

RHODE ISLAND

Commission for Health Advocacy  
and Equity Legislative Report

2020



*“Of all the forms of inequality, injustice in healthcare is the most shocking and inhumane.”*

Martin Luther King, Jr.

Dear fellow Rhode Islanders,

We are pleased to support this important report of the Rhode Island Commission for Health Advocacy and Equity (CHAE). The goal of this report is to highlight how factors like race, gender, and class intersect with historical injustices and forces in our institutions and systems to drive health inequities for many individuals and families in Rhode Island.

The Rhode Island Department of Health (RIDOH) and the CHAE share an important focus. We are working to build a Rhode Island where every person has a fair and just opportunity to be healthy, prosper, and reach their full potential – regardless of race, ethnicity, ZIP code, income, education, employment, sexual orientation, gender identity, or any other factor. This work requires a deep commitment to addressing the root causes of health issues in our communities, including structural racism, discrimination and their consequences. These consequences include poverty and unequal access to good jobs with fair pay, affordable housing, safe neighborhoods, and more.

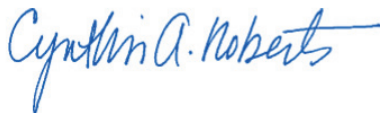
This is a big task. But we all share responsibility for getting it done. We’re also making progress every day, in big and small ways. For example, this report uses data from the recently developed Rhode Island Health Equity Measures. For the first time, we have adopted a standard dataset we can use across sectors to measure the factors in our communities, like education and transportation, that affect up to 80% of our health outcomes. We can also use these data to identify gaps and drive investments in the places that need it most. You can learn more about Rhode Island’s Health Equity Measures at [www.health.ri.gov/data/healthequity](http://www.health.ri.gov/data/healthequity).

We commend the CHAE’s dedication and commitment to building healthier, more resilient, and more just communities across Rhode Island. We look forward to partnering with them to ensure that Rhode Island is a state where every person in every community can thrive.

Sincerely,



Nicole Alexander-Scott, MD, MPH  
Director  
Rhode Island Department of Health



Cynthia Roberts, PhD and Larry Warner, MPH  
Co-Chairs  
Rhode Island Commission for Health Advocacy  
and Equity



# ABOUT THIS REPORT

Imagine a Rhode Island where every person has a fair and just opportunity to be healthy. This is known as health equity. We all want to live in a place without obstacles to health like poverty and discrimination. And we all want to live in communities where we and our loved ones can access good jobs with fair pay, quality education, and safe environments. Yet in every neighborhood, a range of conditions affect people's health and safety every day.

Up to 80% of our health is determined outside the doctor's office and inside our homes, schools, jobs, and communities. Unfortunately, generations-long social, economic, and environmental inequities have resulted in adverse health outcomes that have affected communities very differently. These inequities have a greater influence on health outcomes than individual choices or one's ability to access healthcare.

Reducing these inequities can help improve opportunities for every Rhode Islander. To improve surveillance of the socioeconomic and environmental factors that drive health inequities, RIDOH collaborated with partners from diverse sectors to form the Community Health Assessment Group (CHAG) and develop Rhode Island's first set of statewide Health Equity Measures. This report provides data related to these measures to help educate the Rhode Island General Assembly, State agencies, and partner organizations on health inequities in Rhode Island. For each measure, the report also includes examples of programs and policies in Rhode Island and across the country that are showing promise for reducing inequities.

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## METHODOLOGY

The CHAG includes representatives from local and State government, academia, philanthropy, community-based organizations, healthcare, Health Equity Zones, nonprofit policy and advocacy organizations, and the private sector. Through a two-year, extensive community engagement process, the CHAG developed a set of 15 measures in five domains that affect health equity: integrated healthcare, community resiliency, physical environment, socioeconomics, and community trauma. Data for each measure come from various sources. The CHAG examined more than 180 potential measures and developed a set of criteria to guide the selection of this core set of measures. Some of the criteria included the ability to access publicly available data sources specific to Rhode Island; the ability to update the data regularly; the ability to stratify state-level data by sociodemographic characteristics (race/ethnicity, city/town, disability status, income, education, etc.); and how universally the measures could be applied in different communities across the state. The measures are strategically aligned with, and intended to complement, other measures related to socioeconomic and environmental determinants of health.

## HOW THIS REPORT CAN BE USED

Policy makers, State agencies, healthcare providers, and community partners can use the data in this report to collaborate across sectors to address barriers to health and advance health equity. Each of the Rhode Island Health Equity Measures reflects systems and policies that affect the ability of every Rhode Islander to live a healthy life and achieve their full potential. The data available for each measure can help establish a baseline, identify gaps, determine policy priorities, and assess the impact of health equity initiatives. They also provide a way for Rhode Island to measure its shared progress toward advancing health equity.

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# INTEGRATED HEALTHCARE

Integrated healthcare is an emerging model for treating the whole person. It offers a more efficient and effective way for health professionals to work together by coordinating diagnoses and treatment of all health conditions. The practice of integrating primary care and behavioral health was one of several provisions of the *Affordable Care Act* that was signed into law in 2010.<sup>1</sup>

By expanding access to quality care and leveraging limited resources, integrated healthcare can lead to improved overall health for individuals, families, and communities. It also allows for healthcare cost savings by helping to reduce hospital and emergency room utilization rates. A 2014 report from the American Psychiatric Association found that successful integrated care models have the potential to save the US healthcare system \$26 to \$48 billion annually.<sup>2</sup>

## HEALTH EQUITY MEASURES

### Healthcare Access

Access to medical and dental care helps a person to live a healthy life and prevents more costly medical conditions from developing. Yet gaps in access to affordable care can limit opportunities for health and well-being for some Rhode Islanders.

This measure is based on two questions in the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS) survey that ask respondents, “Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?” and “During the past 12 months, was there any time when you needed dental care (including check-ups), but didn’t get it because you couldn’t afford it?” The measures are reported as the weighted percentage of respondents (non-institutionalized adults in Rhode Island) who answered “yes” to either survey question.

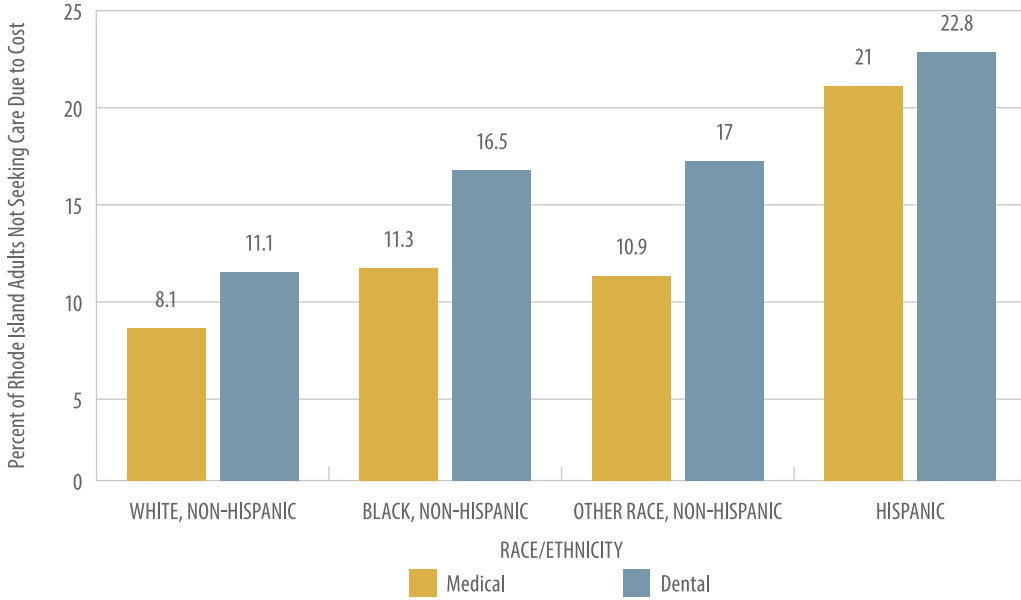
### Key findings:

- Hispanic Rhode Islanders were significantly less likely to seek medical care and dental care due to cost compared to White, non-Hispanic Rhode Islanders.
- Among Rhode Island adults with a disability, 19.3% reported not seeking medical care due to cost, and 26.7% reported not seeking dental care due to cost, compared to 7.3% and 9.0%, respectively, among adults without a disability.
- Rhode Islanders with less than a high school education were significantly less likely to seek medical care and dental care due to cost compared to those who attended at least some college.



**FIGURE 1**

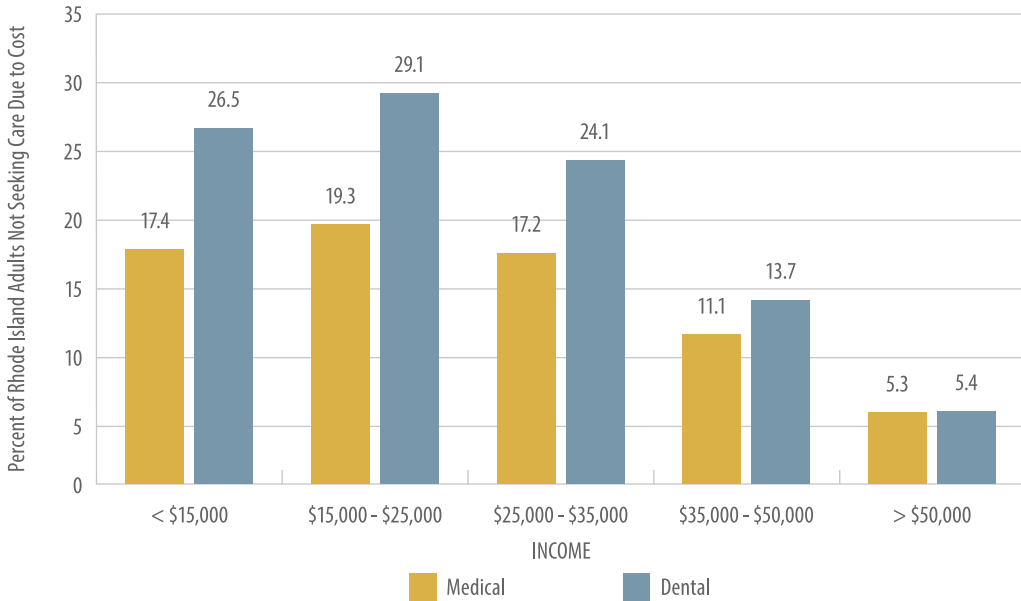
**RHODE ISLAND ADULTS REPORTING NOT SEEKING MEDICAL CARE OR DENTAL CARE DUE TO COST, BY RACE/ETHNICITY, 2016**



Data Source: Rhode Island Behavioral Risk Factor Surveillance System (BRFSS)

**FIGURE 2**

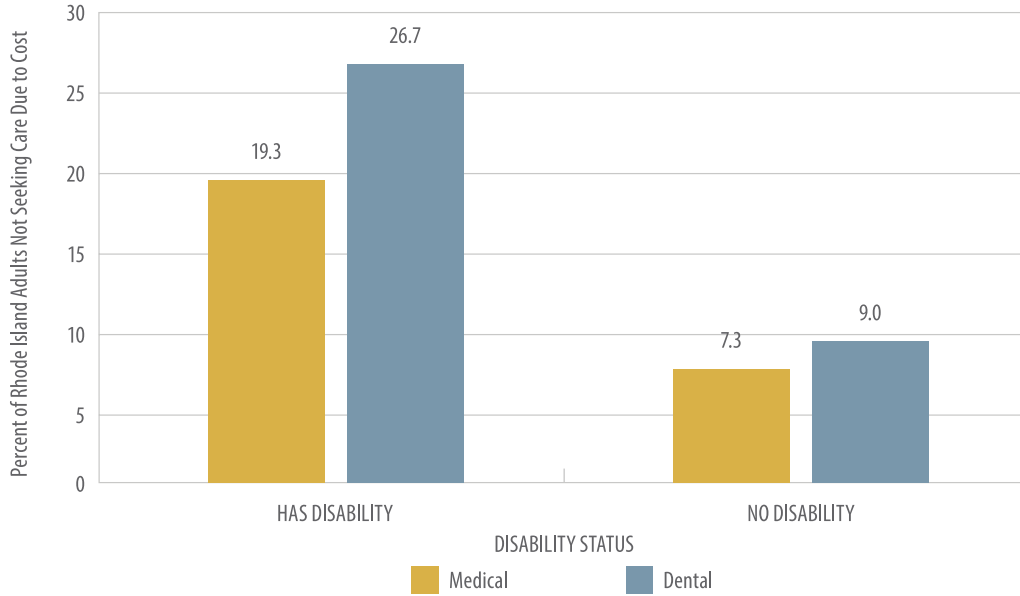
**RHODE ISLAND ADULTS REPORTING NOT SEEKING MEDICAL CARE OR DENTAL CARE DUE TO COST, BY INCOME, 2016**



