



The Health of Rhode Island Non-Metropolitan Communities

Office of Primary Care and Rural Health
November 2012



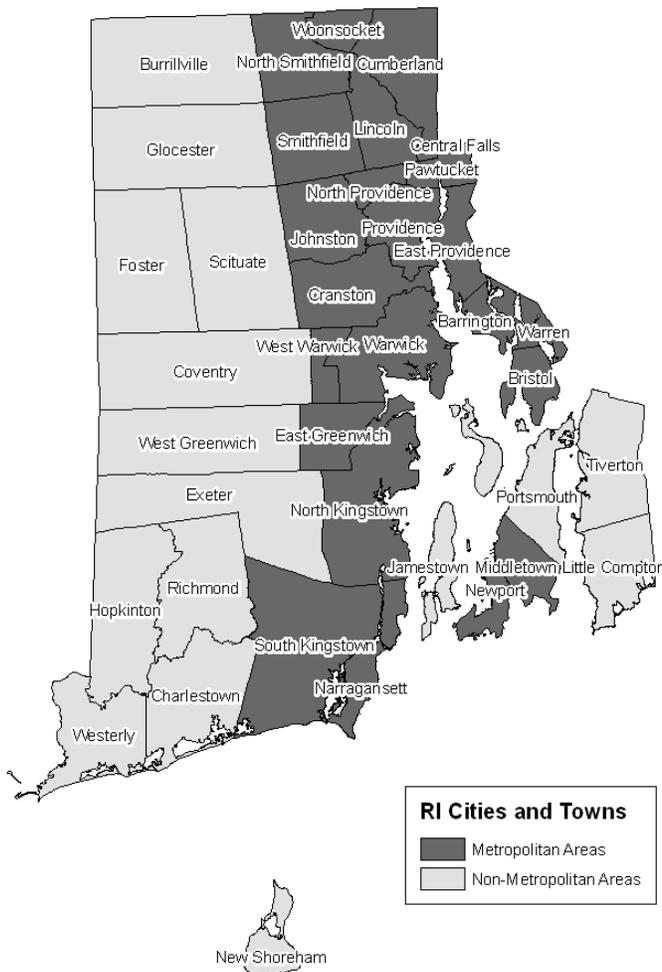


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Introduction

Rhode Island has 1,051,302 residents living in 39 cities and towns. Its five counties comprise 1,045 square miles and cover both metropolitan and non-metropolitan/rural areas. The Rhode Island Office of Primary Care and Rural Health (OPCRH) has designated the following 16 cities and towns non-metropolitan areas:



- Providence County: Burrillville, Foster, Glocester, Scituate
- Kent County: Coventry, West Greenwich
- Washington County: Charlestown, Exeter, Hopkinton, New Shoreham, Richmond, Westerly
- Newport County: Jamestown, Little Compton, Portsmouth, Tiverton

Metropolitan and Non-Metropolitan Areas of Rhode Island

More than 175,000 people, or 17% of the state's population, live in these communities.

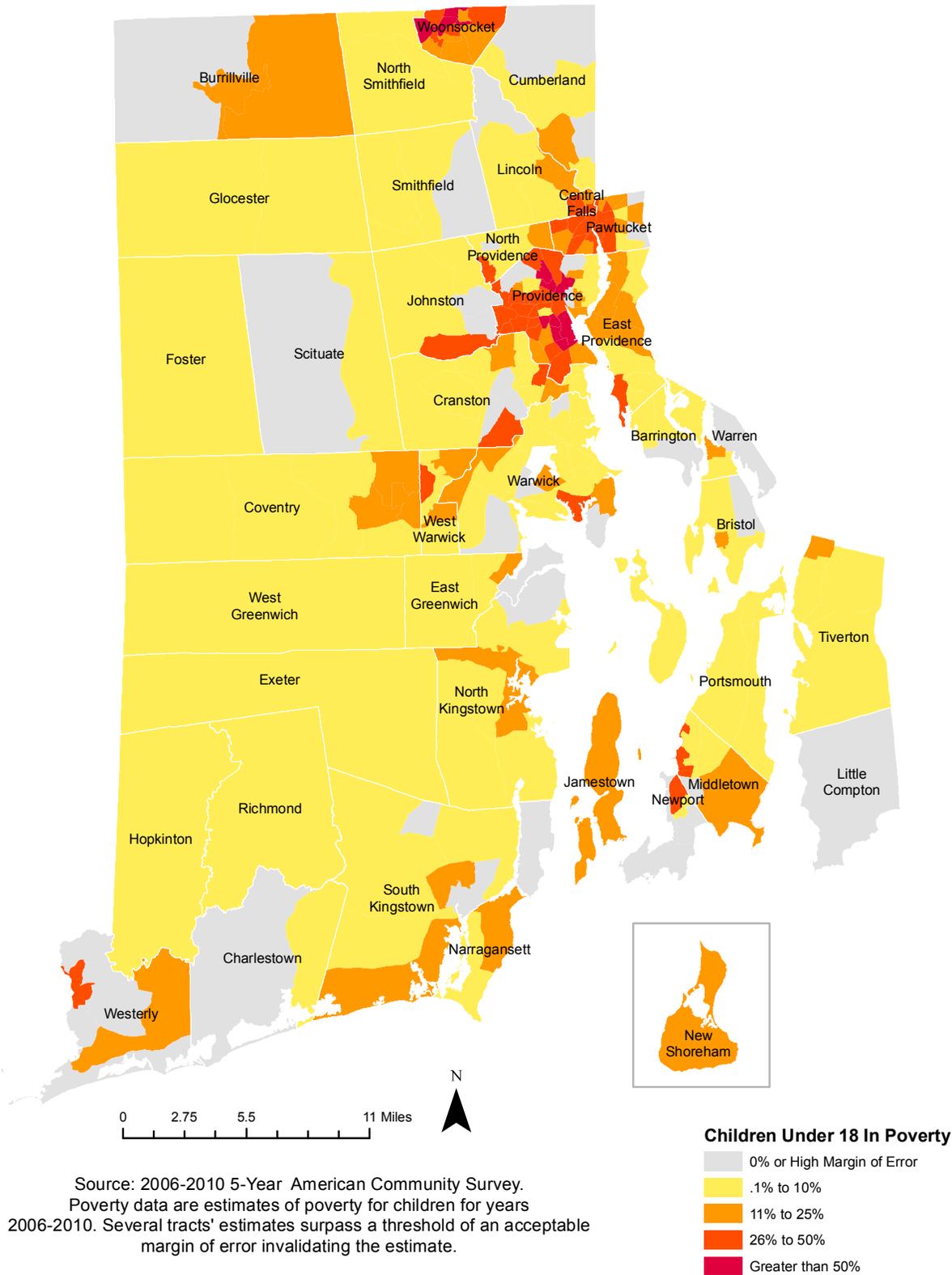
It is important to note that the definition of “non-metro” established by the OPCRH differs from the federal definition of “rural.” Using US Census data, the OPCRH designates all municipalities with a population density of 500 persons per square mile or less as “non-metro.” The Health Resources and Services Administration (HRSA) Office of Rural Health Policy classification is more narrowly defined; only the town of Westerly meets HRSA criteria for a rural community. Briefly, HRSA defines the following areas as rural: all counties designated non-metro by the US Census, all census tracts with RUCA codes 4-10 in metropolitan counties, or certain Census tracts (those with more than 400 square miles, fewer than 35 people per square mile, and RUCA codes 2-3).

