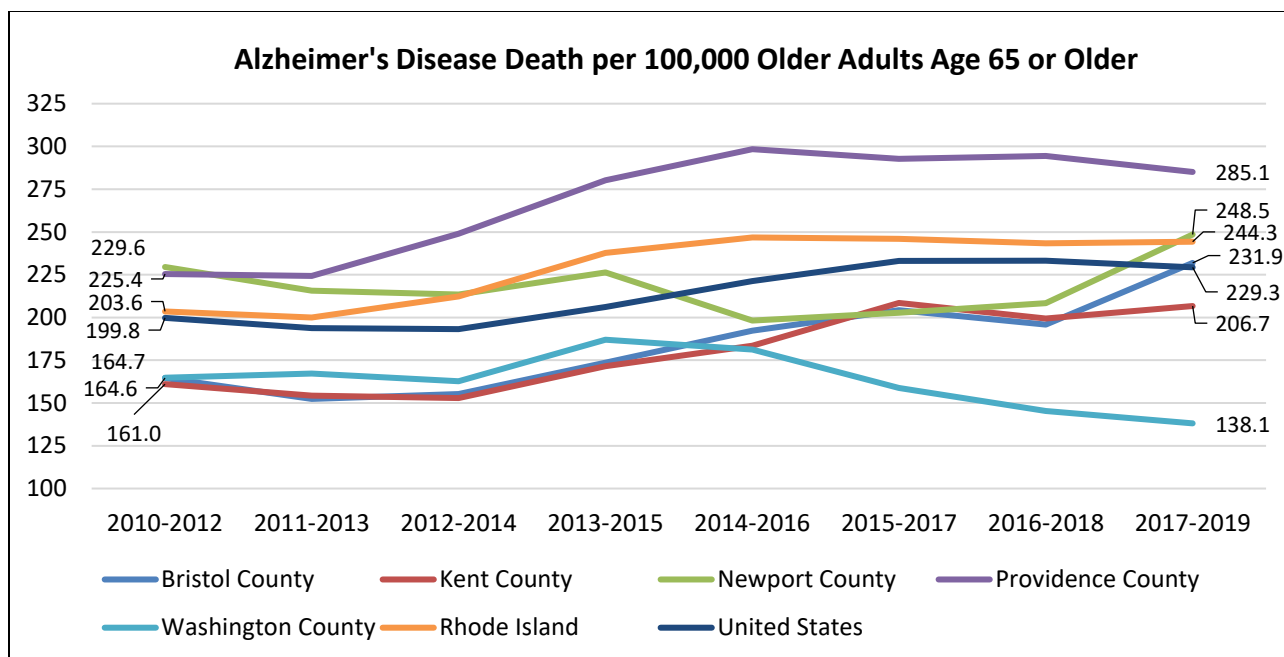
Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol, and arthritis. This finding is consistent across Rhode Island and its five counties. In comparison to the nation, **Rhode Island older adult Medicare beneficiaries 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

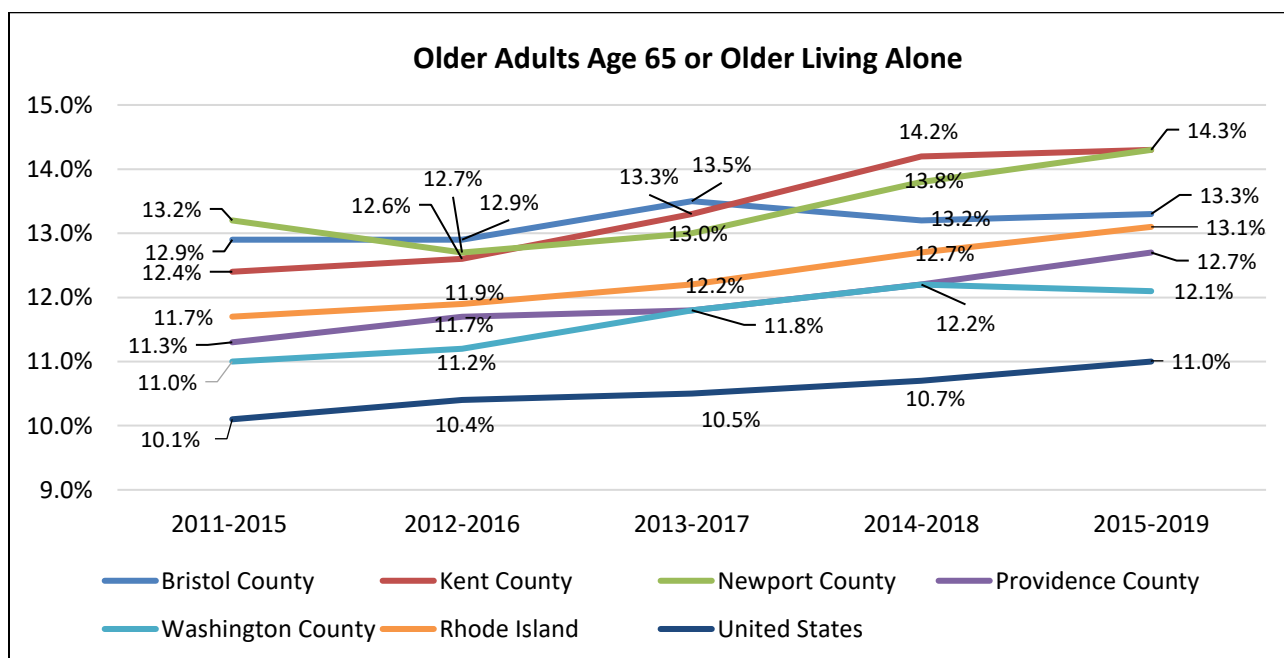
	Bristol County	Kent County	Newport County	Providence County	Washington County	Rhode Island	United States
Alzheimer's Disease	12.0%	10.9%	10.1%	11.6%	9.4%	10.9%	11.9%
Arthritis	34.4%	36.9%	32.8%	35.2%	36.7%	35.4%	34.6%
Asthma	6.4%	6.0%	6.1%	6.8%	5.9%	6.4%	4.5%
Cancer	11.2%	11.3%	11.4%	10.8%	11.2%	11.1%	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



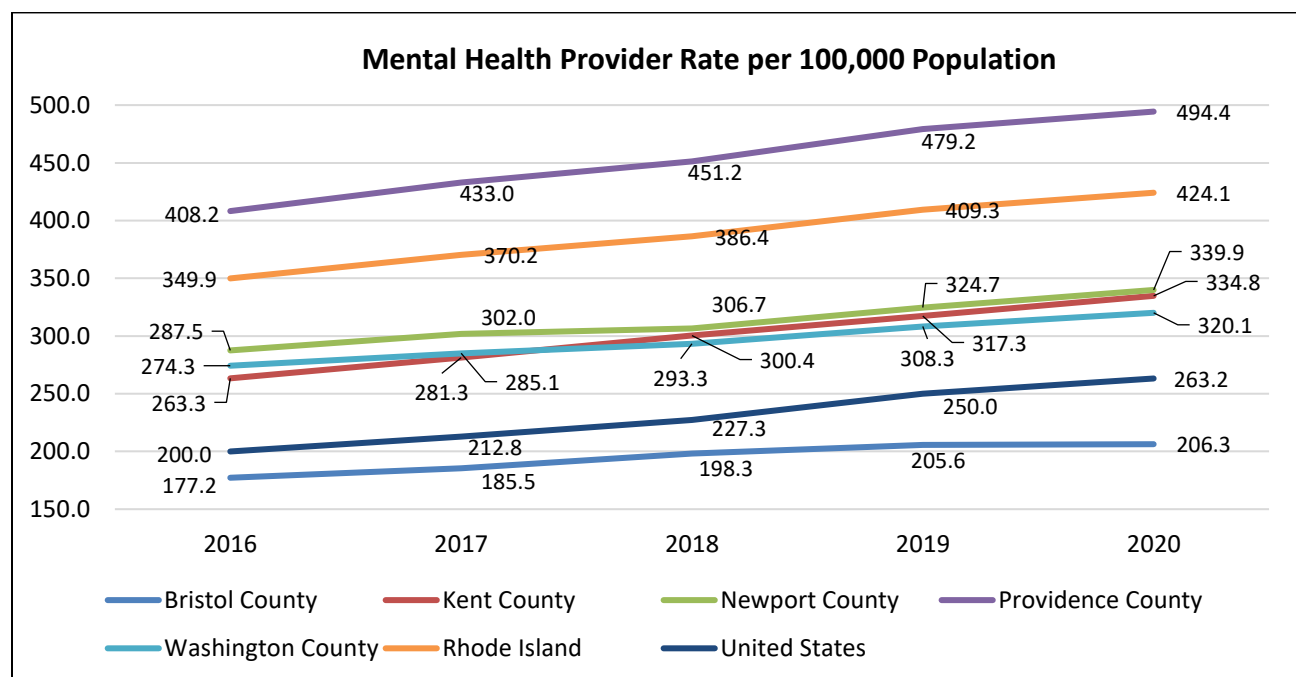
Mental Health and Substance Use Disorder

Access to Services

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.