Data Source: Rhode Island BRFSS

**FIGURE 3**

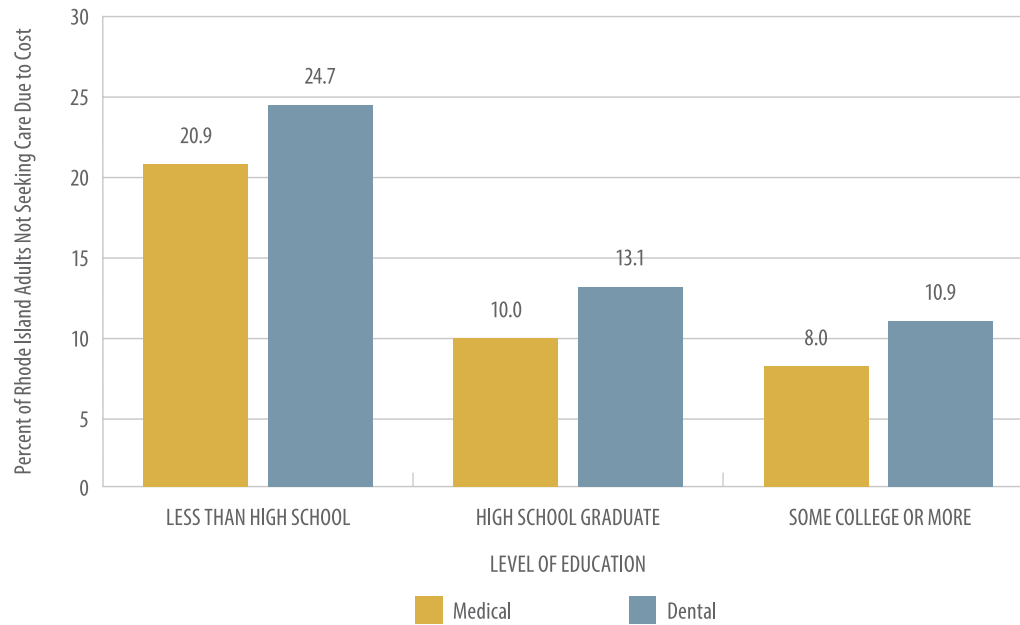
**RHODE ISLAND ADULTS REPORTING NOT SEEKING MEDICAL CARE OR DENTAL CARE DUE TO COST, BY DISABILITY STATUS, 2016**



Data Source: Rhode Island BRFSS

**FIGURE 4**

**RHODE ISLAND ADULTS REPORTING NOT SEEKING MEDICAL CARE OR DENTAL CARE DUE TO COST, BY EDUCATION LEVEL, 2016**



Data Source: Rhode Island BRFSS





## MAKING THE CONNECTION

*The United States is known for the quality of its healthcare, but the quality of care is useless if systemic barriers related to cost, access, language, or transportation prevent individuals and families from pursuing needed services. Even if all these challenges were fixed, patient-provider interactions also matter. Having a good bedside manner is no longer the measure for meaningful engagement. If patients are unable to receive culturally appropriate care that enables them to feel comfortable with, trusting of, and respected in the healthcare setting, then inequities in health and healthcare will persist. As one research article powerfully phrased it, “Se necesita saber mas que Español para servir a los Latinos,” or “Caring for Latinos requires more than just speaking Spanish.”<sup>3</sup>*

*Given the changing demographics of this country, public health practitioners and healthcare providers (including oral health professionals) must step forward to help dismantle unjust barriers to healthcare access. For example, instead of asking patients to bring their own interpreters to appointments, healthcare settings must do more to adhere to, and reinforce, the national Culturally and Linguistically Appropriate Services (CLAS) Standards. Systemic approaches like moving toward value-based models of care and challenging institutional policies that maintain the underrepresentation of certain racial and ethnic demographics in senior management, across health and healthcare professions, and on certifying boards offers tremendous opportunity for policy makers to focus their attention for better health outcomes for all.*

### Social Services

The Supplemental Nutrition Assistance Program (SNAP) provides low-income families with resources to purchase food. Access to this service can help relieve food insecurity. This measure looks at how many individuals who are eligible for SNAP benefits, based on income, are receiving those benefits. For this measure, a higher percent is favorable. A lower percent suggests that fewer people are accessing or aware of SNAP or that more eligible people are experiencing some other barrier to receiving SNAP benefits. For example, in Pawtucket, about 72% of the estimated income-eligible population is enrolled in SNAP. One could also say that just more than seven out of every 10 income-eligible people in Pawtucket are enrolled in SNAP. However, in Bristol, only about 40%, or four out of every 10 income-eligible individuals, are currently enrolled in SNAP.

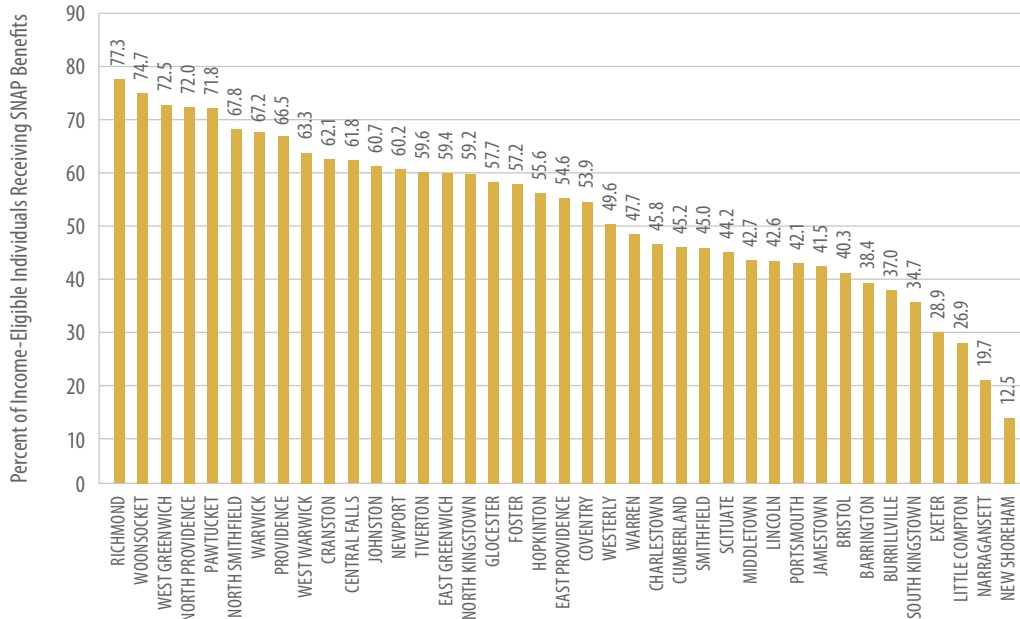
#### Key findings:

- Richmond, Woonsocket, and West Greenwich had the highest percentages of income-eligible individuals enrolled in SNAP.
- Rhode Island’s core cities - Providence, Central Falls, Pawtucket, and Woonsocket - are in the top 11 of Rhode Island’s 39 municipalities for the percent of income-eligible people enrolled in SNAP.



FIGURE 5

**INCOME-ELIGIBLE INDIVIDUALS RECEIVING SNAP BENEFITS, BY MUNICIPALITY, RHODE ISLAND, 2016**



Data Source: Supplemental Nutrition Assistance Program (SNAP)



## MAKING THE CONNECTION

Creating sustainable, effective linkages between the clinical and community settings can improve patients' access to preventive and chronic care services by developing partnerships among organizations that share a common goal of improving the health of people and the communities in which they live.<sup>4</sup> Boston Medical Center (BMC) has chosen to tackle this issue head-on for their low-income patients. BMC aligns social services with the growing field of culinary medicine that incorporates food and nutrition into the practice of medicine. The hospital's Preventive Food Pantry is a prescription-based model that links physicians and nutritionists to patients. The patient referral system is built into the electronic health record system and allows providers to customize the type of food a patient or family should receive. Families can visit the food pantry every two weeks and receive three to four days' worth of food for their household. Produce for the food pantry comes from BMC's rooftop farm that has more than 25 different crops. Farm produce is used in planning meals for the hospital's patients and in the cafeteria. BMC's on-site demonstration kitchen uses produce as well as medically and culturally appropriate food found in the food pantry to teach tailored cooking classes aimed at helping patients prevent and manage their chronic diseases. Cooking classes are also offered to BMC staff during lunch hours, as part of the hospital's refugee program, to Boston public schools, and to the families of patients.

## Behavioral Health

Naloxone is a medicine that can reverse an overdose. Improving access to naloxone helps prevent overdose deaths. This measure is expressed as the number of naloxone kits distributed per every one overdose death by municipality. A higher ratio is considered more favorable because it indicates greater availability of naloxone kits and a greater community response to overdose deaths and substance use disorder within the community. Any municipality with fewer than five overdose deaths during the year will not have valid, reportable data for this measure. (In these cases, small numbers are suppressed for purposes of statistical reliability and to protect confidentiality.) Thus, data used to compare municipalities should be interpreted with caution, because valid data only exist for areas with more than five deaths per year.

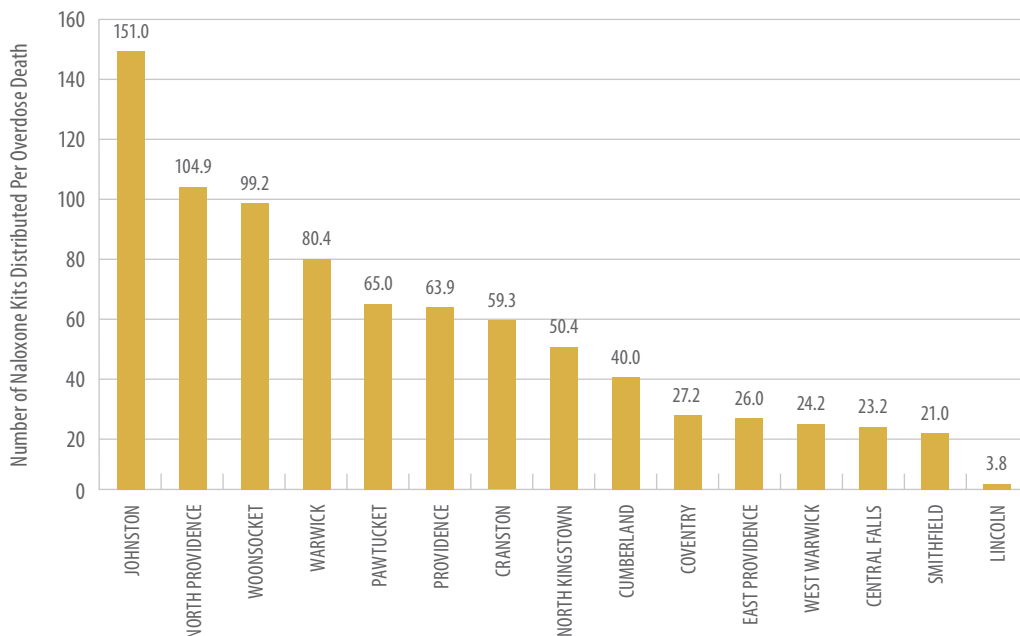
### Key findings:

- Johnston and North Providence had the highest ratios of naloxone kits to overdose deaths.
- 24 out of 39 municipalities had fewer than five overdose deaths in 2018.