Demographic Information

The state population is predominantly white, non-Hispanic (76.5%).¹ Non-metro Rhode Island is less diverse, with people of white, non-Hispanic origin making up 94% of the population. In comparison, 89% of suburban residents and 54% of people living in urban areas are white, non-Hispanic.

According to the 2010 US Census American Community Survey, an average of 6% of people in non-metro communities in Rhode Island live below the federal poverty level, compared to 8% in suburban communities, 22% in urban areas, and 12.2% statewide. Although the Providence area has the highest rates of child poverty, concentrations of poverty exist in the non-metro regions of Westerly, Burrillville, and Coventry where 11% to 50% of children younger than six years of age live below the federal poverty level.

Percent of Children Younger than Eighteen Living below the Poverty Line, Census 2010



Rhode Island Non-Metro Health Data

Like the nation as a whole, Rhode Islanders continue to experience unacceptable disparities in health status, health outcomes, and access to healthcare across socio-economic, racial, ethnic, and geographic lines. While an examination of health indicators demonstrates that Rhode Island non-metro populations are doing better than the rest of the state on a number of measures including rates of heart disease, diabetes, low birth weight, breastfeeding, and numbers of residents with insurance, a few key indicators show significant disparities between non-metro areas and the rest of the state. These include adolescent risk-taking behavior with some non-metro high school students reporting rates of alcohol, drug, and cigarette use that are significantly above suburban and urban communities. Other areas of concern include significantly lower participation in the Women, Infants, and Children (WIC) Program by eligible families. Residents of Rhode Island non-metro areas also face unique systems barriers including limited access to health providers, inadequate public transportation, and environmental health risks such as high levels of radon and lead in specific communities.

Outlined below are key data and information currently available for non-metro communities. This data has been compiled from a variety of sources including hospital discharge and death data collected by the Rhode Island Department of Health, the Behavioral Risk Factor Surveillance System survey, Rhode Island Kids Count, the Rhode Island Cancer Registry, the Rhode Island Department of Health Radon Database, and The Providence Plan. The data compare non-metro communities to suburban, urban communities and statewide rates. The non-metro communities consist of the 16 towns identified by the OPCRH, while the urban category includes the core cities of Providence, Pawtucket, Central Falls, Woonsocket, Newport, and West Warwick. The remainder of the state is considered suburban for the purposes of this report.

This data is limited due to several statistical obstacles around analyzing small populations. Findings of community assessments conducted by non-metro partners augment this information and are described in a following section.

Adolescent Behavior

High school students living in non-metro communities report some of the highest alcohol, drug, and cigarette use in the state. According to the Rhode Island Kids Count 2012 Factbook, 45% of high school students in Burrillville, 34% of students in Westerly & Tiverton, and 30% of students in Charlestown report having used alcohol in the past 30 days. In contrast, 21% of students statewide report current alcohol use.

Marijuana use in some non-metro communities is also significantly higher than statewide and urban rates. In Burrillville, 50% of high school students report having used marijuana at least once in their lifetime. Additionally, 44% of students in Coventry and 43% of students in Tiverton report having used marijuana at least once in their lifetime. The state rate for high school students reporting marijuana use at least once is 39%.

Cigarette use by high school students is also elevated in more than half of non-metro communities. While 24% of students in Burrillville report current cigarette use, 23% of Tiverton students and 21% of Coventry students report current use of cigarettes. The state rate for cigarette use among high school students is 14%⁶¹⁶

Bullying Rates

The available data on bullying in schools indicates that some rural school districts report higher rates than the state average of 57%. In Burrillville, Westerly, and Scituate, over 60% of high school students report being bullied while at school. Additionally, 59% of students in Chariho report being bullied in school.

Bullying is a major cause of school absences. The state average for skipping school due to bullying is 12%. Most non-metro schools report above-average absentee rates due to bullying. For example, 16% of Tiverton and Foster/Glocester students, 14% of Chariho, Westerly and Scituate students, and 12% of Burrillville and Exeter/West Greenwich students report missing school because of bullying.²⁷

Unintentional Injury

Death rates from unintentional injuries have traditionally been higher in rural populations when compared to urban regions. In New England alone, the accidental death rate in rural regions is nearly 50% higher than that in urban regions. Transportation-related deaths and deaths from firearm-related accidents are also notably higher. However, in Rhode Island, we saw no statistical difference in the rates of death from unintentional injuries between the three regions (19 in non-metro, 24 in suburban, and 17 in urban regions per 100,000 deaths). This may be due to the relatively short transportation time for emergency medical services in Rhode Island. Although some deaths may be attributed to factors related to rural lifestyle and infrastructure, the amount of time it takes to transport a patient to medical facilities most likely contributes to the higher rural unintentional injury death rates in other states.⁷

Heart Disease

Deaths from cardiovascular disease are lower in non-metro communities (115 per 100,000 deaths) and core cities (108 per 100,000 deaths) than in the suburban region (171 per 100,000 deaths). Similarly, deaths from ischemia and other forms of heart disease are statistically higher in the suburban region (137 per 100,000 deaths) than both the urban (85 per 100,000 deaths) and non-metro (97 per 100,000 deaths) regions.