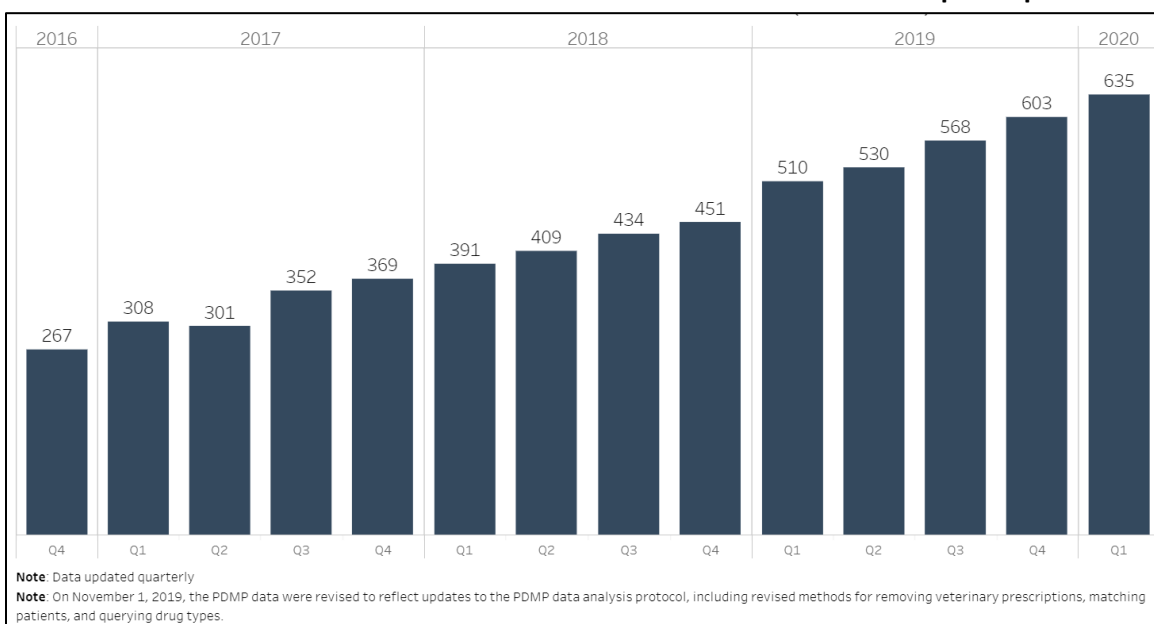


Source: Centers for Medicare and Medicaid Services

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 waived 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.

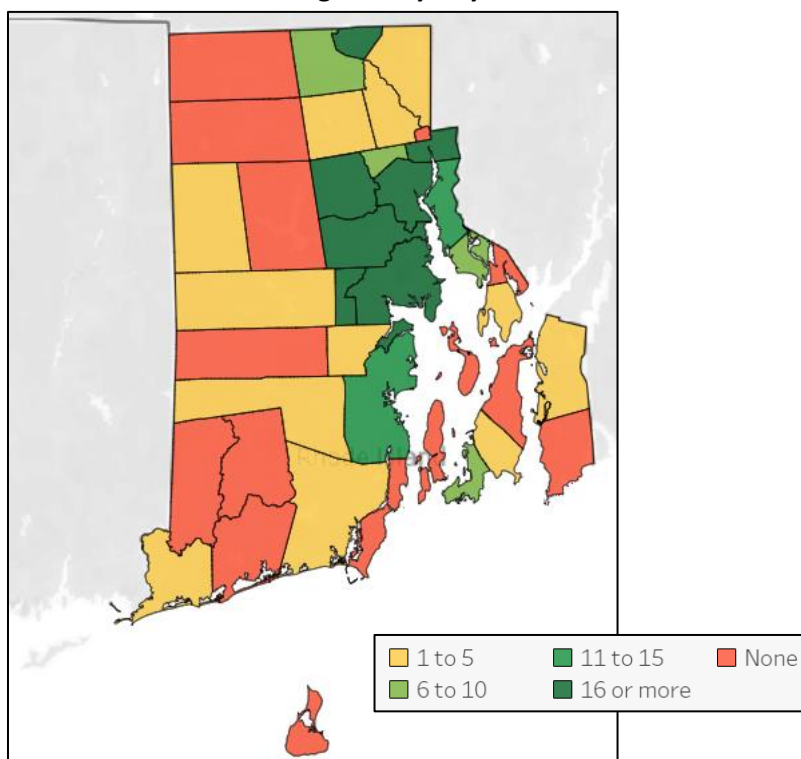


2016-2020 Number of Trained and DATA-Waivered Practitioners for Buprenorphine



Source: Prevent Overdose RI

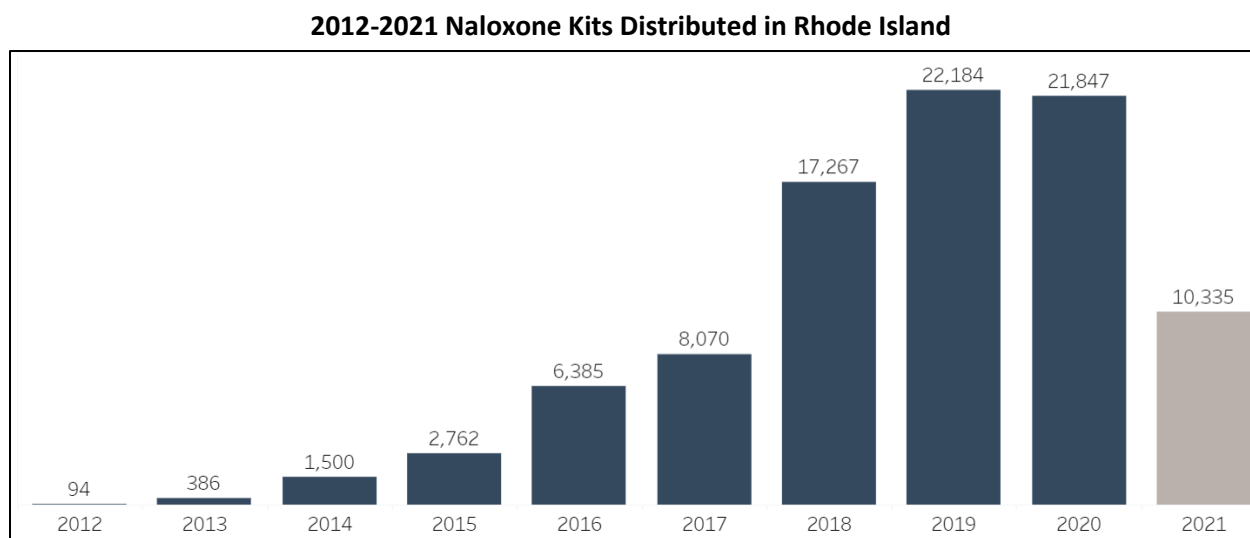
MAT Providers and Programs by City or Town



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.



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. 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)**

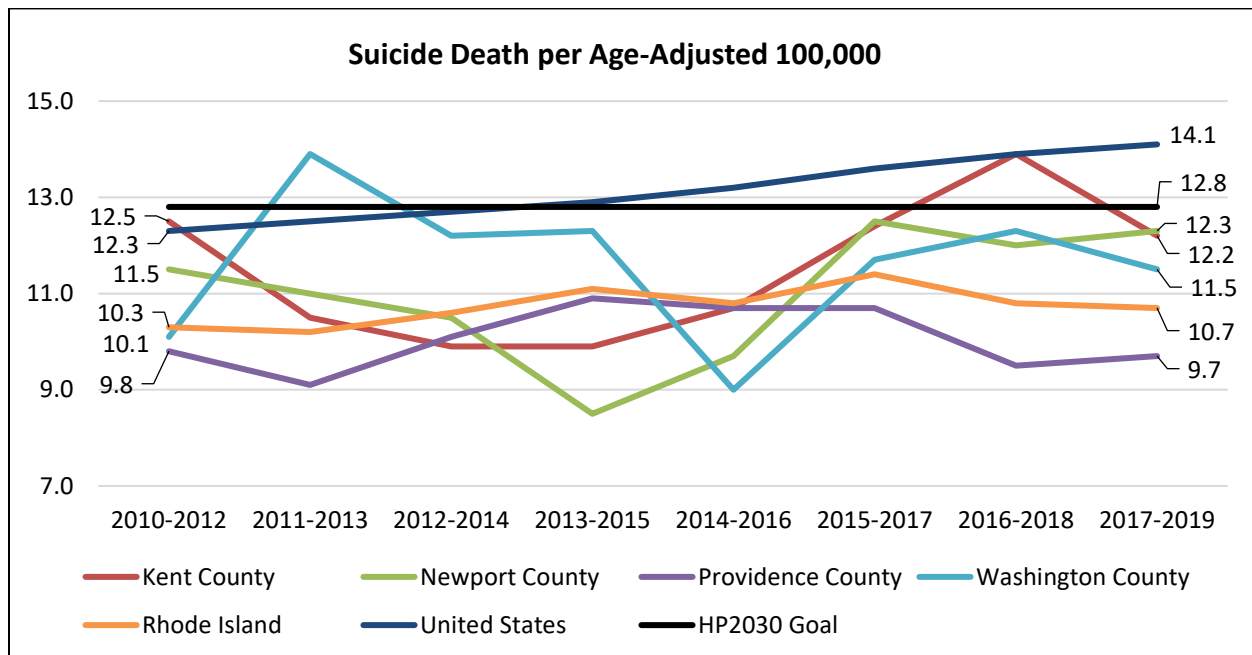
	2016		2017		2018		2019		2020		2021 (Q1-Q2)*	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	14,312	12.0%	13,742	11.1%	12,144	10.1%	12,252	10.3%	10,810	10.2%	5,210	9.9%
Gender												
Male	7,221	13.7%	6,878	12.5%	6,112	11.5%	6,473	12.0%	5,575	11.5%	2,536	10.5%
Female	7,090	10.7%	6,858	10.0%	6,030	9.0%	5,777	8.9%	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%