FIGURE 6

### NALOXONE KITS DISTRIBUTED PER OVERDOSE DEATH, BY MUNICIPALITY, RHODE ISLAND, 2018



Data Source: Prevent Overdose RI website, [www.preventoverdoseri.org](http://www.preventoverdoseri.org)



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## MAKING THE CONNECTION

To help fight the opioid crisis, in August 2015, Governor Gina M. Raimondo established a comprehensive Overdose Prevention and Intervention Task Force. The Task Force has developed and updated an evidence-based Strategic Plan with four complementary pillars: Prevention, Rescue, Treatment and Recovery. As part of the Recovery strategy, RIDOH and its partners are encouraging the public to have the life-saving medication naloxone (also known by its brand name, Narcan®) with them so anyone can respond if they witness an overdose. Data released by RIDOH show that more than a third of overdoses in the state occur in public places. According to data published in the Rhode Island Medical Journal, 34.2% of overdoses that Rhode Island Emergency Medical Services (EMS) workers responded to in 2018 were in public areas, a significant increase from 29.6% in 2016.<sup>5</sup> Public places include parking lots, streets, restaurants, shops, and beaches.<sup>6</sup> Rhode Island's Good Samaritan Laws protect anyone who attempts, in good faith, to help someone having a medical emergency, including cases of a suspected overdose.<sup>7</sup> Naloxone is also available at local pharmacies without a prescription. All health insurers in Rhode Island cover at least one type of generic naloxone. Medicaid covers the cost of generic naloxone and Narcan® single-step intranasal spray.



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# COMMUNITY RESILIENCE

Community resilience is a process that uses a community's assets to strengthen public health and healthcare systems to improve the community's physical, behavioral, and social health. This supports the community's ability to withstand, adapt to, and recover from adversity.<sup>8</sup> Strategies for building community resilience include increasing social connectedness, reducing social vulnerabilities, and making sure everyone in a community is represented in decision making. Social connectedness relates to the frequency of interactions between people. Social ties exist among family members, close friends, neighbors, and coworkers. People also connect within a variety of social settings, including in the workplace or community. Strong social ties have a positive impact on health. Research has shown that higher levels of perceived social connectedness are associated with lower blood pressure rates, better immune responses, and lower levels of stress hormones, all of which contribute to the prevention of chronic disease.<sup>9</sup>

## HEALTH EQUITY MEASURES

### Civic Engagement

Civic engagement means working to make a difference in the life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. Civic engagement improves health by building social capital or networks of relationships among people. Civic engagement, such as volunteering, helps individuals develop a sense of purpose. This measure represents the percent of registered voters who participated in the most recent presidential election, by municipality. A lower percent of participating voters serves as a measure of lower civic engagement.

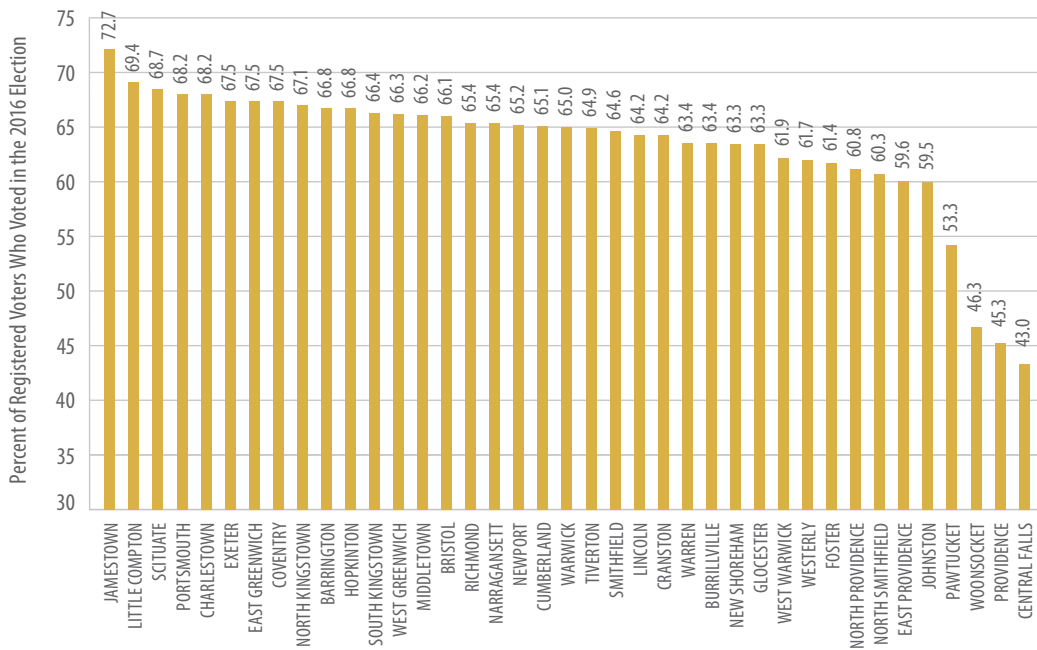
#### Key findings:

- Central Falls (43%), Providence (45.3%), Woonsocket (46.3%), and Pawtucket (53.3%) (Rhode Island's core cities) had the lowest voter participation in the 2016 election.
- Scituate, Little Compton, and Jamestown had the highest voter participation in the 2016 election.



FIGURE 7

Voter Participation in the Presidential Election, Rhode Island, 2016



Data Source: Rhode Island Board of Elections



## MAKING THE CONNECTION

Civic engagement is more than just voting. It necessitates action to help build just, equitable, and sustainable opportunities for all. It is about the right of the people to inform governance concerning the policies, programs, resources, institutions, and representation that will shape the quality of life in their neighborhoods and communities. RIDOH’s Health Equity Zones demonstrate one approach toward spurring civic engagement by organizing neighbors and community partners to collaborate to create healthy places for people to live, learn, work, and play. Research at the University of North Carolina (UNC) Charlotte’s Urban Institute at Johnson C. Smith University uncovered several key influencers of civic engagement. A major finding of their study revealed that lack of trust is a significant barrier to making civic life more meaningful and inclusive.<sup>10</sup> Other findings included family and friends are highly influential in engagement; opportunities to engage need to be diverse and considerate of different work schedules, capabilities, and personalities; and people need to understand how their engagement makes a difference.<sup>11</sup> In response to the study findings, the UNC Charlotte’s Urban Institute partnered with several stakeholders to develop YourVoiceCLT. The online survey research platform allows civic organizations, community stakeholders, academia, and policy makers to learn vital information about perceptions of key issues in their communities. Anyone older than 18 can sign up to take surveys on their computers or tablets or by phone.

## Equity in Policy

Housing affordability affects health in many ways. Having high rent or a big mortgage can force families to forgo other basic needs. It can also relegate lower-income families to substandard housing in unsafe neighborhoods with fewer resources for health. This measure combines data from two sources to estimate how many low to moderate-income housing units there are relative to the number of low to moderate-income households in each municipality. The lower the value of the ratio, the fewer low to moderate-income housing units there are relative to the number of households that may be income-eligible for those units. The number of low to moderate-income housing units is reported annually by HousingWorks RI for each municipality. Comprehensive Housing Affordability Strategy (CHAS) data were used to estimate the number of low to moderate-income households per municipality. The CHAS dataset is created by the US Census Bureau and the Department of Housing and Urban Development (HUD) to demonstrate housing needs and problems, particularly for low-income families.

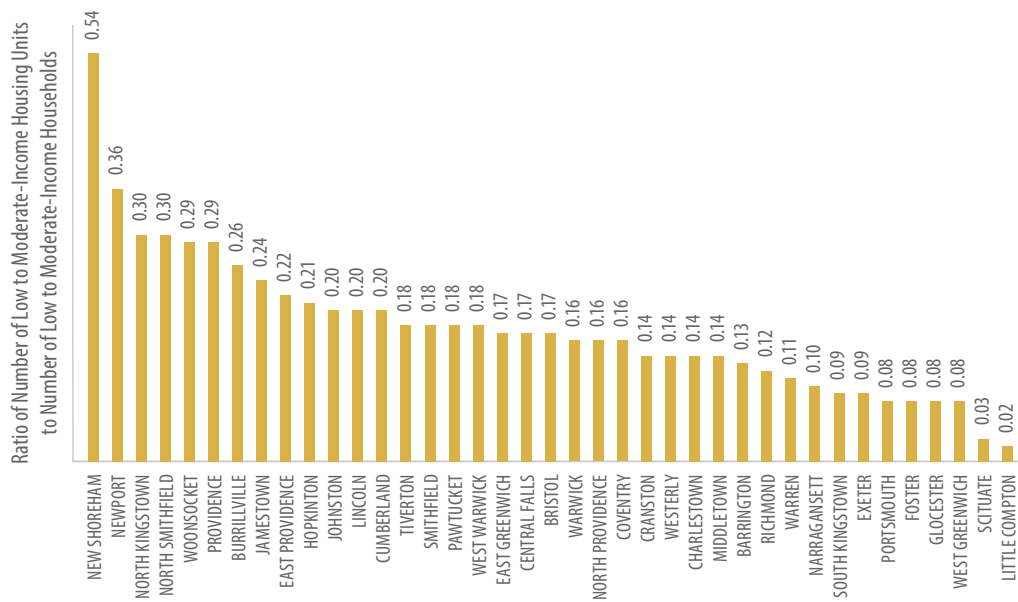
### Key findings:

- Compared to other cities and towns in Rhode Island, West Greenwich, Scituate, and Little Compton have the lowest availability of low to moderate-income housing relative to the estimated number of income-eligible households.
- No community in Rhode Island has enough low to moderate-income housing units relative to the estimated number of income-eligible households, and most communities have **less than one** low to moderate-income housing unit for every **five** income-eligible households.



FIGURE 8

Availability of Affordable Housing, by Municipality, Rhode Island, 2017



Data Source: HousingWorks RI, Comprehensive Housing Affordability Strategy



## MAKING THE CONNECTION

Housing is a predictor of educational outcomes. For low-income households, affordable housing can foster the educational success of children. Conversely, residential instability can lead to excessive absenteeism and disrupt learning. For educators, a supportive and stable home environment fosters student achievement. However, in some communities, educational outcomes are synonymous with the income levels of their residents. In short, a student’s ZIP code largely determines the quality of their schooling and the school resources available to them. Mechanisms like school enrollment policies, zoning, and property taxes are just a few of the factors that contribute to this educational inequity.

The replication of successful partnerships between education and housing is helping to inform collaborations across the public and private sectors. The Partnership for Children and Youth, a California-based advocacy and capacity-building organization, understands the effects a child’s address has on their educational outcomes. Under the organization’s Housing and Education (HousED) initiative, they work with public and affordable housing agencies to build cross-sector collaborations and leadership capacity to provide quality educational services to youth in public and affordable housing communities. One HousED member in Oakland, Lion’s Pride After School, brings after-school programming directly to the Lion Creek Crossings housing development. The program provides educational opportunities and a safe haven for the neighborhood’s children and teens.