Cancer

Incidence rates of some of the most common forms of cancer including colorectal cancer (63 men and 46 women per 100,000), invasive lung cancer in women (61 per 100,000), and in situ breast cancer (38 per 100,000) are similar to rates for suburban and urban communities. Rates of invasive lung cancer in men (83 per 100,000) and prostate cancer (158 per 100,000) are lower than statewide averages (92 and 161 per 100,000, respectively). While the data reveal a slightly higher rate of invasive cervical cancer in women living in non-metro communities (8 per

100,000) than that of women living in suburban areas (7 per 100,000), the difference is not statistically significant.

Other Chronic Diseases

The available data on other chronic diseases suggest that non-metro communities are doing the same as, if not better than, the rest of the state. There are lower death rates from diabetes in the non-metro regions (7 per 100,000 deaths) when compared to suburban (11 per 100,000 deaths) and urban (10 per 100,000 deaths) regions. Hospital discharge data for incidents of asthma show elevated rates in the urban (212 per 100,000) and suburban (111 per 100,000) regions, but lower rates in the non-metro region (88 per 100,000). Self-reported doctor-diagnosed obesity is highest in the core cities at 29% and lower in both the non-metro and suburban regions (25% for both). Deaths from stroke are also lowest in the non-metro regions (12 in non-metro, 26 in suburban, and 20 in urban regions per 100,000 deaths). Self-reported doctor-diagnosed high blood pressure shows no significant difference (30% in non-metro, 30% in suburban, and 28% in urban regions).

Maternal and Child Health

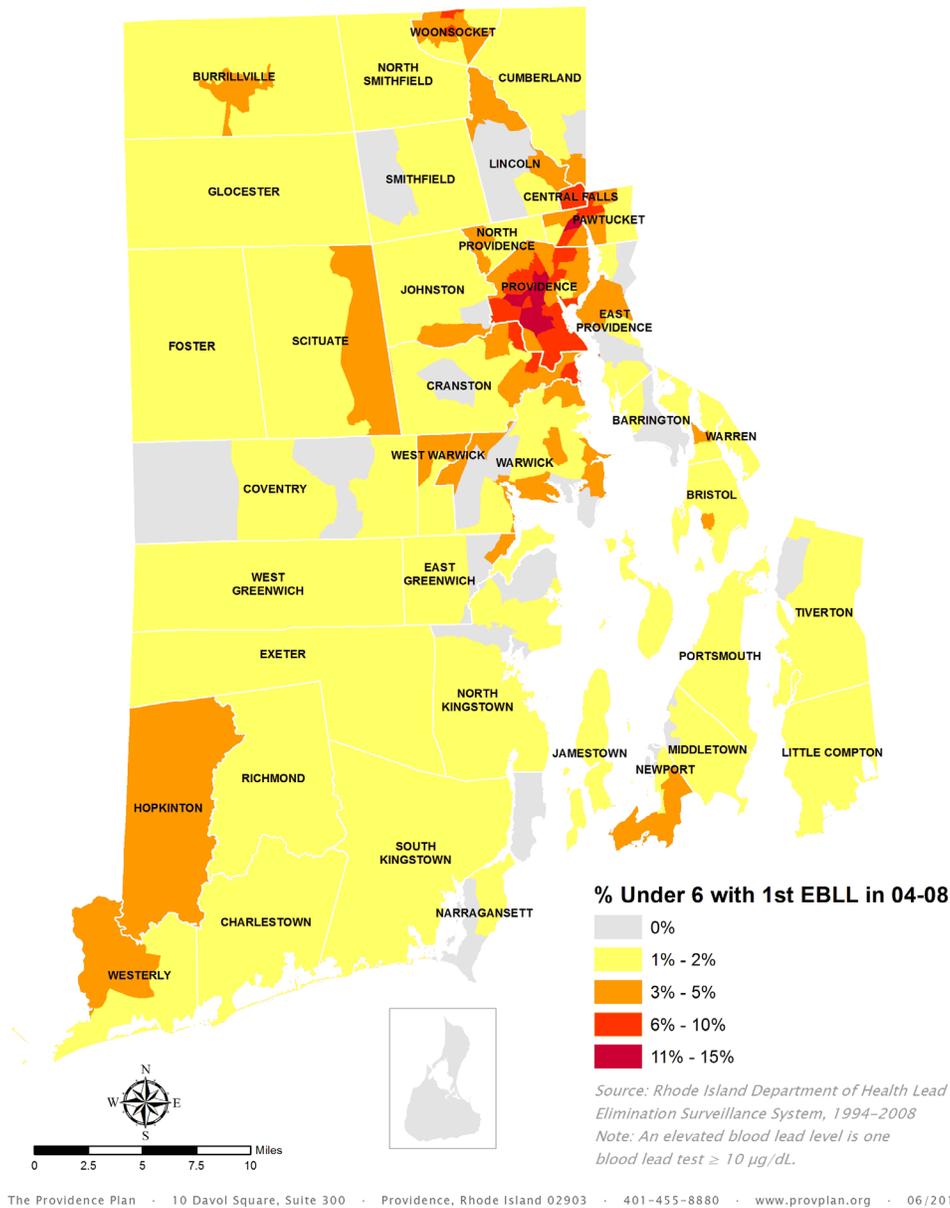
There are statistically similar rates between non-metro and suburban regions for preterm births (11% in non-metro, 11% in suburban, and 13% in urban regions), low birth weight babies (7% in non-metro, 7% in suburban, and 9% in urban regions), and infant mortality (5 in non-metro, 5 in suburban, and 8 in urban regions per 1,000). In all categories, the highest rates were found in the urban region. Non-metro and suburban regions also have lower rates of delayed prenatal care (10% in non-metro, 11% in suburban, and 19% in urban regions) and births to single mothers (30% in non-metro, 34% in suburban, and 62% in urban regions). Rates of breastfeeding are also higher in the non-metro (69%) than in the urban (50%) regions.