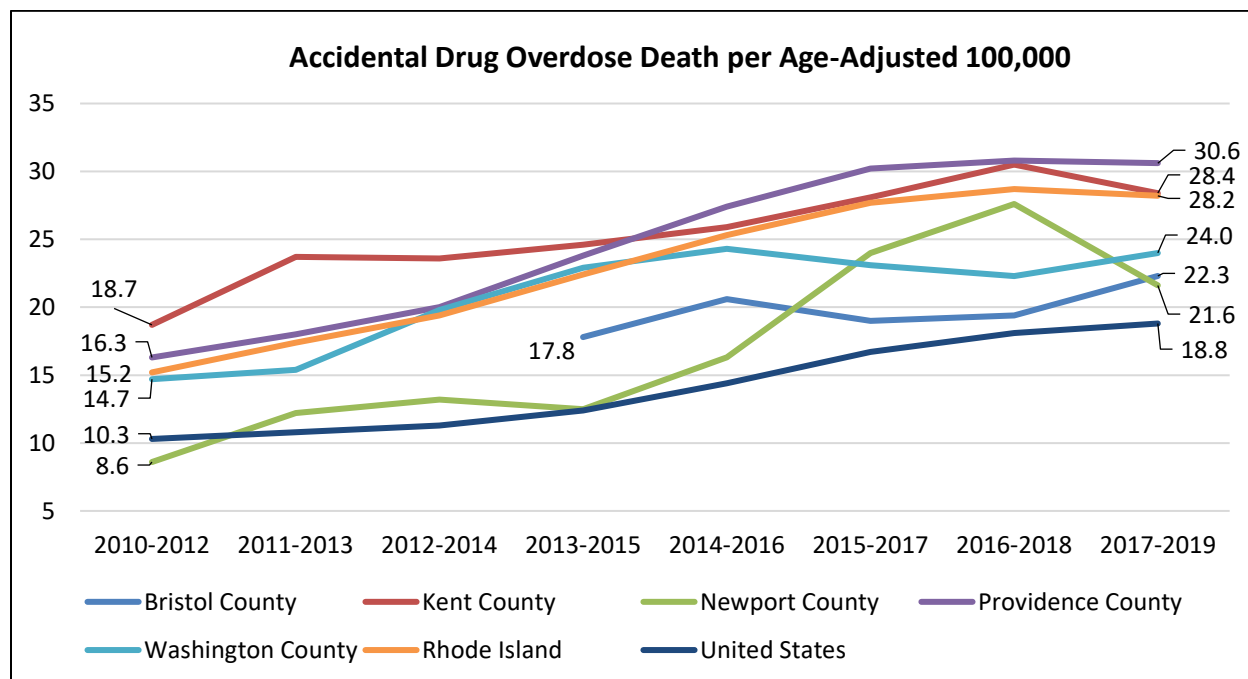
Source: Centers for Disease Control and Prevention, BRFSS



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 core cities, 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.** The number of overdose deaths in Central Falls declined from 10 in 2019 to 8 in 2020.



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

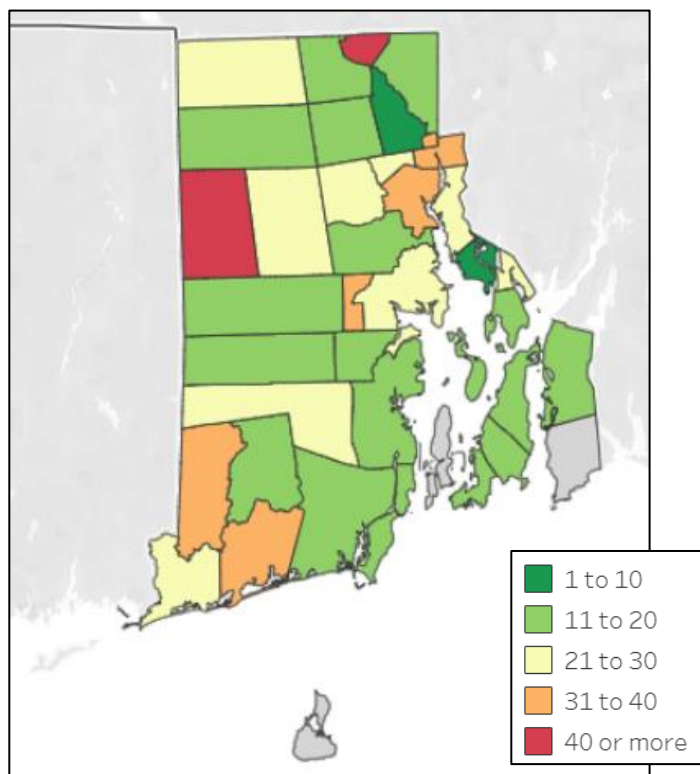
2014	2015	2016	2017	2018	2019	2020	2021*
240	290	336	324	314	308	384	322

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. Overdose death rates are also higher in Providence (39.79), Central Falls (35.34), and Pawtucket (33.30) in comparison to other Rhode Island cities and towns.**

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



Source: Prevent Overdose RI



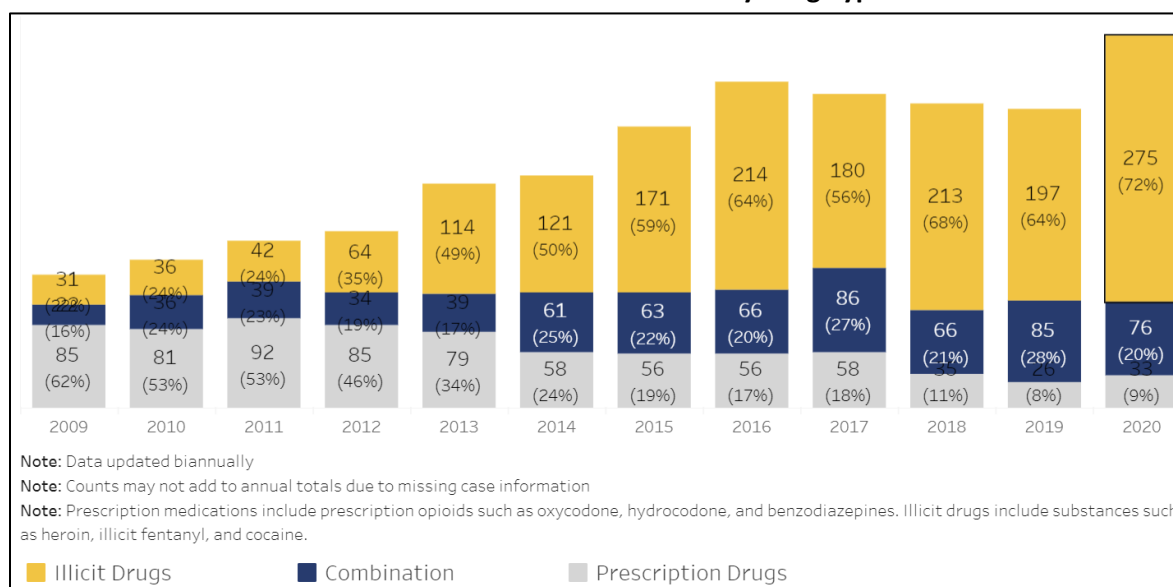
Accidental Drug Overdose Deaths and Rate per 100,000 by Core City

	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
Pawtucket	16	22	26	18	21	29	35	33.30
Providence	55	75	73	72	72	59	93	39.79
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.

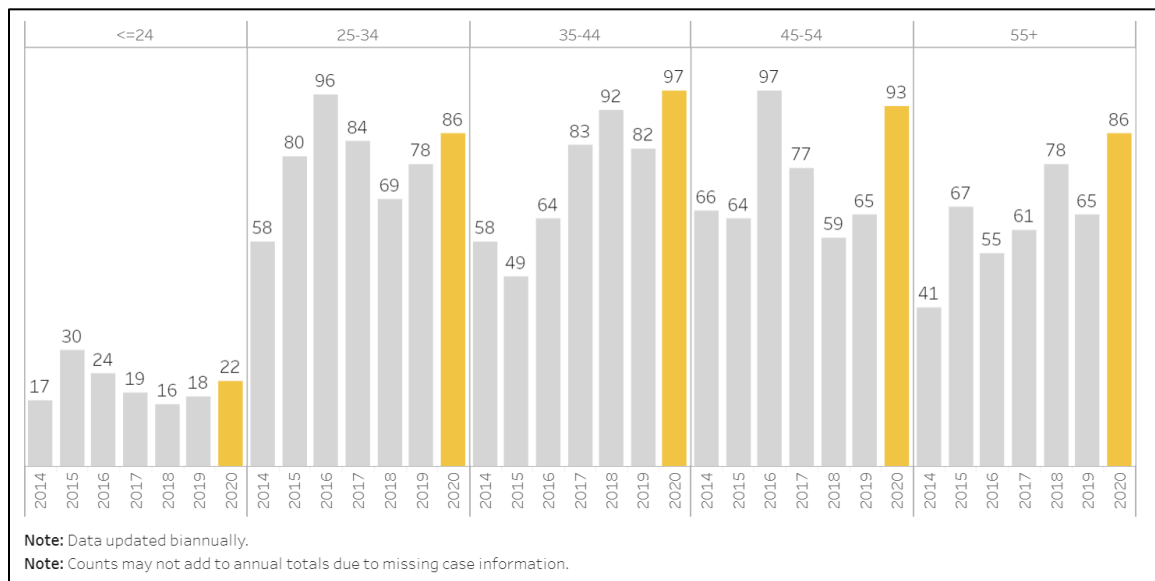
In 2019 and 2020, Rhode Island saw an increase in overdose death rates for Black/African American and Latinx residents. As reported by the Rhode Island Department of Health, this trend is happening across the country and is rooted in systemic racism and related health inequities. These health



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.