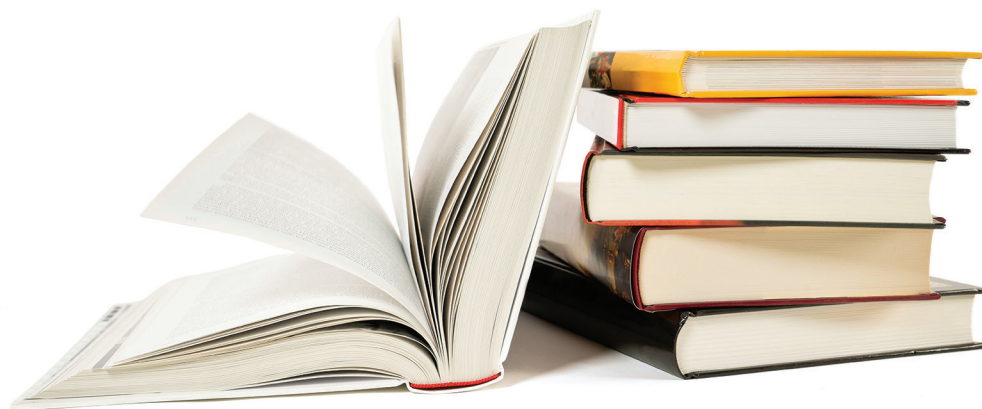




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## PHYSICAL ENVIRONMENT

Environmental factors are vital to understanding health outcomes. Research shows that the health of individuals and families, in part, is largely determined by the conditions in their environment. In fact, the Centers for Disease Control and Prevention (CDC) have determined that more than 50% of our health stems from our physical and social environment.<sup>12</sup>

Environmental factors that influence health go far beyond biological agents such as air, water, and climate. Public health also considers the types of policies and investments in housing, transportation, safety, public recreational spaces such as parks and playgrounds, and the aesthetics of streets and neighborhoods. Whether in an urban or rural environment, these factors affect large groups that share common living or working spaces. They can also account for vast differences in health status across ZIP codes and geographic locations.

### HEALTH EQUITY MEASURES

#### Natural Environment

Trees promote health in many ways. They help clean the air, promote outdoor physical activity, improve quality of life, and protect the environment. This measure shows the percent of land with tree canopy cover in each municipality in Rhode Island and is based on a report conducted in 2014 by the Rhode Island Department of Environmental Management's (DEM) Division of Forest Environment. For this indicator, a high percent of tree canopy cover is considered a more favorable outcome.

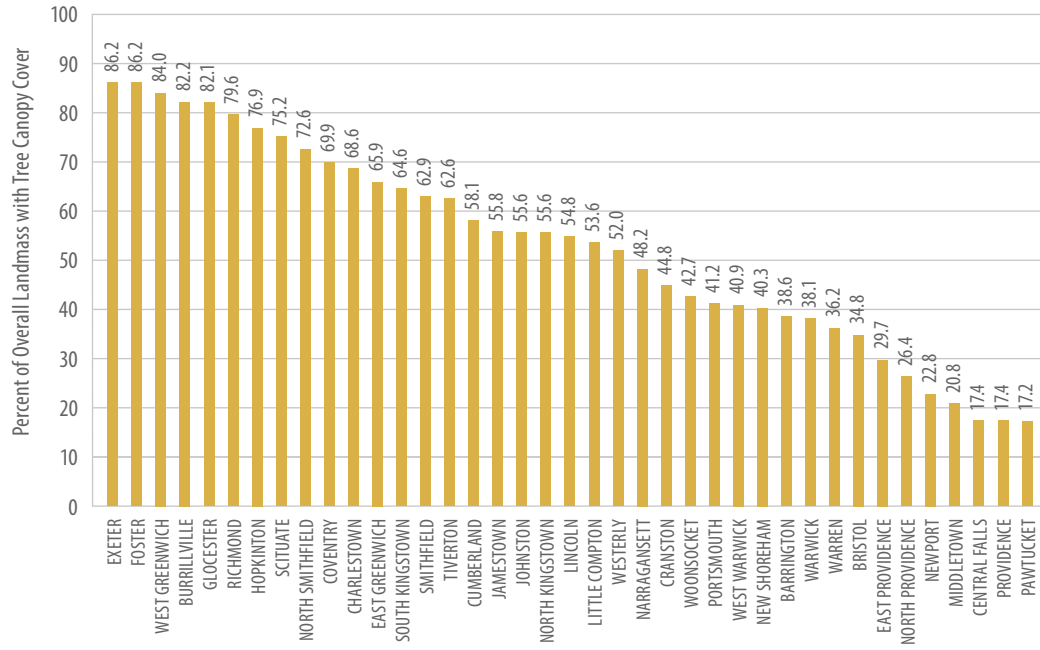
#### Key findings:

- Pawtucket, Central Falls, and Providence have the lowest percentages of tree canopy cover, each with less than 18% of land with tree canopy cover.
- West Greenwich, Exeter, and Foster have the highest percentages of tree canopy cover, each with more than 84% of land with tree canopy cover.



**FIGURE 9**

**Tree Canopy Cover, by Municipality, Rhode Island, 2014**



Data Source: US Department of Agriculture Forest Service i-Tree Tools



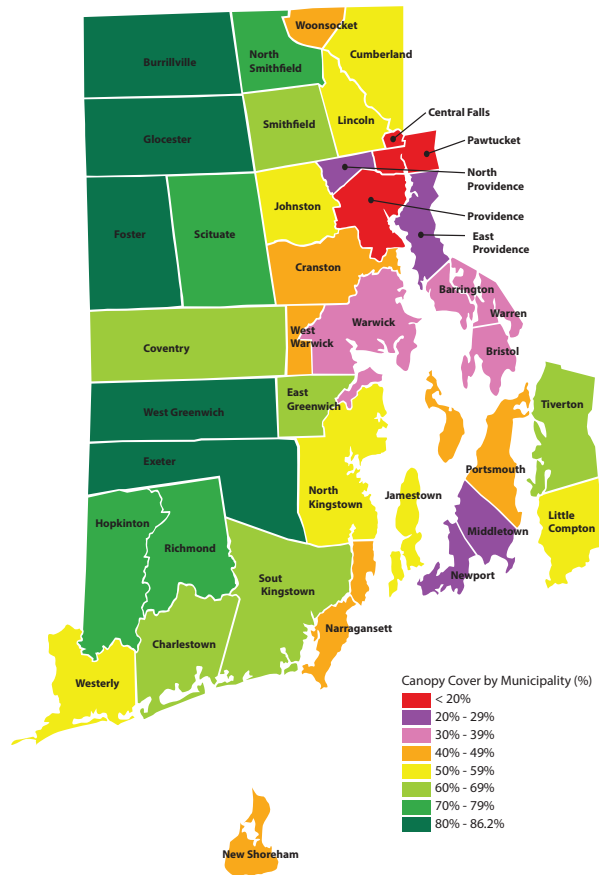


## MAKING THE CONNECTION

According to the 2010 US Census, more than 90% of Rhode Island residents live in areas defined as urban, and many of these urban areas can be defined as heat islands.<sup>13</sup> The urban heat island effect is the phenomenon by which cities tend to have higher average temperatures compared to their surroundings, resulting from the prevalence of man-made materials that absorb sunlight and reduce green space.<sup>14,15</sup> As seen in Map 1 below, Providence is one of the municipalities in Rhode Island with the lowest percent of land covered by tree canopy. Low tree canopy cover predominantly affects low-income neighborhoods in Providence, as shown in Map 2 below, which are the most likely to experience health inequities.

MAP 1

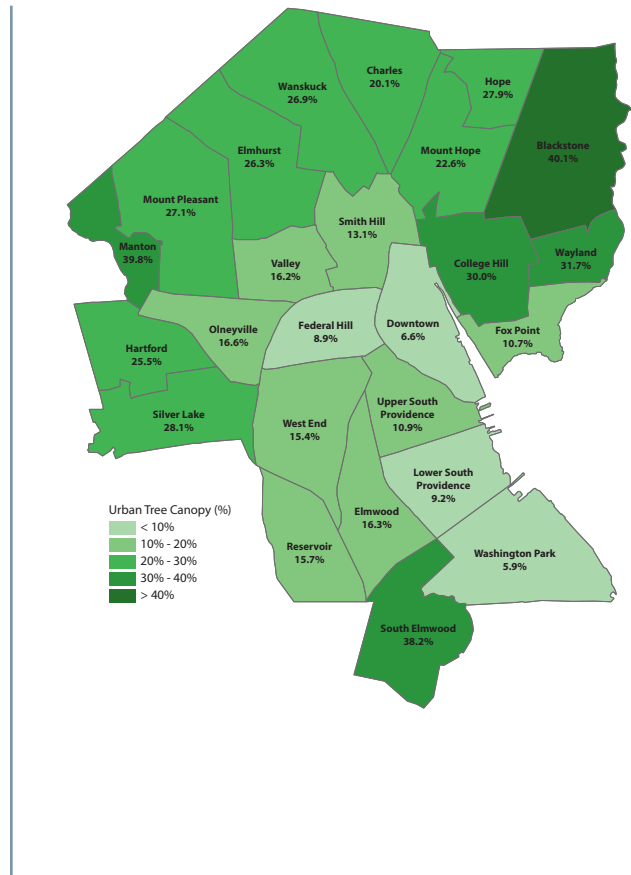
### Tree Canopy Cover, by Municipality, 2014



Data Source: US Department of Agriculture Forest Service i-Tree Tools

MAP 2

### Providence Urban Tree Canopy, by Neighborhood, 2007



Data Source: Providence's Urban Forest: Structure, Effects and Values, City of Providence i-Tree Eco System Analysis

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*Strategies to mitigate the effects of the urban heat islands include planting more trees, creating green spaces like parks and recreation areas, and promoting urban farming. Urban farming offers many benefits for addressing health disparities, like improving access to nutritious food, supporting economic viability, providing skill training, promoting trauma healing, increasing physical activity, and fostering social cohesion. Unless carefully planned and monitored, urban farming initiatives may also have some drawbacks. Farms are limited in how much food can be produced and distributed. Researchers at Johns Hopkins University noted that urban farming can create class divisions within communities because they “have been led by mostly white non-residents in predominantly Black and/or Latino neighborhoods, unintentionally excluding people of color from participating in or reaping the benefit of such efforts.”<sup>16</sup> Urban farms can also inadvertently displace low-income residents by leading to increases in property value or gentrification, as was experienced by residents of the LeDroit Park neighborhood of Washington, D.C. While these factors are important to consider, initiatives to promote urban farms, like those to build tree canopy cover, can also provide important environmental benefits that can help improve public health and well-being.*

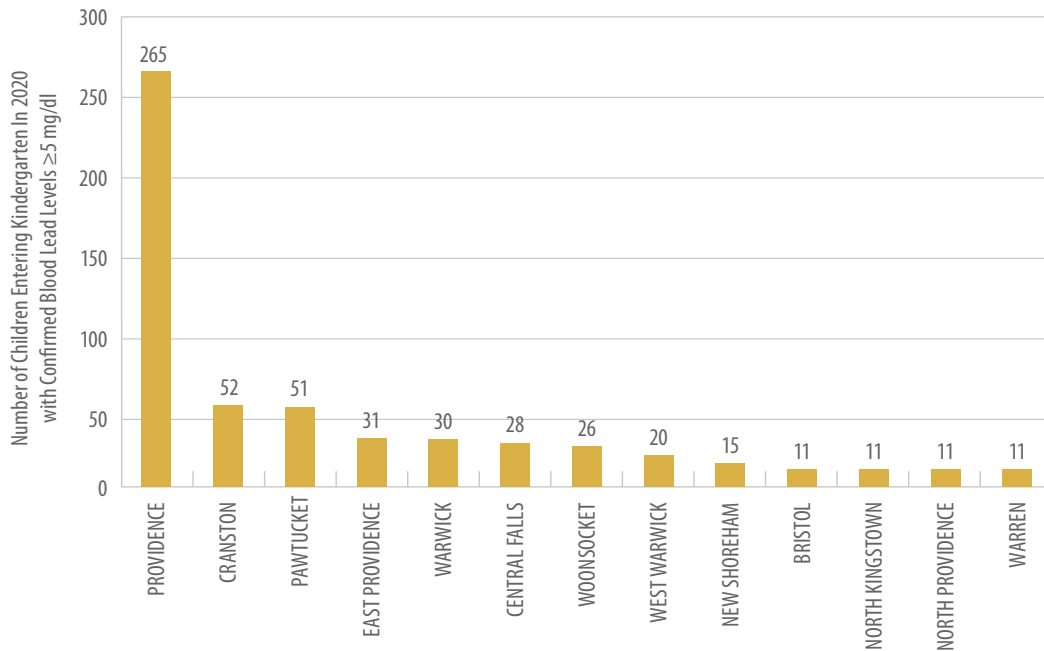


## Environmental Hazards

This measure represents the number and percent of children entering kindergarten who have blood lead levels higher than or equal to five micrograms per deciliter (lead poisoning). These data come from RIDOH's Environmental Lead Program and are also reported annually by Rhode Island KIDS COUNT. Children can be exposed to lead at home, in schools, or from soil contaminated with lead paint chips or dust, which is found in homes and buildings built before 1978.