However, there are significantly lower rates of WIC participation in the non-metro communities. According to Rhode Island Kids Count data, only 52% of women and children who are eligible for WIC actually participate in the non-metro regions. This is compared to 59% of eligible people in suburban regions and 76% in urban regions.. This finding is also reflected in assessments carried out by our non-metro community partners which will be discussed in a following section.

Environmental Health Risks

Non-metro Rhode Island residents must cope with specific environmental health challenges. The areas of greatest radon hazard in the state are in rural Washington County; the towns of Exeter and Richmond have shown more than 50% of tested homes to have high levels of radon gas. Four other municipalities in non-metro areas had more than 30% of homes test high for radon including Hopkinton and Charlestown in Washington County; West Greenwich and Coventry in Kent County; and Foster and Scituate in Providence County. Although the highest rates of elevated blood lead levels are found in Providence, some portions of non-metro Rhode Island show increased rates. In the towns of Burrillville, Scituate, Hopkinton, and Westerly, 3% to 5% of the population younger than six years of age has elevated blood lead levels (as shown on the

Children Younger than Six with First-Time Elevated Blood Lead Levels (EBLL), 2004-2008

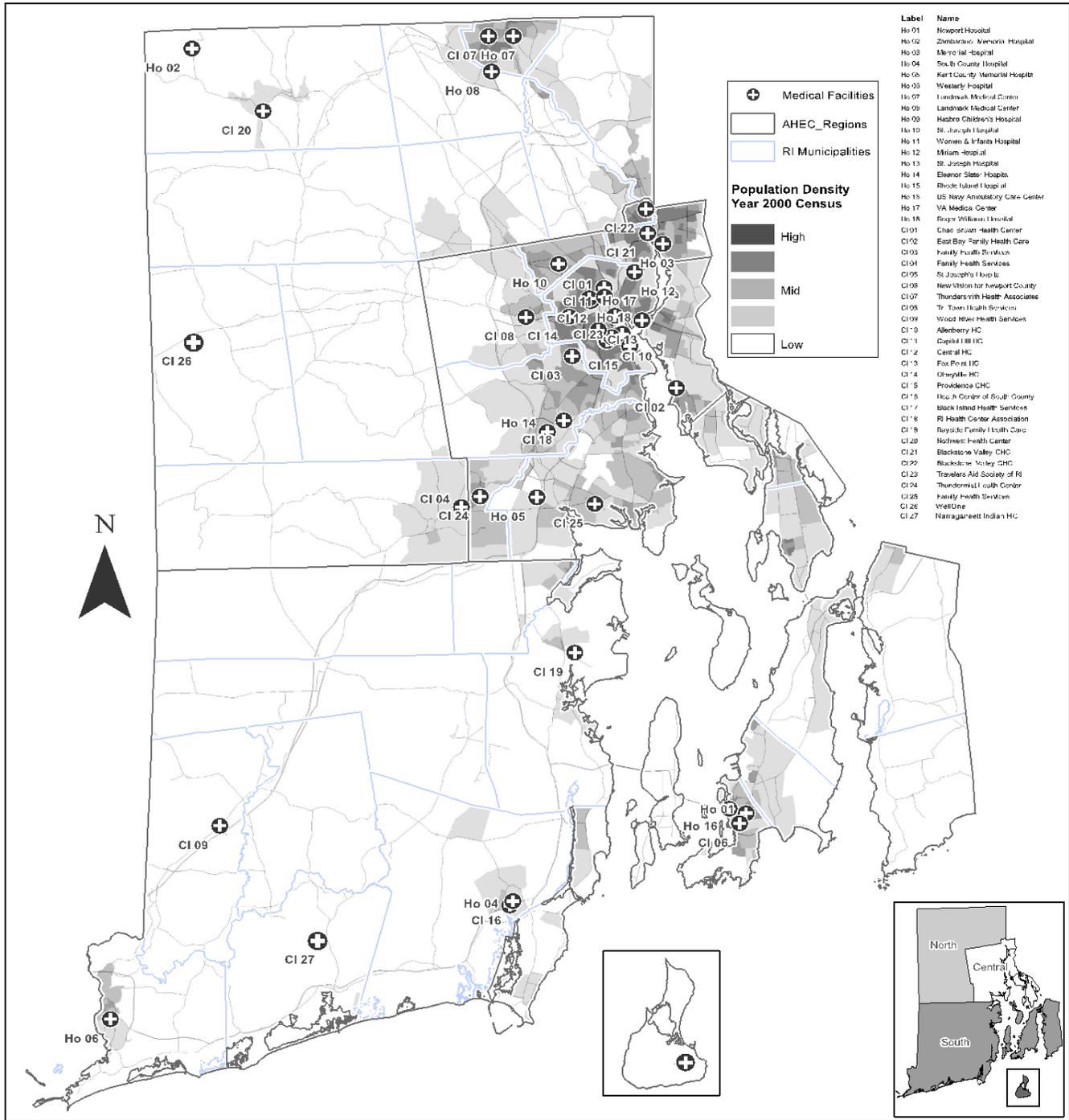


Non-Metro Health Systems Barriers

Access to Care

In rural communities throughout the US, low numbers of local healthcare providers and limited public transportation create barriers to accessing healthcare. In Rhode Island, a limited number of physicians practice outside the greater Providence area. Moreover, the public transportation system is urban-oriented and inadequate for linking non-metro populations with the major medical centers in Providence and other urban areas. As shown on the following map, non-metro Rhode Island has only seven medical facilities, which are found in the towns of Burrillville, Foster, Coventry, Hopkinton, Charlestown, and Westerly. Similarly, as shown in the two figures that follow, far fewer physicians and dentists serve the non-metro regions.