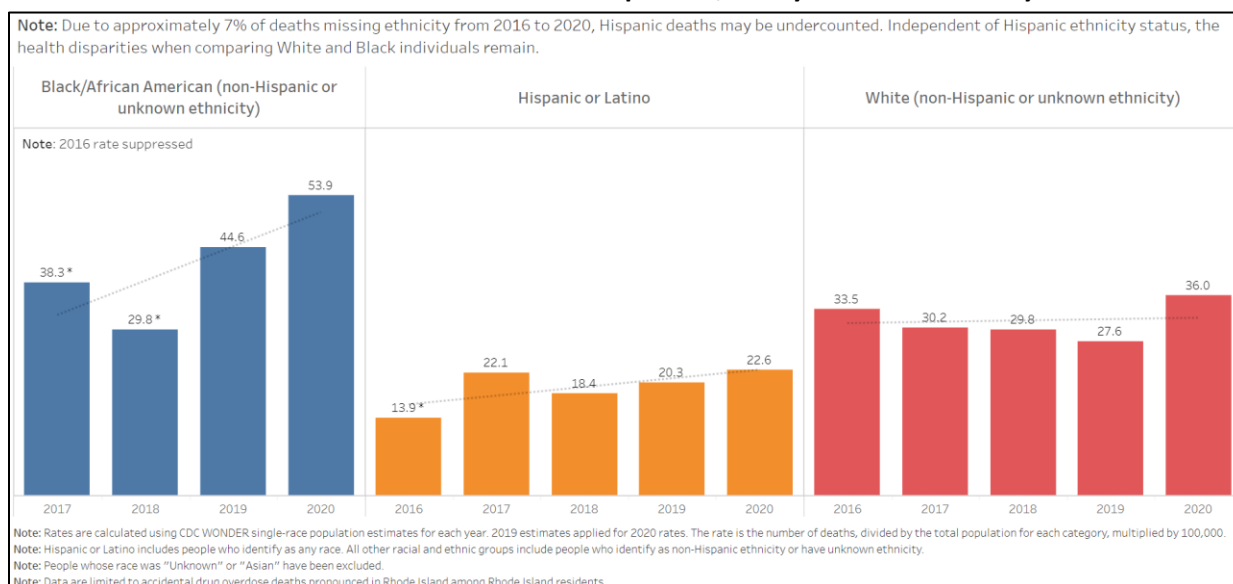
Of note, methadone uptake declined among all racial and ethnic groups in 2020, following two years of growth. This finding is likely a direct result of the COVID-19 pandemic, which caused delays in care and treatment across the healthcare system.

2014-2020 Overdose Deaths by Age



Source: Prevent Overdose RI

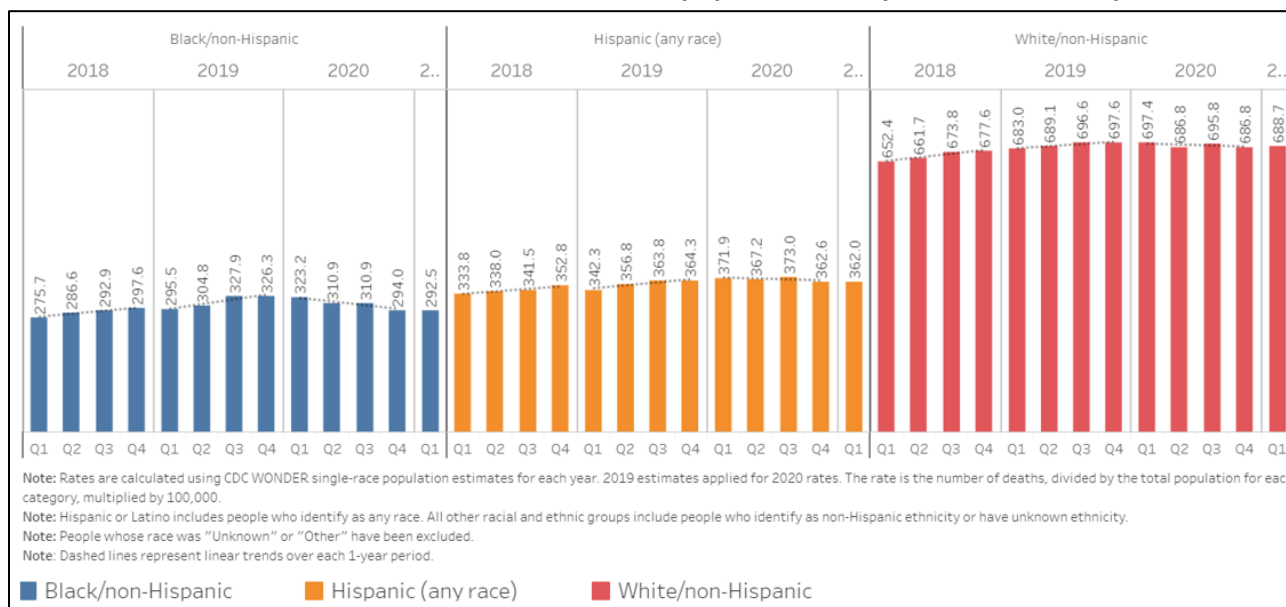
2016-2020 Overdose Death Rate per 100,000 by Race and Ethnicity



Source: Prevent Overdose RI



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



Source: Prevent Overdose RI

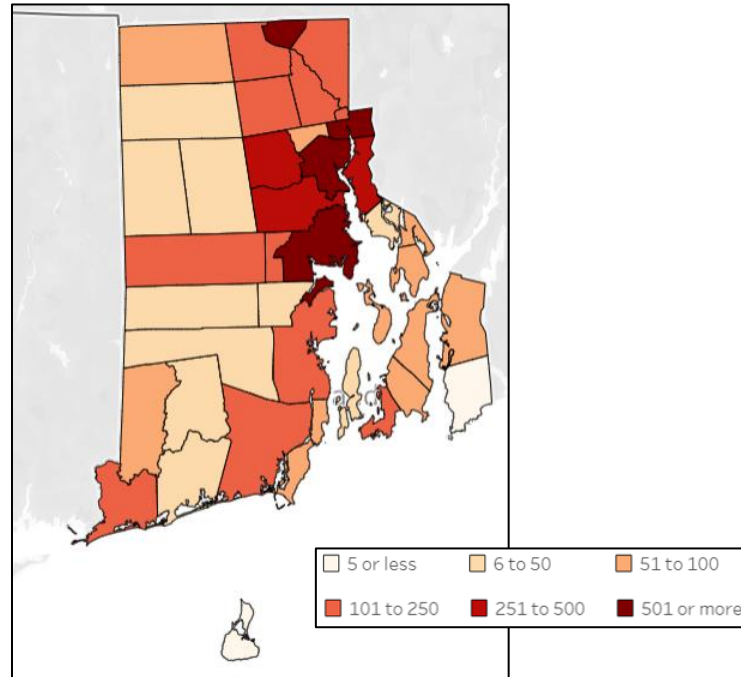
Opioid use disorder and overdoses have had a significant impact on local health resources. The following data depict Emergency Medical Services (EMS) response and ED visits for suspected overdoses.

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.

While the number of overdose deaths generally increased in the core cities from 2019 to 2020, the number of EMS calls declined, 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



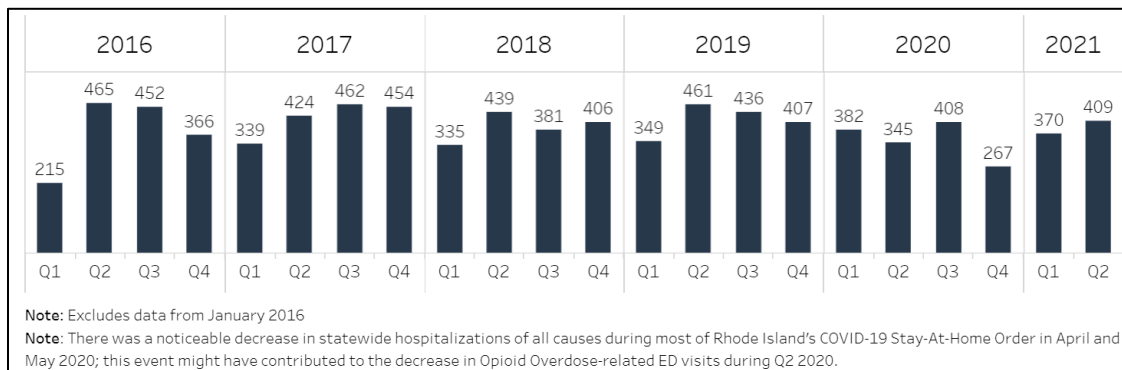
Source: Prevent Overdose RI

EMS Reports for Suspected Opioid Overdose by Core City

	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
Pawtucket	159	148	88	103	95	833.0
Providence	568	433	471	535	402	1,353.0
Woonsocket	138	139	94	152	135	1,598.0

Source: Prevent Overdose RI

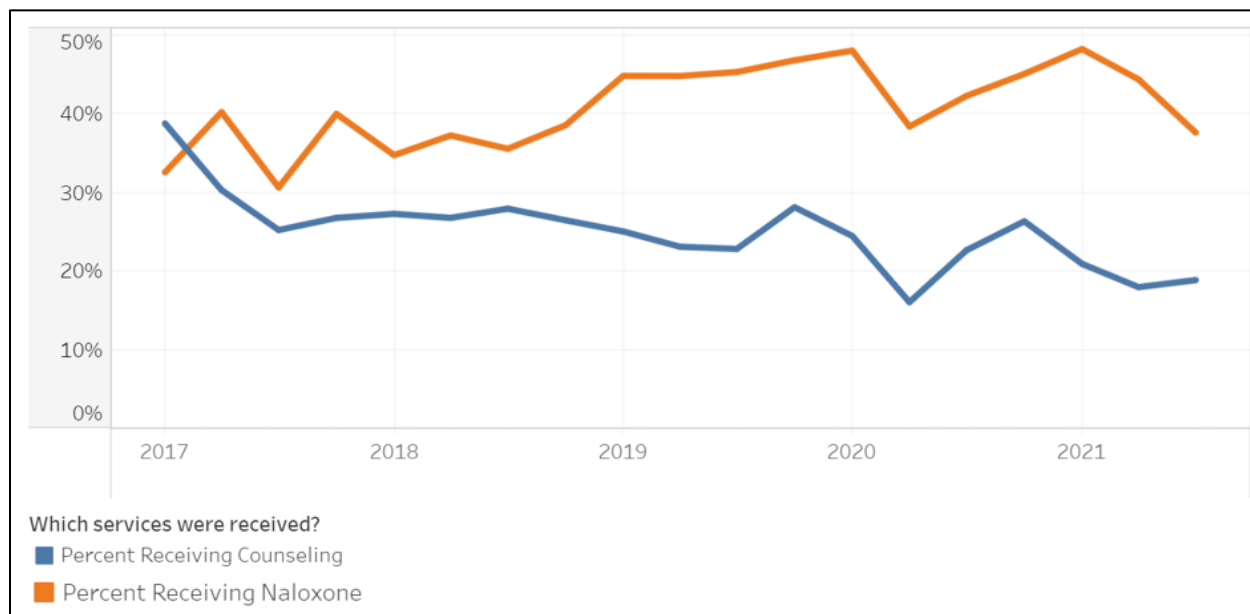
2016 - July 2021 Emergency Department Visits for Opioid Overdose