**FIGURE 10**

### Number of Children Who Are Lead Poisoned, by Municipality\*, Rhode Island, 2018



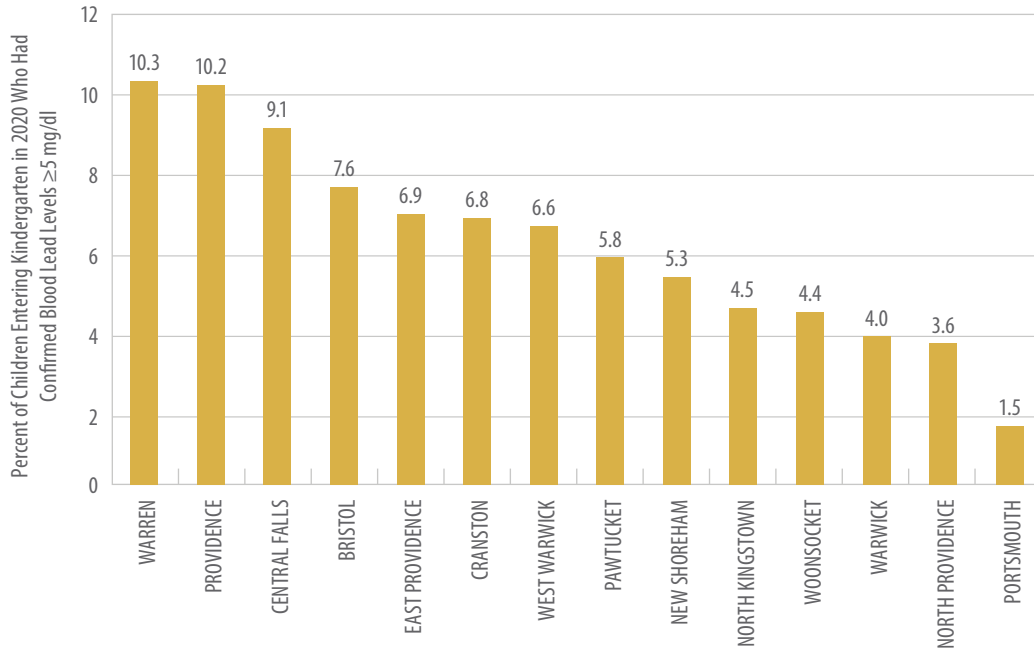
\* Municipalities not represented on this graph had fewer than 10 children who were lead poisoned in 2018.

Data Source: RIDOH Environmental Lead Program

Note: This measure refers to the number of three-year-old children with a confirmed elevated blood lead level (EBLL,  $\geq 5 \mu\text{g/dL}$ ) at any time prior to December 31, 2018. These data are for children eligible to enter kindergarten in the fall of 2020 (i.e., children born between September 1, 2014 and August 31, 2015).

**FIGURE 11**

**Percent of Children Who Were Lead Poisoned, by Municipality\*, Rhode Island, 2018**



\* Data for municipalities not represented were suppressed due to RIDOH's Small Numbers Policy.

Data Source: RIDOH Environmental Lead Program

Note: This measure refers to the percentage of three-year-old children with a confirmed elevated blood lead level (EBLL,  $\geq 5 \mu\text{g}/\text{dL}$ ) at any time prior to December 31, 2018. These data are for children eligible to enter kindergarten in the fall of 2020 (i.e., children born between September 1, 2014 and August 31, 2015).

**Key findings:**

- Providence, Pawtucket, and Cranston had the highest number of children who were lead poisoned.
- Warren, Providence, and Central Falls had the highest percentages of children who were lead poisoned.





## MAKING THE CONNECTION

*Lead poisoning is preventable. Sadly, low-income children and children of color continue to bear a disproportionate burden of exposure – primarily through contact with lead in soil, deteriorating lead-based paint from older housing, contaminated paint dust, and potentially through drinking contaminated water resulting from failing leaded pipes. For African American children, the CDC found they are three times more likely than other children to have elevated blood lead levels.<sup>17</sup> A Washington Post article titled Freddie Gray’s life: a study on the effects of lead paint on poor blacks, highlights the potential implications of lead poisoning on the life course for African American children.*

*In Rhode Island, childhood lead poisoning still occurs. Nearly 1,000 children were poisoned by lead for the first time in 2014, according to the Childhood Lead Action Project.<sup>18</sup> For children living in places like Providence, Pawtucket, and Central Falls, lead poisoning has become a social and environmental justice issue worthy of greater political action.*

*Dr. Wornie Reed, Director of the Race and Social Policy Research Center in Blacksburg, VA, calls lead poisoning a modern plague among children. Dr. Reed sees testing as a prominent prevention measure. However, he contends that “with testing of children it appears as if they are being used the way miners previously used canary birds. Miners would send a canary down a mine to test for poisonous gases. A returning bird was a signal that there were no poisonous gases and it was safe for the men to enter the mine. If the bird did not come back that was a signal that there were poisonous gases and the bird had succumbed. Similarly, with children, if we test them to determine whether their environments have lead, we may find out too late, after they have been poisoned already. We need to practice more primary prevention and test and treat the environment—the home and the soil. Then we can get closer to assuring that we can act before children are poisoned.”<sup>19-24</sup>*

*For decades, Rhode Island has worked to eliminate childhood lead hazards. It is the responsibility of government to ensure no child succumbs to the threat of lead exposure but can thrive in safe, healthy communities regardless of their ZIP code.*

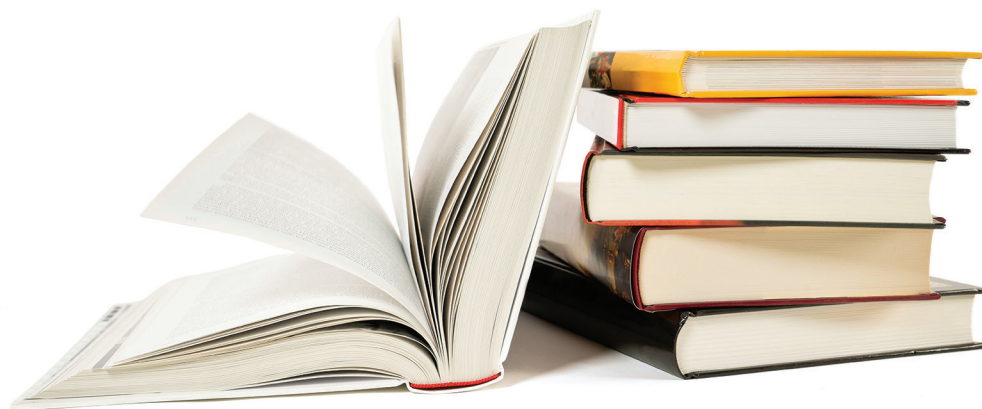




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# 04 | SOCIOECONOMICS

Socioeconomic factors that determine health include education, employment, occupation, and income. Together, these factors influence one another and influence health behaviors. Divisions in socioeconomic status are relevant to understanding risk factors associated with population health outcomes. For example, the lower the social and economic position of a population or community, the higher their rates of mortality and morbidity. On the other hand, the better the social environment, such as can be found in more economically resourced communities, the more possible and likely it is for people to adopt and sustain healthier behaviors.

Education and income inequality also have spillover effects at the local level. Communities with low socioeconomic status are often characterized as having higher risk factors for violence, increased levels of unemployment, decreased levels of economic opportunity, poor housing conditions, and high emotional distress. Consequently, businesses are less likely to invest in these neighborhoods. Neighborhoods marred in poverty often serve as targets for urban revitalization, which can lead to displacement because longstanding residents cannot afford to remain to benefit from new investments in housing, healthy food access, or transit infrastructure. In addition, where limited opportunities for economic growth exist, people sometimes opt out of actively engaging in the democratic process.

## HEALTH EQUITY MEASURES

### Housing Cost Burden

High housing costs have a negative impact on health. Cost-burdened households are forced to choose between the cost of housing and other essentials, such as food, utilities, and healthcare. This measure uses housing data from the American Community Survey to calculate the total estimated percent of cost-burdened renters and owners in each municipality in Rhode Island. Housing cost burden is defined as spending more than 30% of annual household income on housing. For this measure, total housing cost burden was calculated by adding together the number of cost-burdened housing units with a mortgage, without a mortgage, and paying rent; dividing this number by the total number of housing units with a mortgage, without a mortgage, and paying rent; and then multiplying the number by 100.

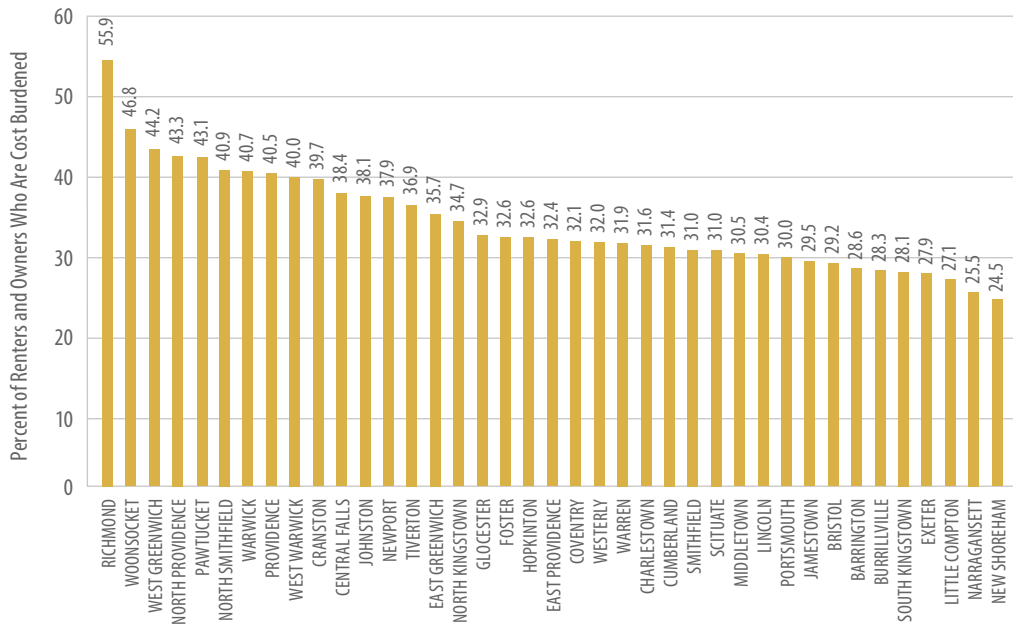
#### Key findings:

- Central Falls, Providence, New Shoreham, and Pawtucket had the highest percentages of cost-burdened renters and owners.
- More than 24% of renters and owners are cost burdened in all municipalities in Rhode Island.
- Rhode Island's core cities – Providence, Pawtucket, Central Falls, and Woonsocket – are four of the top five municipalities with the greatest housing cost burden.