Rhode Island Medical Facilities and Population

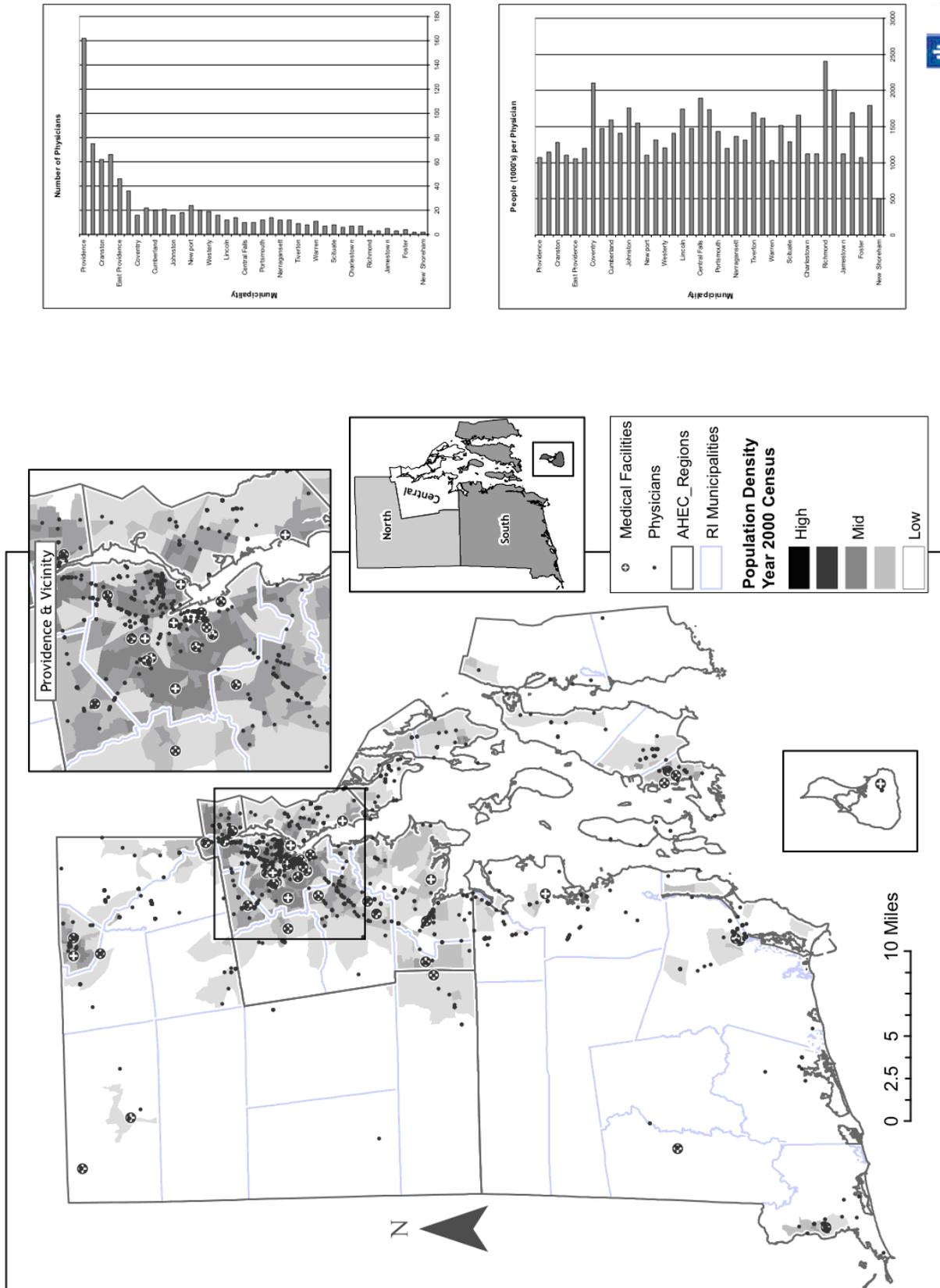


Rhode Island State Plane Feet, NAD83
 Data Sources: City of Providence
 Rhode Island Geographic Information System (RIGIS)

Map Produced by: The Providence Plan
 For: The Rhode Island Area Health Education Program