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



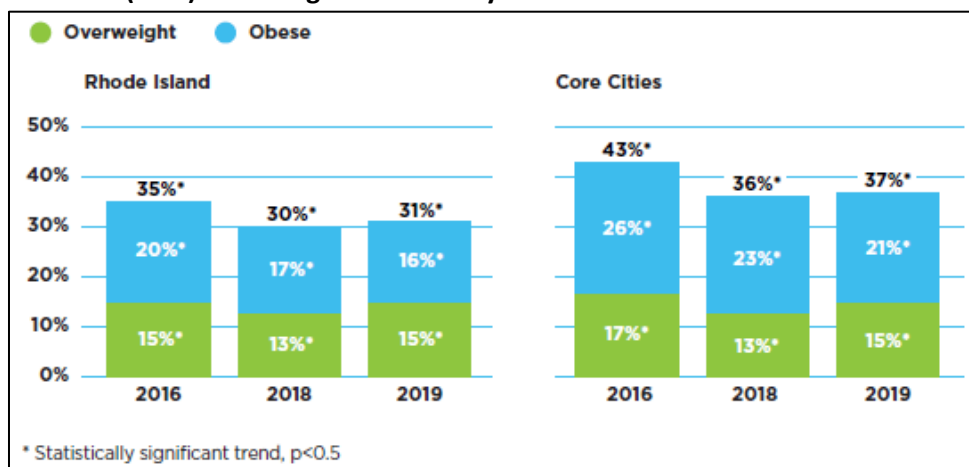
Youth Health

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.**

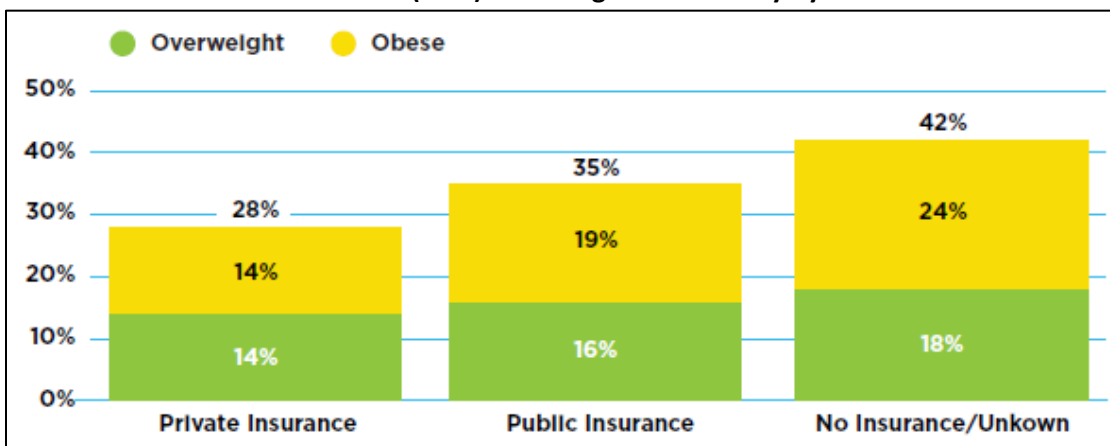
Youth (2-17) Overweight and Obesity for Rhode Island and The Core Cities



Source: Rhode Island Kids Count

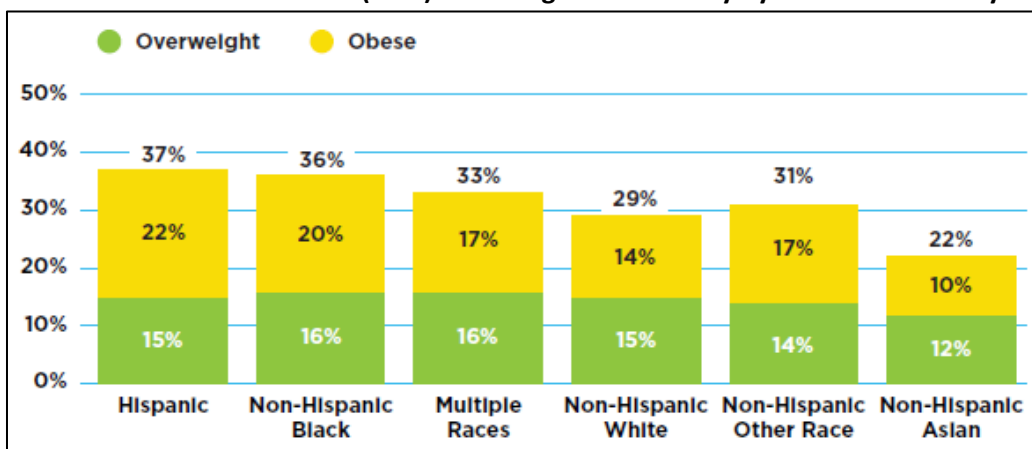


2019 Rhode Island Youth (2-17) Overweight and Obesity by Insurance Status



Source: Rhode Island Kids Count

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

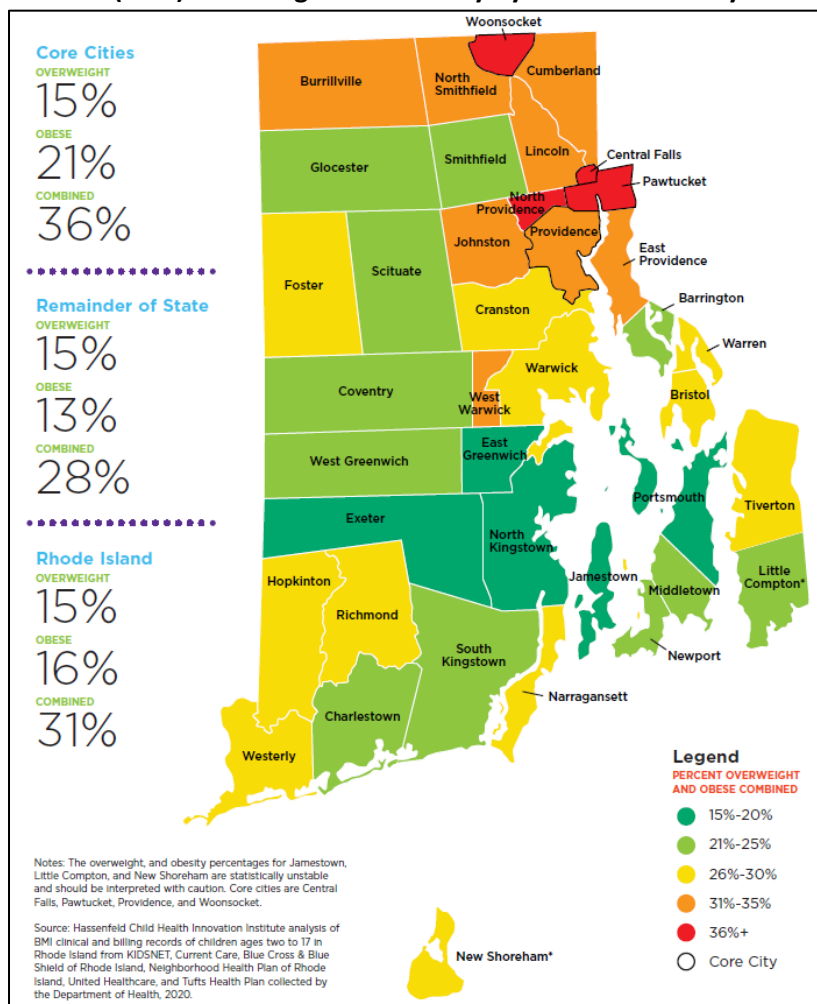


Source: Rhode Island Kids Count

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. Central Falls (50%) and Woonsocket (41%) have the highest proportions of overweight or obese youth of any city or town in Rhode Island.



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 Core City

	Overweight	Obese	Combined
Central Falls	20%	30%	50%
Pawtucket	17%	22%	39%
Providence	14%	19%	33%
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. While youth mental health services are improving statewide, psychiatric care continues to be a needed, limited resource across Rhode Island. **The number of youth 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 youth 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%

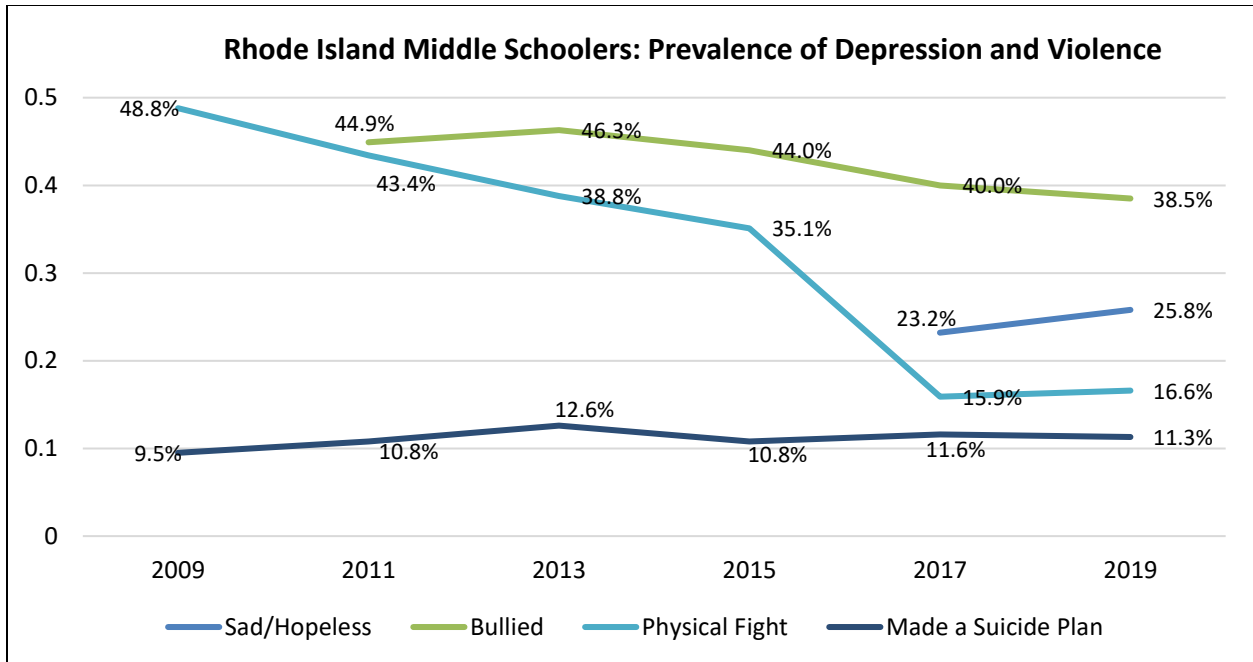
Source: Centers for Disease Control and Prevention, YRBS