FIGURE 12

**Housing Cost Burdened Renters and Owners, by Municipality, Rhode Island, 2013-2017**



Data Source: 2013 – 2017 American Community Survey



## MAKING THE CONNECTION

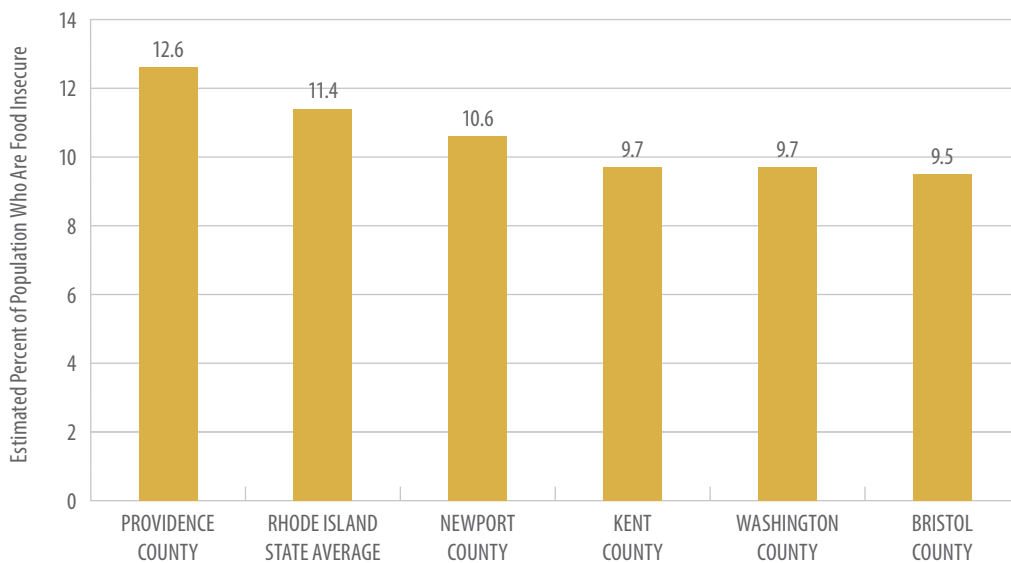
Housing is a human right and an important predictor for health outcomes – including for refugees. Refugees represent one of the most vulnerable population groups in Rhode Island. Before resettlement, many refugees face a variety of risk factors for poor health, such as histories of trauma, displacement, violence, tragic loss of family, and adverse living conditions. Upon arrival in a new country, a host of factors for refugees are critical for successful resettlement, and housing is key. Placement in safe, healthy housing is a means through which to build a new life. Communities where many refugees are placed, like Central Falls, Providence, and Pawtucket, have the highest percentages of cost-burdened renters. Because of the high cost of rent, resettlement agencies find that after the 90-day resettlement period ends, it is common for refugees to incur housing insecurity, to live in housing conditions that are extremely unsafe and unhealthy, to be taken advantage of by landlords, or to become what other countries refer to as the “hidden homeless.” Fear, language barriers, and unfamiliarity with the rights of tenants keep refugees in a cycle of instability. In Rhode Island, little is known about the impact of housing insecurity on the health and well-being of people from refugee backgrounds. Further study is warranted to carefully examine housing conditions for refugees and to design policy interventions and language-appropriate advocacy tools to better support refugee families.

## Food Insecurity

Food insecurity is defined as the disruption of food intake or eating patterns because of lack of money and other resources. Adults who are food insecure may be at an increased risk for a variety of negative health outcomes and health disparities. This measure is a county-level estimate of the prevalence of food insecurity based on an analysis done by Feeding America. The relationship between food insecurity and closely linked measures of food insecurity (poverty, unemployment, homeownership, etc.) are first analyzed at the state level. Then, this analysis is compared with the same variables at the county level to generate estimated food insecurity rates for individuals and children in Rhode Island counties. More information about this measure and its methodology can be found at: <https://map.feedingamerica.org/county/2017/overall/rhode-island>.

**FIGURE 13**

### Prevalence of Food Insecurity, by County, Rhode Island, 2017



Data Source: Feeding America





## MAKING THE CONNECTION

Every Rhode Islander deserves access to healthy, wholesome food. Unfortunately, food insecurity is real for many people living in Rhode Island, including those in our Native American communities. The United States Department of Agriculture (USDA) describes food insecurity as a lack of available financial resources for food at the household level. Health problems associated with food insecurity include risk for chronic illness, impaired cognitive and physical ability, and nutritional deficiency, which can lead to other adverse health conditions.

Across Rhode Island, there are several promising initiatives underway to address food insecurity at the local and state level. Locally, the Southside Community Land Trust, African Alliance of Rhode Island, and Narragansett Food Sovereignty Initiative are notable examples of how low-cost agricultural resources are helping to create sustainable food systems within economically challenged communities. Statewide, RIDOH launched the Rhode to End Hunger, an initiative to help get unused, edible food to organizations who can use it. In partnership with the Matching Excess and Need for Stability (MEANS) database, food donors are connected to soup kitchens and food pantries. After registering in the MEANS database, agencies get notified when excess, unused food is available from restaurants, food retailers, and grocers. The program also benefits the environment by helping to reduce food waste and air toxins associated with disposing food at landfills. To learn more about Rhode to End Hunger, visit [www.health.ri.gov/rhodetoendhunger](http://www.health.ri.gov/rhodetoendhunger).

### Education

Education helps ensure that people can live healthy lives in healthy communities. People with more education are more likely to have well-paying jobs and to live in communities with better access to resources like high-quality schools, transportation, and healthy foods. This measure shows the percent of students graduating from high school in four years by municipality, race/ethnicity, disability status, and economic status. The four-year graduation rate data are also available by race/ethnicity and economic status within each school district.

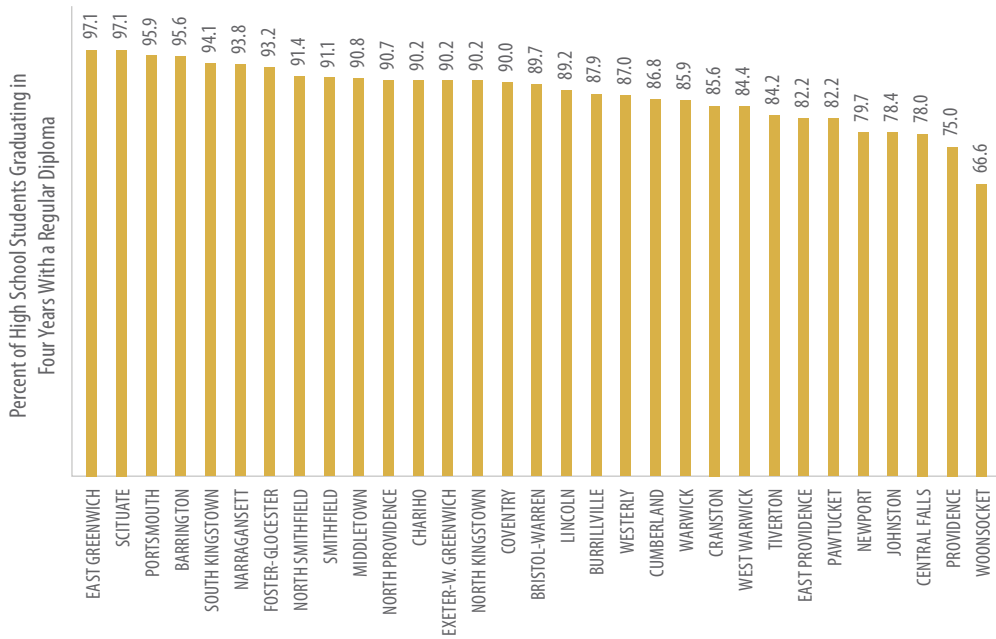
#### Key findings:

- The graduation rate among economically disadvantaged students in Rhode Island was 76%, compared to 93.4% among students who were not economically disadvantaged.
- Hispanic and multiracial students had the lowest four-year graduation rates among all racial/ethnic groups, at 75.8% and 79.3%, respectively.
- Woonsocket, Central Falls, and Providence had the lowest four-year graduation rates among high school students.
- The graduation rate for students with disabilities was 63%, compared to 88.2% for students without disabilities.



**FIGURE 14**

**Four-Year High School Graduation Rate, by School District, Rhode Island, 2017**

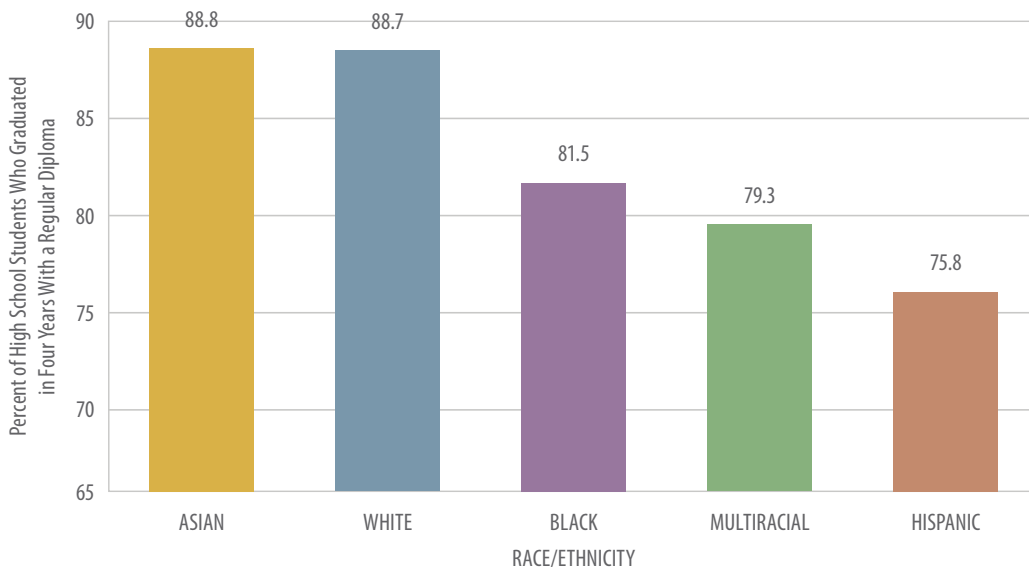


Data Source: Rhode Island Department of Education (RIDE)

Note: Jamestown students can attend either Narragansett or North Kingstown high schools. New Shoreham is not reported due to RIDE's Small Numbers (Minimum Cell Size) reporting policy. Little Compton Students attend Portsmouth High School. The Charho School District includes Charlestown, Richmond, and Hopkinton.

**FIGURE 15**

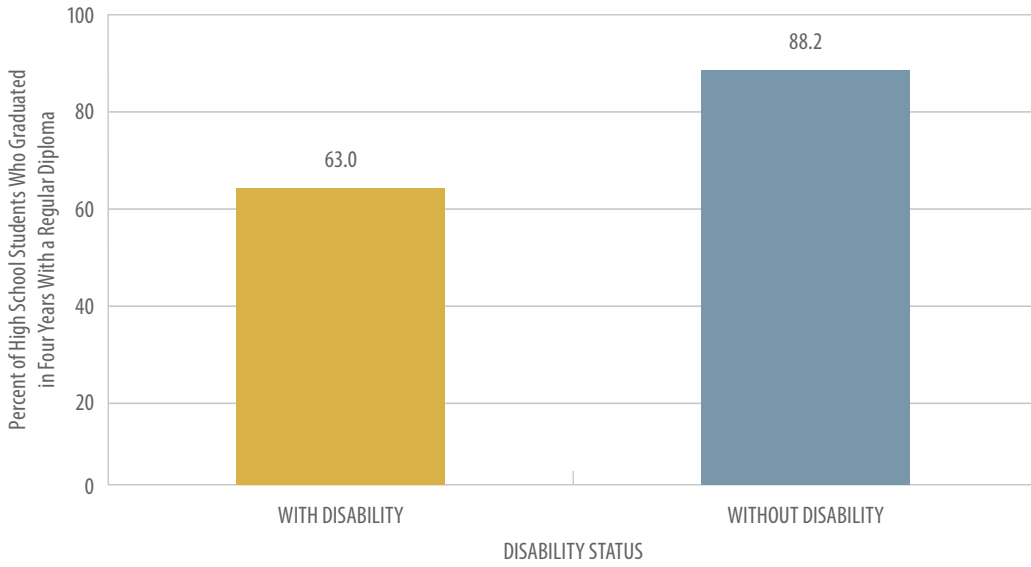
**Four-Year High School Graduation Rate, by Race and Ethnicity, Rhode Island, 2017**