Rhode Island Distribution of Physicians by Municipality

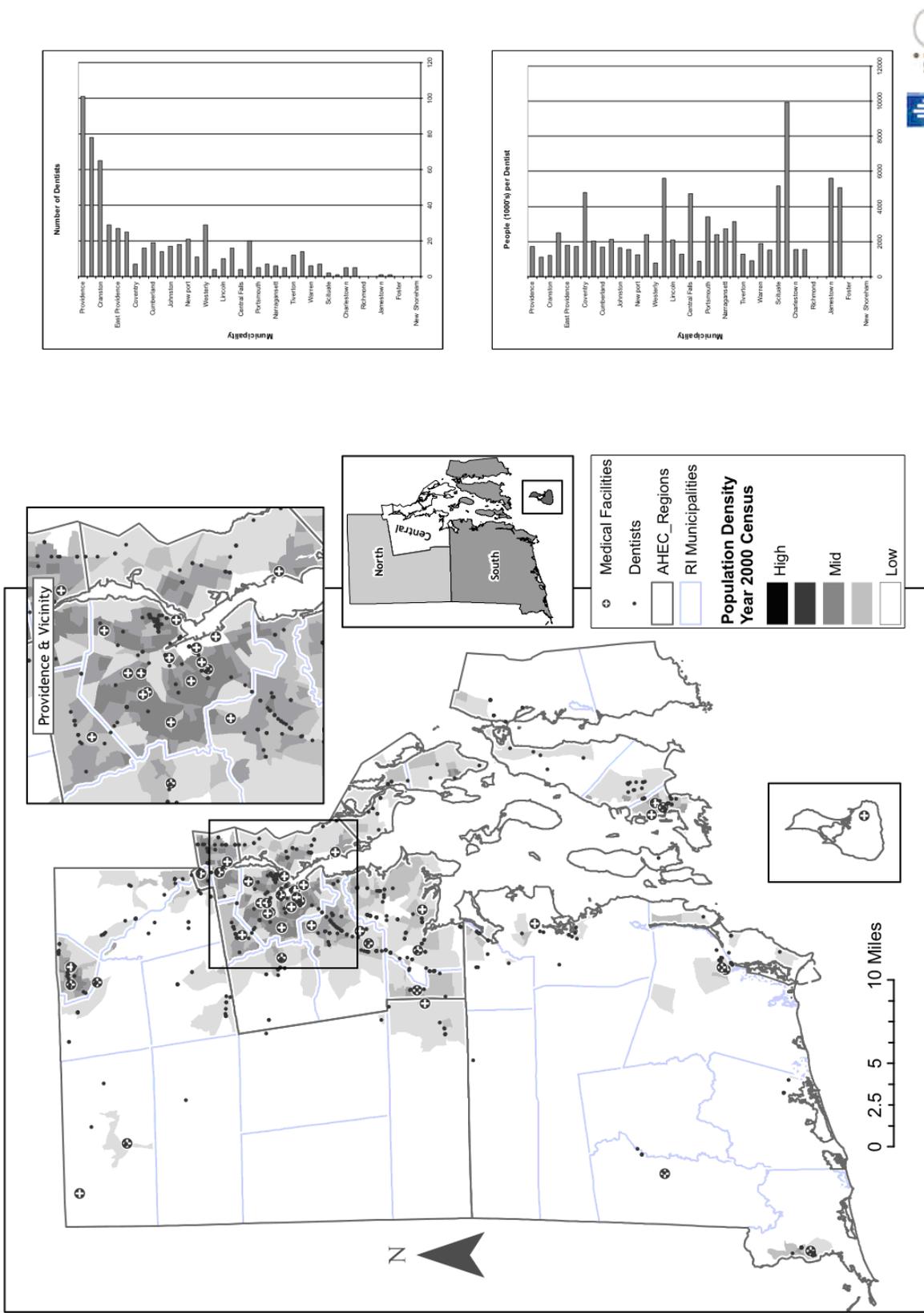


Map Produced by: The Providence Plan
 For: The Rhode Island Area Health Education Program

Rhode Island State Plane Feet, NAD83
 Data Sources: City of Providence
 Rhode Island Geographic Information System (RIGIS)

Note: AHEC stands for Area Health Education Center.

Rhode Island Distribution of Dentists by Municipality



Map Produced by: The Providence Plan
 For: The Rhode Island Area Health Education Program

Rhode Island State Plane Feet, NAD83
 Data Sources: City of Providence
 Rhode Island Geographic Information System (RIGIS)

Healthcare Shortage Areas

Several federal programs in Rhode Island support healthcare provision to medically-under-served populations. These include 11 automatically-designated Federally Qualified Health Centers (FQHCs), FQHC Look-Alikes and Indian Health Service-funded sites. Four of the FQHCs are either located in or serving Rhode Island's non-metro regions: Thundermist Healthcare, Wood River Health Services, WellOne, and the Comprehensive Community Action Program. Rhode Island also currently has designated six primary care Health Professional Shortage Areas (HPSAs), five dental HPSAs, and four mental health HPSAs. The only HPSA located in the non-metro region is New Shoreham town on Block Island.

Insurance and Ongoing Sources of Care

According to Behavioral Risk Factor Surveillance System (BRFSS) data estimates, non-metro regions have comparable rates of health insurance to suburban areas and higher rates of insurance compared to the core cities. In the non-metro region, approximately 89% of survey respondents have health insurance, while 91% in suburban Rhode Island residents and 77% of core cities residents report having insurance. Additionally, non-metro regions have higher rates of ongoing care when compared to urban or suburban regions; In non-metro Rhode Island, 89% of Residents report having a regular provider, as compared to 87% in suburban and 80% in urban Rhode Island²⁰.

Public Transportation

Lack of transportation is a consistent barrier to healthcare in rural communities throughout the United States. Even within New England, more than 1 in 20 households in the combined rural areas have no vehicle and no practical public transportation option.⁷ As evident in the map on the next page, most Rhode Island Public Transit Authority (RIPTA) bus routes exist within urban service boundaries. Most non-metro towns have only one RIPTA bus route through the area, while the towns of Foster and Charlestown have none. In Rhode Island, a few programs such as the Flex service and the RIdE program have begun to address some of these barriers, but they still do not adequately meet the need of many non-metro communities.

Rhode Island Public Transit Authority (RIPTA) Bus Routes



Rural Health Assessments

To support communities to begin to address the non-metro health barriers discussed in previous sections, the OPCRH awarded eleven mini-grants between 2009 to 2011 to qualified community-based coalitions and networks in non-metro regions of the state. The mini-grants supported community assessments that expanded upon the often limited non-metro health data. Grantees conducted community assessments to identify gaps in healthcare services and delivery systems and to develop strategic plans to address these issues. Grantees included organizations from all four counties containing non-metro regions:

- Providence County: WellOne (Foster), Northern Rhode Island Area Health Education Center (nriAHEC), and YWCA Northern Rhode Island
- Kent County: Visiting Nurse Association (VNA) of Care New England (Coventry), Comprehensive Community Action Program (CCAP), Inc. (Coventry)
- Washington County: Washington County Coalition for Children (WCCC)
- Newport County: Visiting Nurse Services (VNS) of Newport and Bristol Counties

Dental Services

As was shown in a previous figure, a limited number of dentists serve the non-metro regions. Several grantees identified inadequate supply of dental services as an area of high need. For example, VNA of Care New England identified routine dental care as the top unmet need for the senior population in Coventry. CCAP identified a similar need in pediatric services in Coventry. According to the CCAP survey, 30% of families said that their children had not visited the dentist in the last year, while 51% of parents had not visited the dentist in the last year and 27% could not afford dental care.²⁰

Mental Health Services

Several grantees identified mental health services as an area of need in non-metro communities. For instance, the WCCC identified access to children's mental health services as a primary issue in Washington County. In response, the WCCC has designed and delivered training and support for medical clinicians and staff, children's behavioral health and social service providers, and school personnel. They have also implemented a social marketing campaign to prevent bullying among middle school students. CCAP also found an insufficient supply of affordable mental health services for all ages in Coventry. For example, an alarming six of eight (75% of) adults that needed mental health counseling had difficulty getting it.²⁰