2019 Rhode Island High School Students Reporting an Attempted Suicide

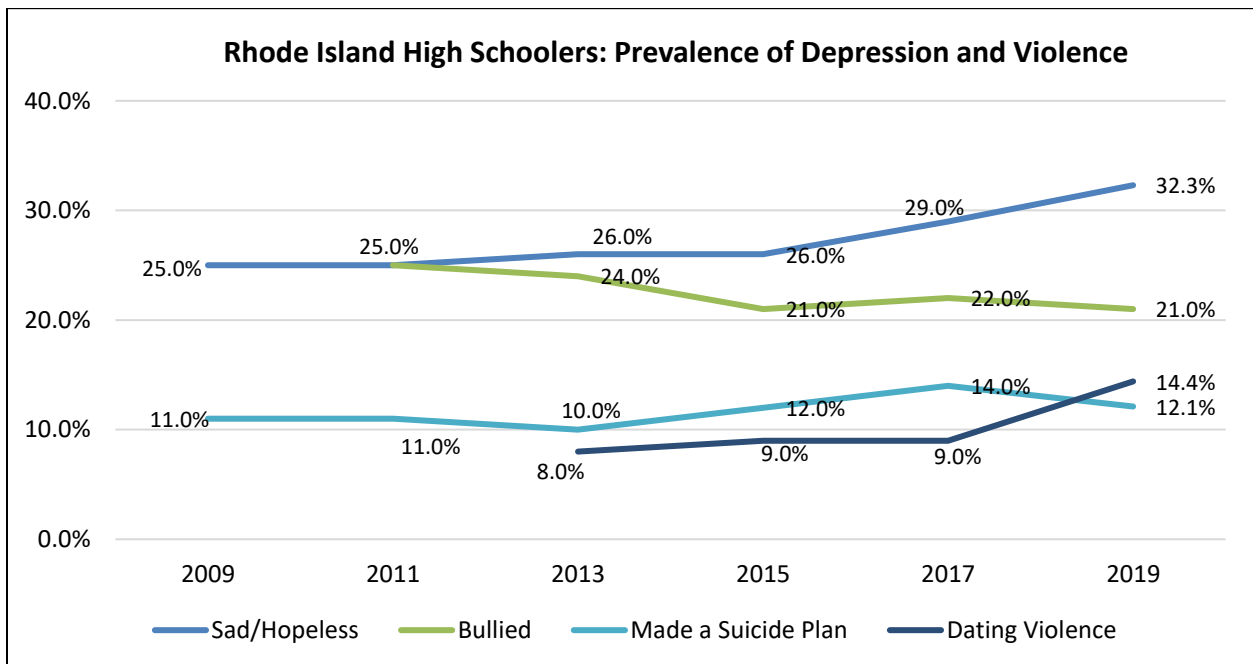
	Percent
Gender	
Female	13.5%
Male	15.5%
Race and Ethnicity	
White	12.1%
Black or African American	18.3%
Latinx origin (any race)	17.7%
Sexual Identity	
Lesbian, Gay, Bisexual (LGB)	21.6%
Straight	13.3%

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

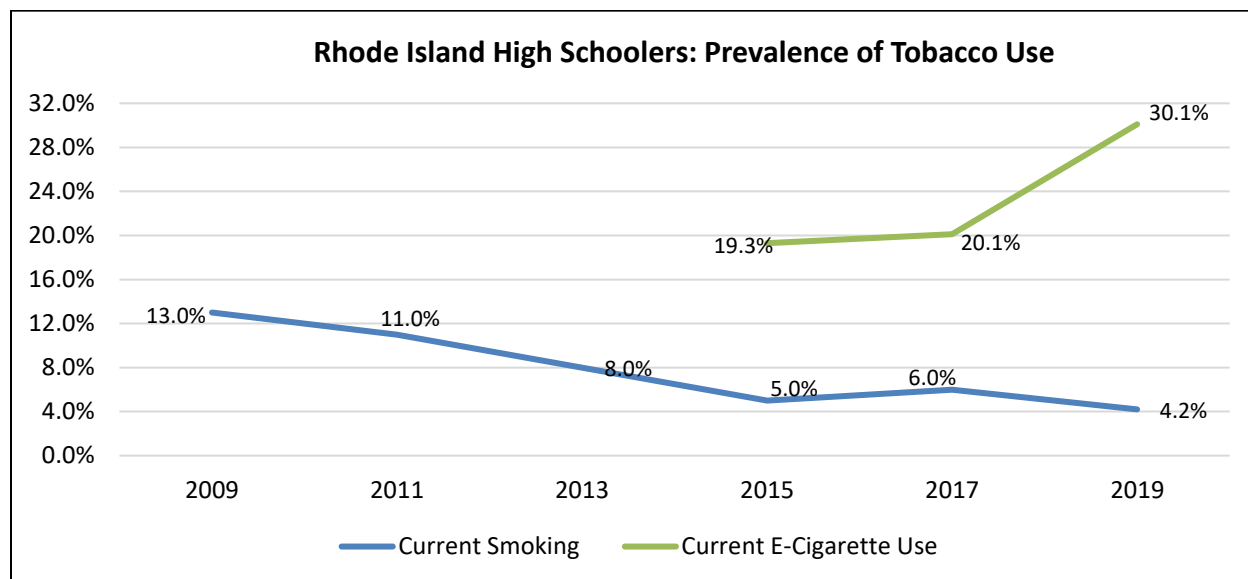


Source: Rhode Island Department of Health



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

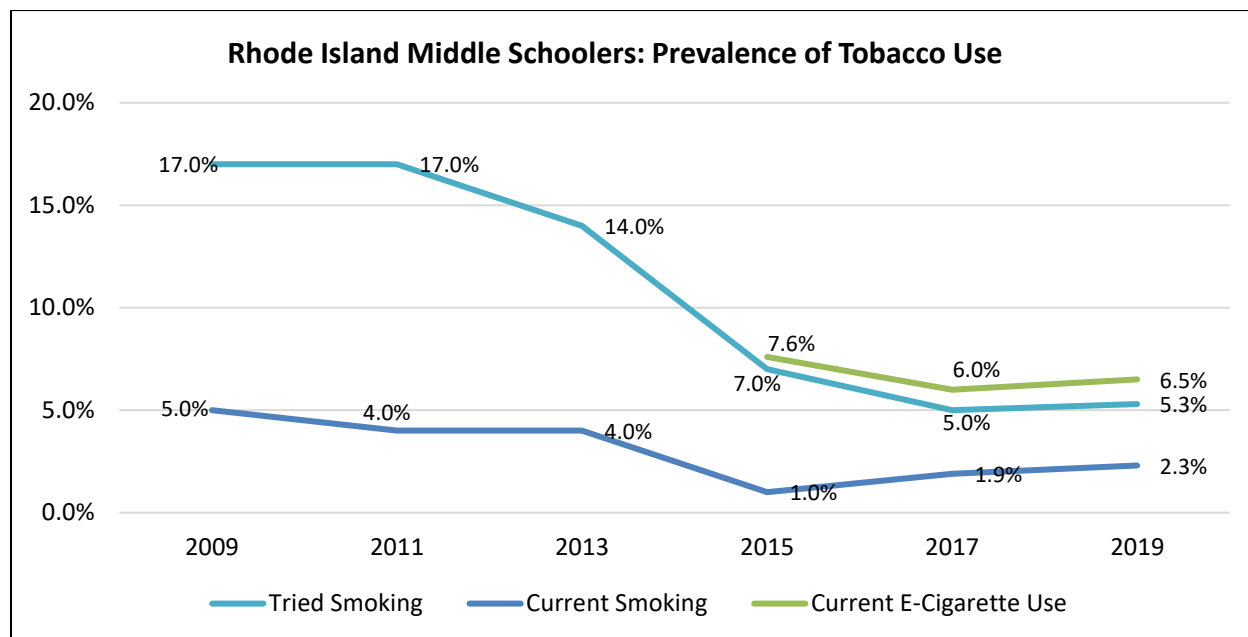
2019 Rhode Island High School Students Reporting Current (within past 30 days) E-Cigarette Use