Data Source: RIDE

**FIGURE 16**

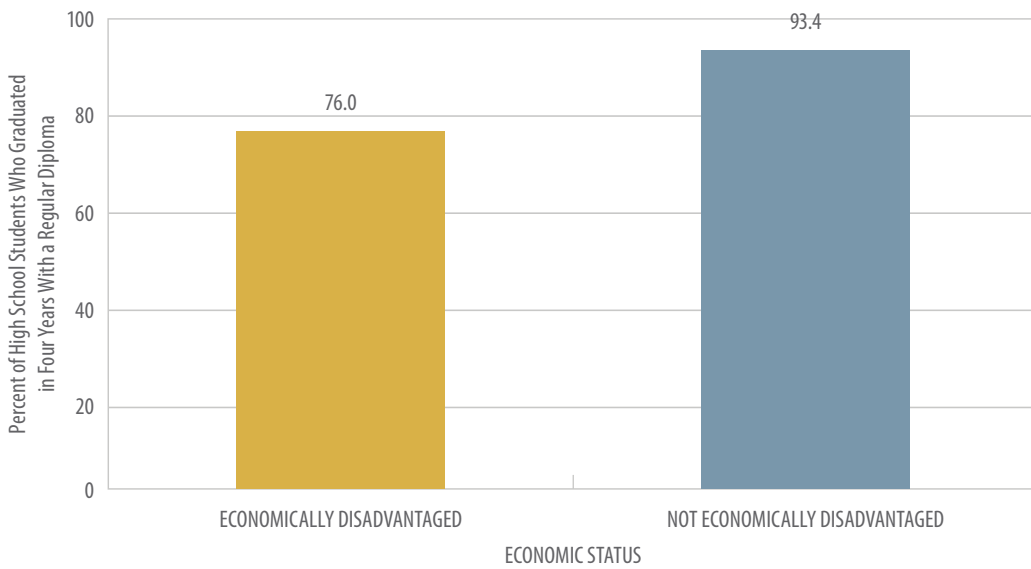
**Four-Year High School Graduation Rate, by Disability Status, Rhode Island, 2017**



Data Source: RIDE

**FIGURE 17**

**Four-Year High School Graduation Rate, by Economic Status, Rhode Island, 2017**



Data Source: RIDE



## MAKING THE CONNECTION

*Without question, education can set students on the path to lifelong success. Conversely, overly punitive policies in the K-12 school setting can be linked to the school-to-prison pipeline. Numerous studies have demonstrated that students who are suspended are more likely to underperform academically, be retained a grade, drop out, commit a crime, and eventually end up incarcerated as an adult. During 2013-2014, the Civil Rights Data Collection, which the US Department of Education releases every two years, found that Black students were nearly four times as likely to be suspended as White students, and nearly twice as likely to be expelled. The same pattern showed up in preschool: Black children represented 19% of all preschoolers but accounted for 47% of those who received suspension.<sup>25</sup> The 2018 Rhode Island KIDS COUNT Factbook notes that Hispanic students are one and a half times more likely to be suspended and twice as likely to be expelled as their White counterparts.<sup>26</sup> And although students with disabilities only constitute 8.6% of the school population, they account for 32% of juveniles in correctional institutions.<sup>27</sup> While these trends are not solely a result of school-based policies, civil rights activists assert that they can be linked to the use of the punitive discipline tools of the criminal justice system that appear to be seeping into American classrooms. In Rhode Island and nationally, Black, Hispanic, and Native American students are more likely to be suspended than their White peers, even though there is no evidence that these students have more serious patterns of rule breaking.<sup>28</sup>*

*RIDOH's Princes 2 Kings (P2K) program aims to push back on the narrative about young boys of color that underlies many of these inequities. Funded by the US Office of Health and Human Services' Office of Minority Health, P2K is based in the belief that with the right supports, every young man can graduate from high school and achieve his dreams. Through mentoring, peer-to-peer and academic supports, experiential learning, and leadership development, P2K aims to increase high school graduation rates among Black and Latino middle and high-school aged boys in Providence. In 2019, seven students graduated from P2K, and they all enrolled in local colleges and universities.*



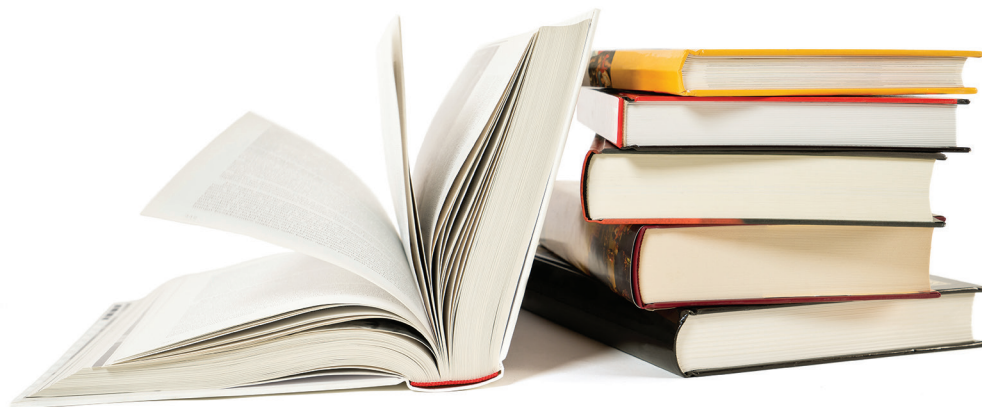




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- *Clarifying the Social Roots of the Disproportionate Classification of Racial Minorities and Males with Learning Disabilities.* Dara Shifrer (2018), *The Sociological Quarterly*, 59:3, 384-406, DOI: 10.1080/00380253.2018.1479198
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# 05 | COMMUNITY TRAUMA

Trauma can affect anyone, regardless of age, gender identity, socioeconomic status, race, ethnicity, sexual orientation, or any other factor. In many neighborhoods, the destructive impact of trauma can overwhelm efforts to advance collective health and well-being. When people don't feel safe in their homes or neighborhoods, they are less likely to walk to the grocery store, use local parks, access public transportation, or let their children play outside. Social cohesion is replaced by social isolation, and factors that contribute to healthy lifestyle behaviors are replaced with unhealthy, undesirable alternatives.

## HEALTH EQUITY MEASURES

### Criminal Justice

This measure is displayed as a ratio. It compares the number of non-violent offenders under probation and parole in each municipality, as reported annually by the Rhode Island Department of Corrections (DOC), to the number of residents in each municipality, based on annual US Census estimates. This measure should be interpreted as the number of non-violent offenders under probation and parole for every 1,000 residents in a given municipality. Higher numbers are less desirable, as they indicate a greater proportion of residents involved with the criminal justice system.

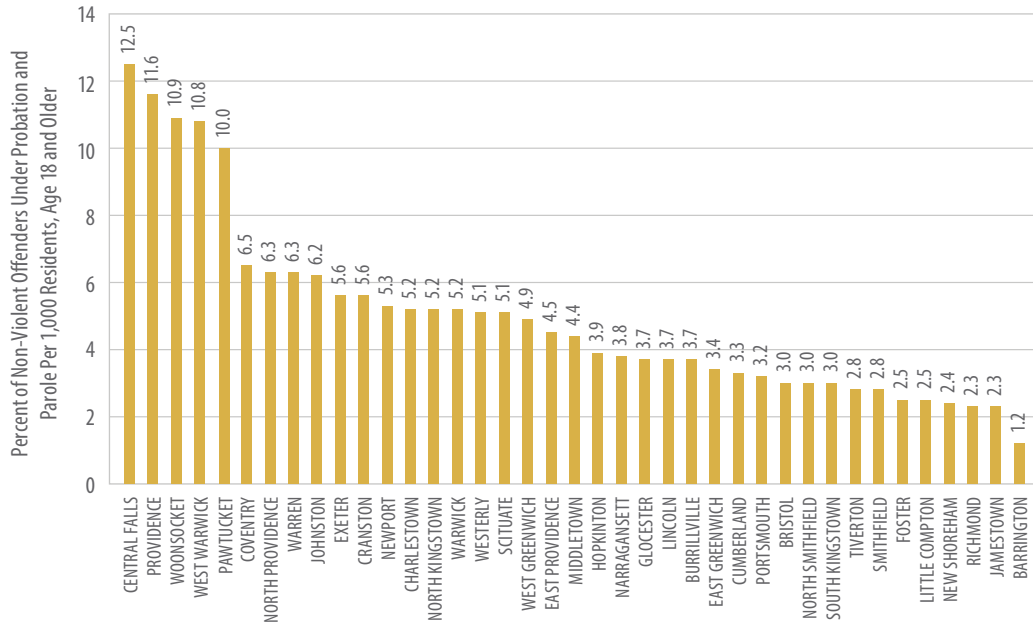
#### Key findings:

- Central Falls, Providence, Woonsocket, and West Warwick had the highest numbers of non-violent offenders under probation or parole per 1,000 residents in each municipality.
- Richmond, Jamestown, and Barrington had the lowest number of non-violent offenders under probation or parole per 1,000 residents in each municipality.
- Four of the top five most disadvantaged municipalities for this measure are core cities – Providence, Pawtucket, Central Falls, and Woonsocket.



**FIGURE 18**

**Non-Violent Offenders Under Probation and Parole, by Municipality, Rhode Island, 2017**



Data Source: Rhode Island DOC, US Census Bureau





## MAKING THE CONNECTION

*Correctional experts have long understood that releasing incarcerated people to the streets without job training, education, or money is the perfect formula for recidivism and re-incarceration. Further, people who are involved in criminal justice systems experience significantly higher rates of chronic, acute, and behavioral health problems than the general population. One of the goals of the criminal justice system is to turn an offender into a productive member of society. Instead, the American prison system is bursting at the seams with people who have been shut out of the economy and who do not have a quality education or access to good jobs. In Black and Brown communities, incarceration, combined with the stigma of race, makes the prospects for economic self-sufficiency even more unattainable.*

*Understanding the impact of a criminal conviction on the prospect of attaining a license for certain occupations, criminal justice reform movements have called on state legislatures to recognize how criminal records create unfair exclusions from employment. In 2018, fair chance licensing legislation was introduced in Rhode Island. The bill demonstrated how government could align policy with the principle that everyone deserves an equal chance at meaningful employment. Despite an abundance of local activism, the bill did not receive the full support of the legislature.*

*It is the responsibility of good government to create pathways out of poverty. In support of fair chance licensing, RIDOH has committed to giving its occupational licensing regulations a second review with the express aim of ensuring that they reflect a commitment to the health and well-being of all Rhode Islanders, including those who have had previous engagement with the criminal justice system. Other State agencies must do the same, and all branches of government must commit to working in partnership on issues related to criminal justice reform in Rhode Island. Specifically, this includes efforts to reduce recidivism; eliminate disparities in incarceration; improve access to treatment for substance use disorder and other behavioral health challenges; and ensure that our state's criminal justice system is promoting the health and safety of every community.*

### Public Safety

Crime and violence affect the health of community members in many ways. People may experience injury or death, mental distress, or reduced quality of life. They may also be less likely to engage in physical activity. In addition, children exposed to violence are at higher risk for long-term behavioral and mental health challenges. This measure reports both the violent crime rate and non-violent crime rate per 100,000 people, by municipality. These data are reported annually by the Rhode Island State Police (RISP) and through the FBI Universal Crime Reporting (UCR) system.