Knowledge of Resources and Stigma

In addition to a lack of resources, there are clear and real social barriers to accessing care. Often, people are unaware of the services for which they would qualify. Furthermore, while some are aware of the services available, they are unwilling to take advantage of these services due to a sense of stigma associated with receiving benefits. This is reflected in the lower rates of participation in WIC for eligible mothers and children and was also identified as an issue by our community partners' assessments. WellOne found that a lack of knowledge of benefits or a lack of knowledge of how to apply for such benefits often prevented residents

from seeking help.²² Furthermore, individual attitudes toward receiving assistance prevented residents from seeking help. YWCA Northern Rhode Island and nriAHEC found that participation rates in Burrillville, Foster, Glocester, and Scituate for the WIC program, the Supplemental Nutrition Assistance Program (SNAP), and the school breakfast program were all lower in comparison to state rates. YWCA and nriAHEC also hypothesized that the low WIC participation rates may not only be due to lack of knowledge of resources, but also to stigma attached to receiving such assistance.²³

Public Transportation

Finally, as outlined in a previous section, non-metro areas face significant transportation barriers. Assessments by WellOne, CCAP, YWCA Northern Rhode Island, and nriAHEC all concluded that transportation issues are one of the biggest challenges facing non-metro residents. CCAP found that 22% of residents did not get needed care due to transportation concerns.²⁰ Because of these issues around transportation and accessing services, nriAHEC and YWCA proposed the use of social media methods to reach out to local young women to increase their knowledge base around women's health and wellness issues, food insecurity, and prenatal care.²³

Rural Health Systems Building Grants

Building on the results of community assessments and recommendations developed under mini-grants, the OPCRH issued a request for proposals designed to strengthen primary care systems by working to develop healthcare infrastructure, increase access to healthcare, reduce health disparities between populations, and promote patient-centered medical homes. Special emphasis was placed on addressing the needs of the uninsured, the underinsured, minority populations, and children with special healthcare needs. Grantees were also required to address improvements in maternal and child health services as a part of their projects. The grants are for a two-year period, contingent on available funding and grantee performance. Eligibility was limited to non-profit organizations leading coalitions of primary care and community organizations serving non-metro regions of the state.

In October 2011, the OPCRH made two Rural Health Systems Building awards. These include a project led by YWCA Northern Rhode Island, in partnership with nriAHEC, to develop and implement a strategic plan to improve access to primary care services (including prenatal care), reduce high risk behaviors, address cultural barriers to care, and improve nutrition among young women (ages 12 to 25) living in northwestern Rhode Island. The YWCA project includes a focus on physical activity as an entry point to connect young women with other preventive services. A second award was made to the WCCC to develop and implement a strategic plan for improving children's behavioral health services, increasing the knowledge and competency of the local workforce, engaging and supporting parents, and providing anti-bullying programs for children living in Washington County. The WCCC project builds on eight years of successful children's mental health program development in the southern region of the state.

Rural Health Grants: A Closer Look

YWCA's Healthy Steps for Girls and Women

Healthy Steps for Girls and Women is an initiative that builds on the connectedness of the families and communities in Northwestern Rhode Island to promote use of preventive health care and physical activity. YWCA Rhode Island and nriAHEC are working with a Steering Committee to develop and implement a community assessment and strategic plan. The Steering Committee consists of professionals from all areas of healthcare, municipal leaders, middle and high school personnel, faith leaders, youth services managers, health coalition coordinators, parks and recreation program directors, and representatives from other community resources in Burrillville, Foster, Gloucester and Scituate.

The project has recently completed a series of focus groups with 27 teens and young women, ages 12 to 25, who reside in Northwest Rhode Island. An initial analysis of findings indicates that 85% of participants had health insurance and most participants turned to friends and family for health information. Younger focus group participants (ages 12-15) reported much greater involvement in physical activity, healthy eating and a lower incidence of substance abuse than their older peers. Areas of need included local emergency care, increased capacity for organized physical activity, improved transportation, better access to mental health services, and “youth-friendly” local primary care for teens and young women. Additional assessment activities are now underway, including school interviews and an on-line survey.

Washington County Coalition for Children

The Washington County Coalition for Children has been working to improve children’s mental health services in Southern Rhode Island for the last 9 years. Through their Rural Health Systems Building Initiative, the Coalition is developing new partnerships and expanding their children’s mental health strategic plan. To inform this process, the Coalition has completed an inventory of current behavioral health services and conducted key informant interviews with a wide range of community stakeholders.

In addition to this important planning work, the Coalition continues to build on a number of established projects. With the additional help of a new Rhode Island Foundation grant, the Coalition will expand the reach of their Collaborative Office Rounds (interdisciplinary training sessions) statewide through live on-line web-streaming and archiving of children’s developmental and behavioral health training sessions. Now in its 6th year, the Coalition continues to promote emotional literacy among area 2nd graders through their Feelin’ Groovy project. Tackling the age-old problem of bullying, the Coalition is working to increase public awareness about the impact of bullying and partnering with local schools to implement evidence-based bullying prevention programs.

Recommendations and Next Steps

Based on the findings of community assessments and analysis of non-metro health data, the OPCRH has developed the following recommendations:

- Address adolescent risk-taking behavior in non-metro communities, including alcohol, drug, and cigarette use. Connect local efforts to statewide resources, including the RI Department of Health (HEALTH) Tobacco Control and Adolescent Health Programs.
- Promote federal and local workforce development initiatives to increase primary care, mental health, and dental provider supply in non-metro communities.
- Work with Rhode Island Department of Education to promote investment of anti-bullying resources in non-metro communities.
- Utilize Community Health Workers (CHWs) in non-metro communities to help residents navigate the health and social service systems and enroll in services such as WIC. Link non-metro CHWs to training and support resources.
- Connect non-metro partners with existing initiatives that promote expansion of public transportation to ensure that the needs of non-metro communities are addressed, including Healthy Places by Design at HEALTH and Grow Smart RI.
- Collaborate with HEALTH's Healthy Homes and Environment programs to design comprehensive environmental risk reduction initiatives in non-metro communities.
- Provide training and technical assistance to local networks, including supporting communities to evaluate the effectiveness of rural health systems building projects.
- Continue to keep non-metro partners up-to-date through electronic newsletters, updates and training on rural health policy including healthcare reform, best practices, grant opportunities, and federal funding.