	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

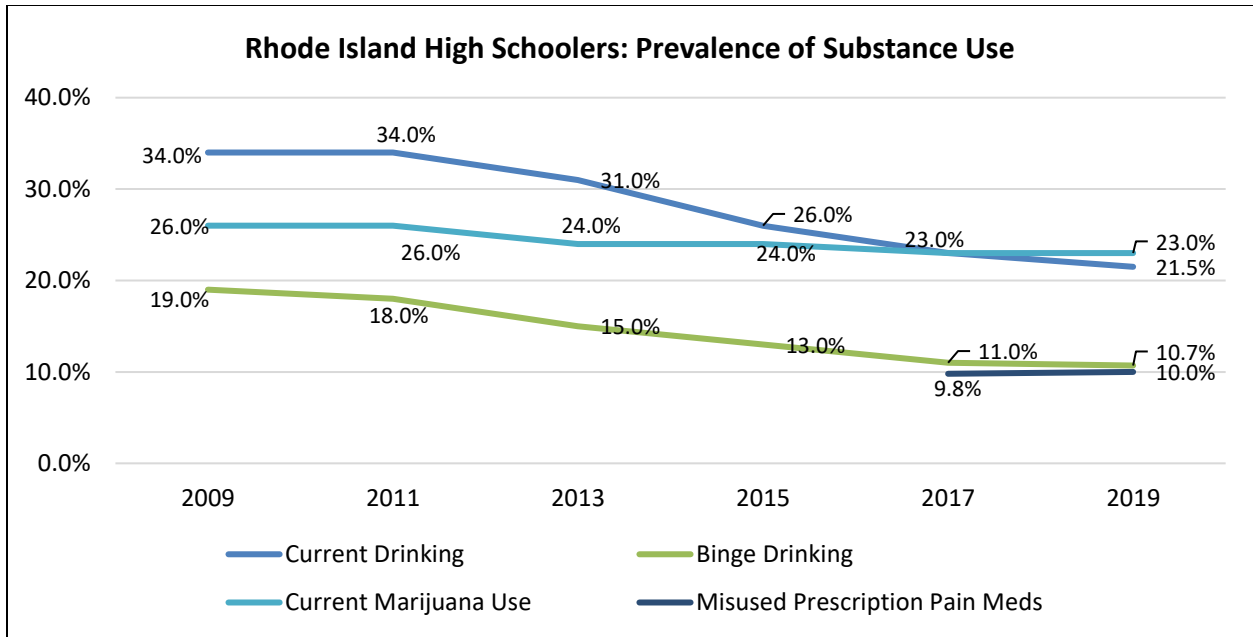


Approximately 16% of Rhode Island middle school students have tried e-cigarettes. **While the percentage of current e-cigarette users has been stable since 2015, the percentage of current traditional cigarette smokers is on the rise, suggesting an increase in overall tobacco product use.**

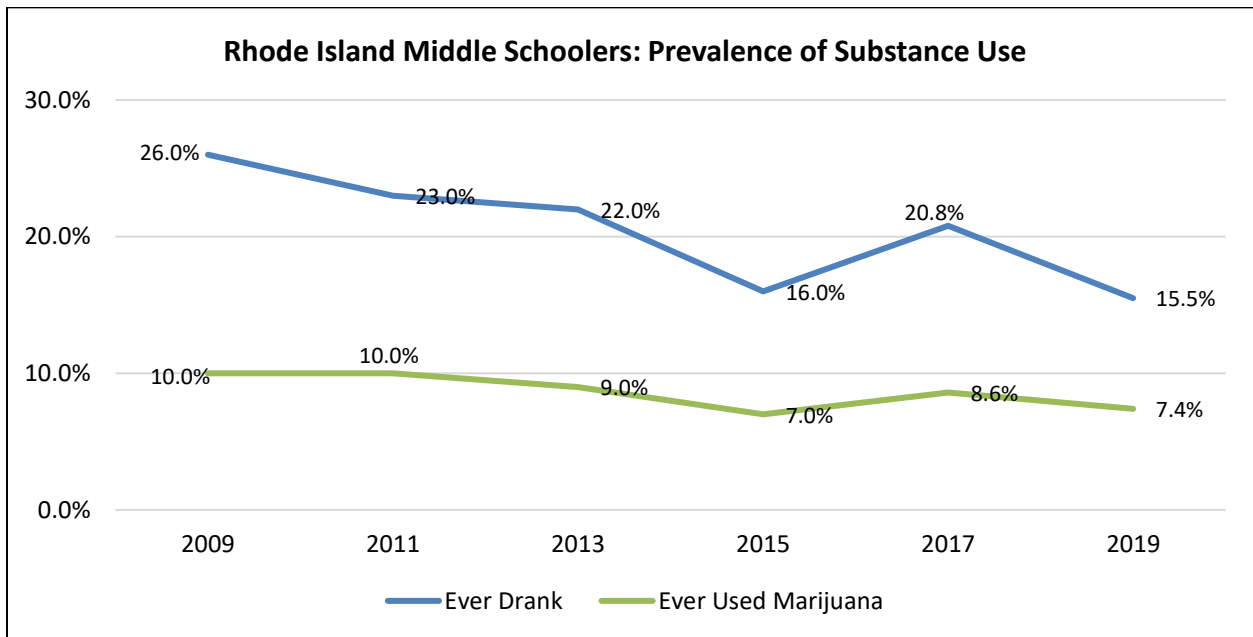


Source: Rhode Island Department of Health

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 core cities, Woonsocket and Central Falls continue to have the highest rates of child abuse/neglect in the state, although rates declined from the 2019 CHNA.



2020 Indicated Investigations of Child Abuse and Neglect by Core City

	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
Pawtucket	203	12.2	300	18.1
Providence	403	9.7	623	15.0
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 Core City*

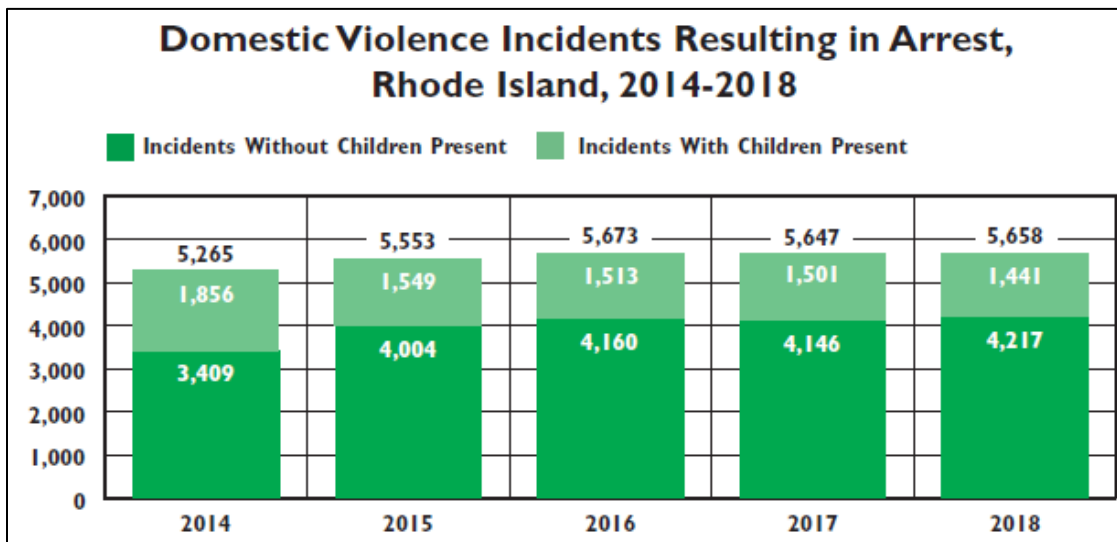
	Number of Children of Incarcerated Parents	Rate per 1,000 Children
Central Falls	113	20.0
Pawtucket	191	11.5
Providence	685	16.5
Woonsocket	162	16.4
Four Core Cities	1,151	15.6
2019 CHNA Comparison	1,676	22.7
Remainder of Rhode Island	656	4.4
2019 CHNA Comparison	1,173	7.8

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 one-quarter of incidents within the core cities had children present.

2018 Children Present During Domestic Violence Incidents Resulting in Arrest by Core City

	Number of Incidents with Children Present	Percent with Children Present
Central Falls	46	26%
Pawtucket	221	25%
Providence	297	29%
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, 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 Core City

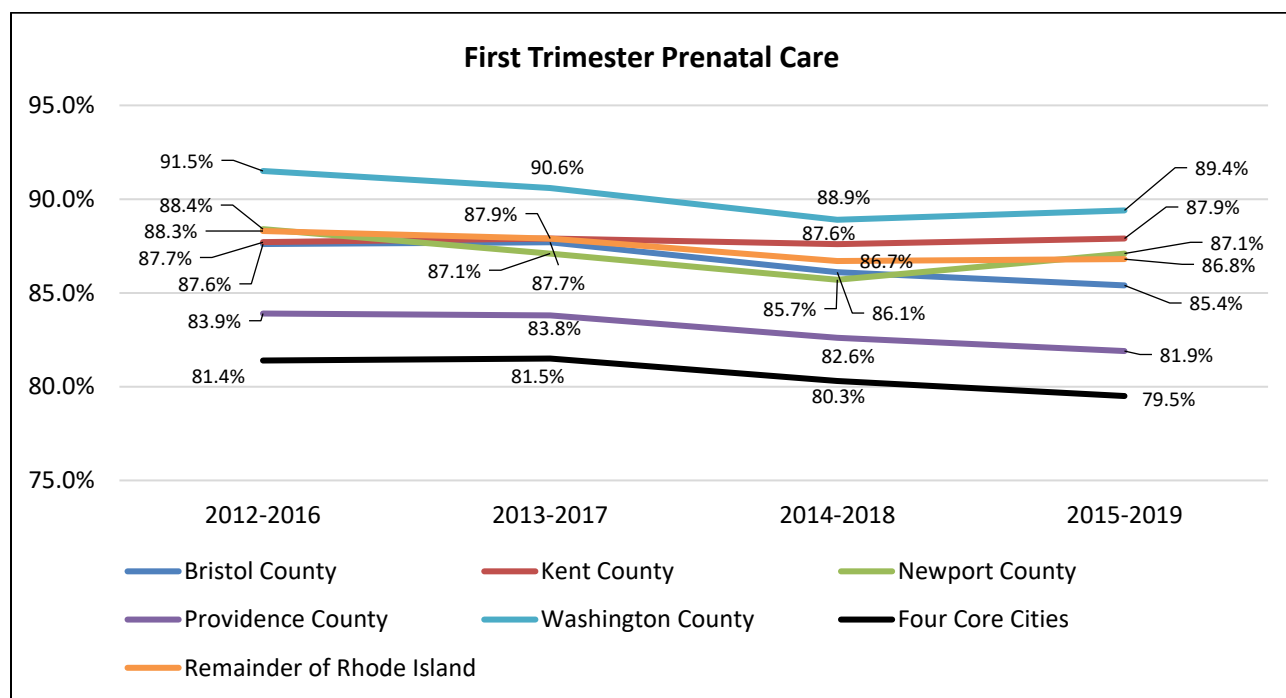
	Percent of All Births to Teens (15-19)	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Breastfeeding at Time of Birth
Central Falls	9.2% (n=144)	78.8%	11.0%	8.7%	60%
Pawtucket	4.6% (n=217)	80.6%	9.7%	8.8%	65%
Providence	6.5% (n=797)	79.3%	9.7%	8.7%	63%
Woonsocket	4.0% (n=201)	78.8%	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