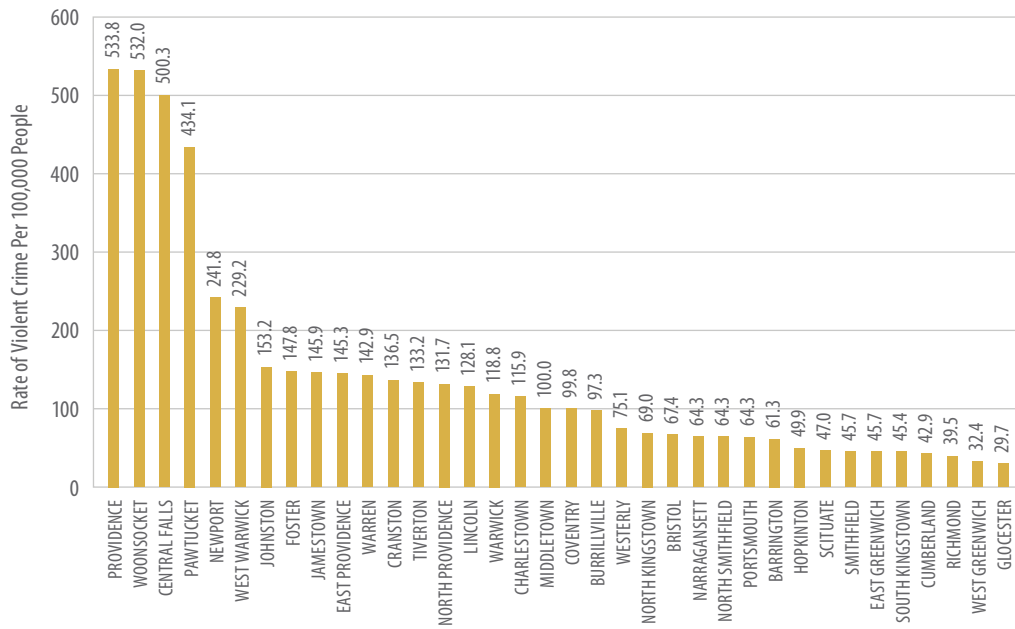
#### Key findings:

- Central Falls, Woonsocket, and Providence had the highest violent crime rates.
- Newport, Providence, Pawtucket, and Woonsocket had the highest non-violent crime rates.



**FIGURE 19**

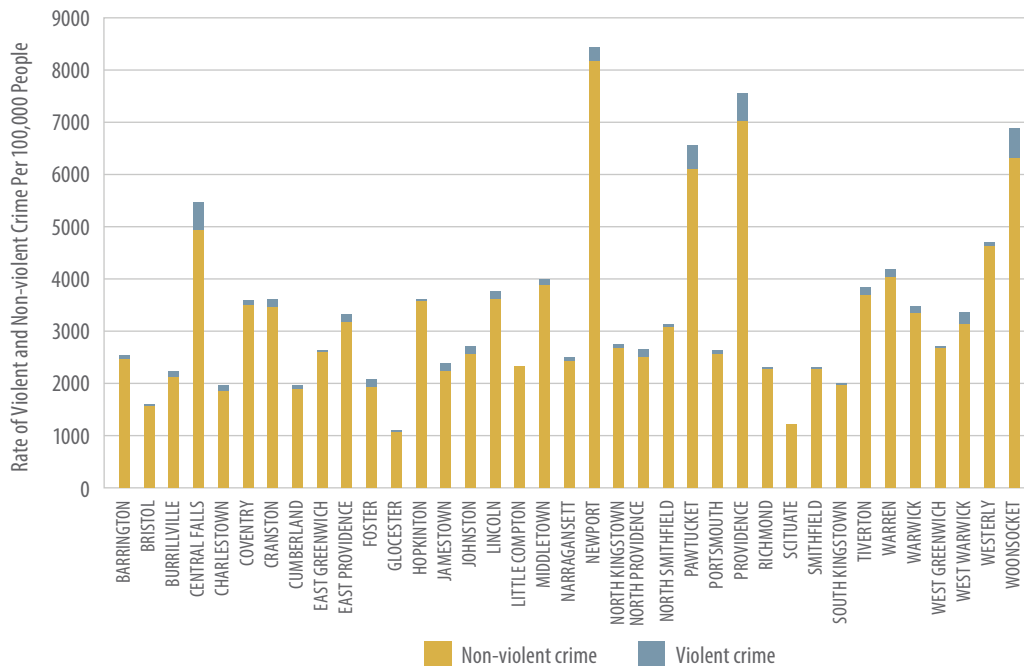
**Violent Crime Rate, by Municipality, Rhode Island, 2017**



Data Source: RISP Uniform Crime Reports, FBI UCR Program

**FIGURE 19**

**Violent and Non-Violent Crime, by Municipality, Rhode Island, 2017**



Data Source: RISP Uniform Crime Reports, FBI UCR Program



## MAKING THE CONNECTION

*While any form of violent crime is concerning, intimate partner violence (IPV) is an issue of special public health concern. An estimated one in three women and one in four men experience a form of partner violence in their lifetime.<sup>29</sup> Experiencing IPV is associated with a host of negative outcomes, including chronic health conditions, reproductive illnesses, mental health disorders, substance use disorders, and/or suicide attempts.<sup>30</sup> As of 2019, the majority of research has studied the prevalence and consequences of, and risk factors for, IPV among heterosexual, cisgender individuals, with less known about IPV among sexual and gender minority individuals.<sup>31</sup> Prevalence estimates and research understanding the risk factors of IPV are even less available for transgender individuals—individuals whose gender identity or gender expression does not correspond with their sex assigned at birth.<sup>32</sup> Because sexual and gender minority individuals and transgender people experience violence at similar, and in some instances, higher rates as heterosexual people, it is critical that healthcare and other providers ensure that their practices are culturally inclusive.<sup>33</sup>*

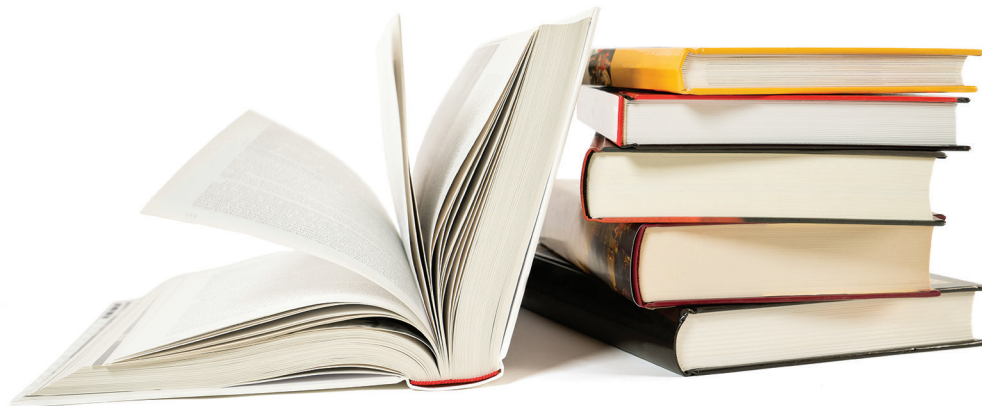
*RIDOH has formed a large, multidisciplinary team, the Sexual Orientation and Gender Identity (SOGI) Equity Work Group, which is working to improve public health policies, systems, and environments for Lesbian, Gay, Bisexual, Trans, Two-Spirit, Queer and Questioning (LGBTQQ) communities. LGBTQQ individuals often face a variety of healthcare challenges, including identifying and accessing providers who are knowledgeable about their health risks and behaviors and who provide culturally affirming care. The SOGI Equity Work Group has developed a list of resources that Rhode Island LGBTQQ community members may find helpful in accessing culturally proficient healthcare. The Work Group is also working to integrate routine inclusion of questions related to sexual orientation and gender identity into all relevant RIDOH surveillance activities.*



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- *Are Ideal Litigators White? Measuring the Myth of Colorblindness.* Kang, Jerry & Dasgupta, Nilanjana & Yogeewaran, Kumar & Blasi, Gary. (2009). Journal of Empirical Legal Studies. 7. 10.2139/ssrn.1442119.
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- *Effect of District Attorneys on Local Criminal Justice Outcomes.* Krumholz, Sam. University of California, San Diego (UCSD) - Department of Economics, Date Written: January 3, 2019; 67 Pages Posted: 31 Oct 2018 Last revised: 9 Jan 2019
- *Equity and Social Justice Strategic Plan 2016 – 2020.* King County, Seattle, WA.
- *Intimate Partner Violence/Problem and Victims in Rhode Island.* Jiang Y, DeBare D, Perez B, Viner-Brown S. R I Med J (2013). 2015 Nov 2;98(11):45-9.
- *The Long Road Home: Decreasing Barriers to Public Housing for People with Criminal Records.* Tesfai, Afomeia & Gilhuly, Kim, Human Impact Partners, May 2016.
- *Vital Funding – Part 2: Grantmaking Strategies for Improving LGBTQ Health.* Maulbeck, Ben Francisco & Avrett, Sam. Funders for LGBTQ Issues, September 2, 2015



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The Rhode Island Health Equity Measure framework includes three additional determinant areas that are not included in this report due to the formatting or availability of the data.

### Social Vulnerability

Social vulnerability refers to the resilience of communities when confronted by external stresses on health, such as natural or human-caused disasters or disease outbreaks. The measure for this determinant is the CDC's Social Vulnerability Index. This index ranks each census tract in Rhode Island on 15 social factors, including poverty, vehicle access, and population density. This measure can help identify communities that are likely to need support before, during, and after a hazardous event and help public health officials and local planners prepare for, and respond to, emergency events.

The data for this measure are available by census tract in an interactive map from the CDC. The map and additional information about the data can be found at

<https://health.ri.gov/data/healthequity/socialvulnerability> or at <https://svi.cdc.gov/map.html>

### Transportation

Access to reliable, affordable, safe transportation options is fundamental to healthy communities. Lack of transportation can impact a person's ability to access healthcare services, healthy foods and other necessities, and steady, well-paying jobs. Developing appropriate transportation options, such as walkable communities, bike lanes, and accessible public transit, can contribute to improving the health of the community.

The data for this measure are available as an index that estimates transportation costs for a three-person, single-parent family at 50% of the median income for renters in the region. The index percentile ranks neighborhoods, where communities with higher index scores have lower transportation costs. Estimates are created using the US Department of Housing and Urban Development's Location Affordability Index data.

The data for this measure are available by census tract in an interactive map developed by PolicyMap. The map and additional information about this measure can be accessed at

<https://health.ri.gov/data/healthequity/transportation>

### Discrimination

Discrimination refers to unjust actions or treatment of individuals or groups, particularly based on race, sex, age, or other characteristics. Discrimination exists at a structural level, where it limits opportunity, resources, and well-being for certain groups. It also exists on an individual or interpersonal level, where negative interactions between individuals and social stress can have psychological and physical effects that can lead to long-term negative health outcomes.

To date, no statewide data on discrimination have been consistently collected. To address this, RIDOH's Health Equity Institute worked with the administrators of the Rhode Island BRFSS to add a standard question about experiences of discrimination in healthcare settings to the 2019 survey. This item will serve as the Health Equity Measure for discrimination, and the data will be available in 2020.



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## FOOTNOTES

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## FOOTNOTES continued

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## WHO IS THE RHODE ISLAND COMMISSION FOR HEALTH ADVOCACY AND EQUITY?

The Rhode Island Commission for Health Advocacy and Equity (CHAE) is a State commission introduced and written into legislation in 2011 (RIGL §23-64.1), with support from current and former legislators including Representatives Donna Walsh, Maria Cimini, Edith Ajello, Leo Medina, and Anastasia Williams, and Senators Juan Pichardo, Louis DiPalma, Harold Metts, Paul Jabour, and Donna Nesselbush.

The role of the Commission is to:

- Advise the Governor, the General Assembly, and RIDOH on racial, ethnic, cultural, and socioeconomic health disparities;
- Advocate for the integration of activities that will help achieve health equity;
- Develop a health equity plan that addresses the social determinants of health;
- Align statewide planning activities in developing health equity goals and plans; and
- Educate other state agencies and organizations on health disparities

## Commissioners

Co-Chair, Cynthia Roberts, PhD  
Rhode Island Coalition Against Domestic Violence

Co-Chair, Larry Warner, MPH  
United Way of Rhode Island

Shontay Delaloe, PhD  
Brown University

Aleatha Dickerson, MS  
Rhode Island Office of Healthy Aging

Heather Gaydos  
Center for Prisoner Health and Human Rights

Andrea Goldstein, MPAC  
Brown University

Raymond Neirinckx  
State of Rhode Island Office of Housing and  
Community Development

Michael Nina  
Neighborhood Health Plan of Rhode Island

Fred Ordonez  
Direct Action for Rights and Equality (DARE)

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