Rhode Island Office of Primary Care and Rural Health

The Rhode Island Rural Health program is housed in HEALTH's Office of Primary Care and Rural Health (OPCRH), within the Health Disparities and Access to Care Team of the Division of Community, Family Health, and Equity (DCFHE). The OPCRH exists to promote access to comprehensive primary care for all state residents. Particular emphasis is placed on assuring access and improving health outcomes for the traditionally medically underserved, racial/ethnic minorities, low-income and uninsured individuals, and those facing geographic barriers. The OPCRH is responsible for assessing primary care capacity in Rhode Island, delineating low-income, geographic, and specialty-specific shortage areas, and developing plans to address those shortages. The OPCRH provides a rural health information clearinghouse, technical assistance and other support to rural health partners, program coordination, rural health policy leadership, and development, recruitment, and retention of a skilled rural health workforce.

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- Rhode Island Department of Education: Jan Mermin

For More Information

To access an electronic copy of this report or its maps, please contact Mia Patriarca O’Flaherty at mia.patriarca@health.ri.gov or visit www.health.ri.gov/programs/primarycareandruralhealth

¹US Census Bureau, 2006-2010 American Community Survey

²The only exception is the town of Coventry, which has a population density of 564.87 persons per square mile. This community was included as non-metro due to its location between other non-metro towns and because two Coventry census tracts, representing 65% of the town's area, have very low population density.

³Definition, Health Resources and Services Administration, hrsa.gov/ruralhealth/policy/definition_of_rural.html, Accessed October 25, 2011. The Office of Rural Health Policy uses two methods to determine geographic eligibility for its grant programs. All counties not designated as parts of Metropolitan Areas (MAs) by the Office of Management and Budget are considered rural. Counties classified as MAs are still non-metropolitan and considered rural. For the list of MAs, see www.census.gov/population/www/metroareas/metrodef.html. RI has no rural counties, and five rural Census tracts in Washington County, for the purposes of the Rural Health Outreach, Network Development, or Rural AED Grant Programs. Due to the fact that entire counties are designated as metropolitan when, in fact, large parts of many counties may be rural in nature, the Office of Rural Health Policy sought an alternative method of looking at sub-county sections of these MAs. Rural Urban Commuting Area Codes (RUCAs) are a Census tract-based classification scheme that utilizes the standard Bureau of Census urban area and place definitions in combination with commuting information to characterize all of the nation's Census tracts regarding their rural and urban status and relationships. RI has no Census tracts with RUCAs coded as rural.

⁴Fact Finder, US Census Bureau, http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_GCT0209.ST26&prodType=table, Accessed October 29, 2012.

⁵US Census Bureau, 2006- 2010 American Community Survey. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_GCT1701.ST26&prodType=table, Accessed October 29, 2012.

⁶2000 US Census Data. Map produced by The Providence Plan. Providence, RI.

⁷New England Rural Health RoundTable. Rural Data for Action. West Lebanon, NH. New England Rural Health RoundTable.

⁸Unintentional injuries include such things as drowning, falling, fires/burns, machinery accidents, traffic or transport accidents, poisoning, and suffocation.

⁹These rates are based on the available 2010 data from the Center for Health Data and Analysis at the Rhode Island Department of Health.

¹⁰Data was collected by the Center for Health Data and Analysis at the Rhode Island Department of Health. Rates were calculated by dividing the total number of incidences in each region (non-metro, sub-urban and urban) by the total populations for each region based on 2010 Census data and multiplying by 100,000.

¹¹Self-reported rates are based on results from the Behavioral Risk Factor Surveillance System.

¹²"Breastfeeding" rates refer to the percentage of newborn infants who are exclusively breastfed at the time of hospital discharge.

¹³Women and children participating in WIC is the percentage of eligible women, infants and children enrolled in the Special Supplemental Nutrition Assistance Program (SNAP) for WIC. WIC is a federally-funded program that serves pregnant, postpartum, and breastfeeding women, infants, and children younger than five years old with household incomes below 185% of the federal poverty level. In addition, any individual who participates in SNAP (formerly the Food Stamp Program), RIte Care, Medicaid, or the Rhode Island Works Program or who is a member of a family in which a pregnant woman or infant receives Medicaid benefits, is automatically income-eligible for WIC.

¹⁴Rhode Island Kids Count. 2012 Rhode Island Kids Kids Count Factbook. Providence, RI: Rhode Island Kids Count.

¹⁵Data represents 43,463 houses tested for radon. Rhode Island Department of Health Radon Database, Healthy Housing Databook 2010. Rhode Island Department of Health; December 2008.

¹⁶Rhode Island Department of Health Lead Elimination Surveillance System. Map produced by The Providence Plan. 2008.

¹⁷US Census 2000. City of Providence, Rhode Island Geographic Information System. Map produced by The Providence Plan.

¹⁸The BRFSS is a survey of non-institutionalized Rhode Island resident adults age 18 and older who have a land-line phone. The sample data are weighted to be representative of the target population, 2011

¹⁹Map produced by The Providence Plan. Providence, RI. 2011.

²⁰Comprehensive Community Action, Inc. Rural Health Mini Grant, Coventry Access Survey Results Summary. Cranston, RI. Comprehensive Community Action, Inc.; 2011.

²¹Washington County Coalition for Children. 2009 and 2011 Mini-Grant Reports. Narragansett, RI: Washington County Coalition for Children; 2009, 2011.

²²WellOne. 2010 Rural Health Mini Grant. Foster, RI: WellOne; 2010.

²³YWCA Northern Rhode Island and Northern Rhode Island Area Health Education Center. Addressing Prenatal Care & Food Insecurity for Young Women Living in Rural Northwestern Rhode Island. Woonsocket, RI: YWCA Northern Rhode Island and Northern Rhode Island Area Health Education Center; 2011.

27- Rhode Island Data Hub. Student Reports of Bullying At Schools. Providence, RI. Providence Plan; 2012



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