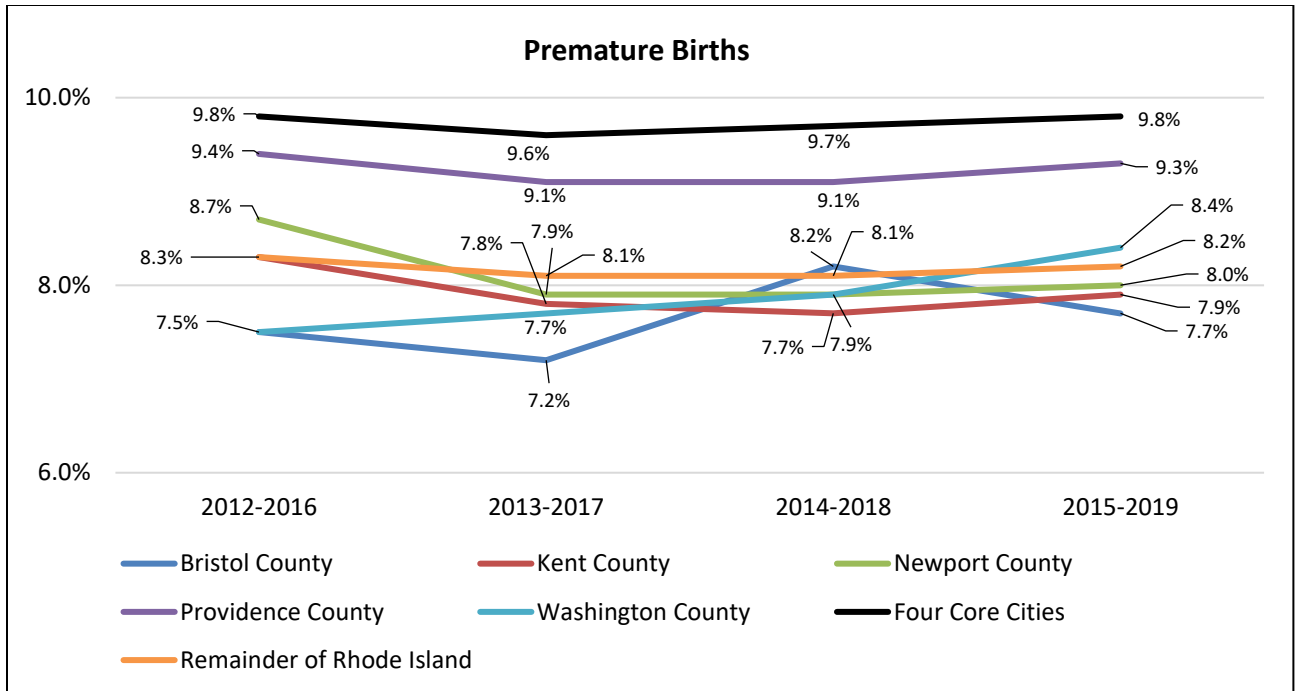


The following graphs depict trends in prenatal care and birth outcomes from 2012-2016 to 2015-2019. **The percentage of pregnant people receiving first trimester prenatal care declined in both the core cities and the remainder of the state, and in all counties except Kent.** In Bristol, Providence, and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

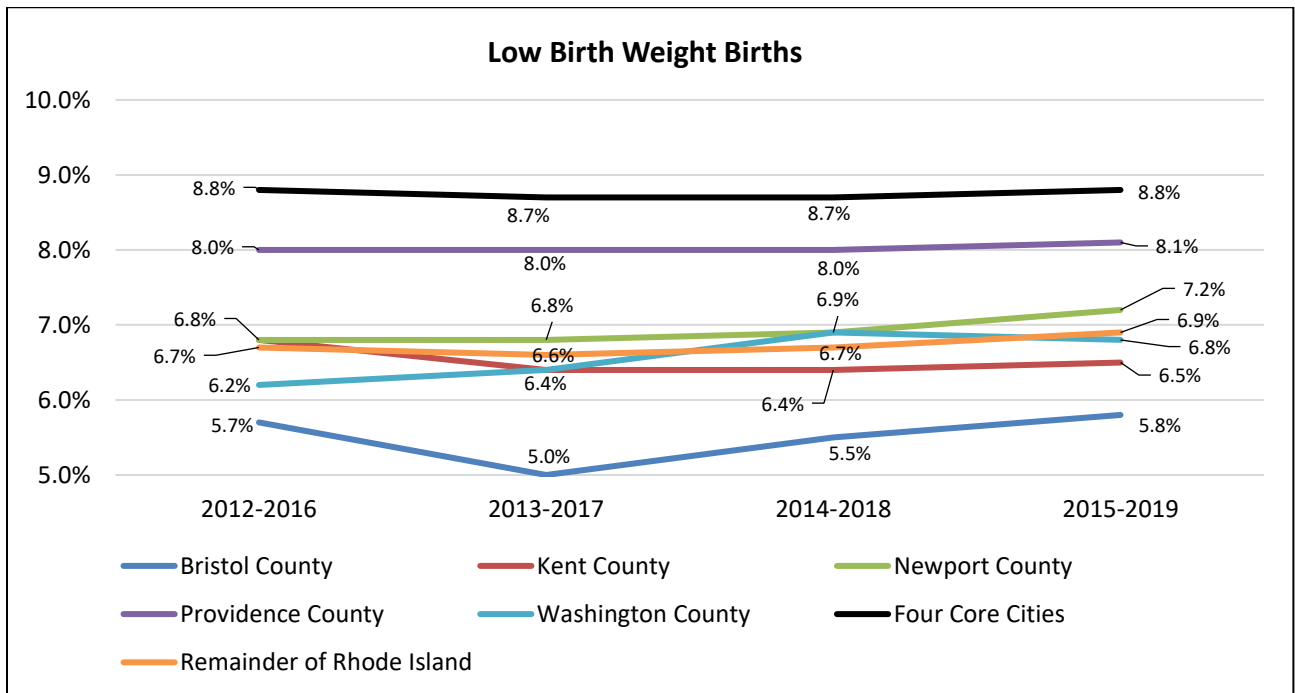
The percentage of babies breastfed at the time of birth also declined statewide, driven by a 10-percentage point decline in the core cities from 2012-2016 to 2015-2019. Based on known racial and ethnic disparities, the decline in breastfeeding was likely higher among non-White infants, particularly Black/African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



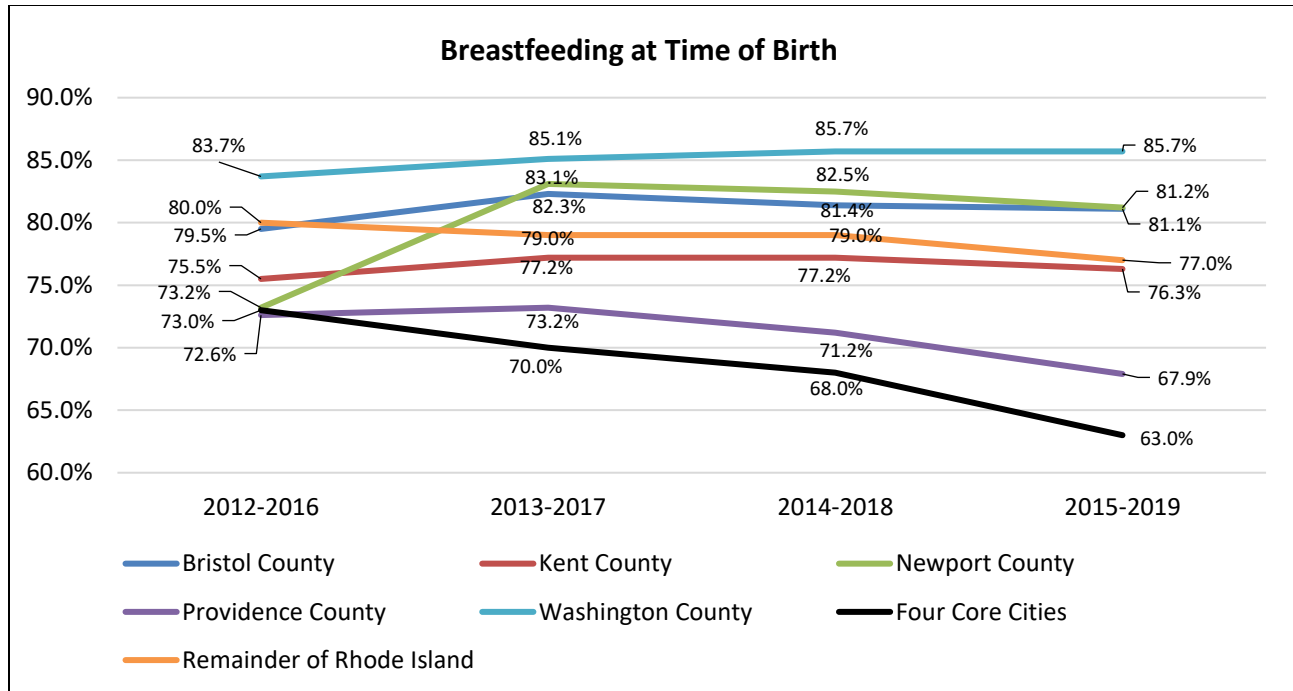
Source: Rhode Island Kids Count



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.



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